

# E.H. WACHS



**E.H. WACHS®**

Superior Equipment. Complete Support.™

PORTABLE WELD PREP MACHINE TOOLS



**INDUSTRIAL PIPE CUTTING  
& BEVELING MACHINES**

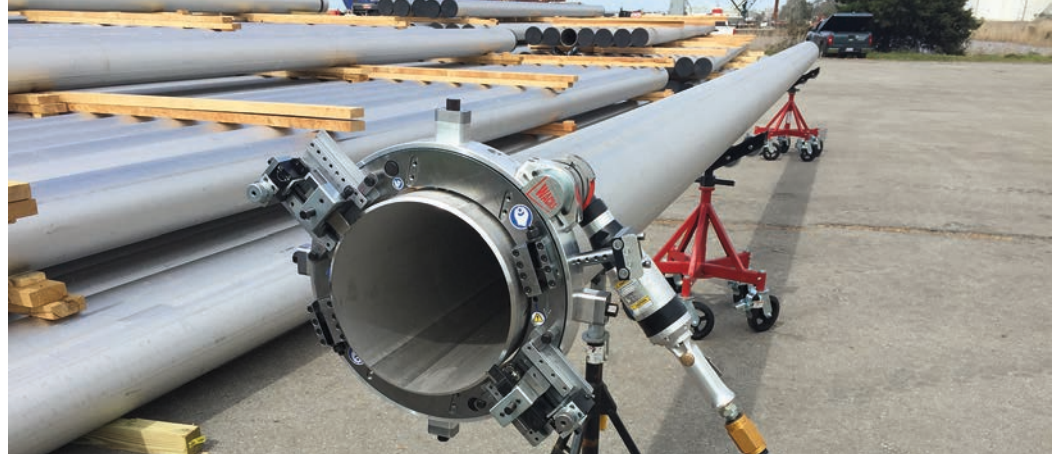
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**WACHS**

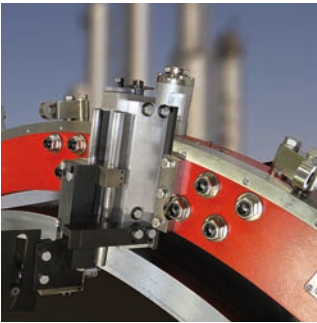




SDSF Small Diameter Split Frame



DynaPrep MDSF Split Frame



LDSF Large Diameter Split Frame  
for pipe & vessels



Early cutting with Trav-L-Cutter

Welcome to this newest edition of the E.H. Wachs Industrial pipe cutting and beveling catalog, featuring a wealth of new products designed for the professional field machinist. This edition highlights the newly redesigned lineup of Wachs split frames with the SDSF, DynaPrep® MDSF and LDSF offering standard sizes to cover a full .5in to 120in (DN15-1500) range of tube, pipe or vessel outside diameters.

The DynaPrep MDSF Modular Design Split Frames line is designed to fit pipe OD sizes from 2in to 60in OD (DN50-1500). Building on the strength of its predecessor the LCSF Low Clearance Split Frame, the MDSF redefines the category of split frame, clamshell type pipe cutter/bevelers with more power, more features, greater ease of use, and the option for true remote control across all three drive types, pneumatic, hydraulic and electric.

The DynaPrep is flanked by the SDSF Small Diameter Split Frame for diameters ranging from .5in to 6in (DN15-150), and by the LDSF Large Diameter Split Frame for larger diameters (60in to 120in or DN1500-6000). The combination of these three product lines, along with their advanced accessories, combine to form the industry's most complete portable field machining system. E.H Wachs offers a machine tool to handle most of the applications encountered in the field, without reverting to a custom solution.

As the foundation of our portable machining system, Wachs split frames can be configured to cut, bevel, cut and bevel simultaneously, counterbore, face, record groove, remove socket welds, perform chipless cutting, trepanning, and cut casings externally and internally for wellhead completion, to name just a few. Bring us your toughest application - we probably have a machine for it.

In addition to building the most comprehensive line of split frames offered anywhere, E.H. Wachs products include our famous Guillotine® pipe saws and the Trav-L-Cutter®, industry favorites that continue to fill the needs of professionals around the globe. ID mounted end prep machine tools include our class leading EP 424 with its unique, patented autofeed system, and the proven SDB series that can be converted to FF series flange facers. Wachs RS-2 (rising stem) and P-2 handheld valve operators return with new options for control and monitoring valve activity.

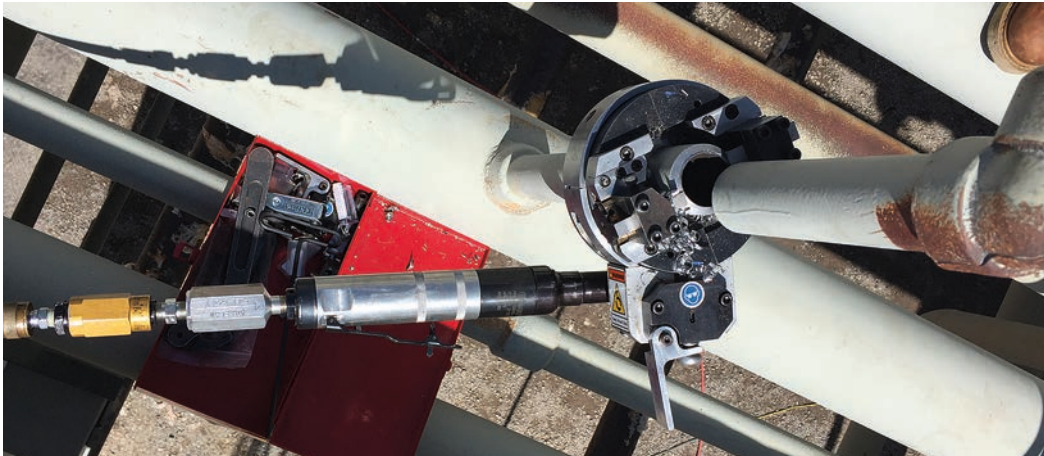
Sold and supported worldwide (with most available for rental), E.H. Wachs products are built to world class standards under ISO 9001. Now available locally at our regional Sales, Service and Rental Centers, Wachs machines are quickly available when and where you need them.



ISO 9001



# COMPLETE Support



E.H. Wachs based in Lincolnshire, Illinois and Orbitalum Tools based in Singen, Germany combine to form ITW Orbital Cutting & Welding. Orbitalum (formerly known as GF) is the leading manufacturer of high purity cutting products and orbital welding systems. Together we offer our users One Source for the products used to Cut. Prep. Weld.

ITW Orbital Cutting & Welding joins other welding related companies in the ITW Welding products group, further strengthening its position as the premier global supplier of advanced welding solutions. ITW Welding is a unit of Illinois Tool Works, a Fortune 200 global industrial manufacturer with operations in 58 countries and 60,000 worldwide employees. As a Division of ITW, E.H. Wachs benefits from their strong leadership, financial strength and global engineering, sales and product resources.

When you purchase an E.H. Wachs® product, you're partnering with the industry leader in portable weld prep machine tools. That partnership means the equipment you buy today will be supported with the training, service, parts and upgrades that keep these machines working in the field, day in and day out, year after year.

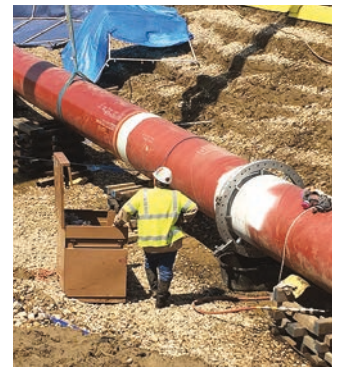
Incorporated in 1883, E.H. Wachs has been manufacturing quality products for nearly 135 years. Each product builds on the strength of the previous one, while incorporating new technologies, materials and innovations to advance the power and versatility of these superb machine tools. Our DynaPrep MDSF has so many unique and patented features it makes lesser machines look and feel outdated. New modules for the MDSF help future-proof your investment - our latest FFC and FFR modules for example add flange facing and ring grooving capabilities, often saving the need to bring multiple machines onsite.

At Wachs we back up our motto of Complete Support each and every day. We support our standard machines with a great warranty, but support means more at Wachs – support means partnering with a manufacturer who understands what it takes to complete a project on time and under budget. Like the ability to rent machines, to manufacture custom tooling, to modify standard products, or design and build customized machining solutions.

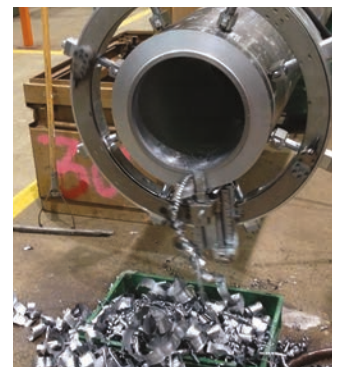
Support includes training options, at your location or ours. And support also means that, unlike other machine tool manufacturers, when you partner with E.H. Wachs for equipment you're not competing against us for service. At Wachs we take pride in saying we don't just build machines, we build relationships - one customer at a time.



Early pipe fitting



Field machining today with Wachs Split Frames



DynaPrep MDSF machine tool



Machined split frame rings





Power Generation



Oil & Gas



Pipeline Distribution



High Purity Process Pipe

ITW Orbital Cutting & Welding products cover a wide range of applications in a broad spectrum of industries. E.H. Wachs and Orbitalum offer machines and accessories to perform facing, counterboring, flange facing and high purity cutting and welding. Used in construction, maintenance and repair operations (MRO) and decommissioning our primary industrial markets include:

## Oil & Gas

Upstream, midstream and downstream, anywhere pipe and vessels are employed you'll find Wachs products. Our experience in Oil & Gas dates back to 1949 with the introduction of our revolutionary Trav-L-Cutter, designed to replace hot torch cutting and grinding. Today E.H. Wachs remains at the forefront of cold cutting machine tool technology, and is the superior choice anywhere volatile hydrocarbons are present. E.H. Wachs builds machine tools specifically for well head completion, maintenance and repair, and valve exercising and operation.

## Power Generation

The Power Generation industry is characterized by the drive for greater efficiency and power output. E.H. Wachs machine tools are optimized for power generation, and built to deliver more power and precision for these demanding schedules, materials and processes. Many machines are offered with remote control options to conform to ALARA, distancing the operator from risks related to extreme environments.

## Pipeline Distribution

Pipelines and the materials they transport are a vital part of the energy landscape. E.H. Wachs products are ideal for construction, repair and replacement activities on the extensive network of gathering, transportation and distribution pipelines carrying oil, natural gas and petrochemical products. Heavy duty and large diameter split frames and pipe saws are offered to tackle the biggest jobs.

## High Purity

High Purity includes those industries that make use of high alloy and stainless steel tubing. These applications typically require perfectly executed, highly repeatable and measurable welds, often subject to the most rigorous record keeping and inspection requirements.

The Orbitalum product line is the ideal solution for these demanding projects, and include precision tube saws and facers, power supplies, open and closed weld heads and accessories. They see wide application in industries including Semiconductor, Aerospace, Pharmaceutical, and Food, Dairy and Beverage.



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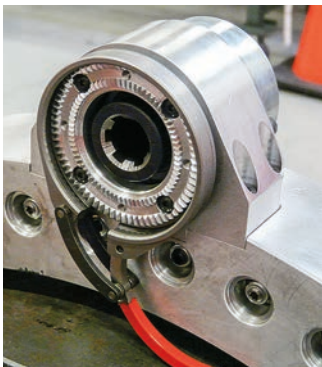
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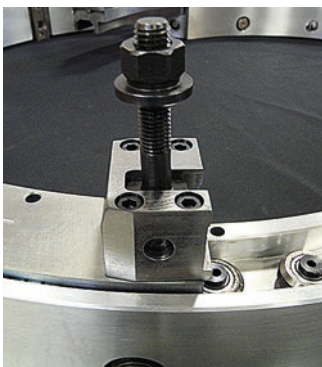




DynaPrep MDSF enhanced form tool capabilities



Tool-free drive mounting on heavy duty pinion to handle more power



Aluminum stationary frame with steel rotating ring



DynaPrep MDSF tool slides with Rapid Adjust

## DynaPrep MDSF

As the needs of the field machinist have evolved, E.H. Wachs products have evolved to meet those needs. Our users asked for stronger form tooling capabilities and a more productive user experience, while delivering greater precision with faster and safer operation. The DynaPrep MDSF Modular Design Split Frame is the latest example of Wachs machine tool innovation that does just that.

The DynaPrep MDSF represents the pinnacle of cold cutting split frame technology. Retaining the class leading portability and versatility that distinguished our LCSF Low Clearance Split Frame, DynaPrep is built tougher to withstand additional torque to pull bigger chips. It offers so many patented features that make it so easy to use you'll wonder why nobody thought of them before.

## Portable, Easy to Operate

Unlike heavy steel machines, the DynaPrep MDSF retains the advanced light-weight aluminum and steel construction that maintains the portability and ease of setup and operation that characterized the LCSF. DynaPrep includes system indexing, where major assemblies are indexed to simplify setup and promote repeatability. The tool slides are indexed to the rotating ring, the trip is indexed to the tool slides, making the DynaPrep virtually crash proof.

The DynaPrep tool slides incorporate our patented Rapid Adjust feature, where a turn of a collar allows for large tooling movement during setup, a real time saver. Patented Micro Adjust on the slide allows fine hand positioning of the tooling, and a tooling spacer block arrangement accepts multiple tooling sizes and types.

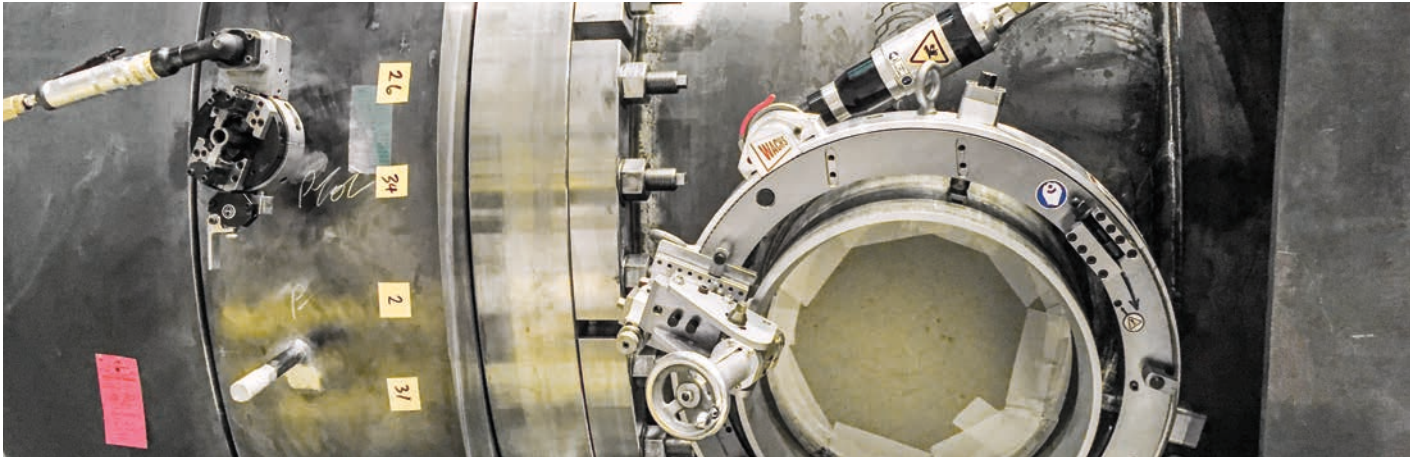
## Remote Control Options

The DynaPrep MDSF is the first machine designed from the ground to accommodate remote control operation, conforming to the industry trend of moving operators out of hostile environments and away from rotating machinery. Remote options exist for all MDSF drive types, pneumatic, hydraulic and electric, including remote trip actuation. All remotes feature ergonomic handheld pendants for maximum comfort and control.

The DynaPrep MDSF is yet another in a long string of innovations from the pioneer in portable, cold cutting machining technology. It started with the Trav-L-Cutter, then we built the Guillotine saw, then we introduced the ground breaking LCSF split frame. Now we've done it again, setting the bar higher still with the DynaPrep MDSF.



## OD Mounted Machine Tools



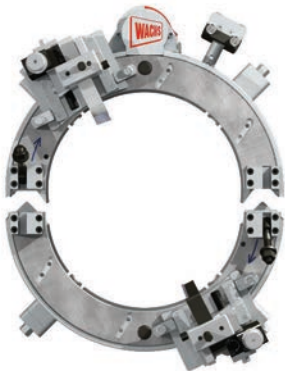
### OD Mounting for Inline Pipe & Vessels

E.H. Wachs machine tools can be specified by the mounting method used - our machines can be broadly divided into OD mounted machines and ID mounted machines. OD mounted machines mount around the outside of a pipe or vessel and, with the exception of Wachs Guillotine saws, are characterized by their ability to simultaneously cut and bevel. This elevates our OD mounted machines into the weld prep category, as opposed to the ID mounted machines which fall largely into the end prep category.

E.H. Wachs OD mounted split frames are more than just cutting tools - they're part of a complete machining system designed to handle most applications encountered by the field machinist. Properly equipped Wachs split frames can perform a wide range of tasks including counterboring and deep counterboring, flange facing, single point machining, axial and radial socket weld removal, trepanning, and external and internal casing cutting, to name just a few.

Our OD mounted machines include the entire family of Wachs split frames, three distinct series named for their ability to split in half to mount around inline pipe. From smallest to largest they're the SDSF Small Diameter Split Frame, the DynaPrep MDSF, and the range topping LDSF Large Diameter Split Frame, designed for larger diameters, tanks, and vessels.

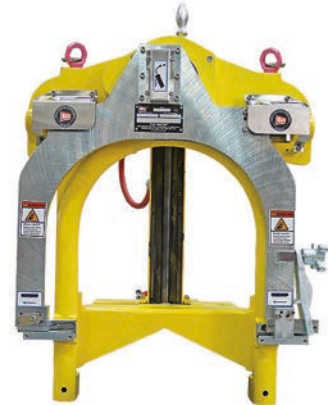
Other OD mounted products include our pioneering cold cutting Trav-L-Cutter, which rotates on its drive tensioning chain and can accommodate larger diameters by adding additional chain sections. For destructive cutting our proven Guillotine series of reciprocating saws (widely known in the field as the "Wachs Saw") are unmatched for simplicity and durability.



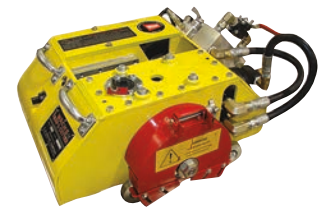
Split frame unbolted  
for OD mounting



Split frame  
bolted together









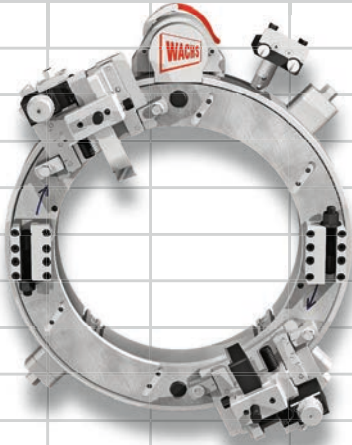
















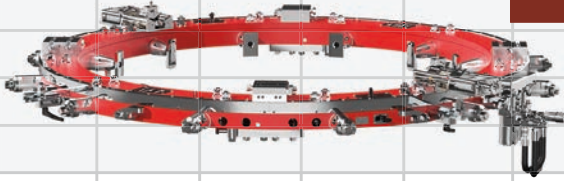







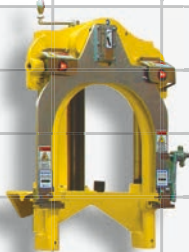





Split frame  
bolted together



Trav-L-Cutter  
Model HE Hydraulic

# OD Mounted Machine Ranges

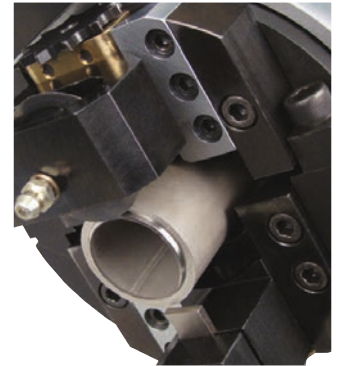
	1/2in (13mm)	12in (305mm)	24in (610mm)	36in (914mm)	48in (1219mm)	60in (1524mm)	72in (1829mm)	90in (2286mm)	120in (3048mm)
SDSF	SDSF 1.0								
	SDSF 2.0								
	SDSF 3.0								
	SDSF 4.0								
	SDSF 5.0								
	SDSF 6.0								
DYNAPREP MDSF	MDSF 206								
	MDSF 408								
	MDSF 610								
	MDSF 612								
	MDSF 814								
	MDSF 1016								
	MDSF 1218								
	MDSF 1420								
	MDSF 1824								
	MDSF 2228								
	MDSF 2632								
	MDSF 3036								
	MDSF 3642								
	MDSF 4248								
	MDSF 4854								
	MDSF 5460								
LDSF	LDSF 75								
	LDSF 90								
	LDSF 105								
	LDSF 120								
TRAV-L-CUTTER	MODEL E (PNEUMATIC)								
	MODEL HE (HYDRAULIC)								
GUILLOTINE	SUPER C								
	MODEL D								
	SUPER D								
	GOLIATH								



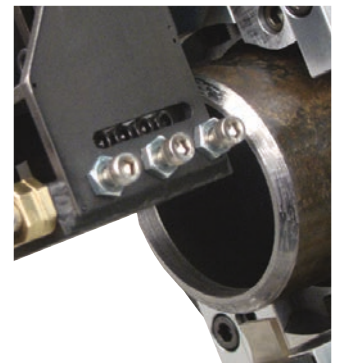
## SDSF Small Diameter Split Frame



Axial Tool Slide accessory  
for socket weld removal



Wheel Cutting Module  
accessory for FME cutting

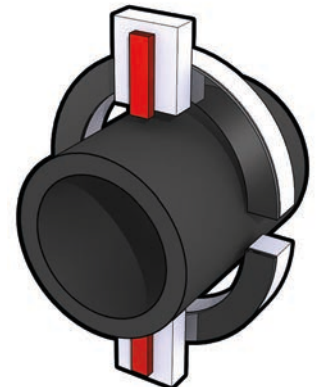


Counterbore attachment  
fits all models

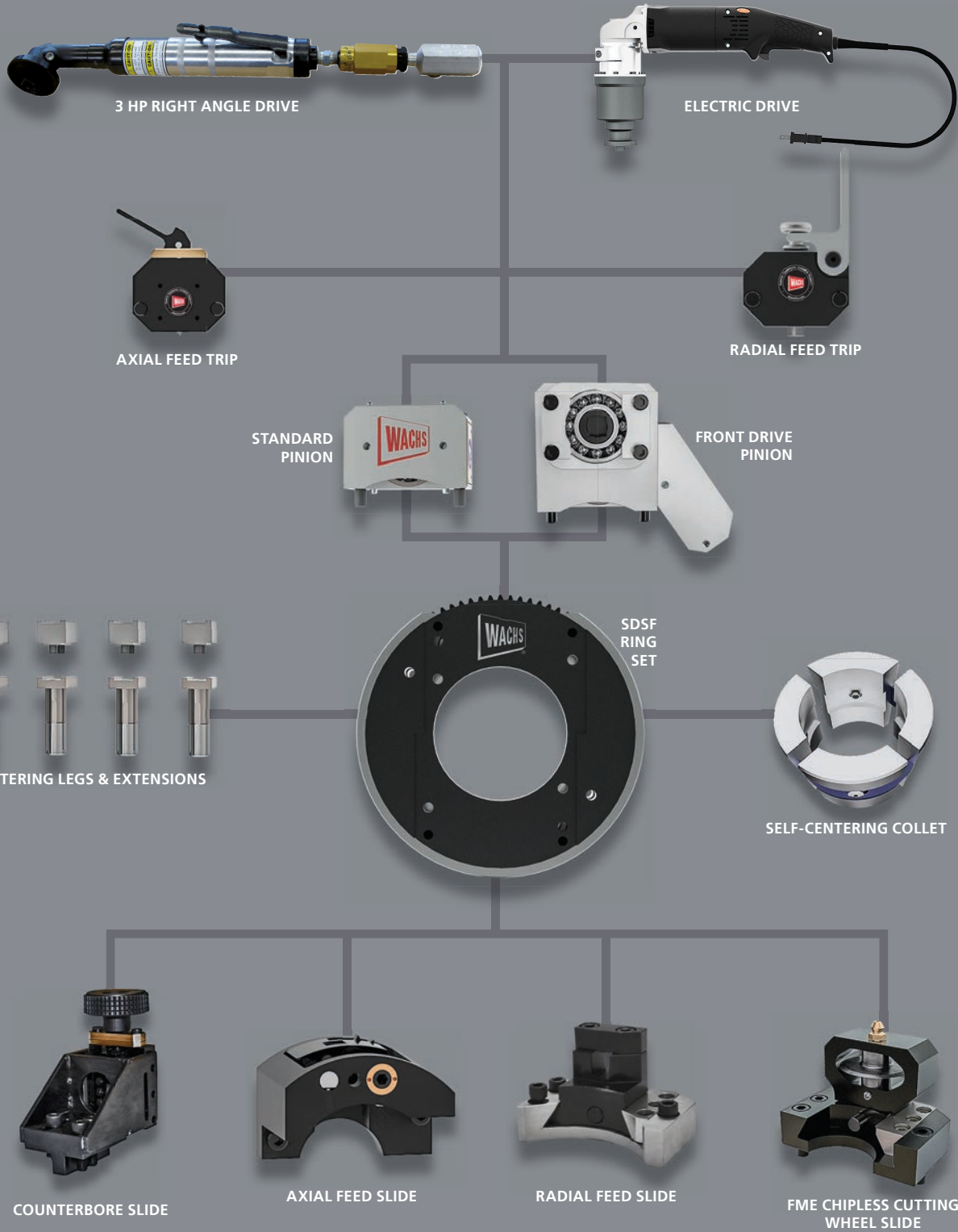
### Optimized for Low Clearance Environments

E.H. Wachs® SDSF Small Diameter Split Frames are the smallest, most compact member of the Wachs split frame family, and are designed for cutting, beveling and counterboring pipe and tubing from OD 0.5in - 6in (DN 15-150). Six models are available in 1in (25.4 mm) increments, with additional sizes by special order.

Like all E.H. Wachs split frame clamshell style machines the SDSF is designed to “split” in half to fit over inline pipe, or can be slipped over open ended pipe. The SDSF serves as the basis of Wachs axial and radial socket weld removal kits that remove the weld filler metal without sacrificing the base material, an important consideration in complex assemblies.



# SDSF Split Frame



**SDSF**



# SDSF Split Frame Overview

## Portable Pipe Cutting & Beveling

- SDSF quickly splits open to mount around the OD of inline pipe
- Machines carbon steel, stainless steel and alloys, e.g. Hastelloy™, Inconel™ and other high-performance materials
- Cuts and bevels up to 0.438in (11.1 mm) wall thickness
- Low clearance design requires minimal space for setup and operation
- Self-squaring pipe clamping system, using either collets or integrated, close tolerance legs with wide feet stability
- Low friction adjustable bearing system provides maximum stability and extended machine life
- Fully enclosed bearing and drive gear system for operational safety
- Infinite motor positioning
- Modular tool slides
- Lever type trip actuation for safety
- Spring loaded axial trip for crash resistance
- Improved radial trip geometry for crash resistance and durability
- Improved bearing adjustment design
- Improved durability in pinion gear bearing arrangement
- Easier assembly and disassembly of frame halves
- Improved sealing for chip exclusion
- Captive fasteners used for all accessories
- Reduced fastener count for simplified inventory. Only 3 hex wrench sizes required to operate machine
- Rings from 1-6in (DN 15-150) can mount with collets. Clamping feet can be used on 2in (DN30) and up

## Small Size, Big Capabilities

The SDSF is ideal anywhere pipe and tube are arrayed in tight places and finds many uses in power generation, oil and gas and the shipbuilding industries. Operating on air or electric power using standard Wachs motors and adapters, the SDSF is part of a complete system that includes a broad range of tool slides and accessories for maximum versatility. As with all E.H. Wachs products, the Small Diameter Split Frame is built with Wachs legendary quality and durability for years of reliable service.

Like all Wachs split frames the SDSF is designed to simultaneously cut and bevel pipe and tube with Wachs parting and beveling tool slides. It's also the basis of Wachs specialized Socket Weld Removal kits, in both axial and radial configurations. The FME (Foreign Material Exclusion) chipless cutting module makes the SDSF the perfect split frame for the high purity market. So while the SDSF is Wachs smallest split frame, it's big in capabilities.

## Socket Weld Removal

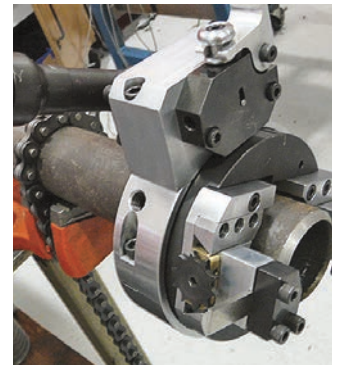
SDSF split frames are the building block of Wachs socket weld removal machines. They're designed to remove couplers and elbows from existing piping systems by machining away the weld material that joins them. This is done without sacrificing the base material – a vital consideration in the repair or modification of complex process systems. These machines designs incorporate all that we've learned from years of socket weld removal experience. They're the easiest to use and most productive socket weld removal machines offered anywhere.

## Foreign Material Exclusion (FME)

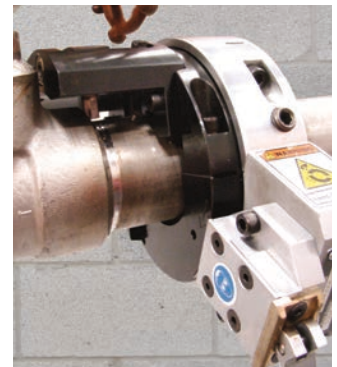
Wachs FME (Foreign Material Exclusion) is a chipless wheel cutting module designed for use with the SDSF. FME is critical in high purity and process applications where the introduction of chip debris cannot be tolerated. Examples include the food, dairy and pharmaceutical industries and the highly controlled power generation field.



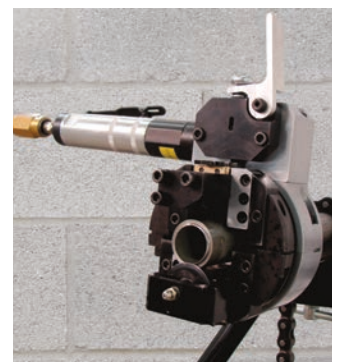
Front Drive Pinion



Bevel Prep

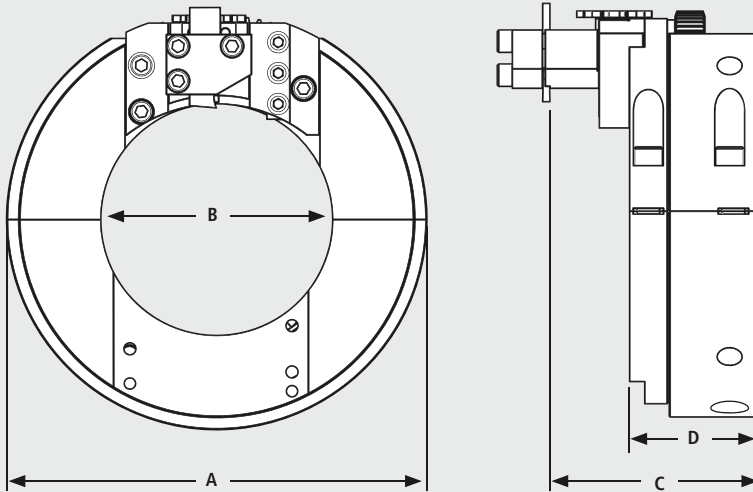


Socket Weld Removal



FME Wheel Cutting

# SDSF Split Frame Specifications



SPECIFICATIONS	SDSF 1.0	SDSF 2.0	SDSF 3.0	SDSF 4.0	SDSF 5.0	SDSF 6.0
Machine Capacity OD	The machine capacity depends on the mounting system and on the operating method.					
"A" Machine OD	5in (127 mm)	5.689in (145 mm)	6.87in (175 mm)	7.815in (199 mm)	8.937in (227 mm)	9.937in (252 mm)
"B" Machine ID	1.563in (40 mm)	2.626in (67 mm)	3.75in (95 mm)	4.752in (121 mm)	5.878in (149 mm)	6.878in (175 mm)
"C" Parting line	3.469in (88 mm)					
"D" Machine thickness	2.531in (64 mm)	2.154in (55 mm)				

## System Function:

Part off, bevel and counterbore pipe and tube; radial and axial socket weld removal; wheel cutting

**Cutting tool surface speed:** 10 m/min, 2in 40 sf/m 4in

**Drive options:** Pneumatic or electric

## Air requirements:

35 ft<sup>3</sup>/min at 90 psi  
(1 m<sup>3</sup>/min at 6.2 BAR)

**Electrical requirements:** 230/120 Volt

**Feed method:** Star wheel

## Feed rate:

Fixed at 0.0031in (0.079 mm) per trip

**Construction:** Alloy steel

**Tool slide:** Radial or axial feed, cut and bevel, counterbore, FME module

**Tool stroke:** 0.468in (11.9 mm)

**Finish:** Hard chrome coating

**Tooling:** Axial or radial socket weld removal tooling, cut/bevel tooling.  
High speed steel or carbide

**Packaging:** Heavy duty carrying case

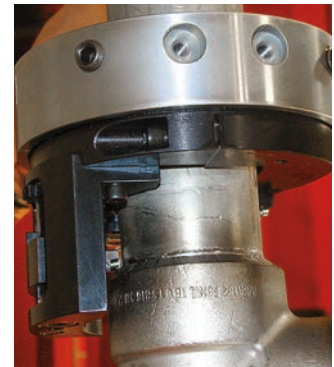
## Optional Equipment

- Pneumatic or electric drive motor
- Genuine Wachs Tooling
- Axial feed tool slide
- Radial feed tool slide set
- Bench mount
- Front drive pinion housing
- Counterbore attachment
- FME tool slide
- Aluminum collet sets
- Clamp pads sets
- Radial socket weld slide

Add frames, slides, collets, collet nut and spanner wrench, or clamping feet to complete machine.



SDSF Counterbore



Axial Socket Weld Removal



SDSF Axial Turning



SDSF Counterbore Bevel



# SDSF Split Frame Kits

## SDSF Socket Weld Removal

For socket weld removal, available as radial or axial feed kits.

### Includes:

- Frame assemblies 1in and 2in (DN 25 and DN 50)
- Axial and/or radial feed socket weld removal tool slides
- Aluminum collets for pipes with Ø:
- 0.5in / 0.75in / 1in / 1.25in / 1.5in / 2in  
(12.7 / 19.05 / 25.4 / 31.75 / 38.1 / 50.8 mm)
- Clamp foot and extension leg kit for 2in (50.8 mm) frame\*
- 1 Air drive
- Spare fastener kit
- Storage case
- Operating hand tools
- Manual

\*Collet only 1in (25.4mm) and below.

ITEM	DRIVETYPE	PIPE OD	CODE	PART #
SDSF Kit "Axial Feed"	Pneumatic	0.5-2in (12.7-50.8 mm)	980 000 029	80-0000-AX
SDSF Kit "Radial Feed"	Pneumatic	0.5-2in (12.7-50.8 mm)	980 000 072	80-0000-RA

## SDSF Split Frame Ring Sets

Add slides, collets or legs\*, drive, collet nut and spanner wrench for complete machine. See individual ring size accessory listings on the following pages.

### Includes:

- Individual Split Frame
- Pinion housing
- Heavy duty, watertight storage / carrying case
- Spare fastener kit
- Hand tools
- Manual

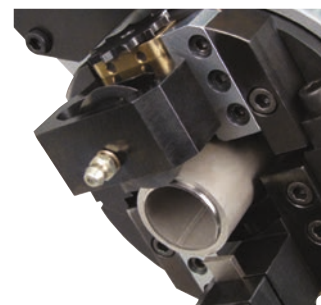
ITEM	PIPE OD	CODE	PART #
SDSF Split Frame 1.0*	1in (25mm)	980 400 010	80-4000-10
SDSF Split Frame 2.0	2in (51mm)	980 400 020	80-4000-20
SDSF Split Frame 3.0	3in (76mm)	980 400 030	80-4000-30
SDSF Split Frame 4.0	4in (102mm)	980 400 040	80-4000-40
SDSF Split Frame 5.0**	5in (127mm)	980 400 050	80-4000-50
SDSF Split Frame 6.0**	6in (152mm)	980 400 060	80-4000-60

\* Collet only 1in (25.4mm) and below.

\*\* Special sizes on request.



Axial Slide for  
Socket Weld Removal



Wheel Cutting Module for  
FME Cutting



Standard Storage Case



Counterbore attachment  
fits all models

# SDSF Split Frame Slides

## SDSF Tool Slide & Trip Assemblies

ITEM	CODE	PART #
Tool slide and trip assemblies for SDSF 1.0		
Tool slide and trip assemblies for SDSF 1.0 Radial feed parting tool slide	980 410 110	80-4101-10
Radial feed beveling tool slide	980 410 210	80-4102-10
Radial feed tool slide trip assembly For SDSF 1.0 to SDSF 6.0	980 410 300	80-4103-00
Radial feed tool slide kit includes: • 1 parting slide • 1 beveling slide • 1 trip assembly	980 510 110	80-5101-10
Radial feed socket weld removal tool slide Used with the SDSF for removal of socket welds, the radial slide requires less axial clearance. The tooling is advanced to the pipe center line (radially) to remove the weld material. Also available as a complete Radial Socket Weld Removal Kit	980 410 010	80-4100-10
Axial feed socket weld removal tool slide Used with the SDSF for removal of socket welds, the axial slide requires less radial clearance. The tooling is advanced axially along the pipe to remove the weld material. Also available as a complete axial socket weld removal kit	980 410 410	80-4104-10
Axial feed tool slide trip assembly For SDSF 1.0 to SDSF 6.0	980 410 500	80-4105-00
Axial feed tool slide kit includes: • 1 axial slide • 1 trip assembly	980 510 210	80-5102-10
Universal counterbore slide Designed for perfect counterboring of the pipe or tube inside diameter, the universal counterbore fits all Wachs SDSF ring set. Utilizes a simple and effective hand advance to precisely control the counterbore. For SDSF 1.0 to SDSF 6.0	980 410 700	80-4107-00
Tool slide and trip assemblies for SDSF 2.0		
Radial feed parting tool slide	980 410 120	80-4101-20
Radial feed beveling tool slide	980 410 220	80-4102-20
Radial feed tool slide trip assembly For SDSF 1.0 to SDSF 6.0	980 410 300	80-4103-0
Radial feed tool slide kit includes: • 1 parting slide • 1 beveling slide • 1 trip assembly	980 510 120	80-5101-20
Radial feed socket weld removal tool slide	980 410 020	80-4100-20
Axial feed socket weld removal tool slide	980 410 420	80-4104-20
Axial feed tool slide trip assembly For SDSF 1.0 to SDSF 6.0	980 410 500	80-4105-00
Axial feed tool slide kit includes: • 1 axial slide • 1 trip assembly	980 510 220	80-5102-20
Universal counterbore slide For SDSF 1.0 to SDSF 6.0	980 410 700	80-4107-00
Tool slide and trip assemblies for SDSF 3.0 & SDSF 4.0		
Radial feed parting tool slide	980 410 140	80-4101-40
Radial feed beveling tool slide	980 410 240	80-4102-40
Radial feed tool slide trip assembly	980 410 300	80-4103-00
Radial feed tool slide kit includes: • 1 parting slide • 1 beveling slide • 1 trip assembly	980 510 140	80-5101-40
Trip assembly	980 410 440	80-4104-40



Radial Socket Weld Removal Slide



Axial Socket Weld Removal Slide



Counterbore Tool Slide



Radial Feed Tool Slide Kit



# SDSF Split Frame Slides & Tooling

## SDSF Tool Slide & Trip Assemblies

ITEM	CODE	PART #
Axial feed tool slide trip assembly For SDSF 1.0 to SDSF 6.0	980 410 500	80-4105-00
Axial feed tool slide kit includes <ul style="list-style-type: none"> <li>• 1 axial slide</li> <li>• 1 trip assembly</li> </ul>	980 510 240	80-5102-40
Universal counterbore slide For SDSF 1.0 to SDSF 6.0	980 410 700	80-4107-00
Tool slide and trip assemblies for SDSF 5.0 and SDSF 6.0		
Radial feed parting tool slide	980 410 160	80-4101-60
Radial feed beveling tool slide	980 410 260	80-4102-60
Radial feed tool slide trip assembly For SDSF 1.0 to SDSF 6.0	980 410 300	80-4103-00
Radial feed tool slide kit includes <ul style="list-style-type: none"> <li>• 1 parting slide</li> <li>• 1 beveling slide</li> <li>• 1 trip assembly</li> </ul>	980 510 160	80-5101-60
Axial feed socket weld removal tool slide	980 410 460	80-4104-60
Axial feed tool slide trip assembly For SDSF 1.0 to SDSF 6.0	980 410 500	80-4105-00
Axial feed tool slide kit includes <ul style="list-style-type: none"> <li>• 1 axial slide</li> <li>• 1 trip assembly</li> </ul>	980 510 260	80-5102-60
FME (foreign material exclusion) slide	980 410 660	80-4106-60



FME (Foreign Material Exclusion) Slide



Parting tooling standard

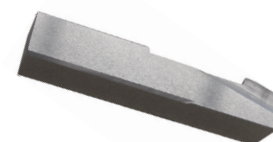
## SDSF Tooling

Cutting, bevel, counterbore, radial and axial socket weld removal

ITEM	DIMENSIONS	LENGTH	CODE	PART #
Parting Tooling				
Low clearance	1/8 x 1/2in (3.2 x 12.7 mm)	1.63in (41.4 mm)	980 700 101	80-7001-01
Standard		2.13in (54.1 mm)	980 700 102	80-7001-02
Extended reach		2.63in (66.8 mm)	980 700 103	80-7001-03
Bevel Tooling				
Standard 37.5°	3/8 x 1/2in (9.5 x 12.7 mm)	2.13in (54.1 mm)	952 710 020	52-710-02
Extended reach 37.5°		2.63in (66.8 mm)	952 710 030	52-710-03
Extended reach 30°		2.67in (67.8 mm)	952 705 010	52-705-01
Extended reach 45°			952 705 030	52-705-03
Low clearance 37.5°, outside		1.63in (41.4 mm)	980 700 801	80-7008-01
Standard 37.5°, outside		2.13in (54.1 mm)	980 700 802	80-7008-02
Universal Counterbore Tool				
Counterbore tool taper 4:1 (14°)	—	—	980 700 301	80-7003-01
Socket Weld Removal Tooling, Radial Feed				
Standard, radial	—	—	980 700 601	80-7006-01
Extended reach, radial	—	—	980 700 602	80-7006-02
Low clearance , radial	—	—	980 700 603	80-7006-03
Socket Weld Removal Tooling, Axial Feed				
Standard, axial	3/8 x 3/8in (9.5 x 9.5 mm)	2.0in (50.8 mm)	980 700 702	80-7007-02
Standard, HSS tool bit, axial For single point facing, beveling and flange facing For use with EP 424, LCSF/3, FF, SWR and SDSF machines			952 701 010	52-701-01
Standard, axial. Offset dogleg. With 1in (25.4 mm) extension		1.5in (38.1 mm)	952 701 020	52-701-02
Standard, carbide, axial		1.0in (25.4 mm)	952 702 010	52-702-01
Extended reach, axial		2.5in (63.5 mm)	980 700 703	80-7007-03
Extended reach, axial. Offset dogleg. With 1 1/4in (31.8 mm) extension			952 701 030	52-701-03
FME chipless cutting wheel			980 005 300	80-0053-00



Bevel tooling extended reach 30°



Counterbore tool taper 4:1



FME cutting wheel

# SDSF Split Frame Accessories

## SDSF Aluminum Collets & Collet Accessories

Please specify when ordering customized tools:

Pipe/tube true OD, material (aluminum, delrin, stainless), collet size markings

Collets require collet nut and spanner wrench when purchased with individual SDSF machine.

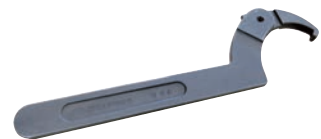
ITEM	CODE	PART #
Customized aluminum collets for SDSF 1.0-SDSF 3.0	ON REQUEST	ON REQUEST
Customized aluminum collets for SDSF 4.0-SDSF 6.0	ON REQUEST	ON REQUEST
Collet kit for SDSF 1.0 Includes: <ul style="list-style-type: none"> <li>Aluminum collets for pipe OD: 0.5in, 0.75in, 1in (12.7, 19.05, 25.4 mm)</li> <li>1 collet nut</li> <li>1 spanner wrench</li> </ul>	980 520 110	80-5201-10
Collet kit for SDSF 2.0 Includes: <ul style="list-style-type: none"> <li>Aluminum collets for 1.25in, 1.5in, 2in (31.75, 38.1, 50.8 mm) Pipe OD</li> <li>1 collet nut</li> <li>1 spanner wrench</li> </ul>	980 520 120	80-5201-20
Collet kit for SDSF 3.0 Includes: <ul style="list-style-type: none"> <li>Aluminum collets for 2in, 2.5in, 3in (50.8, 63.5, 76.2 mm) Pipe OD</li> <li>1 collet nut</li> <li>1 spanner wrench</li> </ul>	980 520 130	80-5201-30
Collet kit for SDSF 4.0 Includes: <ul style="list-style-type: none"> <li>Aluminum collets for 3in, 3.5in, 4in (76.2, 88.9, 101.6 mm) Pipe OD</li> <li>1 collet nut</li> <li>1 spanner wrench</li> </ul>	980 520 140	80-5201-40
Collet kit for SDSF 5.0 Includes: <ul style="list-style-type: none"> <li>Aluminum collets for pipe OD: 4in, 5in (101.6, 127.0 mm)</li> <li>1 collet nut</li> <li>1 spanner wrench</li> </ul>	980 520 150	80-5201-50
Collet kit for SDSF 6.0 Includes: <ul style="list-style-type: none"> <li>Aluminum collets for pipe OD: 5in, 6in (127.0, 152.4 mm)</li> <li>1 collet nut</li> <li>1 spanner wrench</li> </ul>	980 520 160	80-5201-60
Collet nut for SDSF 1.0	980 000 710	80-0007-10
Collet nut for SDSF 2.0	980 000 720	80-0007-20
Collet nut for SDSF 3.0	980 000 730	80-0007-30
Collet nut for SDSF 4.0	980 000 740	80-0007-40
Collet nut for SDSF 5.0	980 000 750	80-0007-50
Collet nut for SDSF 6.0	980 000 760	80-0007-60
Spanner wrench for SDSF 1.0 to SDSF 2.0	990 800 780	90-800-78
Spanner wrench for SDSF 3.0 to SDSF 4.0	990 800 790	90-800-79
Spanner wrench for SDSF 5.0 to SDSF 6.0	990 800 800	90-800-80



Aluminum Collet



Collet Nut for SDSF



Spanner Wrench for SDSF



# SDSF Split Frame Accessories

## SDSF Motors & Miscellaneous Accessories

ITEM	1.0	2.0	3.0	4.0	5.0	6.0	CODE	PART #
Clamp foot and extension leg set Includes: 4 each clamp foot 80 4001 00 4 each extension legs 0.31in (7.9 mm) 4 each extension legs 0.56in (14.2 mm)		x	x	x	x	x	980 500 100	80-5001-00
Universal right angle air drive motor	x	x	x	x			980 400 400	80-4004-00
Electric motor For SDSF 120V 1500W	x	x	x	x	x	x	900 002 015	80-4005-01
Electric motor For SDSF 230V 1500W	x	x	x	x	x	x	900 002 002	80-4006-01
Front drive pinion housing assembly	x						980 400 310	80-4003-10
		x					980 400 320	80-4003-20
			x				980 400 330	80-4003-30
				x			980 400 340	80-4003-40
					x		980 400 350	80-4003-50
						x	980 400 360	80-4003-60
Universal spare fastener kit.*	x	x	x	x	x	x	980 550 000	80-5500-00
Axial feed tool slide trip assembly	x	x	x	x	x	x	980 400 330	80-4003-30
Universal manual	x	x	x	x	x	x	980 626 010	80-MAN-01
Bevel slide cover assembly. For use with outside bevel tooling	x	x	x	x	x	x	980 410 800	80-4108-00

\* Kit BOM's subject to change based on current production configuration

## Cutting Lubrication

Water soluble, fully synthetic cooling fluid that extends the life of tool bits. This biodegradable, non-hazardous, well corrosion resistant mixture was developed conforming to drinking water requirements according to DVGW work sheet W521 (thread cutting compounds for drinking water installations)

DESCRIPTION	VERSION	WEIGHT	CODE
Cutting lubrication KSS-TOP	Pump sprayer with 500 ml	1.39 lb (630 g)	790 060 226
Cutting lubrication KSS-TOP refill canister	Canister with 10 l	24.25 lb (11 kg)	790 060 227



Clamp Foot & Extension Leg Set



Universal Right Angle Pneumatic Drive Motor

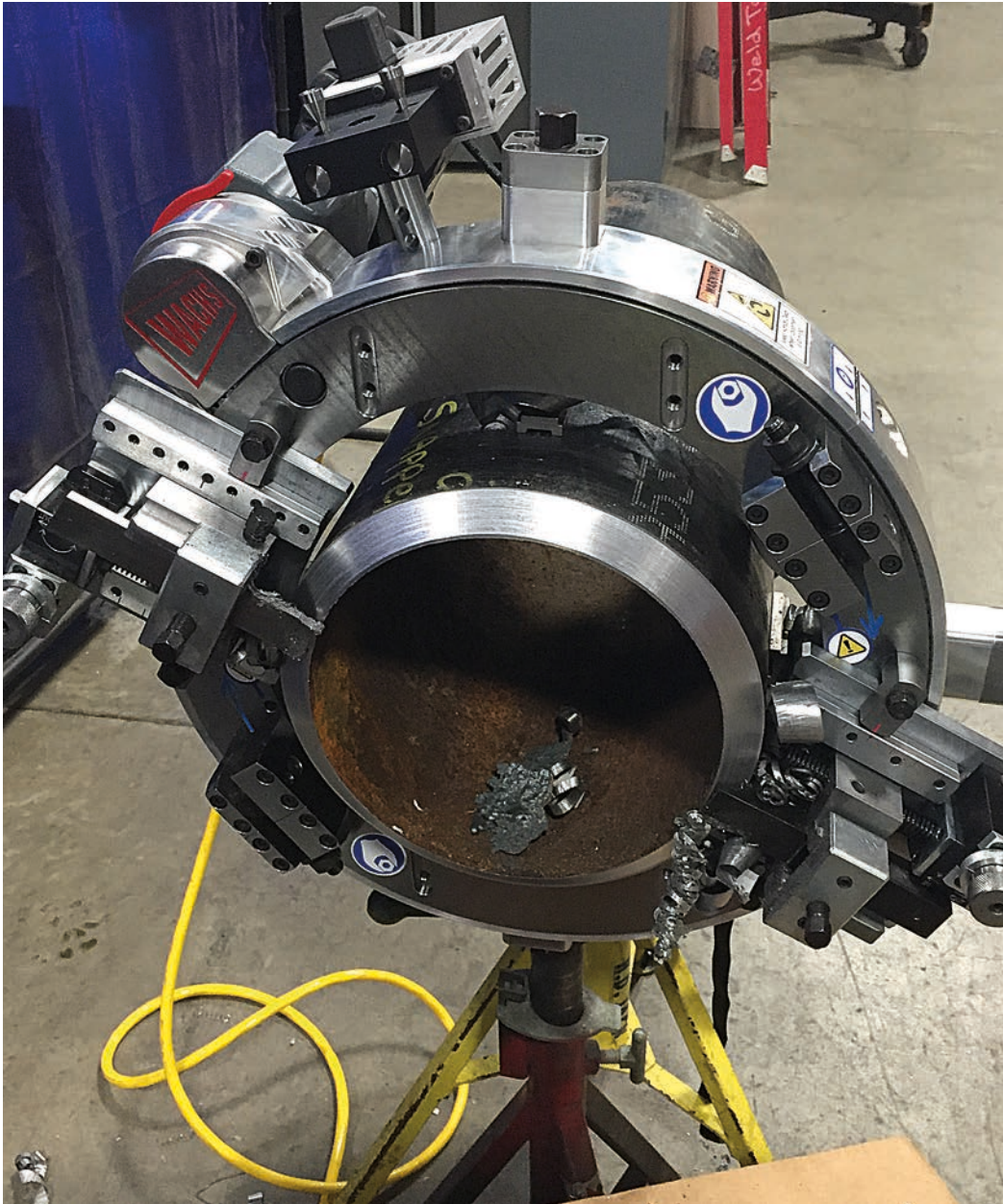


Electric Motor for SDSF

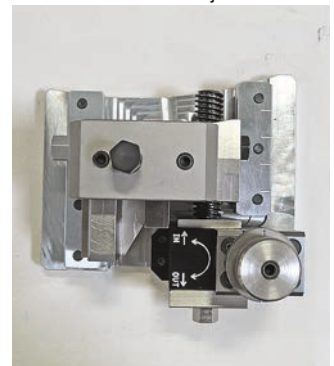


Cutting lubrication KSS-TOP

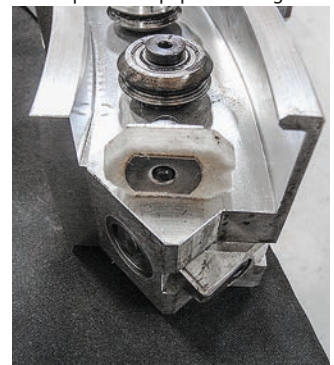
# DynaPrep MDSF Split Frame



Slides feature Rapid Adjust and Micro Adjust



Slides now accept 1in (25.4 mm) square & all popular tooling

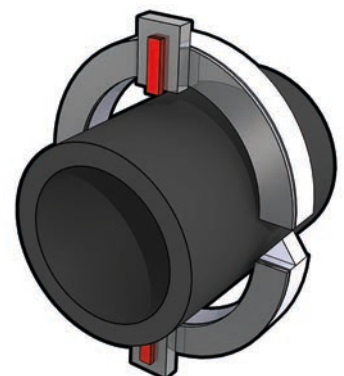


V-Lock ring mating surface resists force distortion

## Complete Machining System

E.H. Wachs DynaPrep® MDSF split frame redefines the category of cold cutting machine tools for pipe and vessels. Designed for cutting, beveling, facing, counterboring, and flange facing, it's offered in 16 standard models for popular nominal pipe sizes ranging from 2-60in OD (DN50-1500), with each machine covering a generous 6in range.

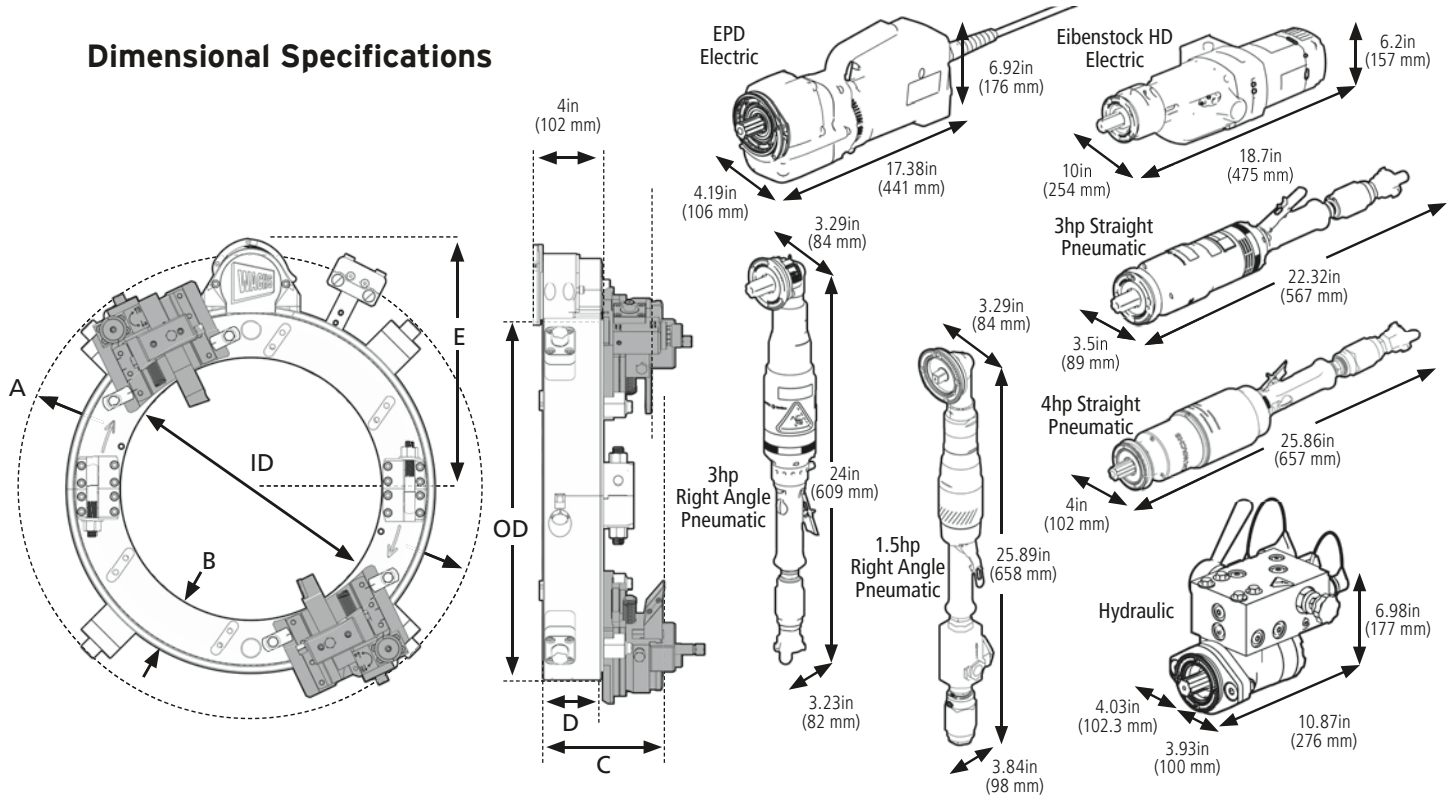
Engineered to be powerful, strong and lightweight, DynaPrep offers unmatched form tooling capability on heavy wall pipe including high alloy material. Sold as complete kits or individual components the DynaPrep MDSF is available with remote control options in your choice of pneumatic, hydraulic or electric drive.





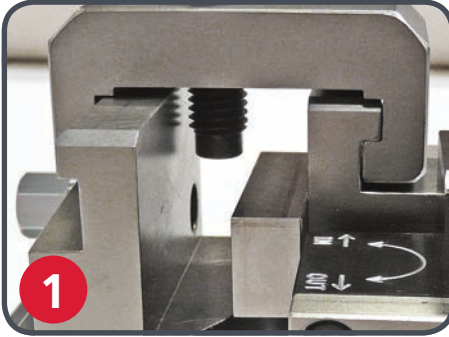
# DynaPrep MDSF Specifications

## Dimensional Specifications



MODEL	ID	OD	A ROTATING PARTS DIAMETER			B FRAME THICKNESS	C CUT LINE TO REAR		D FRAME DEPTH	E PINION RADIUS		PRODUCT WEIGHT		
			1.5IN SLIDES	2.5IN SLIDES	5.5IN SLIDES		MDSF TOOLING	LEGACY TOOLING		LEGACY	STANDARD	HALF RING	FULL RING	RING & 2.5IN SLIDES
206	7.25in (184 mm)	12.65in (321 mm)	17.86in (454 mm)	20.2in (513 mm)		2.7in (69 mm)	5.375in (136.5 mm)	5.125in (130.2 mm)	3in (76.2 mm)	8.99in (228.3 mm)	9.49in (241 mm)	28 lb (12.7 kg)	54.5 lb (24.7 kg)	74.9 lb (34 kg)
408	9.25in (235 mm)	14.53in (369 mm)	19.8in (503 mm)	22.16in (563 mm)		2.64in (67 mm)				9.99in (253.7 mm)	10.49in (266.4 mm)	31 lb (14.1 kg)	57.5 lb (26.1 kg)	77.9 lb (35.3 kg)
610	11.25in (286 mm)	16.5in (419 mm)	21.76in (553 mm)	24.12in (613 mm)		2.625in (67 mm)				10.99in (279.1 mm)	11.49in (291.8 mm)	37 lb (16.8 kg)	70 lb (31.8 kg)	90.4 lb (41 kg)
612	13.25in (337 mm)	18.5in (470 mm)	23.74in (603 mm)	26.1in (663 mm)	32.04in (814 mm)	2.625in (67 mm)				11.99in (304.5 mm)	12.49in (317.2 mm)	41 lb (18.6 kg)	77 lb (34.9 kg)	97.4 lb (44.2 kg)
814	14.65in (372 mm)	19.9in (506 mm)	25.16in (639 mm)	27.54in (700 mm)	33.48in (850 mm)	2.65in (67 mm)				12.69in (322.3 mm)	13.19in (335 mm)	44 lb (20 kg)	81 lb (36.7 kg)	101.4 lb (46 kg)
1016	16.65in (423 mm)	21.95in (558 mm)	27.22in (691 mm)	29.6in (752 mm)	35.54in (903 mm)	2.65in (67 mm)				13.69in (347.7 mm)	14.19in (360.4 mm)	47 lb (21.3 kg)	88 lb (39.9 kg)	108.4 lb (49.2 kg)
1218	18.65in (474 mm)	23.95in (608 mm)	29.28in (744 mm)	31.66in (804 mm)	37.6in (955 mm)	2.65in (67 mm)				14.69in (373.1 mm)	15.19in (385.8 mm)	52 lb (23.6 kg)	97 lb (44 kg)	117.4 lb (53.3 kg)
1420	20.65in (525 mm)	25.95in (659 mm)	31.3in (795 mm)	33.68in (856 mm)	39.64in (1007 mm)	2.65in (67 mm)				15.69in (398.5 mm)	16.19in (411.2 mm)	54 lb (24.5 kg)	103 lb (46.7 kg)	123.4 lb (56 kg)
1824	25.05in (636 mm)	30.35in (771 mm)	35.78in (909 mm)	38.16in (969 mm)	44.14in (1121 mm)	2.65in (67 mm)				17.89in (454.4 mm)	18.39in (467.1 mm)	60.5 lb (27.4 kg)	116.5 lb (52.8 kg)	136.9 lb (62.1 kg)
2228	29.05in (738 mm)	35.55in (903 mm)	39.94in (1015 mm)	42.32in (1075 mm)	48.3in (1227 mm)	2.65in (67 mm)	5.625in (142.9 mm)	5.375in (136.5 mm)	3.25in (82.6 mm)	20.49in (520.4 mm)	20.99in (533.1 mm)	92 lb (41.7 kg)	174.5 lb (79.2 kg)	194.9 lb (88.4 kg)
2632	33.05in (840 mm)	39.55in (1005 mm)	43.92in (1116 mm)	46.3in (1176 mm)	52.28in (1328 mm)	2.65in (67 mm)				22.49in (571.2 mm)	22.99in (583.9 mm)	101 lb (45.8 kg)	191.5 lb (86.9 kg)	211.9 lb (96.1 kg)
3036	37.65in (956 mm)	44.15in (1121 mm)	48.56in (1233 mm)	50.94in (1294 mm)	56.94in (1446 mm)	3.25in (83 mm)				24.79in (629.7 mm)	25.29in (642.4 mm)	115 lb (52.2 kg)	218 lb (98.9 kg)	238.4 lb (108.1 kg)
3642	43.65in (1109 mm)	50.15in (1274 mm)	54.54in (1385 mm)	56.94in (1446 mm)	62.92in (1598 mm)	3.25in (83 mm)				27.79in (705.9 mm)	28.29in (718.6 mm)	127 lb (57.6 kg)	246 lb (111.6 kg)	266.4 lb (120.8 kg)
4248	49.65in (1261 mm)	56.15in (1426 mm)	60.52in (1537 mm)	62.92in (1598 mm)	68.9in (1750 mm)	3.25in (83 mm)				30.79in (782.1 mm)	31.29in (794.8 mm)	139.5 lb (63.3 kg)	271 lb (122.9 kg)	291.4 lb (132.2 kg)
4854	56.05in (1424 mm)	63.75in (1619 mm)	66.9in (1699 mm)	69.3in (1760 mm)	75.3in (1913 mm)	3.25in (83 mm)				34.49in (876 mm)	34.99in (888.7 mm)	174 lb (78.9 kg)	344 lb (156 kg)	364.4 lb (165.3 kg)
5460	62.05in (1576 mm)	69.75in (1772 mm)	72.9in (1852 mm)	75.3in (1913 mm)	81.28in (2065 mm)	3.25in (83 mm)				38.49in (977.6 mm)	38.99in (990.3 mm)	190 lb (86.2 kg)	375 lb (170.1 kg)	395.4 lb (179.4 kg)

# DynaPrep MDSF Features



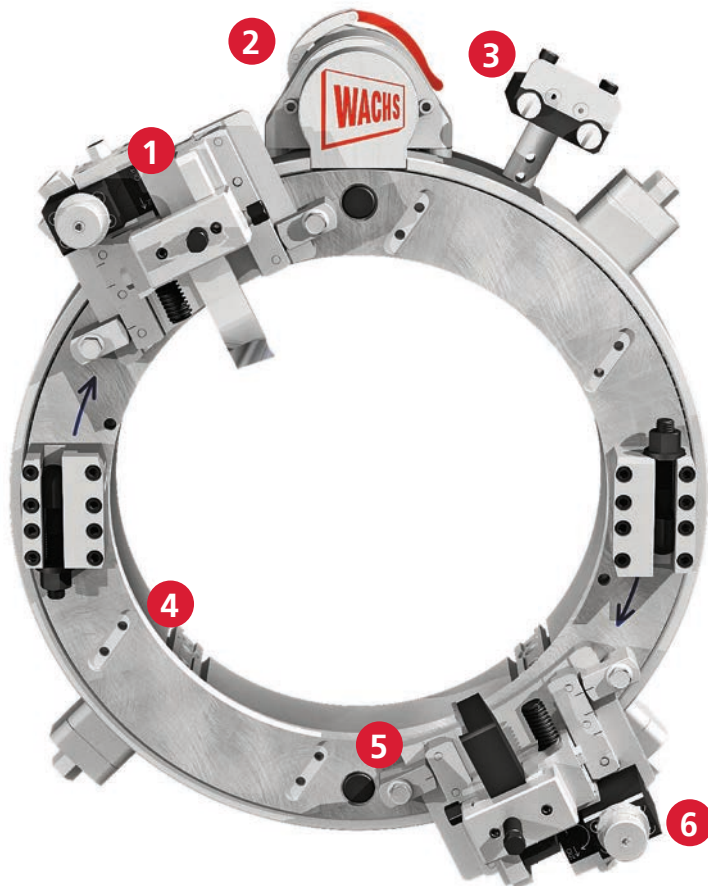
1 Accepts most popular tooling sizes including 1in (25.4 mm) square & 1/2x 3/4in (12.7 x 19 mm)



2 Gear design withstands force from all drive types: Pneumatic, Hydraulic & Electric

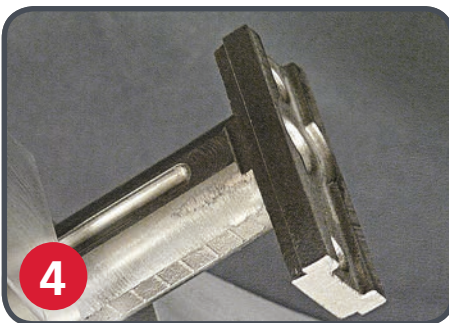


3 Anti crash ramp on tool slides retracts dual trips if mispositioned



## DynaPrep MDSF

- More rugged design with vastly increased form tooling capability
- Gear design withstands force from larger more powerful drive motors
- Ring sizes 20in and below use four clamping feet for squaring
- V-Lock frame mating surfaces feature angled captivated bolt and keyway
- Common cross sectional height for tool slide commonality
- Low sectional height fits in narrow or confined operating envelopes
- Aluminum fixed ring for portability, steel rotating ring for strength
- Advanced heat treating and anti-corrosion coatings for enhanced durability
- Dual row v-bearing construction for precision and durability
- V-bearings run in a unique hardened steel dual raceway
- Dual raceway design evenly distributes force loading no matter the direction



4 Ring sizes 20in & below use four clamping feet for squaring



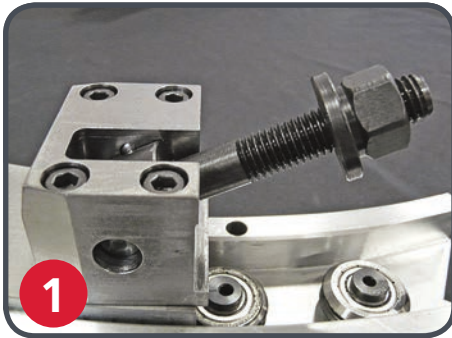
5 Captivated, swing-away toe clamp for easier slide mounting



6 Rapid Adjust and Micro Adjust knobs provide greater precision during setup & operation



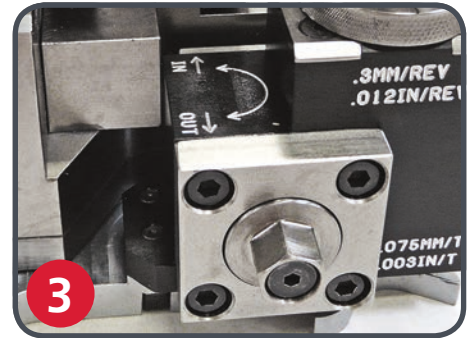
# DynaPrep MDSF Features



Swing bolts allow for fast positioning over inline pipe



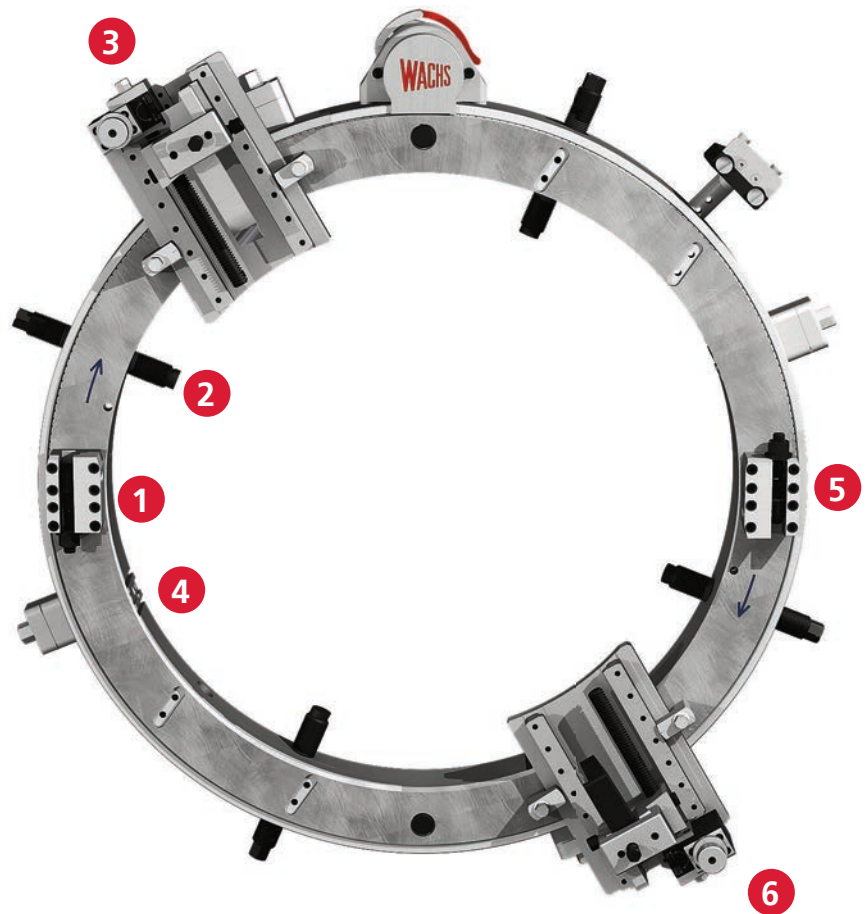
Screw feet reverse and accept push-in buttons & pins



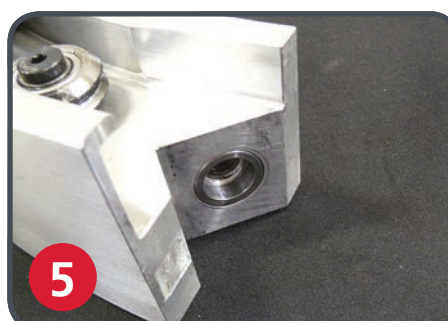
Rapid Adjust feature speeds positioning of tooling

## DynaPrep MDSF

- Only two sockets, 1/2in (13 mm) and 3/4in (19 mm), needed for setup and operation
- Ring sizes 24in (610 mm) up to 60in (1500mm) use eight clamping feet for squaring and stability
- Indexed, squaring clamping leg design features a 2in (50 mm) stroke
- Single clamp pad extension covers a 6in (152 mm) pipe diameter range
- Clamp pads mount axially without removing the machine from the pipe
- U shaped feet pair with push in buttons and points for miter or elbow mounting
- Screw feet reverse for internal clamping, also accept push in buttons and points
- All models feature replaceable felt wiper for lubrication and to capture chip debris
- Swing bolts allow for fast positioning over inline pipe



Clamp pads mount axially without removing the machine from the pipe

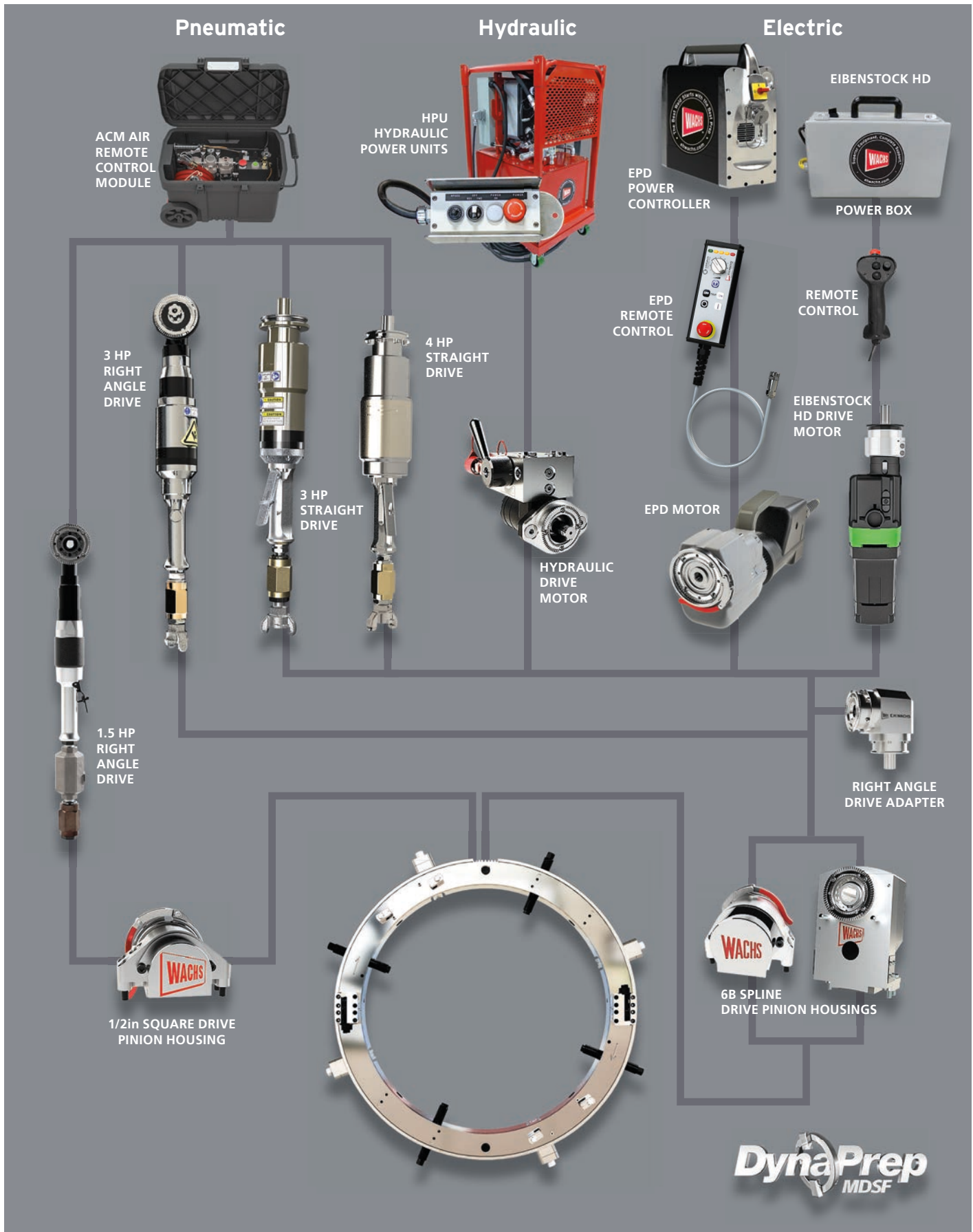


Patent pending V Lock ring mating surfaces are easier to join & stronger



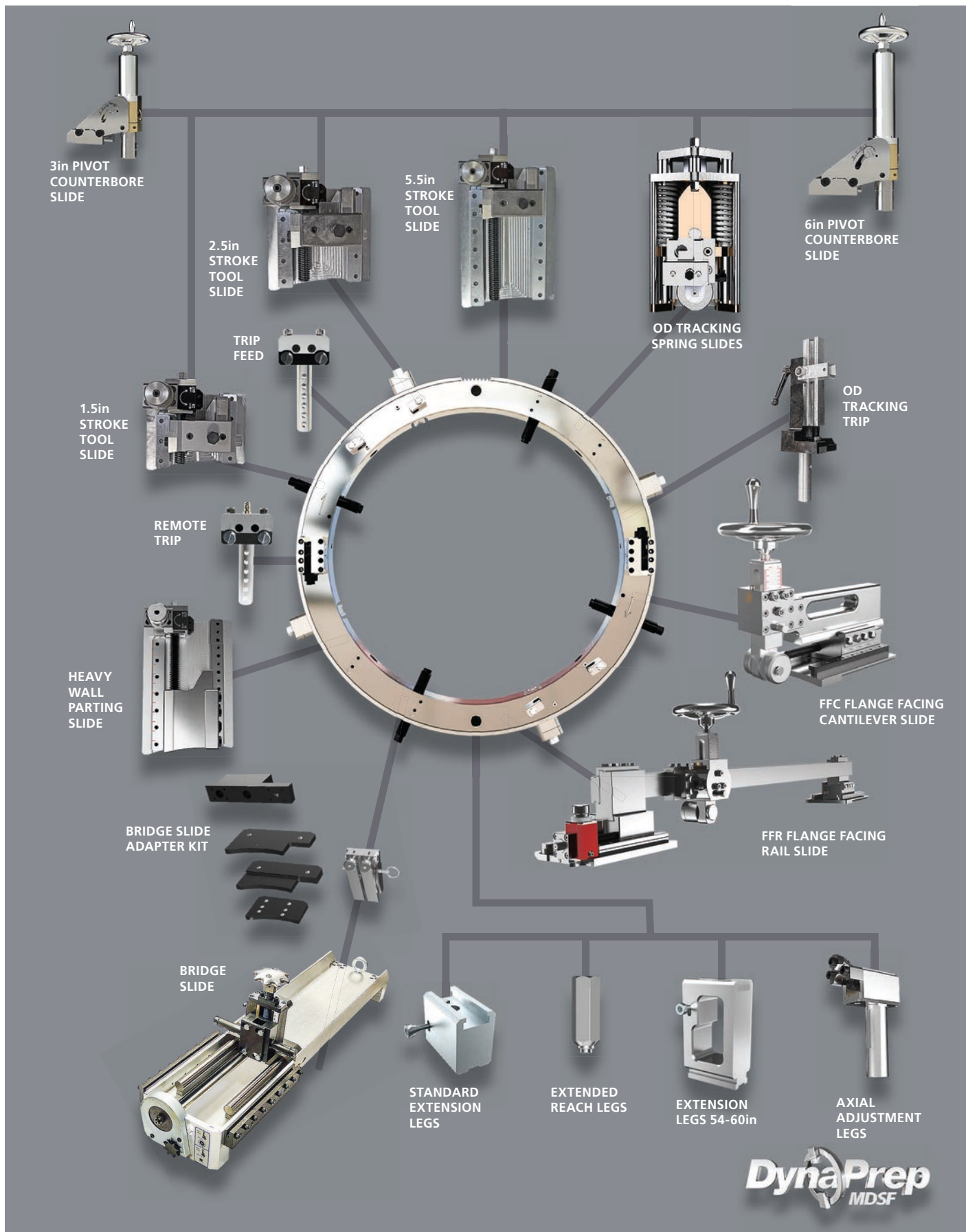
No-time starwheel tool advance is designed to work with the anti-crash trip

# DynaPrep MDSF Split Frame





# DynaPrep MDSF Split Frame





# DynaPrep MDSF Pneumatic Kits

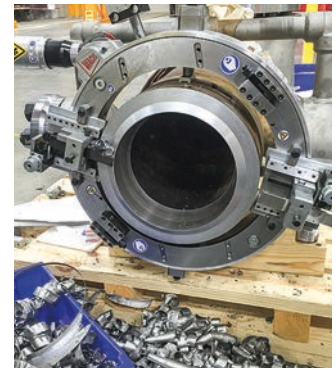
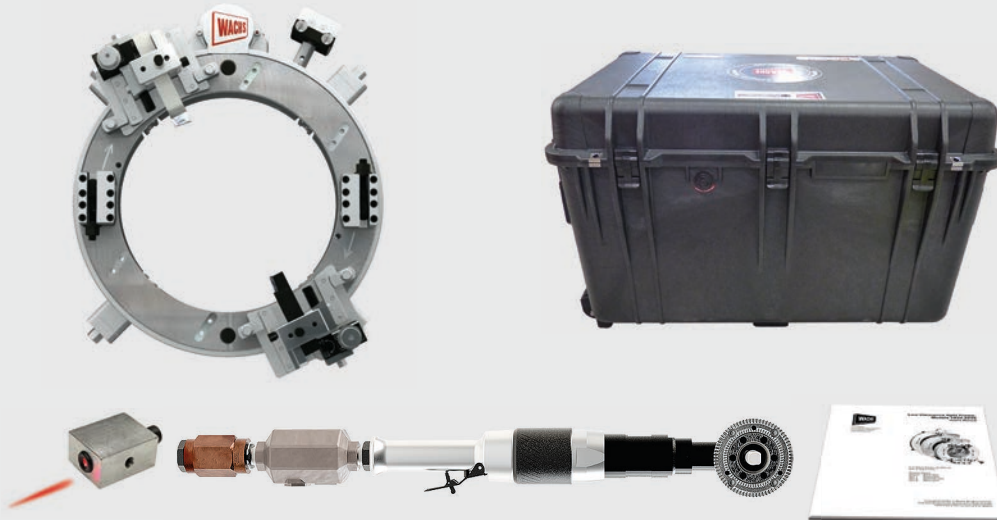
## 1.5 hp Pneumatic Right Angle Drive Kits

The DynaPrep MDSF 1.5hp Right Angle Pneumatic Kit provides everything needed to cut and bevel, including sample tooling. Less expensive and easier than ordering components ala carte, the 1.5 hp drive motor is suitable for machine sizes up to 14in (356 mm) depending on the pipe material. Highly upgradeable, this kit is lightweight and portable and includes the Legacy pinion housing for 1/2in drive..

All E.H. Wachs pneumatic drives feature our tool-less quick mount system with positive face gear engagement. As part of a complete machining system, the MDSF's modular design allows different modules to extend its capabilities into multiple applications including flange facing, casing cutting, trepanning and deep counterboring. Like all E.H. Wachs split frames it comes complete with a heavy duty storage case to protect your machine tool investment.

### Each Kit Includes:

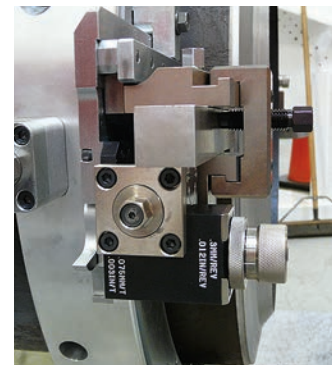
- Legacy 1/2in Drive Pinion Set
- Rapid Adjust Indexed 1.5in Stroke Tool Slide
- Indexing Trip Assembly
- Right Angle 1.5 hp Air Motor w/ 1/2in square drive
- 4 Clamping Leg Extension Pads
- Parting Tool & DuoEdge 37 1/2° Bevel Tool Insert & Holder
- Laser Alignment Kit
- Spare Fastener Kit
- Operating Hand Tool Kit
- Storage Case
- Operating Manual



DynaPrep MDSF precision cutting & beveling



Fast, tool-free drive motor mounting



Includes state-of-the-art tool slides



Includes heavy duty case

DESCRIPTION	MODEL	PIPE CAPACITY	PART #	CE VERSION #
DynaPrep MDSF 6in 1.5hp Pneumatic Kit	MDSF 206	2-6in (51-152 mm)	69-5002-06	69-5003-06
DynaPrep MDSF 8in 1.5hp Pneumatic Kit	MDSF 408	4-8in (102-203 mm)	69-5002-08	69-5003-08
DynaPrep MDSF 10in 1.5hp Pneumatic Kit	MDSF 610	6-10in (152-254 mm)	69-5002-10	69-5003-10
DynaPrep MDSF 12in 1.5hp Pneumatic Kit	MDSF 612	6-12in (152-305 mm)	69-5002-12	69-5003-12
DynaPrep MDSF 14in 1.5hp Pneumatic Kit	MDSF 814	8-14in (203-356 mm)	69-5002-14	69-5003-14

# DynaPrep MDSF Pneumatic Kits

## 3 hp Pneumatic Drive Kits

The DynaPrep MDSF 3hp Right Angle Pneumatic Kit and 3hp Pneumatic Straight Drive Kits provide everything needed to cut and bevel right out of the box, including sample tooling. Less expensive and easier than ordering components ala carte, the 3hp drive motors are suitable for all machine sizes up to our largest 60in (1524 mm). Like all E.H. Wachs split frame kits, these kits come complete with a heavy duty storage case to protect your machine tool investment. Highly upgradeable, these kits feature the versatile 2.5in stroke tool slides on sizes up to 48in, and 5.5in stroke tool slides on the two larger ring sizes. All machines in this group offer a large range of optional tool slides.

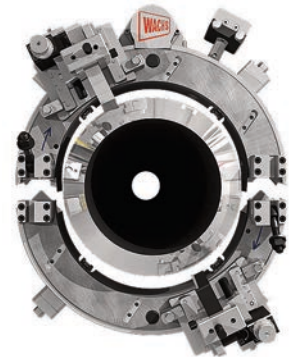
All E.H. Wachs pneumatic drives feature our tool-less quick mount system with positive face gear engagement. As part of a complete machining system, the MDSF's modular design allows different modules to extend its capabilities into multiple applications including flange facing, casing cutting, trepanning and deep counterboring.

### Each Kit Includes:

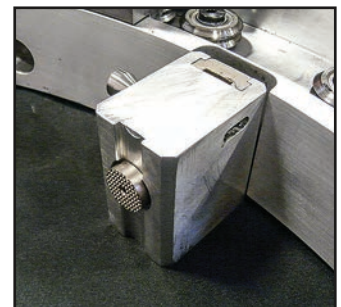
- Rotating Ring & Drive Pinion Set
- Tool Slides:  
Rapid Adjust 2.5in Stroke (2-48in)  
Rapid Adjust 5.5in Stroke (54-60in)
- Indexing Trip Assembly
- 3 hp Pneumatic Motor with Handle
- ATM Air Treatment Module
- Parting Tool & DuoEdge 37 1/2° Bevel Tool Insert & Holder
- Laser Alignment Kit
- Spare Fastener Kit
- Operating Hand Tools
- Storage Case
- Operating Manual



3 hp DynaPrep MDSF Pneumatic Kit includes right angle or straight drive



Splits to mount around inline pipe



Leg extensions mount without removing machine from pipe

DESCRIPTION	CAPACITY	RIGHT ANGLE KIT PART #	STRAIGHT DRIVE KIT PART #
MDSF 206 3hp Pneumatic Kit	2-6in (51-152 mm)	69-5000-06*	69-5006-06
MDSF 408 3hp Pneumatic Kit	4-8in (102-203 mm)	69-5000-08*	69-5006-08
MDSF 610 3hp Pneumatic Kit	6-10in (152-254 mm)	69-5000-10*	69-5006-10
MDSF 612 3hp Pneumatic Kit	6-12in (152-305 mm)	69-5000-12*	69-5006-12
MDSF 814 3hp Pneumatic Kit	8-14in (203-356 mm)	69-5000-14*	69-5006-14
MDSF 1016 3hp Pneumatic Kit	10-16in (254-406 mm)	69-5000-16*	69-5006-16
MDSF 1218 3hp Pneumatic Kit	12-18in (305-457 mm)	69-5000-18*	69-5006-18
MDSF 1420 3hp Pneumatic Kit	14-20in (356-508 mm)	69-5000-20*	69-5006-20
MDSF 1824 3hp Pneumatic Kit	18-24in (457-610 mm)	69-5000-24*	69-5006-24
MDSF 2228 3hp Pneumatic Kit	22-28in (559-711 mm)	69-5000-28*	69-5006-28
MDSF 2632 3hp Pneumatic Kit	26-32in (660-813 mm)	69-5000-32*	69-5006-32
MDSF 3036 3hp Pneumatic Kit	30-36in (762-914 mm)	69-5000-36*	69-5006-36
MDSF 3642 3hp Pneumatic Kit	36-42in (914-1067 mm)	69-5000-42*	69-5006-42
MDSF 4248 3hp Pneumatic Kit	42-48in (1067-1219 mm)	69-5000-48*	69-5006-48
MDSF 4854 3hp Pneumatic Kit	48-54in (1219-1372 mm)	69-5000-54*	69-5006-54
MDSF 5460 3hp Pneumatic Kit	54-60in (1372-1524 mm)	69-5000-60*	69-5006-60

\*Call for CE version



# DynaPrep MDSF Pneumatic Kits

## 4 hp Pneumatic Straight Drive Kits

The DynaPrep MDSF 4hp Pneumatic Kit provides everything needed to cut and bevel right out of the box, including sample tooling. Less expensive and easier than ordering components ala carte, the powerful 4hp drive motor is suitable for all machine sizes up to our largest 60in (1524 mm). Highly upgradeable, this kit features the versatile 2.5in stroke tool slides on sizes up to 48in, and 5.5in stroke tool slides on the two larger ring sizes. All machines in this group offer a large range of optional tool slides.

All E.H. Wachs pneumatic drives feature our tool-less quick mount system with positive face gear engagement. An optional right angle adapter is available for use with the straight drive motor if required. As part of a complete machining system, the modular design of the MDSF allows different modules to extend its capabilities to include multiple applications such as flange facing, casing cutting, trepanning, and deep counterboring. Like all E.H. Wachs split frames it comes complete with a heavy duty storage case to protect your machine tool investment.

### Each Kit Includes:

- Rotating Ring & Drive Pinion Set
- Tool Slide sets:  
Rapid Adjust 2.5in Stroke (2-48in)  
Rapid Adjust 5.5in Stroke (54-60in)
- Indexing Trip Assembly
- 4 hp Straight 6B Spline Pneumatic Drive Motor with Handle
- ATM Air Treatment Module
- Parting Tool & DuoEdge 37 1/2° Bevel Tool Insert & Holder
- Laser Alignment Kit
- Spare Fastener Kit
- Operating Hand Tools
- Storage Case
- Operating Manual

MODEL	PIPE CAPACITY	WEIGHT	DIMENSIONS WITHOUT ACCESSORIES	PART #	CE MODEL #
MDSF 612 4 hp Pneumatic Kit	6-12in (152-305mm)	135lb (61kg)	12in x 32in x 21in	69-5001-12	69-5005-12
MDSF 814 4 hp Pneumatic Kit	8-14in (203-356mm)	141lb (64kg)	24in x 32in x 20in	69-5001-14	69-5005-14
MDSF 1016 4 hp Pneumatic Kit	10-16in (254-406mm)	165lb (75kg)	19in x 42in x 24in	69-5001-16	69-5005-16
MDSF 1218 4 hp Pneumatic Kit	12-18in (305-457mm)	175lb (79kg)	24in x 32in x 20in	69-5001-18	69-5005-18
MDSF 1420 4 hp Pneumatic Kit	14-20in (356-508mm)	193lb (88kg)	24in x 32in x 20in	69-5001-20	69-5005-20
MDSF 1824 4 hp Pneumatic Kit	18-24in (457-610mm)	499lb (226kg)	24in x 48in x 20in	69-5001-24	69-5005-24
MDSF 2228 4 hp Pneumatic Kit	22-28in (559-711mm)	520lb (236kg)	24in x 48in x 29in	69-5001-28	69-5005-28
MDSF 2632 4 hp Pneumatic Kit	26-32in (660-813mm)	538lb (244kg)	25in x 48in x 29in	69-5001-32	69-5005-32
MDSF 3036 4 hp Pneumatic Kit	30-36in (762-914mm)	548lb (249kg)	25in x 48in x 29in	69-5001-36	69-5005-36
MDSF 3642 4 hp Pneumatic Kit	36-42in (914-1067mm)	597lb (271kg)	32in x 61in x 38in	69-5001-42	69-5005-42
MDSF 4248 4 hp Pneumatic Kit	42-48in (1067-1219mm)	670lb (304kg)	32in x 61in x 38in	69-5001-48	69-5005-48
MDSF 4854 4 hp Pneumatic Kit	48-54in (1219-1372mm)	700lb (318kg)	32in x 61in x 38in	69-5001-54	69-5005-54
MDSF 5460 4 hp Pneumatic Kit	54-60in (1372-1524mm)	720lb (327kg)	32in x 61in x 38in	69-5001-60	69-5005-60



3 hp DynaPrep MDSF Kit



Powerful air motors for greater form tooling capability.



3 hp DynaPrep MDSF Kit in standard shipping / storage case



# DynaPrep MDSF Hydraulic Kits

## Hydraulic Drive Kits

DynaPrep MDSF Hydraulic Drive Kits combine portability with reliable performance, with the ideal flat torque curve that is the hallmark of hydraulic drive. The DynaPrep MDSF 4hp Hydraulic Kit provides everything needed to cut and bevel right out of the box, including sample tooling. Less expensive and easier than ordering components ala carte, hydraulic drive is suitable for all machine sizes but a superior choice for our larger 54in (1372 mm) and 60in (1524 mm) machines.

Highly upgradeable, this kit features the versatile 2.5in stroke tool slides on sizes up to 48in, and 5.5in stroke tool slides on the two larger ring sizes. All machines in this group offer a large range of optional tool slides.

Additional accessories are available for these kits, including larger tool slides and remote controlled hydraulic power units. An optional right angle adapter is available for use with the straight hydraulic motor if required. In the field or in the shop, this kit makes short work of any weld prep project, while providing the sealed flow of hydraulic power.

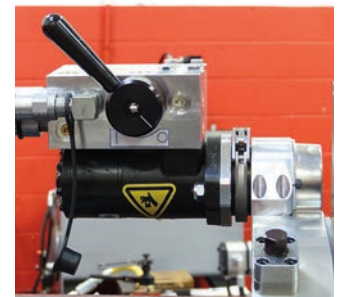
### Each Kit Includes:

- Sized Rotating Ring & Pinion Set
- Tool Slides:  
Rapid Retract 2.5in Stroke (2-48in)  
Rapid Retract 5.5in Stroke (54-60in)
- Indexing Trip Assembly
- Hydraulic Drive Motor
- Parting Tool
- DuoEdge 37 ½° Bevel Tool Insert & Holder
- Laser Alignment Kit
- Spare Fastener Kit
- Operating Hand Tools
- Storage Case
- Operating Manual

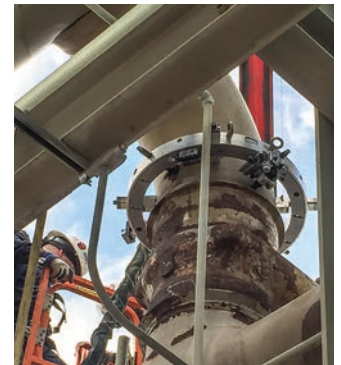
MODEL	PIPE CAPACITY	WEIGHT	DIMENSIONS WITHOUT ACCESSORIES	PART #
MDSF 206 Hydraulic Kit	2-6in (51-152mm)	106lb (48kg)	12in x 32in x 21in	69-5100-06
MDSF 408 Hydraulic Kit	4-8in (102-203mm)	110lb (50kg)	12in x 32in x 21in	69-5100-08
MDSF 610 Hydraulic Kit	6-10in (152-254mm)	130lb (59kg)	24in x 32in x 20in	69-5100-10
MDSF 612 Hydraulic Kit	6-12in (152-305mm)	135lb (61kg)	12in x 32in x 21in	69-5100-12
MDSF 814 Hydraulic Kit	8-14in (203-356mm)	141lb (64kg)	24in x 32in x 20in	69-5100-14
MDSF 1016 Hydraulic Kit	10-16in (254-406mm)	165lb (75kg)	19in x 42in x 24in	69-5100-16
MDSF 1218 Hydraulic Kit	12-18in (305-457mm)	175lb (79kg)	24in x 32in x 20in	69-5100-18
MDSF 1420 Hydraulic Kit	14-20in (356-508mm)	193lb (88kg)	24in x 32in x 20in	69-5100-20
MDSF 1824 Hydraulic Kit	18-24in (457-610mm)	499lb (226kg)	24in x 48in x 29in	69-5100-24
MDSF 2228 Hydraulic Kit	22-28in (559-711mm)	520lb (236kg)	24in x 48in x 29in	69-5100-28
MDSF 2632 Hydraulic Kit	26-32in (660-813mm)	538lb (244kg)	25in x 48in x 29in	69-5100-32
MDSF 3036 Hydraulic Kit	30-36in (762-914mm)	548lb (249kg)	25in x 48in x 29in	69-5100-36
MDSF 3642 Hydraulic Kit	36-42in (914-1067mm)	597lb (271kg)	32in x 61in x 38in	69-5100-42
MDSF 4248 Hydraulic Kit	42-48in (1067-1219mm)	670lb (304kg)	32in x 61in x 38in	69-5100-48
MDSF 4854 Hydraulic Kit	48-54in (1219-1372mm)	700lb (318kg)	32in x 61in x 38in	69-5100-54
MDSF 5460 Hydraulic Kit	54-60in (1372-1524mm)	720lb (327kg)	32in x 61in x 38in	69-5100-60



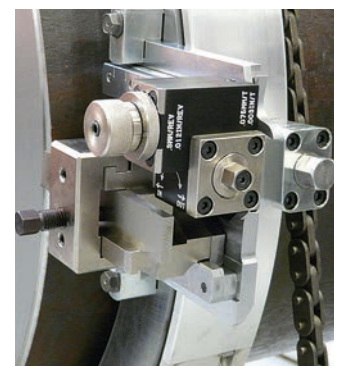
DynaPrep MDSF Hydraulic Kit



Tool-free quick mounting for fast setup and operation



DynaPrep MDSF mounts in any orientation



DynaPrep MDSF slides feature Rapid Adjust tool depth control

# DynaPrep MDSF Pipeline Pneumatic Kits

## Pipeline Pneumatic Drive Kits

DynaPrep MDSF Pipeline 3hp Pneumatic Kits are configured with the components typically specified in pipeline MRO operations. Large diameter thin wall pipe used in pipelines tend to be out-of-round, which makes precision weld preps with standard tool slides problematic. Wachs advanced out-of-round spring tool slides track the outside of the pipe, riding in and out to maintain a perfect land and prep. These slides allow a 12in operating range.

The powerful 3hp drive motor included in these kits is perfect for most pipeline applications, but a 4 hp straight drive motor can be specified if greater power is required. Available in right-angle or straight drive. Like all DynaPrep MDSF machines, their modular design means a machine configured for pipeline projects can be reconfigured for multiple applications, including deep counterboring and flange facing, making them highly versatile machines. These and all DynaPrep machines and accessories are available for purchase or rental at a Sales, Service and Rental Center near you.

### Each Kit Includes:

- Rotating Ring & Drive Pinion Set
- OD Tracking Tool Slide Set
- Manual Trip Assembly
- 6B Spline drive 3 hp Pneumatic Motor with Handle
- ATM Air Treatment Module
- Parting Tool
- DuoEdge 37 1/2° Bevel Tool Insert & Holder
- Laser Alignment Kit
- Spare Fastener Kit
- Operating Hand Tools
- Storage Case
- Operating Manual



MODEL	ROTATING RING SIZE	PIPE CAPACITY	RIGHT ANGLE KIT PART #	STRAIGHT DRIVE KIT PART #
MDSF 612 Pipeline Pneumatic Kit	6-12in (152-305 mm)	4-12in (102-305 mm)	69-5020-12*	69-5026-12
MDSF 814 Pipeline Pneumatic Kit	8-14in (203-356 mm)	4-14in (102-356 mm)	69-5020-14*	69-5026-14
MDSF 1016 Pipeline Pneumatic Kit	10-16in (254-406 mm)	4-16in (102-406 mm)	69-5020-16*	69-5026-16
MDSF 1218 Pipeline Pneumatic Kit	12-18in (305-457 mm)	6-18in (152-457 mm)	69-5020-18*	69-5026-18
MDSF 1420 Pipeline Pneumatic Kit	14-20in (356-508 mm)	8-20in (203-508 mm)	69-5020-20*	69-5026-20
MDSF 1824 Pipeline Pneumatic Kit	18-24in (457-610 mm)	12-24in (305-610 mm)	69-5021-24*	69-5026-24
MDSF 2228 Pipeline Pneumatic Kit	22-28in (559-711 mm)	16-28in (406-711 mm)	69-5021-28*	69-5027-28
MDSF 2632 Pipeline Pneumatic Kit	26-32in (660-813 mm)	20-32in (508-813 mm)	69-5021-32*	69-5027-32
MDSF 3036 Pipeline Pneumatic Kit	30-36in (762-914 mm)	24-36in (610-914 mm)	69-5021-36*	69-5027-36
MDSF 3642 Pipeline Pneumatic Kit	36-42in (914-1067 mm)	30-42in (762-1067 mm)	69-5021-42*	69-5027-42
MDSF 4248 Pipeline Pneumatic Kit	42-48in (1067-1219 mm)	36-48in (914-1219 mm)	69-5021-48*	69-5027-48
MDSF 4854 Pipeline Pneumatic Kit	48-54in (1219-1372 mm)	42-54in (1067-1372 mm)	69-5021-54*	69-5027-54
MDSF 5460 Pipeline Pneumatic Kit	54-60in (1372-1524 mm)	48-60in (1219-1524 mm)	69-5021-60*	69-5027-60

\*Call for CE version.



DynaPrep MDSF Pipeline Pneumatic Kit



Available in sizes for 4-60in  
(102-1524 mm) pipe



OD tracking slides follow  
out-of-round pipe & vessels.



# DynaPrep MDSF Pipeline Hydraulic Kits

## Pipeline Hydraulic Drive Kits

DynaPrep MDSF Pipeline Hydraulic Drive Kits are configured with the components typically specified in pipeline MRO operations. Large diameter thin wall pipes used in pipelines tend to be out-of-round, making precision weld preps with standard tool slides problematic. Wachs advanced out-of-round spring tool slides, included with these kits, track the outside of the pipe to maintain a perfect land and prep. These slides allow a 12in operating range.

Hydraulic power is clean, powerful, and a sealed loop, ideal suited for partial or full immersion pipeline projects. An optional right angle adapter is available for use with the straight hydraulic motor if required. Like all DynaPrep MDSF machines their modular design means a machine configured for pipeline applications can be converted for other operations including deep counterboring and flange facing. Pipeline DynaPrep MDSF Hydraulic Drive Kits, tooling, accessories and field portable HPU's (Hydraulic Power Units) powered by gasoline or diesel are available for purchase or rental at the Sales, Service and Rental Center nearest you.

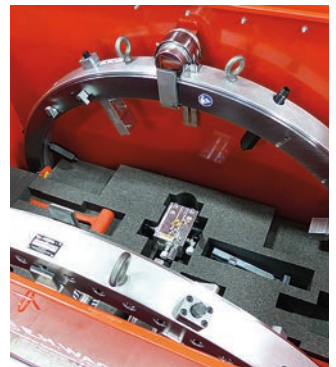
### Each Kit Includes:

- Rotating Ring & Drive Pinion Set
- OD Tracking Tool Slide Set
- Manual Trip Assembly
- Hydraulic Drive Motor
- Parting Tool
- DuoEdge 37 1/2° Bevel Tool Insert & Holder
- Laser Alignment Kit
- Spare Fastener Kit
- Operating Hand Tools
- Storage Case
- Operating Manual

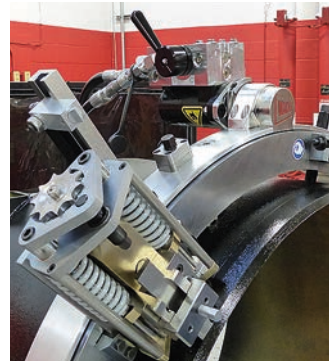
MODEL	ROTATING RING SIZE	PIPE CAPACITY	PART #
MDSF 612 Pipeline Hydraulic Kit	6-12in (152-305 mm)	4-12in (102-305 mm)	69-5024-12
MDSF 814 Pipeline Hydraulic Kit	8-14in (203-356 mm)	4-14in (102-356 mm)	69-5024-14
MDSF 1016 Pipeline Hydraulic Kit	10-16in (254-406 mm)	4-16in (102-406 mm)	69-5024-16
MDSF 1218 Pipeline Hydraulic Kit	12-18in (305-457 mm)	6-18in (152-457 mm)	69-5024-18
MDSF 1420 Pipeline Hydraulic Kit	14-20in (356-508 mm)	8-20in (203-508 mm)	69-5024-20
MDSF 1824 Pipeline Hydraulic Kit	18-24in (457-610 mm)	12-24in (305-610 mm)	69-5025-24
MDSF 2228 Pipeline Hydraulic Kit	22-28in (559-711 mm)	16-28in (406-711 mm)	69-5025-28
MDSF 2632 Pipeline Hydraulic Kit	26-32in (660-813 mm)	20-32in (508-813 mm)	69-5025-32
MDSF 3036 Pipeline Hydraulic Kit	30-36in (762-914 mm)	24-36in (610-914 mm)	69-5025-36
MDSF 3642 Pipeline Hydraulic Kit	36-42in (914-1067 mm)	30-42in (762-1067 mm)	69-5025-42
MDSF 4248 Pipeline Hydraulic Kit	42-48in (1067-1219 mm)	36-48in (914-1219 mm)	69-5025-48
MDSF 4854 Pipeline Hydraulic Kit	48-54in (1219-1372 mm)	42-54in (1067-1372 mm)	69-5025-54
MDSF 5460 Pipeline Hydraulic Kit	54-60in (1372-1524 mm)	48-60in (1219-1524 mm)	69-5025-60



DynaPrep MDSF Pipeline Hydraulic Kit



Larger MDSF machines include heavy duty steel storage cases.



Out of round tracking slides are ideal for pipelines

# DynaPrep MDSF Flange Facing

## FFC Flange Facing Cantilever Module

E.H. Wachs new FFC flange facing is ideal where an MDSF is already onsite for pipe cutting and beveling. This kit adds advanced flange facing and record grooving capabilities without the need for heavy and expensive dedicated facers.

The FFC module is used on flat face, raised face and applications where the FFR rail cannot be accommodated, such as heat exchangers. It will machine 500 RMS, 250 RMS, 125 RMS and 63 RMS record groove finishes, plus machining of the smooth bolt face finish. Setting up the DynaPrep for flange facing is fast and easy with its new patent pending Axially Adjustable Legs featuring removable guides to quickly square the machine to the bolt face. Two FFC modules will simultaneously machine multiple surfaces in a single pass (as shown).

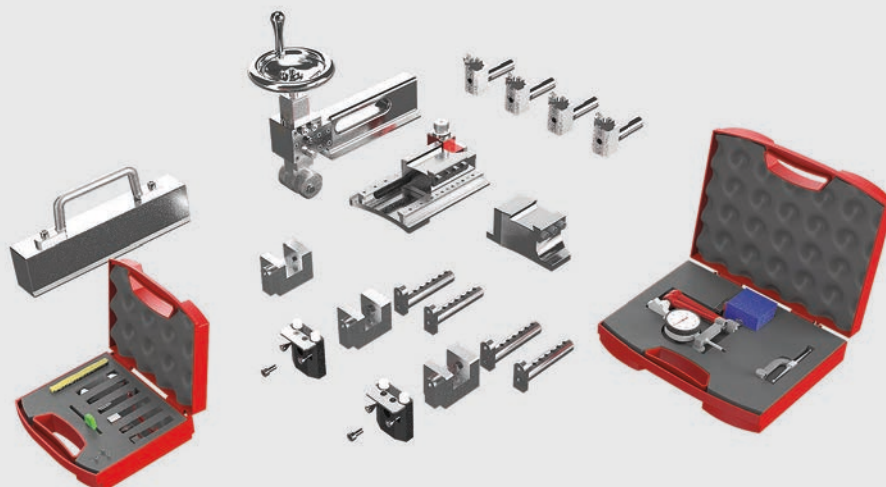
### FFC Kit includes

- FFC module
- MDSF heavy wall tool slide
- Counterweight & holder
- Two trips
- Trip extensions
- Axial adjustable legs
- Magnetic base dial indicator set
- Complete starter tooling kit

### Specifications

- FFC uses the DynaPrep MDSF as the machining platform
- Radial auto feed crashproof starwheel
- Radial feed rate in inches per revolution .003-.048in
- Axial feed rate in inches per revolution manually variable .001-.025in with 2in of axial travel
- Optional remote trip actuation
- Heavy duty storage case

FRAME SIZE	MOUNTING Ø MAX	MOUNTING Ø MIN	ID REACH FFC	PART #
6-12in (152-305 mm)	10.7in (272 mm)	3.3in (84 mm)	Full Reach	69-5260-00
8-14in (203-356 mm)	11.9in (302 mm)	4.6in (117 mm)	Full Reach	
10-16in (254-406 mm)	13.9in (353 mm)	6.6in (168 mm)	Full Reach	
14-20in (356-508 mm)	17.9in (455 mm)	10.6in (269 mm)	Full Reach	
18-24in (457-610 mm)	22.2in (564 mm)	15.1in (384 mm)	Full Reach	
22-28in (559-711 mm)	26.2in (665 mm)	19.1in (485 mm)	13.6in (345 mm)	
26-32in (660-813 mm)	30.2in (767 mm)	23.1in (587 mm)	13.6in (345 mm)	
30-36in (762-914 mm)	34.4in (874 mm)	27.6in (701 mm)	13.6in (345 mm)	
36-42in (914-1067 mm)	40.4in (1026 mm)	33.6in (853 mm)	13.6in (345 mm)	
42-48in (1067-1219 mm)	46.4in (1179 mm)	39.6in (1006 mm)	13.6in (345 mm)	
48-54in (1219-1372 mm)	52.4in (1331 mm)	45.6in (1158 mm)	13in (330 mm)	
54-60in (1372-1524 mm)	58.4in (1483 mm)	51.6in (1311 mm)	13in (330 mm)	



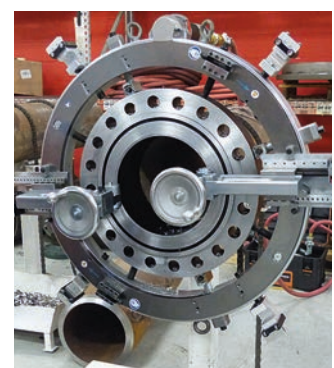
FFC Flange Facing Cantilever Module



FFC reaches up to 13.6in (345mm) in certain configurations.



Compact, the FFC can face flanges in any position or orientation



Two FFC modules simultaneously machine bolt face & record groove



# DynaPrep MDSF Flange Facing

## FFR Flange Facing Rail Modules

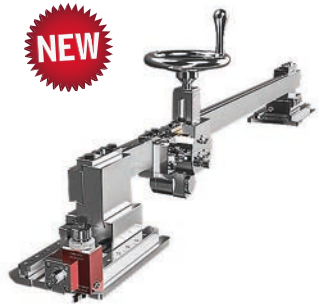
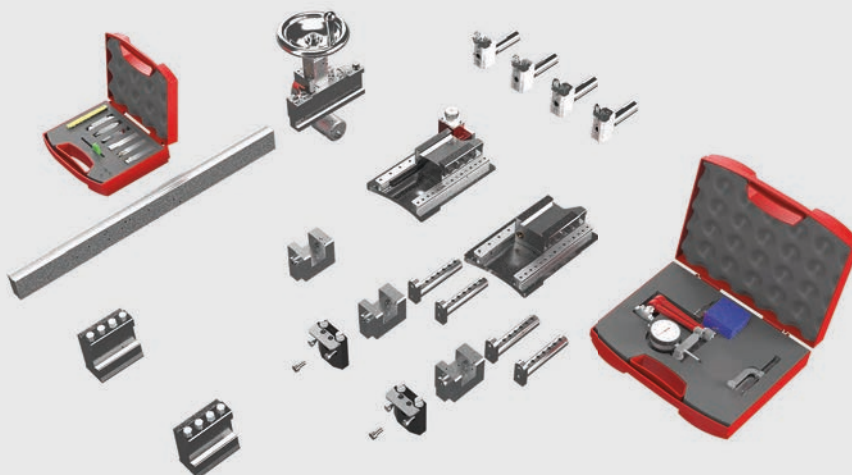
The FFR module is used on flat face, raised face and RTJ grooved flanges to machine 500 RMS, 250 RMS, 125 RMS and 63 RMS record groove finishes, plus machine the smooth bolt face finish. The FFR (Rail) module uses an advanced design that's adjustable in multiple axes to machine RTJ ring grooves. Setting up the DynaPrep for FF flange facing is fast and easy with the DynaPrep's new patent pending axially adjustable legs that feature removable guides to quickly square the machine to the bolt face.

The FFR Kit includes the FFR module, MDSF heavy wall tool slide and MDSF slave slide that the FFR rail mounts to, two additional trips and trip extensions, and the axial adjustable legs, plus a magnetic base dial indicator set and a complete starter tooling kit. A single FFR module can machine the bolt face and record groove in two operations, or optionally use two modules to simultaneously machine multiple surfaces in a single pass (as shown) or machine RTJ grooves in half the time.

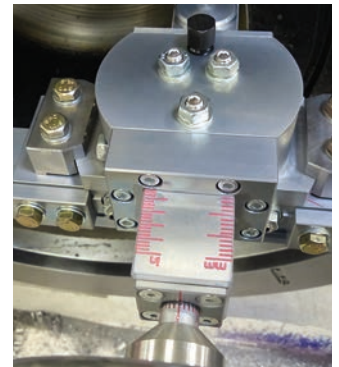
### Specifications

- FFR Flange Facing Rail Module uses the DynaPrep MDSF as the machining platform
- Full range machining from 0-60in (module specific)
- Radial feed rate in inches per revolution .003-.048in
- Radial auto feed crashproof starwheel
- Radial travel 3.5-60in; kit dependent
- Axial feed rate in inches per revolution manually variable .001-.025in with 2in of axial travel
- Optional auto axial feed, optional remote trip actuation
- FFR Kit includes heavy duty storage case, rails cased separately

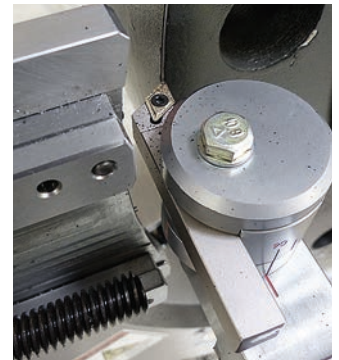
FRAME SIZE	MOUNTING Ø MAX	MOUNTING Ø MIN	ID REACH FFR	PART #
6-12in (152-305 mm)	10.7in (272 mm)	3.3in (84 mm)	Full Reach	69-5270-16
8-14in (203-356 mm)	11.9in (302 mm)	4.6in (117 mm)	Full Reach	
10-16in (254-406 mm)	13.9in (353 mm)	6.6in (168 mm)	Full Reach	
14-20in (356-508 mm)	17.9in (455 mm)	10.6in (269 mm)	Full Reach	69-5270-20
18-24in (457-610 mm)	22.2in (564 mm)	15.1in (384 mm)	Full Reach	
22-28in (559-711 mm)	26.2in (665 mm)	19.1in (485 mm)	Full Reach	69-5270-28
26-32in (660-813 mm)	30.2in (767 mm)	23.1in (587 mm)	Full Reach	
30-36in (762-914 mm)	34.4in (874 mm)	27.6in (701 mm)	Full Reach	69-5270-36
36-42in (914-1067 mm)	40.4in (1026 mm)	33.6in (853 mm)	Full Reach	
42-48in (1067-1219 mm)	46.4in (1179 mm)	39.6in (1006 mm)	Full Reach	69-5270-48
48-54in (1219-1372 mm)	52.4in (1331 mm)	45.6in (1158 mm)	Full Reach	
54-60in (1372-1524 mm)	58.4in (1483 mm)	51.6in (1311 mm)	Full Reach	69-5270-60



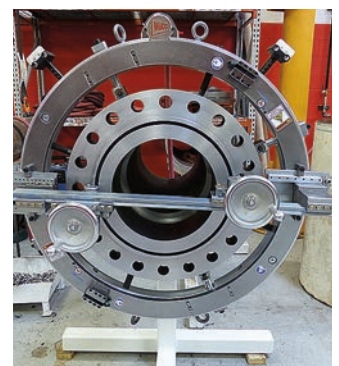
FFR Flange Facing Rail Module



Modules are clearly marked to indicate depth and prep angle



FFR tooling can be adjusted on multiple axes



Two FFR modules performing simultaneous operations

# DynaPrep MDSF Accessories

## DynaPrep MDSF Drive Motors

Wachs offers a wide range of pneumatic, hydraulic and electric drive motor options, offering the power and durability required to drive the MDSF to its full form tooling potential.

DESCRIPTION	PART #
1.5 hp Pneumatic Motor Right Angle with Quick Clamp, Speed Control & Chicago Fitting	69-4352-00
3 hp Pneumatic Modec Motor Right Angle w/Speed Control & Chicago Fitting No Handle. (Requires ACM Module)	69-4351-00
3 hp Pneumatic Modec Motor Right Angle w/Control Handle, Speed Control, Oiler & Chicago Fitting	69-4353-00
3 hp Pneumatic Modec Straight Drive Motor w/Control Handle, Speed Control, Oiler & Chicago Fitting	69-4350-00
3 hp Pneumatic Modec Straight Drive Motor w/Speed Control & Chicago Fitting No handle (Requires ACM Module)	69-4362-00
4 hp Pneumatic Modec Motor Straight w/Speed Control & Chicago Fitting No handle (Requires ACM Module)	69-4355-00
4 hp Pneumatic Modec Motor Straight w/Control Handle, Speed Control, Oiler & Chicago Fitting	69-4356-00
3 hp Reversible Right Angle Pneumatic Motor w/Handle	69-4353-01
230V 1-Phase EPD Electric Power Drive-MDSF	69-4357-01
220-480V 3-Phase EPD Electric Power Drive-MDSF	69-4357-03
Universal Hydraulic Drive Motor	69-4358-00
Right Angle Adapter Head for Modec Straight Air Motors	69-4359-00
Eibenstock HD Electric Drive-110V, MDSF	69-4340-00
Eibenstock HD Electric Drive-220V, MDSF	69-4341-00
Eibenstock HD Electric Drive-110V with remote pendant (requires controller box)	69-4342-00
Eibenstock HD Electric Drive-220V with remote pendant (requires controller box)	69-4343-00
Eibenstock HD 110v with remote pendant, electric remote trip, controller box	69-4344-00
Eibenstock HD 220v with remote pendant, electric remote trip, controller box	69-4345-00
Eibenstock Legacy Drill-style Electric Drive Assembly-110V, LCSF	SPG-489-4110
Eibenstock Legacy Drill-style Electric Drive Assembly-220V, LCSF	SPG-489-4220

## DynaPrep MDSF Pinion Drive

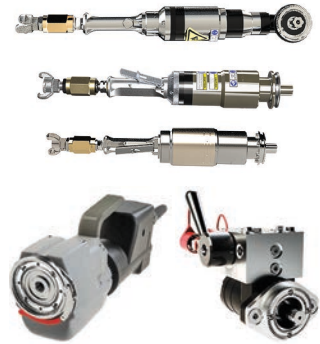
½in (12.7 mm) square and advanced heavy duty 6B splined pinion drives are responsible for applying power with their stronger, heat treated gear sets.

DESCRIPTION	MOUNT	CODE	PART #
Legacy Pinion Standard	½in (12.7 mm) Square	969 448 001	69-4480-01
1/2in Female to 6b Spline Male Adapter		969 303 700	69-3037-00
Spline Drive Pinion Standard (Tool Free)	6B Spline	969 448 201	69-4482-01
Spline Drive Pinion Front Drive (Tool Free)		969 448 101	69-4481-01

## DynaPrep MDSF Trip Feed

Advanced dual pin design that eliminates the need to time the starwheel prevents crashes and is engineered to accommodate optional pneumatic and electric powered remote trip control.

DESCRIPTION	PART #
Manual Trip All slide sets. (No post)	69-3018-00
Pneumatic Trip, All slide sets. ( No Post)	69-4741-00
Electric Trip	69-3084-00
Trip Bar/Post Positioning 6-24in (For 1.5in and 2.5in slides)	69-0071-00
Trip Bar/Post Positioning 28-60in (For 1.5in and 2.5in slides)	69-0232-00
Trip mounting screw required for all trip posts	90-1010-16
Trip extension Adapter for (5.50in slide assembly)	69-3019-00
Trip Assembly, OD Tracking 12-60in	69-4744-01
Mechanical counter assembly for EICC system; Not included with Bridge	69-4743-00
Dual Trip Assembly. Required when Flange Facing with LCSF Bridgeslide	69-3046-00



Multiple drive options are available for DynaPrep MDSF



DynaPrep MDSF Tool-Free 6B Spline Drive Pinion



Dual pin trip design eliminates star wheel timing



Pneumatic Trip assembly for remote operation



# DynaPrep MDSF Accessories

## DynaPrep MDSF Tool Slide Options

Groundbreaking design with multiple patented features including Rapid Adjust & Micro Adjust tool depth, MDSF tool slides are available in standard and high feed models plus dedicated standard and deep counterboring slides.

DESCRIPTION	PART #
Low Clearance Cutting & Beveling Worm Slide Kit* .003in Feed & 1.5in Stroke. Includes (2) 69-4615-03 Slides & Double Bevel Cover.	69-5215-03
Standard Cutting & Beveling Worm Slide Kit* .003in Feed & 2.5in Stroke. Includes (2) 69-4625-03 Slides & Double Bevel Cover.	69-5225-03
Extended Cutting & Beveling Worm Slide Kit* .003in Feed & 5.5in Stroke. Includes 69-3019-00 trip extension, (2) 69-4655-03 Slides & Double Bevel Cover.	69-5255-03
Low Clearance Cutting & Beveling Worm Slide Kit* .006in Feed & 1.5in Stroke. Includes (2) 69-4615-06 Slides & Double Bevel Cover.	69-5215-06
Standard Cutting & Beveling Worm Slide Kit* .006in Feed & 2.5in Stroke. Includes (2) 69-4625-06 Slides, & Double Bevel Cover	69-5225-06
Extended Cutting & Beveling Worm Slide Kit* .006in Feed & 5.5in Stroke. Includes 69-3019-00 trip extension, (2) 69-4655-06 Slides, & Double Bevel Cover	69-5255-06
OD Tracking Slide Kit. 12-60in Includes (2) 69-4604-01 Slides & (1) 69-4744-01 Spring Trip, 54-60in Extension Leg Sets, Storage Case, Toe Clamps & Hand Tools.	69-5204-01
Deep Counter Bore Slide Assembly. 3in Depth.	69-4605-00
Deep Counter Bore Slide Assembly. 6in Depth.	69-4606-00
Heavy Wall Parting Slide Kit .003in Feed & 3.50in Stroke. Includes Parting Slide & Trip Adaptor.	69-5235-03
Heavy Wall Parting Slide Kit .006in Feed & 3.50in Stroke. Includes Parting Slide & Trip Adaptor.	69-5235-06

\*Trip not included

## DynaPrep MDSF Miscellaneous Accessories

Perform casing cutting and more with the line of DynaPrep MDSF Accessories.

DESCRIPTION	CODE	PART #
Axial Adjustment Legs with Removable Shoulders	969 480 700	69-4807-00
Casing Cutter, Internal/External 7-13in	969 481 000	69-4810-00
Dial Indicator Set for LCSF & MDSF Machines	969 308 200	69-3082-00
Button Leg Pad Set	969 480 200	69-4802-00
Extension Leg Assembly (Single Leg)	969 480 000	69-4800-00
Extension Leg Assembly, 54-60in (Single Leg)	969 480 100	69-4801-00

## Air Treatment & Control Module

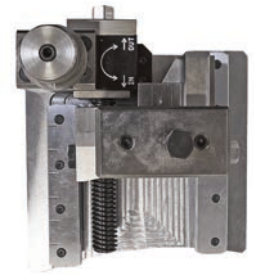
Untreated air can be rough on even the toughest air motors. Wachs ATM Air Treatment Modules condition and regulate the incoming air to extend motor life.

DESCRIPTION	PART #
Air Control Module & Remote Trip Kit (CE Compliant) <i>Required for use with "no control handle" air motors</i>	69-4100-01
Air Control Remote <i>Required for use with "no control handle" air motors.</i>	69-4101-01
Air Treatment Module with Shipping Case (non-CE compliant) Supersedes P/N (26-407-00). <i>Required for use with "control handle" air motors only.</i>	69-4102-01

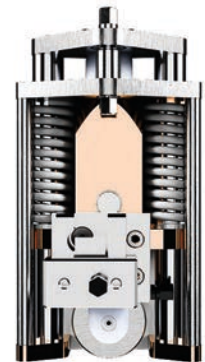
## DynaPrep MDSF Pneumatic Meter-Out Kits

Includes exhaust manifold, speed control and muffler. Controls (meter) the airflow on the exhaust (out) side to yield high torque, low rpm operation. Where extra torque and precise speed control at slow speeds is required, consider a meter-out kit for your air motor. It is the ideal upgrade for machining stainless steel and other corrosion resistant alloys.

DESCRIPTION	CODE	PART #
3 hp Meter-Out Adapter Kit	969 436 000	69-4360-00
4 hp Meter-Out Adapter Kit	969 436 100	69-4361-00



DynaPrep MDSF 2.5in Stroke Slide



DynaPrep MDSF OD Tracking Slide for out-of-round pipe



ACM Air Treatment & Remote Control Module



3hp Meter-Out Adapter Kit

# DynaPrep MDSF Accessories

## DynaPrep MDSF Bridge Slide Modules & Templates

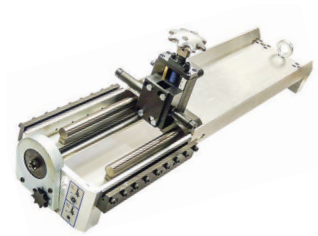
For single point beveling applications, counterboring, and flange facing operations. (MDSF requires 69-5300-00 Adaptor)

DESCRIPTION	PART #
Bridge Slide for SF612/3, SF814/3, & MDSF 612*	60-428-14
Bridge Slide for SF612/3, SF814/3, SF1016/3, MDSF 612, & MDSF 814*	60-428-16
Bridge Slide for SF612/3, SF814/3, SF1016/3, SF1420/3, MDSF 612, MDSF 814, MDSF 1016, & MDSF 1218*	60-428-20
Bridge Slide for SF1824/3, MDSF 1218, MDSF 1420, MDSF 1824	60-428-24
Bridge Slide for SF1824/3, SF2228/3, MDSF 1824 & MDSF 2228	60-428-28
Bridge Slide for SF2632/3, MDSF 2228, & MDSF 2632	60-428-32
Bridge Slide for SF2632/3, SF3036/3, MDSF 2632, & MDSF 3036	60-428-36
Bridge Slide for SF3642/3 & MDSF 3642	60-428-42
Bridge Slide for SF3642/3, SF4248/3, MDSF 3642 & MDSF 4248	60-428-48
37 ½° Bridge Slide Template	53-409-02
30° Bridge Slide Template	53-409-03
20° Bridge Slide Template	53-409-05
10° X 37 ½° Bridge Slide Template	53-409-11
10° X 30° Bridge Template	53-409-12
10 Degree X 20 Degree Bridge Slide Template	53-409-13
LCSF Bridge Slide to MDSF Adapter Kit	69-5300-00

\*Includes Storage Case.

## DynaPrep MDSF Bridge Slide Tooling

DESCRIPTION	PART #
HSS Standard 3/8 x 3/8in Tool Bit for Single Point Facing, Beveling, Socket Weld Removal & Flange Facing. For use with SDB 206/412, EP 424, LCSF/3, FF, SWR & SDSF Machines. (2-piece minimum Order)	52-701-01
Premium coated HSS 3/8 x 3/8in Tool Bit for Single Point Facing, Beveling, Socket Weld Removal & Flange Facing. For use with SDB 206/412, EP 424, LCSF/3, FF, SWR & SDSF Machines. (2-piece minimum Order)	52-701-01P
Single Point Tool Holder Kit for Facing & Beveling. Utilizes P/N 81-701-XX HSS & 81-703-XX Carbide Tool Inserts	60-718-00
Single Point Tool Insert (HSS)	81-701-01
Single Point Tool Insert, 10-Pack (HSS)	81-701-10
Single Point Tool Insert (Carbide)	81-703-01
Single Point Tool Insert, 10-Pack (Carbide)	81-703-10
Premium Coated Single Point Tool Insert (HSS)	81-701-00P
Premium Coated Single Point Tool Insert, 10-Pack (Coated HSS)	81-701-10P
HSS 4:1 Taper Counterbore Tool for use with LCSF/3 & EP 424 machines. (2-piece minimum order)	60-700-04
HSS .094in (3/32in) Radiusing "J" Tool Insert	81-704-01
HSS .125in (1/8in) Radiusing "J" Tool Insert	81-705-01
HSS .188in (3/16in) Radiusing "J" Tool Insert	81-706-01
HSS 6 mm Radiusing "J" Tool Insert	81-707-01



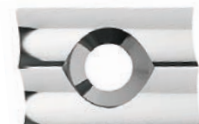
Bridge Slide Accessory



Bridge Slide Adapter Kit for MDSF



Single Point Tooling available in 10 packs



HSS DuoEdge Single Point Tooling Insert



## DynaPrep MDSF Tooling

HSS blades, carbide Tool insert holders & carbide inserts for straight cut-off

DESCRIPTION	PART #
HSS 3/16in Wide Parting Blade (3- 7/16in Long)	43-711-00
HSS 3/16in Wide Parting Blade (3- 7/16in Long, Premium Coated)	43-711-00P
HSS 3/16in Wide Parting Blade (5in Long)	43-711-01
HSS 3/16in Wide Parting Blade (5in Long, Premium Coated)	43-711-01P
HSS 1/4in Wide Parting Blade (6in Long)	60-711-00
HSS 1/4in Wide Parting Blade (6in Long, Premium Coated)	60-711-00P
3/16in Carbide Parting Tool Kit (Holder, Extractor, (1) 60-717-00 Tool Insert)	60-716-00
3/16in Carbide Tool Insert for Parting	60-717-00
1/4in Carbide Parting Tool Kit (Holder, Extractor, (1) 60-715-00 Tool Insert)	60-714-00
1/4in Carbide Tool Insert for Parting	60-715-00
Heavy Wall Carbide Insert Tooling Kit Includes Insert Holder, (1) (60-713-00) .313in Insert & Insert Extractor	60-712-00
Carbide Cutting Tool Insert, .313in wide Used with 60-712-00 Tool Insert Holder Kit. (2-piece minimum order)	60-713-00
.314 Heavy Wall Carbide Tooling Kit. Includes (1) 10in long Holder (69-7012-01), (1) .314in wide Tool Insert (69-7013-00), & (1) Extractor (60-712-02)	69-7012-00
Tool Insert, .314 Wide	69-7013-00
Tool Insert, 10-Pack .314 Wide Heavy Wall	69-7013-10
.374 Heavy Wall Carbide Tooling Kit. Includes (1) 10in long Holder (69-7012-01), (1) .374in wide Tool Insert (69-7014-00), & (1) Extractor (60-712-02)	69-7112-00
Tool Insert, .374 Wide	69-7014-00
Tool Insert, 10-Pack .374 Wide Heavy Wall	69-7014-10
DuoEdge HSS Tool Insert 10-Pack	81-701-10
DuoEdge Carbide Tool Insert 10-Pack	81-703-10
DuoEdge Triple Point Tool Insert	56-710-00

Consult the factory for other applications or custom tooling.

## Bevel, Counterbore & Flange Facing Tool Insert Holder Kits

(Each kit includes insert holder, insert screws, insert wrench, & storage container)

DESCRIPTION	PART #
Tool Holder Kit, 37.5-Deg. Inside Bevel	69-7002-03
Tool Holder Kit, 37.5 Deg. Outside Bevel	69-7003-03
Tool Holder Kit, 30-Deg. Inside Bevel	69-7004-02
Tool Holder Kit, 30 Deg. Outside Bevel	69-7005-02
Tool Holder Kit, 10 x 37.5 Degree Compound Inside Bevel Utilizes 69-7008-02 Tool Insert	69-7008-01
Tool Holder Kit, 10 x 37.5 Degree Compound Outside Bevel Utilizes 69-7009-02 Tool Insert	69-7009-01
Tool Holder Kit, 10-30 Deg. Compound Inside Bevel	69-7020-01
Tool Holder Kit, 4:1 Taper Counterbore Utilizes 81-701-XX HSS & 81-703-XX Carbide Tool Inserts	69-7007-00
Tool Holder Kit, 30 Degree Single Point Counterbore Utilizes 81-701-XX HSS & 81-703-XX Carbide Tool Inserts	69-7007-01
Single Point Tool Holder Kit for Facing & Beveling Utilizes P/N 81-701-XX HSS & 81-703-XX Carbide Tool Inserts	60-718-00
Tool Holder Kit, Flange Facing. Utilizes 56-710-00 Tool Insert	69-7010-00
Tool Holder Kit, Counterbore.	60-708-00
DuoEdge J-prep Bevel Tool Insert	81-707-01



DuoEdge 30° Inside Bevel  
Tool Holder & Tool



DuoEdge Triple Point Insert



DuoEdge 37 1/2° Outside Bevel  
Tool Holder & Tool

## DynaPrep MDSF Bevel, Counterbore & Flange Facing Inserts

The industry's most innovative split frame deserves the most advanced tooling.

DESCRIPTION	PART #
Tool Insert for 30 & 37.5 Degree Inside Bevel	69-7002-02
Tool Insert for 30 & 37.5 Degree Outside Bevel	69-7003-02
Tool Insert for 10 x 37.5 Degree Inside Compound Bevel	69-7008-02
Tool Insert for 10 x 37.5 Degree Outside Compound Bevel	69-7009-02
Tool Insert, 10-Deg. x 30-Deg. Inside Comp. Bevel	69-7020-00
Single Point Tool Insert (HSS)	81-701-01
Single Point Tool Insert, 10-Pack (HSS)	81-701-10
Premium Coated Single Point Tool Insert (HSS)	81-701-00P
Premium Coated Single Point Tool Insert, 10-Pack (Coated HSS)	81-701-10P
Single Point Tool Insert (Carbide)	81-703-01
Single Point Tool Insert, 10-Pack (Carbide)	81-703-10
HSS .094in (3/32in) Radiusing "J" Tool Insert	81-704-01
HSS .125in (1/8in) Radiusing "J" Tool Insert	81-705-01
HSS .188in (3/16in) Radiusing "J" Tool Insert	81-706-01
HSS 6 mm Radiusing "J" Tool Insert	81-707-01
HSS Tool Insert for Flange Facing (3 Cutting Tips, High and Low Range)	56-710-00

Consult the factory for other applications or custom tooling.

## DynaPrep MDSF Single Bevel Form Tools\*

DESCRIPTION	PART #
HSS 37 1/2° Inside Bevel Tool (3 1/8in long)	43-703-05
HSS 37 1/2° Outside Bevel Tool (3 1/8in long)	43-708-05
HSS 37 1/2° Double Bevel Tool (3 1/8in long)	43-710-05
HSS 37 1/2° Inside Bevel Tool (5in long)	53-703-00
HSS 37 1/2° Inside Bevel Tool (5in long), Premium Coated	53-703-00P
HSS 37 1/2° Outside Bevel Tool (5in long)	43-708-06
HSS 37 1/2° Double Bevel Tool (5in Long)	43-710-06
HSS 30° Inside Bevel Tool (3 1/8in long)	43-702-05
HSS 30° Outside Bevel Tool (3 1/8in long)	43-707-05
HSS 30° Double Bevel Tool (3 1/8in long)	43-709-05
HSS 30° Inside Bevel Tool (5in long)	53-703-01
HSS 30° Inside Bevel Tool (5in long), Premium Coated	53-703-01P
HSS 30° Outside Bevel Tool (5in long)	43-707-06
HSS 30° Double Bevel Tool (5in long)	43-709-06
HSS 45° Inside Bevel Tool (5in long)	60-719-00
HSS 45° Outside Bevel Tool (5in long)	60-720-00
HSS 60° Inside Bevel Tool (5in long)	60-719-01
HSS 60° Outside Bevel Tool (5in long)	60-720-01

## DynaPrep MDSF Compound Bevel Form Tools\*

DESCRIPTION	PART #
HSS 10° x 37 1/2° Inside Bevel Tool (4in Long)	43-712-01
HSS 10° x 37 1/2° Outside Bevel Tool (4in Long)	43-712-02
HSS 10° x 37 1/2° Inside Bevel Tool, 5in long	53-705-00
HSS 10° x 30° Inside Bevel Tool, 5in long	53-704-00

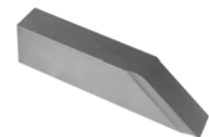
\*2-Piece minimum order required



DuoEdge Tooling 37 1/2° Outside Bevel



DuoEdge Tooling Single Point Insert



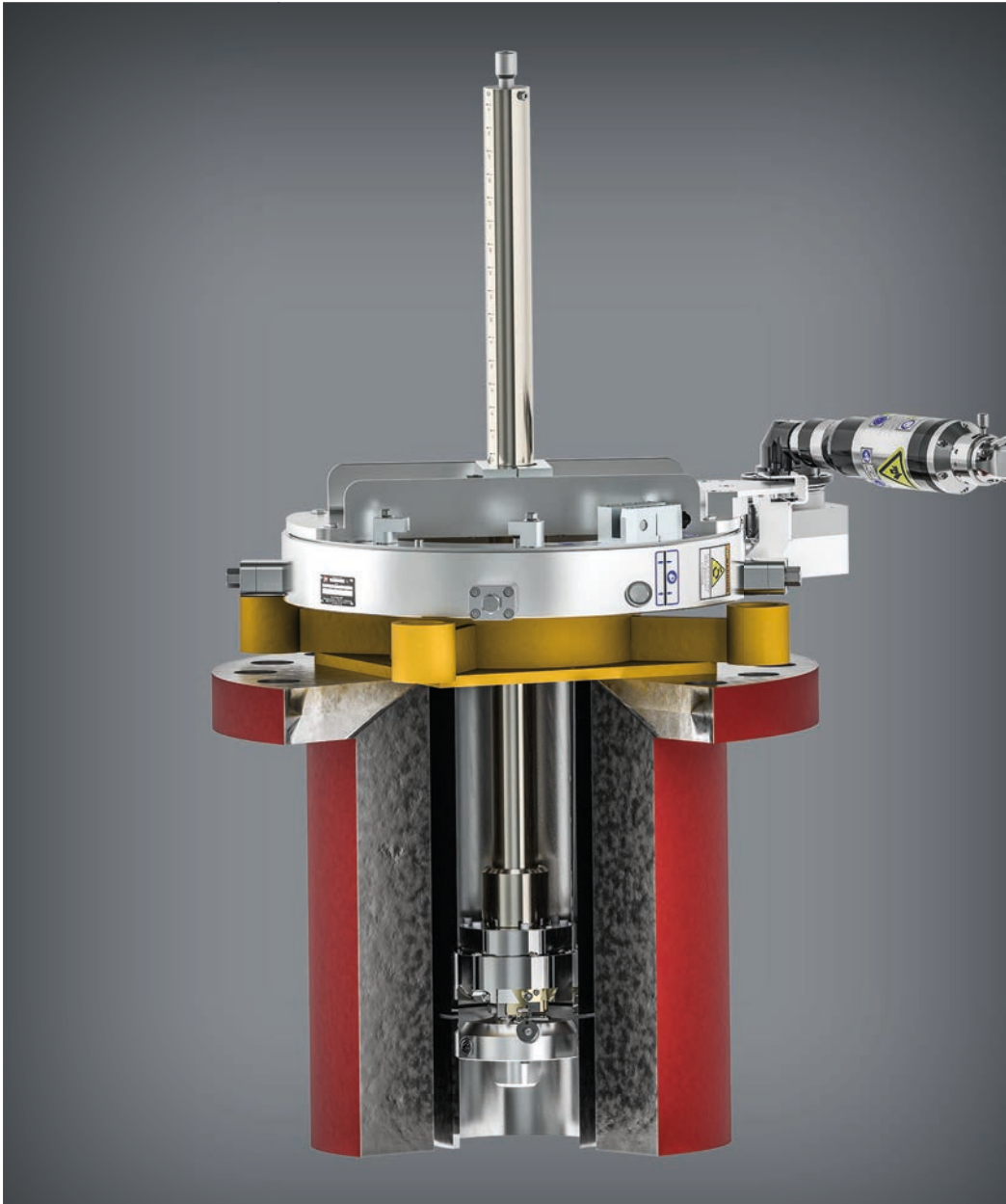
Single Bevel Form Tool for DynaPrep MDSF



Compound Bevel Form Tool for DynaPrep MDSF



# DynaPrep MDSF Casing Cutting



Simultaneously cuts and bevels casing



Lightweight, the ECC can work inverted for a closer cut.



EICC Casing Cutter used for wellhead completion

## External / Internal Casing Cutting

Wachs proven DynaPrep MDSF split frame technology is the base platform for our casing cutting solutions, designed to cut a wide range of casing conductors externally above the wellhead and internally below the external cut.

The ECC split frame mounts around the exposed casing OD above the wellhead and simultaneously cuts and chamfers prior to fitting the BOP. The Wachs External-Internal Casing Cutter (EICC) module kit accommodates a wide range of casing diameters above the wellhead and ID cuts with chamfering below.



# ECC External Casing Cutter Kits

## Precision External Cutting

E.H. Wachs ECC External Casing Cutter Kit utilizes Wachs proven DynaPrep MDSF split frame technology to cut a wide range of casing conductors externally above the wellhead. The ECC split frame mounts around the exposed casing OD above the wellhead and simultaneously cuts and chamfers prior to fitting the BOP. Ring sizes are available for most grades and weights of the exposed external casing (or drive pipe/conductor) up to a 26in (660 mm) diameter.

The ECC is based on Wachs proven split frame technology and takes advantage of the wide range of standard Genuine Wachs Tooling, It requires minimal axial and radial clearances, and is available with pneumatic or hydraulic drive. Remote hand held controls are optionally available for pneumatic powered machines.

ECC kits are available in 6 standard ring sizes, featuring interchangeable tool slides and machine drives to cut and bevel all wellhead casing grades, sizes and weights from 4 1/2in to 26in OD (with larger sizes available by special order). The ECC is portable, compact, lightweight and requires minimal axial and radial clearance. A single operator can setup and machine the casing for minimal open time.

## ECC External Casing Cutter Features

- External casing (drive pipe/conductor) cutting and beveling up to a 26in (660 mm) diameter
- Utilizes standard Wachs Genuine Tooling for severing and chamfering
- Based on Wachs field proven Split Frame technology
- Requires minimal axial and radial clearances; hydraulic or pneumatic drive

## Specifications

Cutting Tool Surface Speed:  
60 ft. per minute (18 mpm)

Machine Drive : Pneumatic, Hydraulic

Air Requirements:  
70 cfm @ 80-100 psi (2cmm @ 5.6-7 Bar)

Hydraulic Requirements:  
8 gpm @ 1500 psi (30 lpm @ 103 Bar)

Feed Method: Star wheel feed

Feed Rate: Fixed @.0026in per revolution (starwheel)

## Standard Equipment

- Self Squaring Mounting System
- Fitted Storage Case
- Operating Manuals & Tools

## Optional Equipment

- Extension legs
- Tooling (standard and custom)

## Casing/Conductor Cutting Range Chart

CASING SIZE	4 1/2IN (114 MM)	5IN (127 MM)	5 1/2IN (140 MM)	6-5/8IN (168 MM)	7IN (178 MM)	7-5/8IN (194 MM)	8-5/8IN (219 MM)	9-5/8IN (244 MM)	10 3/4IN (273 MM)	11 3/4IN (298 MM)	13-3/8IN (340 MM)	16IN (406 MM)	18-5/8IN (473 MM)	20IN (508 MM)	24IN (610 MM)	26IN (660 MM)
ECC SF8																
ECC SF10																
ECC SF14																
ECC SF20																
ECC SF26																



Simultaneously cuts & bevels casing



ECC can be used inverted for cut lines close to the flange



ECC low clearance design fits into tight operating envelope



Dedicated DuoEdge Casing Cutting Tool Holder & Insert



# EICC External / Internal Casing Cutter Kits

## External / Internal Precision Cutting

E.H. Wachs External/Internal Casing Cutter (EICC) module kit accommodates a wide range of casing diameters above the wellhead and ID cuts below. Splitting to mount around the casing OD above the wellhead, the MDSF split frame serves as the foundation of the EICC. Requiring minimum axial and radial clearance, the EICC can be setup and will cut casing above the wellhead in less than 30 minutes. An internal parting and bevel attachment mounts to the LCSF or DynaPrep MDSF rotating ring for cutting and/or beveling the internal casing below the wellhead. Because of its ability to cut at various depths, the time the wellhead must remain open is greatly reduced.

### Features

- Cuts up to 7in through 13 3/8in API casing.
- Utilizes standard Wachs Genuine Tooling for external severing and chamfering
- Optional specialized casing cutter tooling holder and inserts available
- Based on the Wachs field proven LCSF & DynaPrep MDSF split frame
- Requires minimal axial and radial clearances; requires reversible pneumatic drive motor

SPECIFICATIONS	
Mounting System	Three-leg, universal chuck.
Tool Slides	Standard (7in-9 5/8in) extended range 10 3/4in-13 3/8in mechanical starwheel feed.
Counter	Mechanical/rotation.
Tooling	Insert & holder/chamfer.
Feed Rate	.004in (0.1016 mm) per revolution
Power	Pneumatic
Weight	150 lb. (69kg.)

### Machining Capacity

COMPATIBLE SPLIT FRAME	OD CASING SIZE	SPLIT FRAME SIZE	PART #
Model 610	7in – 9 5/8in (177.8 – 244.475 mm)	6-10in (152.4-254 mm)	60-4001-1031
Model 814		8-14in (203.2-355.6 mm)	60-4001-1431
Model 1016		10-16in (254-406.4 mm)	60-4001-1631
Model 1420		14-20in (355.6-508 mm)	60-4001-2031
Extends range of 60-4001-xxxx EICC system with slides and extension legs to allow internal cuts on 10 ¾in-13 3/8in casing. Bridge & Drive Tube not included			60-4001-01
Model 610	10 ¾in – 13 3/8in (273 – 339.7 mm)	6-10in (152.4-254 mm)	60-4002-1031
Model 612		6-12in (152.4-304.8 mm)	60-4002-1231
Model 814		8-14in (203.2-355.6 mm)	60-4002-1431
Model 1016		10-16in (254-406.4 mm)	60-4002-1631
Model 1420		14-20in (355.6-508 mm)	60-4002-2031
Extends range of 60-4002-xxxx EICC system with slides and extension legs to allow internal cuts on 7-9 5/8in casing. Bridge & Drive Tube not included			60-4002-01

### Casing/Conductor Cutting Range Chart

CASING SIZE	4 1/2IN (114 MM)	5IN (127 MM)	5 1/2IN (140 MM)	6 5/8IN (168 MM)	7IN (178 MM)	7 5/8IN (194 MM)	8 5/8IN (219 MM)	9 5/8IN (244 MM)	10 3/4IN (273 MM)	11 3/4IN (298 MM)	13 3/8IN (340 MM)	16IN (406 MM)	18 5/8IN (473 MM)	20IN (508 MM)	24IN (610 MM)	26IN (660 MM)
7in - 9 5/8in																
10in - 13 3/8in																



Size range includes most popular casing conductor sizes



EICC Internal Casing Cutter used for wellhead completion



Internal cutting module lowered to cutting depth



MDSF EICC Internal Cut

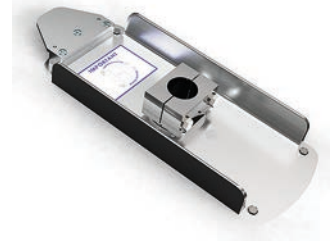
## EICC Kits, Accessories & Motors

DESCRIPTION	PART #
EICC Casing Cutting System for MDSF 814 Machine. Includes: <ul style="list-style-type: none"> <li>• External/internal mount for cutting 7in, 7- 5/8in, 8- 5/8in and 9- 5/8in casing</li> <li>• Complete with drive tube (adjustable cut depth from 6-31in)</li> <li>• Cutting head</li> <li>• Mounting chuck with extension legs to cover ID range</li> <li>• Drive tube-mounting adapter (Bridge mounts to MDSF 814 machine)</li> <li>• 2 parting blades</li> <li>• 30 degree deburring tool</li> <li>• Operating tools</li> <li>• Shipping box</li> <li>• Manual.</li> </ul>	69-4815-14
7in through 9- 5/8in Slide Assembly	60-4005-01
9- 5/8in through 13-3/8in Slide Assembly	60-4005-02
Extension Leg Assembly to mount EICC clamping chuck into 7in, 7- 5/8in, 8- 5/8in and 9- 5/8in casing	60-4006-01
Extension Leg Assembly to mount EICC clamping chuck into 10 3/4in, 11 3/4in and 13-3/8in casing	60-4006-02
LCSF 610 EICC Bridge Assembly	60-4007-10
LCSF 612 EICC Bridge Assembly	60-4007-12
LCSF 814 EICC Bridge Assembly	60-4007-14
LCSF 1016 EICC Bridge Assembly	60-4007-16
LCSF 1420 EICC Bridge Assembly	60-4007-20
Mechanical counter assembly for EICC system. Counter cam not supplied with this assembly.	60-4008-01
31in Drive Tube Assembly	60-4009-31
42in Drive Tube Assembly	60-4009-42
48in Drive Tube Assembly	60-4009-48
54in Drive Tube Assembly	60-4009-54
Heavy Duty Right Angle Cleco 2 1/2 hp Reversible Air Motor Assembly w/Oiler & Speed Control.	60-4010-01
Universal Wellhead Adapter	60-4011-03
Wellhead Adapter for EICC system. Requires customer supplied CAD model of wellhead. P/N will be assigned after review of the application and wellhead design	60-4011-X1
Wellhead Adapter for EICC system. P/N will be assigned after review of the application and wellhead design	60-4011-X2
HSS Severing Tool for EICC system. (2) severing tools required per machine for use. (2-piece minimum order)	60-7000-01
HSS 20 Degree OD Bevel Tool. 70 degree bevel when measured from casing centerline. (2-piece minimum order)	60-7001-20
HSS 30 Degree OD Bevel Tool. 60 degree bevel when measured from casing centerline. (2-piece minimum order)	60-7001-30

\*MDSF 814 machine with front pinion and air motor ordered separately\*

## Casing Cutting Tools

DESCRIPTION	PART #
Tool Holder Kit, 45 Degree Casing Bevel	69-7015-00
Tool Holder Kit, 60 Degree Casing Bevel	69-7016-00
Tool Insert, 45 Degree Casing Inside Bevel	69-7017-00
Tool Insert, 60 Degree Casing Inside Bevel	69-7018-00



EICC Bridge Assembly



Universal Wellhead Adapter



DuoEdge 45° Casing Bevel Tool Holder & Insert



DuoEdge 60° Casing Bevel Tool Holder & Insert



# LDSF Large Diameter Split Frame



Four standard LDSF sizes cover 60-120in (DN1500-3000)



LDSF splits into quadrants for setup, transport & storage



LDSF standard dual hydraulic drive motors & dual pinion housings

## Designed for Large Diameter Pipes & Vessels

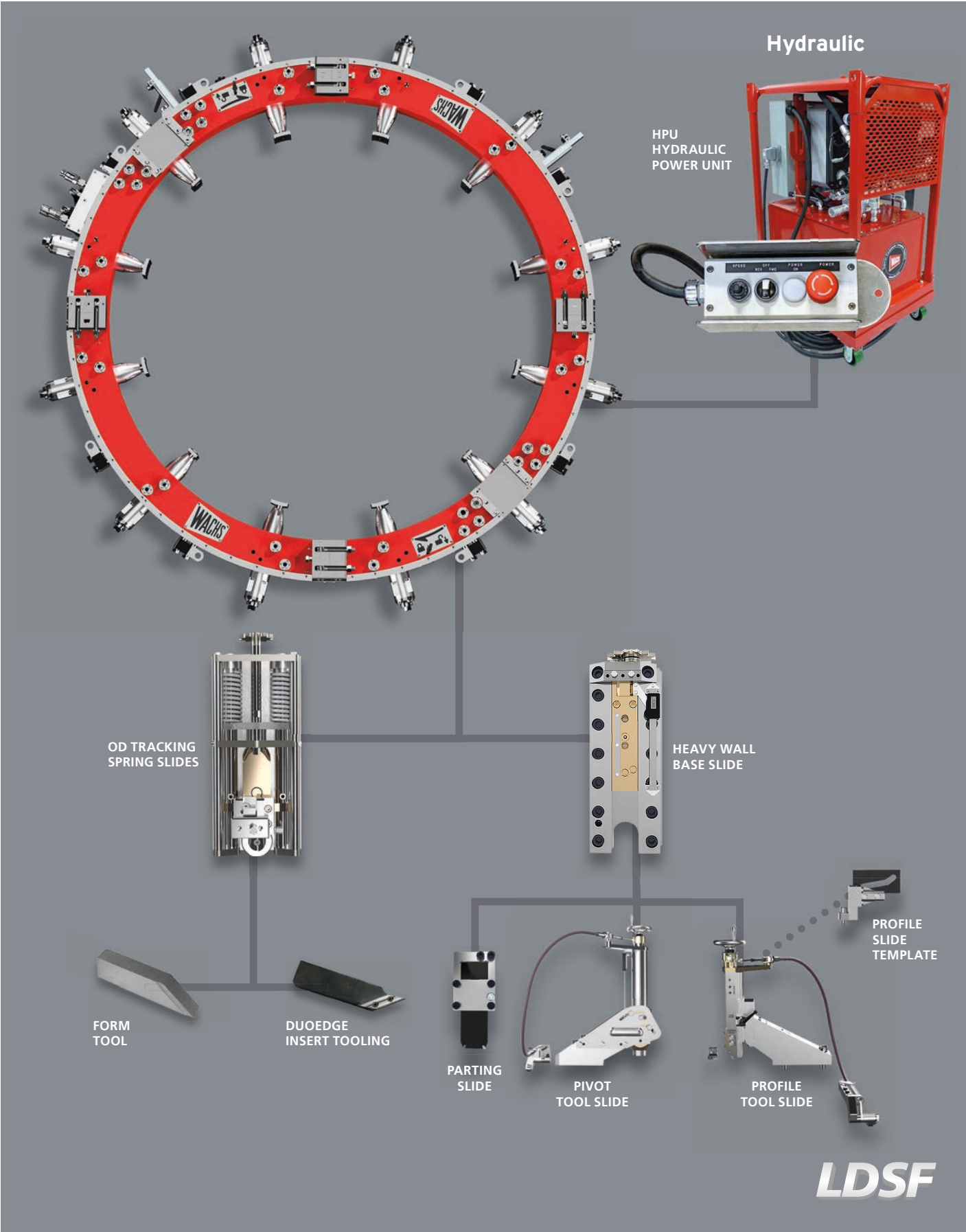
E.H. Wachs LDSF Large Diameter Split Frame is designed for cold cutting, beveling, facing and counterboring on large diameter pipes, vessels and flanges. Engineered to incorporate multiple advancements, it's designed to be stronger, faster to set up, faster to operate, and even more versatile than our previous HDSF models.

Picking up where our DynaPrep MDSF split frames leave off, four standard LDSF sizes cover a range from 60-120in OD (DN1500-DN3000). New modules for machining heavy wall up to 6in (152.4mm) and a new, more versatile profile slide kit for single pointing makes the LDSF the most versatile machine in its category.





# LDSF Split Frame



# LDSF Split Frame Overview

## Splits Into Quadrants for Easy Installation Ideal for Vessels & Steam Generator Replacement (SGR)

- Designed for large and very large diameter pipes and vessels
- Four standard LDSF sizes cover a 60in to 120in OD range (DN1500-3000)
- 15in (381 mm) clamping diameter range across four standard LDSF models
- 30 in (762 mm) diametrical machining range including clamping leg and tool slide stroke
- Splits into quadrants for easier storage, transport and set-up
- All steel construction for durability and rigidity
- Common size, fully captivated fasteners used throughout
- Quick release, adjustable height setup legs, 3 per quadrant
- Self squaring mounting system features axially micro adjustable clamping legs
- Rigging blocks with lifting eyes allow horizontal or vertical lifting
- Multiple setup configurations for vertical or horizontal operation

## LDSF Large Diameter Split Frame

The internal, full bearing construction contributes to the LDSF's smooth operation and long service life. Spring loaded OD tracking slides for irregularly shaped or out-of-round pipe and vessels are standard, and allow the tooling to maintain continuous contact, producing precision weld preps with consistent lands. The LDSF takes corrosion protection to a new level with virtually every surface treated. Its attractive red powder coated finish proudly reflects E.H. Wachs famous red and black corporate colors.

New modules and kits broaden the versatility of the LDSF. Pivot Slide and Profile Slide kits allow for deep counterboring and heavy wall (up to 6in or 152mm) single point machining and profiling. A new flange facing adapter kit allows the LDSF to perform facing on very large diameter flanges. A new double parting kit allows for faster severing on even the heaviest wall or high alloy materials.

### Additional Features:

- Reinforcing stiffener blocks at the split lines offer increased rigidity
- Hinged open/close mechanism to simplify machine mounting
- Frame fastening swing bolts holds ring frames in place during assembly
- Dual hydraulic drive motors require less clearance than one large motor
- Dual drive reduces gear tooth loading for greater durability
- Drive motors utilize Wachs universal quick mount drive assembly
- Fully adjustable mounting legs replace traditional bolt on spacer feet
- Modular leg assemblies offer both ID and OD clamping options
- Designed to use a minimum number of hand tools
- Spring loaded trip design eliminates feed crashes

### Standard equipment:

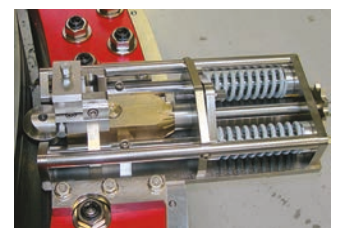
- Dual hydraulic drive motors
- Heavy duty OD tracking tool slides
- Self re-setting trip assembly
- Lifting eyes for vertical or horizontal mounting
- Ratcheting hinge mechanism for opening & closing
- Self squaring mounting system with axially adjustable clamping legs
- Sealed dual pinion housings
- Custom wood storage case & quadrant end protectors
- Operating hand tools and manual



LDSF Split Frame

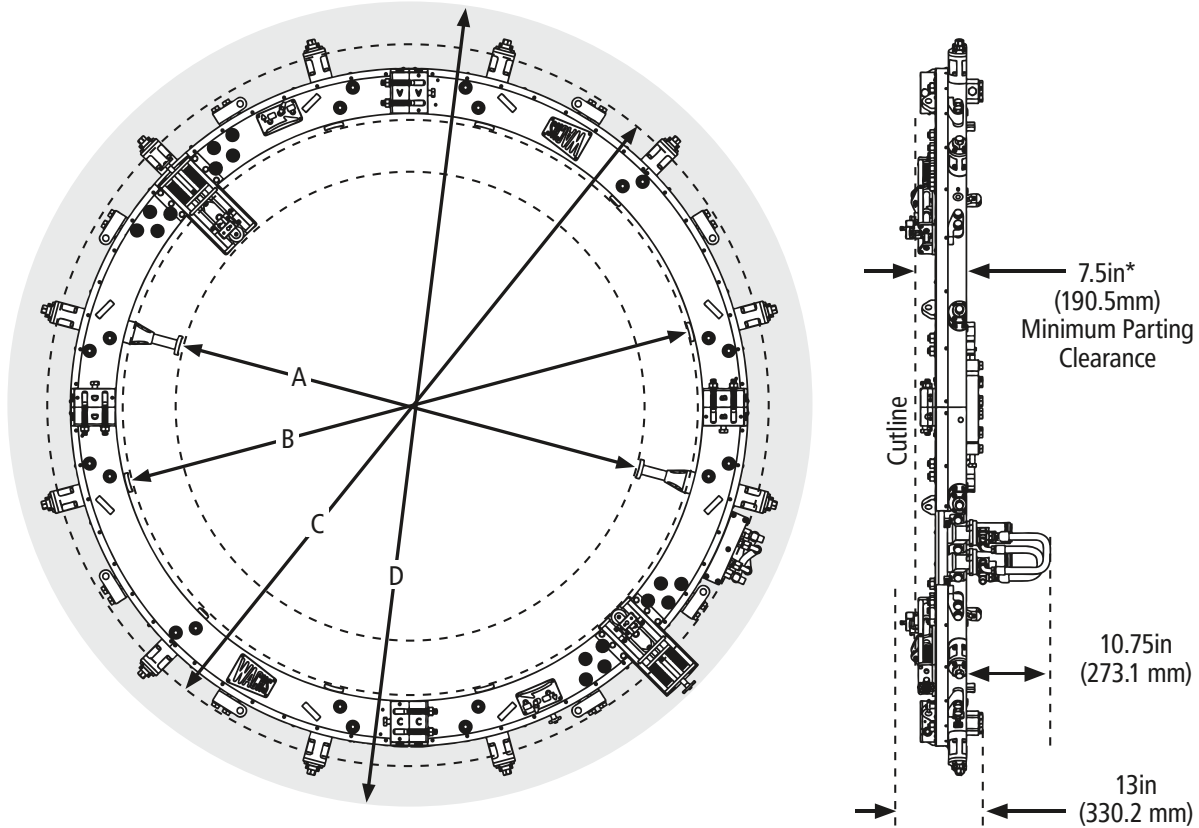


Swing bolts & hinge mechanism speeds assembly & mounting



LDSF includes OD Tracking Slides as standard equipment

# LDSF Split Frame Specifications



SPECIFICATIONS	LDSF 75	LDSF 90	LDSF 105	LDSF 120
Dimension "A - B" Machine capacity range (Nominal Pipe Size)	60-75 in (1524-1905mm)	75-90 in (1905-2286mm)	90-105 in (2286-2667mm)	105-120 in (2667-3048mm)
Dimension "C" pinion clearance	99 in (2515 mm)	114 in (2896 mm)	129 in (3277 mm)	144 in (3658 mm)
Dimension "D" Standard OD Tracking slide clearance	111 in (2820 mm)	126 in (3200 mm)	141 in (3581 mm)	156 in (3962 mm)
Dimension "D" Optional Heavy Wall Base Slide clearance	117 in (2972 mm)	132 in (3353 mm)	147 in (3734 mm)	162 in (4115 mm)
Machine height	13 in* (330.2 mm*)			
Hydraulic motor height	10.7** (271.8 mm**)			
Cutting tool surface speed	Adjustable, 60 surface ft/min (18.28 m/min)			
Hydraulic power requirements	14 gpm @ 1800 psi (53 lpm @ 124 BAR)			
Feed Methods	Mechanical Starwheel or Cable feed			
Feed Rates	0.0031 in (0.0787 mm) per trip w/ OD Tracking Slide			
	0.003846 in (0.09769 mm) per trip w/ Heavy Wall Base Slide			
	0.001 to 0.006 in (0.0254 to 0.1524 mm) per trip w/ axial operations (adjustable)			

\* Minimum clearance shown is with stiffening blocks removed.

\*\* Standard drive motor configuration. Reduced clearance options available.

## Construction:

- Alloy steel stationary and rotating rings
- Alloy mounting legs
- High capacity bearings
- Dual heavy duty pinion housings
- Ratcheting hinge mechanism
- Stainless steel, nickel plating and powder coating for corrosion resistance

## Optional equipment:

- Base slide kit
- Pivot slide kit\*
- Profile slide kit\*
- Flange facing adapter kit
- Genuine Wachs Tooling

\*Requires base slide kit



# LDSF Split Frame Tool Slides

## OD Tracking Slide *(Standard, included with LDSF)*

Standard equipment with the LDSF, the OD Tracking Slide is extremely versatile and suitable for typical applications including parting and beveling, and includes spring loaded trips to eliminate feed crashes. Utilizes standard Legacy and DynaPrep MDSF tooling.

## Heavy Wall Kits

### Pivot Slide Kit

The LDSF Pivot Slide Kit is designed for ID or OD turning, facing and beveling. It's ideal for large diameter vessels, including steam generators, used in oil and gas and power generation applications. Used for extra heavy wall applications (up to 6in) with greater metal removal requirements on ID and OD profiles.

### Profile Slide Kit

The LDSF Profile Slide Kit is a multipurpose slide that can be configured to bevel heavy wall pipe and vessels and face large diameter flanges. The Profile Slide utilizes standard and custom made interchangeable templates to perform precise compound bevels.

### Parting Slide Kit

The LDSF Parting Kit features digital read out (DRO) for precise radial position indication. This module is designed for parting and beveling configurations.

### Heavy Wall Base Slide

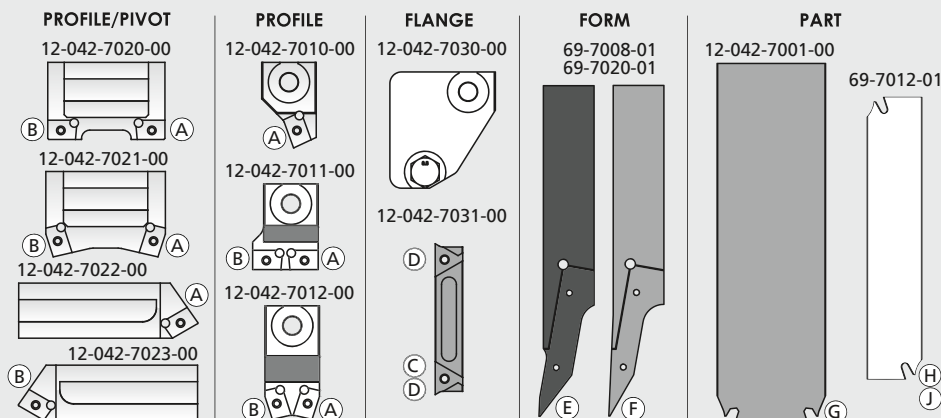
The LDSF Heavy Wall Base Slide serves as the mounting platform for the Parting Kit, Pivot Slide and Profile Slide Kits.

DESCRIPTION	PART #
Pivot Slide Kit*	12-042-4442-00
Profile Slide Kit*	12-042-4443-00
Template for Profile Slide Kit**	12-042-4445-00
Parting Kit*	12-042-4441-01
Heavy Wall Base Slide	12-042-4440-00

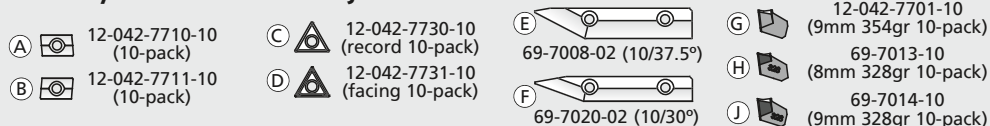
\*Requires mounting base 12-042-4440-00, sold separately.

\*\*Requires mounting base 12-042-4440-00 and 12-042-4443-00 Profile Slide, sold separately.

## Heavy Wall Insert Holders *(includes insert screws and wrench)*



## Heavy Wall Insert Tooling



OD Tracking Slide



Pivot Slide Kit



Profile Slide Kit



Parting Kit

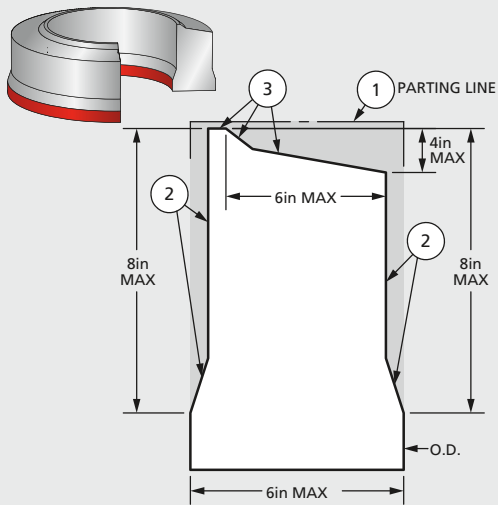


Heavy Wall Base Slide



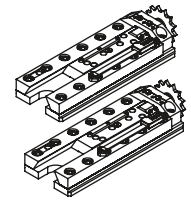
Template for Profile Slide Kit

# LDSF Split Frame Heavy Wall Kits

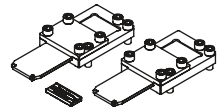


## LDSF 6in Wall Tooling Setup 12-042-5701-00

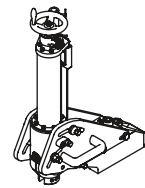
	DESCRIPTION	PART #
ALL	(2) BASE SLIDE KIT	12-042-4500-00
ALL	FEED TRIP KIT	12-042-4506-00
1	PARTING KIT	12-042-4501-00
2	PIVOT SLIDE KIT	12-042-4502-00
3	PROFILE SLIDE KIT	12-042-4503-00



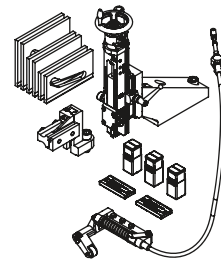
Heavy Wall Base Slide



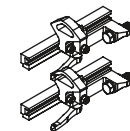
Parting Kit



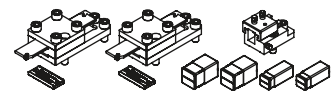
Pivot Slide Kit



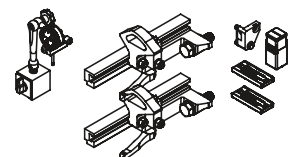
Profile Slide Kit



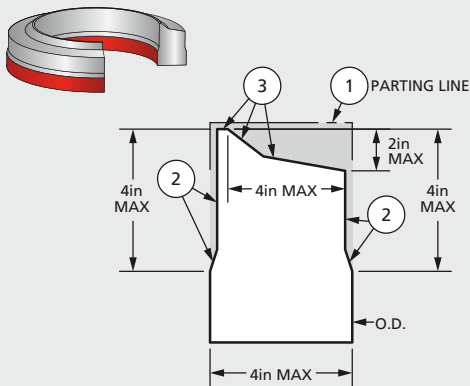
Feed Trip Kit



Form Tool Adapter Kit



Flange Face Adapter Kit



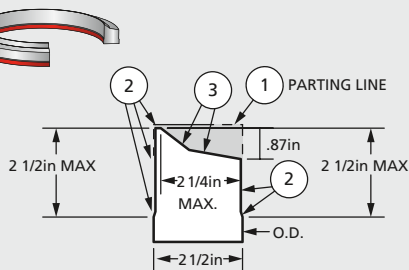
## LDSF 4in Wall Tooling Setup 12-042-5702-00

	DESCRIPTION	PART #
ALL	(2) BASE SLIDE KIT	12-042-4500-00
ALL	FEED TRIP KIT	12-042-4506-00
1	PARTING KIT	12-042-4501-00
2,3	PROFILE SLIDE KIT	12-042-4503-00

## LDSF Form Tool Adapter Setup 12-042-5703-00

	DESCRIPTION	PART #
2	PROFILE SLIDE KIT	12-042-4503-00
1,3	FORM TOOL ADAPTER	12-042-5703-00

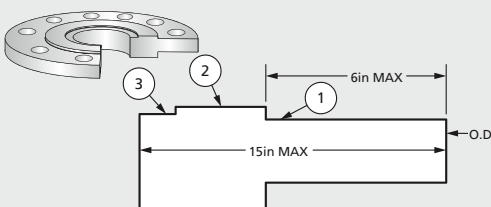
\* Requires 4in Wall Kit 12-042-5702-00



## LDSF Flange Facing Adapter 12-042-5704-00

	DESCRIPTION	PART #
ALL	FLANGE FACING ADAPTER KIT	12-042-5704-00

\* Requires 4in Wall Kit 12-042-5702-00



# TRAV-L-CUTTER Pipe Cutter



Horizontal & vertical cutting



Fast & accurate cutting & beveling



Add mounting chain sections to fit larger diameters

## Cold Cutting, Compact Design, Easy Set-Up

The Wachs Trav-L-Cutter is a portable milling machine capable of cold cutting and beveling simultaneously on all machinable pipe materials, pipe schedules and pipe sizes from OD 6in - 72in (152.4-1829 mm).

Mounted by its own tensioning chain, the Trav-L-Cutter drives itself around the pipe as it machines. For larger diameter pipe or vessels, simply add more drive chain sections. For greater accuracy specify the Trav-L-Cutter Guide Track. Available with pneumatic (Model E) and hydraulic (Model HE) drive.





# TRAV-L-CUTTER Overview

## Portable Milling Machines

- Safe cold cutting
- Simultaneous cutting and beveling
- Compact design, easy set-up
- Horizontal and vertical cutting
- Wide dimension range

## Fast & Accurate

Wachs high-performance cutters remove 3/16in (4.8 mm) of metal while cutting, leaving the pipe end with a smooth, machined finish. The chain feed system maintains continuous out-of-round compensation while providing constant drive under all conditions for accurate cuts. By using an optional guide track and special guide track wheels, higher accuracy can be maintained. This cutting method facilitates section removal in the field where new sections, precut by the same method, can be easily dropped into place.

## Operates Anywhere

The Trav-L-Cutter operates on horizontal or vertical pipe, in the field or the shop.

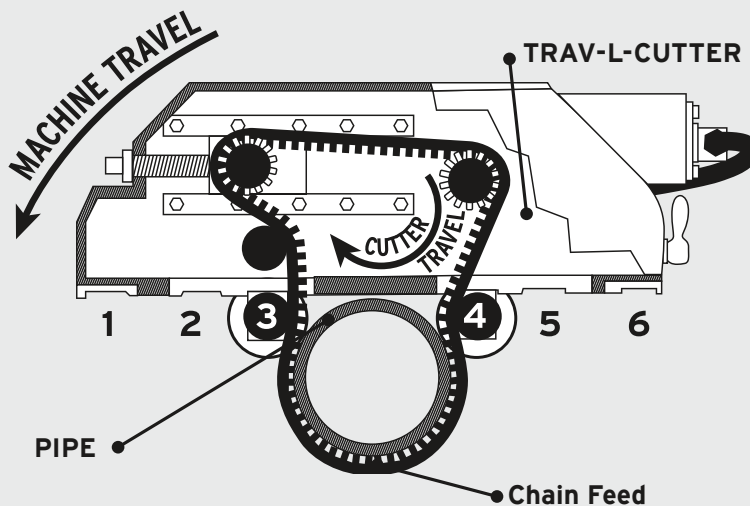
## Machines Most Materials

Materials such as carbon steel, ductile iron, cast iron and most alloys in all pipe sizes from 6in to 72in (152.4-1829 mm) can be cold cut and beveled simultaneously.

## Corrosion Resistance

Hydraulic models offer the inherent advantages of a completely sealed and self-lubricating closed loop system. The Model HE is particularly suited to field machining operations under the type of hostile conditions often found on offshore drilling rigs, pipelines and other construction work.

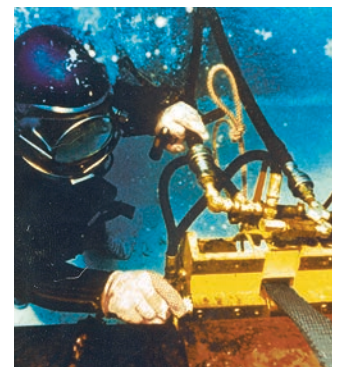
Both the HE and E models feature corrosion resistant components including stainless steel, hi-spec bearings and anti-corrosive finishes.



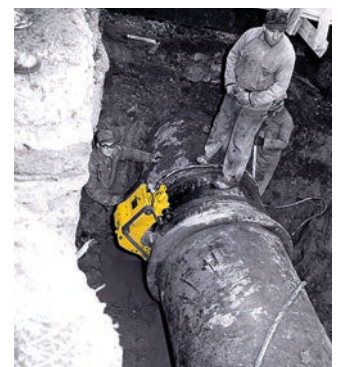
Model HE Hydraulic



Trav-L-Cutter shown in steel storage case



Model HE Hydraulic Trav-L-Cutter suitable for full immersion



First generation Trav-L-Cutter photo circa 1952

# TRAV-L-CUTTER Specifications

SPECIFICATIONS	
Machining capacity	6in - 72in (152-1829 mm)
Cutter drive	Pneumatic: 2.9 kW (4 hp) governed air motor coupled with worm gearbox. Hydraulic: As above, with hydraulic motor.
Cutter speed	Pneumatic: Adjustable from 35-55 rpm for use on work-hardened alloys. Hydraulic: Adjustable from 0-60 rpm.
Feed	<ul style="list-style-type: none"> <li>Pneumatic: 0.56 kW (¾ hp) air motor coupled through overload clutch, gearbox and chain reduction to final machine drive sprocket.</li> <li>Hydraulic: 2.9 kW (4 hp) hydraulic motor.</li> </ul>
Feed method	Positive, nonslip chain drive
Air requirements	2.8 m³/min (100 cfm at 90 psi)
Hydraulic requirements	55 l/min (15 gal/min at 1500 psi)
Work speed	<ul style="list-style-type: none"> <li>Provides cutting time of 1inch/min of pipe diameter. 10in (254 mm) = 10 minutes.</li> <li>Over ½in (12.7 mm) wall as well as most alloys require reduced feed rate.</li> </ul>
Clearance	Radial: 10in - 12in (254-305 mm) Axial: 20in (508 mm)
Controls	Cutter on-off, feed on-off, with interlock to prevent machine feed unless cutter is turning, adjustable feed control. Flow control valves (Model HE only). Separate controls provide adjustable spindle speed and cutter speed. Forward/reverse valve governs machine travel direction.
Weight	Operating: 97.5 kg (215 lb) Shipping: 189.6 kg (418 lb)
Finish	Corrosion resistant powder coat
Dimensions (LxWxH)	24 x 20 x 10.75in (61 x 51 x 28 cm)

## Standard Equipment

- Air line lubricator (air only)
- Filter (air only)
- Speed control
- Operating manual and isometric parts list
- Operating tools
- Connecting pins
- Basic mounting chain for 6in - 48in (152-1219 mm) diameter pipe
- Steel storage case
- 6ft whip hose without oiler (air only)

## Optional Equipment

- Additional chain sections
- Additional cutter blades
- Guide track and wheels to fit all pipe sizes up to 48in (1219 mm) for vertical cutting multiple pass cutting or high accuracy cutting
- Long cutter spindle for use with grooving cutters

ITEM	MODEL	DRIVETYPE	PIPE OD	CODE	PART #
Trav-L-Cutter	E	Pneumatic	6-72* (152-1829*)	902 000 010	02-000-01
Trav-L-Cutter	HE	Hydraulic	6-72* (152-1829*)	902 000 020	02-000-02

\* Standard equipment includes a basic mounting chain for OD 6in - 48in (152-1219 mm) only.  
Chain assembly for OD 54- 72in (1371- 1829 mm) sold separately.



Model E Pneumatic



Trav-L-Cutter is in use worldwide



Heavy duty steel storage case hinges open for easy access



Trav-L-Cutter being used for submarine decommissioning

# TRAV-L-CUTTER Tooling

## Slitting Saw Blades

ITEM	SAW BLADE Ø	SAW BLADE THICKNESS	FOR PIPE MATERIALS	WALL THICKNESS MAX.	CODE	PART #
Slitting Blade HSS	6in (152.4 mm)	3/16in (4.8 mm)	Steel	1in (25.4 mm)	902 601 000	02-601-00
Slitting Blade HSS*	7in (177.8 mm)			1.5in (38.1 mm)	902 602 000	02-602-00
Slitting Blade HSS**	7in (177.8 mm)	9/32in (7.1 mm)			902 603 000	02-603-00
Slitting Blade HSS	8in (203.2 mm)	3/16in (4.8 mm)		Ductile, cast iron	2.125in (54.0 mm)	902 604 000
Slitting Blade Carbide tipped	6in (152.4 mm)		1in (25.4 mm)		902 605 000	02-605-00
	7in (177.8 mm)		1.5in (38.1 mm)		902 606 000	02-606-00
	8in (203.2 mm)		2.125in (54.0 mm)		902 607 000	02-607-00



Slitting blade



Slitting blade

## Bevel Cutters

VERSION	BEVEL CUTTER Ø	BEVEL CUTTER THICKNESS	BEVEL ANGLE	WALL THICKNESS MAX.	CODE	PART #
Left hand (inside)	5in (127.0 mm)	.5in (12.70 mm)	30°	.75in (19.05 mm)	902 608 540	02-608-LH
Right hand (outside)					902 608 740	02-608-RH
Left hand (inside)			37.5°	.625in (15.88 mm)	902 609 540	02-609-LH
Right hand (outside)					902 609 740	02-609-RH
Left hand (inside)	6in (152.4 mm)	.75in (19.05 mm)	30°	1in (25.40 mm)	902 610 540	02-610-LH
Right hand (outside)					902 610 740	02-610-RH
Left hand (inside)			37.5°	.875in (22.23 mm)	902 611 540	02-611-LH
Right hand (outside)					902 611 740	02-611-RH



Bevel cutter

## Saw Blade & Bevel Cutter Combination Options

Example: Cutting and beveling up to .75in (19.05 mm) wall thickness

BLADE	BLADE Ø	BLADE THICKNESS	BEVEL ANGLE °	WALL THICKNESS MAX.	CODE	PART #
HSS Slitting Blade	6in (152.4 mm)	.1875in (4.8 mm)	–	1in (25.4 mm)	902 601 000	02-601-00
Bevel cutter Left hand (inside)	5in (127.0 mm)	.5in (12.70 mm)	30	.75in (19.05 mm)	902 608 540	02-608-LH
Bevel cutter Right hand (outside)	5in (127.0 mm)	.5in (12.70 mm)	30	.75in (19.05 mm)	902 608 740	02-609-RH



Bevel cutter

Example: Cutting and beveling up to 1in (25.4 mm) wall thickness

BLADE	BLADE Ø	BLADE THICKNESS	BEVEL ANGLE °	WALL THICKNESS MAX.	CODE	PART #
Slitting Blade HSS**	7in (177.8 mm)	.28in (7.1 mm)	–	1.5in (38.1 mm)	902 603 000	02-603-00
Bevel cutter Left hand (inside)	6in (152.4 mm)	.75in (19.05 mm)	30	1in (25.4 mm)	902 610 540	02-610-LH
Bevel cutter Right hand (outside)	6in (152.4 mm)	.75in (19.05 mm)	30	1in (25.4 mm)	902 610 740	02-610-RH
Spacer Kit 3/16, 11/16, 3/4	–	–	–	–	902 500 030	02-500-03

\* For parting only.

\*\* For use with 6in bevel cutter.

\*\*\* Hi-grain carbide is a micrograin carbide with higher strength for tough materials.



Bevel cutter & slitting saw combination



# TRAV-L-CUTTER Accessories

## Clamping Chains

ITEM	PIPE OD	CHAIN LENGTH	CODE	PART #
Clamping chain	– per linear inch –		call	call
Chain assembly	6-48in (152.4-1219.2 mm)	173in (4394 mm)	902 450 480	02-450-48
Chain assembly	54-72in (1371.6-1828.8 mm)	67in (1702 mm)	902 450 720	02-450-72
Connecting pin			902 158 000	02-158-00

## Guide Tracks

Guide tracks require purchase of guide track wheel (Set of two).

DESCRIPTION	CODE	PART #	DESCRIPTION	CODE	PART #
6in (108.3 mm) Track	902 428 060	02-428-06	26in (660.4 mm) Track	902 428 260	02-428-26
8in (219.1 mm) Track	902 428 080	02-428-08	28in (711.2 mm) Track	902 428 280	02-428-28
10in (273.1 mm) Track	902 428 100	02-428-10	30in (762.0 mm) Track	902 428 300	02-428-30
12in (323.9 mm) Track	902 428 120	02-428-12	32in (812.8 mm) Track	902 428 320	02-428-32
14in (355.6 mm) Track	902 428 140	02-428-14	34in (863.6 mm) Track	902 428 340	02-428-34
16in (406.4 mm) Track	902 428 160	02-428-16	36in (914.4 mm) Track	902 428 360	02-428-36
18in (457.2 mm) Track	902 428 180	02-428-18	38in (965.2 mm) Track	902 428 380	02-428-38
20in (508.0 mm) Track	902 428 200	02-428-20	40in (1016.0 mm) Track	902 428 400	02-428-40
22in (558.8 mm) Track	902 428 220	02-428-22	42in (1066.8 mm) Track	902 428 420	02-428-42
24in (609.6 mm) Track	902 428 240	02-428-24	48in (1219.2 mm) Track	902 428 480	02-428-48

Set of 2 guide track wheels	902 429 000	02-429-00
Guide track bolt (2 required per guide track)	902 209 000	02-209-00

## Miscellaneous Accessories & Spare Parts

ITEM	CODE	PART #
Hydraulic hose set 13.9 m (45 ft 5/8in). Includes 4 sets M/F quick disconnects. For use with Trav-L-Cutter Model HE	902 408 000	02-408-00
Hydraulic female disconnect	909 025 000	09-025-00
Hydraulic male disconnect	909 026 000	09-026-00
Dust cover, plug-cap	909 027 000	09-027-00
Set of 2 guide track wheels	902 429 000	02-429-00
Long cutter spindle*	902 073 020	02-073-02
Spare parts kit**	902 500 010	02-500-01
Spare parts kit with air motor (includes both air motors)**	902 500 020	02-500-02
Spare parts kit for 902 000 040 (atmospheric)**	902 500 040	02-500-04
Chain connecting pin	902 158 000	02-158-00
Steel wedges.	902 175 000	02-175-00
Trav-L-Cutter manual. Electronic version via e-mail available free upon request.	902 626 010	02-MAN-01

\* If purchased in place of standard spindle: add \$125.00 to machine price.

\*\* Kit BOM's subject to change based on current production configuration.

## Hydraulic Power Units

For available Hydraulic Power Unit options, see page 76.

## Cutting Lubrication KSS-TOP

Cutting lubrication "KSS-TOP", see page 53.



Chain assembly & pins



Guide track

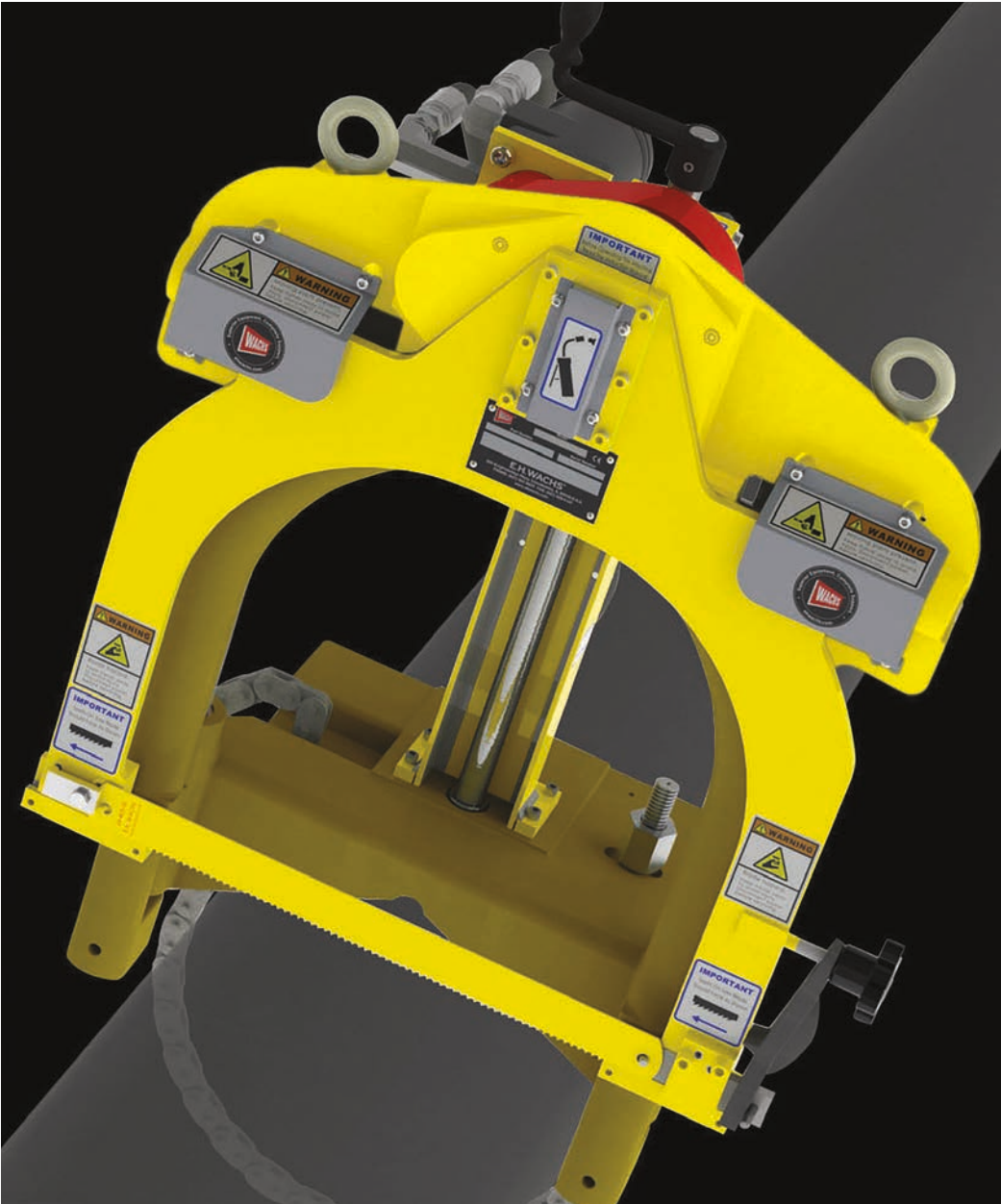


Gasoline Driven  
HPU Hydraulic Power Unit



KSS Top

# GUILLOTINE Saw



Famous "Wachs Saw" is used around the world



Unique elliptical stroke for extended blade life

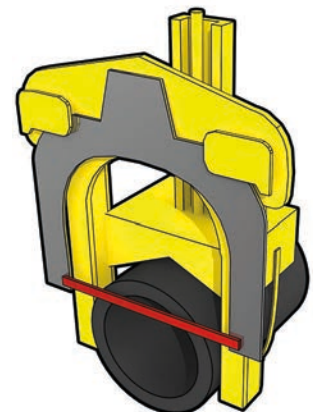


Goliath Saw shown on large diameter conductor

## Fast Setup & Cutting, both Horizontally or Vertically

E.H. Wachs family of portable Guillotine® pipe saws are designed to cold cut 2in - 32in (DN 50-800) pipe, as well as solids such as bar stock, rails and beams. Their compact design and easy setup make it the ideal saw for contractors, pipeline operations, refineries, petrochemical and processing plants and anywhere a fast, safe cut is needed.

In use virtually everywhere, Wachs Guillotine reciprocating saws are strong yet light, simple to mount, simple to operate and simply bulletproof. It's no wonder that when pipe saws are first mentioned, the "Wachs Saw" is mentioned first.



# GUILLOTINE Saw

## Super C, Model D, Super D, Goliath

- Rugged yet compact design requires minimal clearances
- Four models cut from 2in - 32in (DN 50-800)
- Fast setup and cutting, both horizontally or vertically
- Pneumatic, hydraulic and electric drive options
- Optional autofeed and autoclamping on select models

### Easy setup, vertical or horizontal

A chain pipe vise clamps the Guillotine Saw to the pipe. The machined cast iron "V"-saddle base assures square cuts at right angles. It can be mounted on horizontal as well as vertical piping. Custom bases for unusual workpiece shapes such as I beams available by special order.

### Quick cold cuts, minimal clearance

Wachs Guillotine saws require minimal clearance (the model Super C needs as little as 1.5in (38.1 mm) on one side of the pipe). All models feature finger tip feed control. The pipe is cold cut in a matter of minutes. A 6in (152.4 mm) standard wall steel pipe is cut in only 6 minutes. A 16in (406.4 mm) diameter 0.5in (12.7 mm) wall steel pipe is cut in about 20 minutes.

### Portable, rugged design

The Guillotine Saws combine compact size and light weight with simple, rugged construction for ease of operation and low maintenance.

### Long blade life

The high-speed steel blades are easily changed. The unique Guillotine cutting action lifts the blade from the cut on the return stroke, extending blade life.

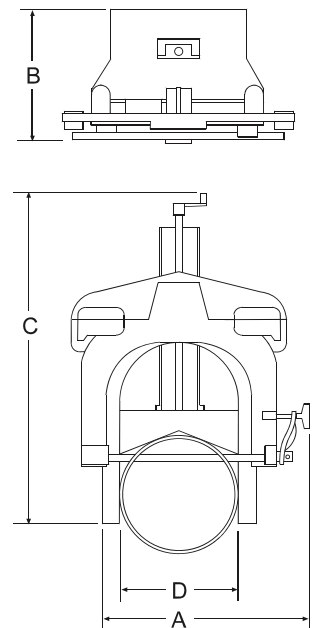
DIMENSIONS	UNITS	SUPER C	MODEL D	SUPER D	GOLIATH
Machine capacity	mm	DN 50-300	DN 150-450	DN 250-600	DN 400-800
	inch	2-12	6-18	10-24	16-32
Solids through	mm	324	473	622	838
	inch	12.75	18.625	24.5	33
Clearance overall width (on one side min.)	mm	711 (63.5)	813 (76)	991 (76)	1.676
	inch	28 (2.5)	32 (3)	39 (3)	66
Weight (operating / shipping)	kg	52 / 82	154 / 188	234 / 281	816.5
	lb	115 / 180	340 / 415	515 / 620	1800
Dimension A	mm	596,9	794	972	1676.4
	inch	23.5	31.25	38.25	66
Dimension B	mm	323,85	368	368	635
	inch	12.75	14.5	14.5	25
Dimension C	mm	800	940	1118	1943
	inch	31.5	37	44	76.5
Dimension D	mm	337	476	629	838
	inch	13.25	18.75	24.75	33
Stroke	mm	51	51	102	
	inch	2	2	4	
Shipping dimensions (estimated)	cm	66 x 74 x 56	160 x 119 x 74		
	inch	26 x 29 x 22	63 x 47 x 29		



Guillotine Super C



Long blade life





# GUILLOTINE Specifications

## Specifications

**Drive options:** Pneumatic or hydraulic (Goliath only with hydraulic drive)

**Pneumatic drive:** 50 ft<sup>3</sup>/min at 85 psi (1.4 m<sup>3</sup>/min at 5.0 BAR)

**Electric drive:** 15 A, 110 or 220 Volt single phase

**Hydraulic drive:** 10gal/min at 1500 psi (38 l/min at 106 BAR)

**Controls:** Single crank, manual feed. Motor on-off.

**Lubrication:** Grease fittings at all wear points

**Finish:** Powder coat frame with zinc coated bow

## Standard equipment

- Drive motor (pneumatic or hydraulic)
- 1 Standard saw blade
- Wrench 1 1/4in (31.75 mm)
- Air lubricator and filter (Air Model)
- Steel storage case (Model C and D only)
- Lifting eyes (Model D and Super D)
- Mounting chains
- Manual

## Optional equipment

- Blades: HSS and carbide blades (depending on the machine version)
- Control Panel for remote operation
- Autoclamp mechanism
- Autofeed mechanism
- Custom mounting bases

## Guillotine Saw Kits

DESCRIPTION	PIPE OD	CODE	PART #
Super C Pneumatic	2-12in (DN 50-300)	924 000 020	24-000-02
Super C Hydraulic	2-12in (DN 50-300)	924 000 030	24-000-03
Super C Autoclamp Hydraulic	2-12in (DN 50-300)	ON REQUEST	P06-150-502
Super C Autoclamp & Autofeed Hydraulic	2-12in (DN 50-300)	ON REQUEST	P06-150-500
Model D Pneumatic	6-18in (DN 150-457)	904 000 020	04-000-02
Model D Hydraulic	6-18in (DN 150-457)	904 000 030	04-000-03
Super D Pneumatic	10-24in (DN 250-610)	925 000 010	25-000-01
Super D Hydraulic	10-24in (DN 250-610)	925 000 030	25-000-03
Super D Autoclamp Hydraulic	10-24in (DN 250-610)	ON REQUEST	P06-150-512
Super D Autoclamp & Autofeed Hydraulic	10-24in (DN 250-610)	ON REQUEST	P06-150-510
Goliath Hydraulic	16-32in (DN 400-800)	ON REQUEST	P06-150-523
Goliath Autoclamp Hydraulic	16-32in (DN 400-800)	ON REQUEST	P06-150-522
Goliath Autoclamp & Autofeed Hydraulic	16-32in (DN 400-800)	ON REQUEST	P06-150-520



Guillotine cutting pipe



Guillotine Goliath cutting powerplant turbine shaft



Cuts a wide variety of materials



Guillotine cutting wellhead

## Miscellaneous Accessories & Spare Parts

DESCRIPTION	MODEL COMPATIBILITY				CODE	PART #
	MODEL C	SUPER C	MODEL D	SUPER D		
Air motor conversion (replaces all obsolete motors)	x				903 414 000	03-414-00
Lubricator retrofit kit	x	x	x	x	903 500 100	03-500-10
Spare parts kit	x	x			903 500 010	03-500-01
Spare parts kit			x		904 500 010	04-500-01
Spare parts kit				x	925 500 010	25-500-01
Manual - Electronic version via e-mail available free upon request.					903 626 010	03-MAN-01

## Hydraulic Power Units

For available Hydraulic Power Unit options, see page 76.

## Cutting Lubrication

Water soluble, fully synthetic cooling fluid that extends the life of tool bits. This biodegradable, non-hazardous, well corrosion resistant mixture was developed conforming to drinking water requirements according to DVGW work sheet W521 (thread cutting compounds for drinking water installations).

DESCRIPTION	VERSION	WEIGHT	CODE
Cutting lubrication KSS-TOP	Pump sprayer with 500 ml	1.39 lb (630 g)	790 060 226
Cutting lubrication KSS-TOP refill canister	Canister with 10 l	24.25 lb (11 kg)	790 060 227










Gasoline Powered  
HPU Hydraulic Power Unit

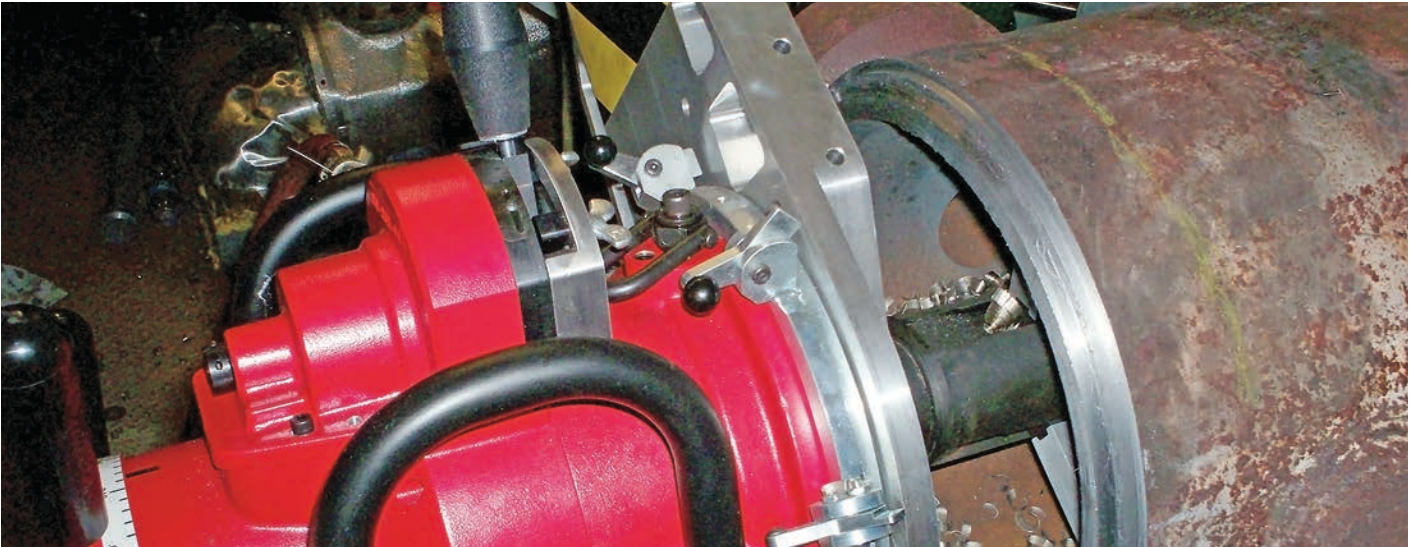


Cutting Lubrication KSS Top

## Saw Blades

PROFILE	DESCRIPTION	APPLICATION	CODE	PART #
	Model C HSS standard blade	For general use	903 405 000	03-405-00
	Model Super C standard blade - general use	Carbon steel pipe, stainless steel and other high alloy materials	924 405 000	24-405-00
	Model Super C carbide blade	Cast, ductile and concreted lined pipe	924 405 010	24-405-01
	Model D HSS standard blade	Carbon steel pipe, stainless steel and other high alloy materials	904 402 000	04-402-00
	Model D carbide blade	Cast, ductile and concreted lined pipe	904 405 010	04-405-01
	Model Super D heavy duty blade	Carbon steel pipe, stainless steel and other high alloy materials	925 402 000	25-402-00
	Goliath heavy duty blade	For general use	906 150 701	P06-150-701

## ID Mounted Machine Tools



### End Prep Machines & Flange Facers

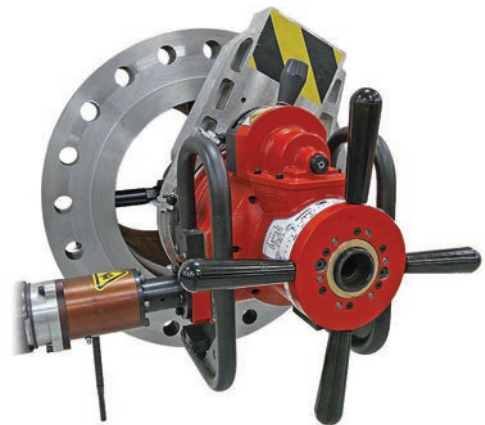
E.H. Wachs machine tools are broadly divided into OD mounted machines and ID mounted machines. ID mounted machine tools fall into the end prep category, meaning they machine the end of a pre-cut pipe or workpiece. Wachs ID mounted machines use a mandrel (or in specific cases a chuck head) that expands into the pipe inside diameter to hold fast. An inherent advantage of mandrels is they self center when tightened, assuring a high precision end prep.

ID mounting is also useful for special applications such as prepping elbows, with mandrels and fittings offered specifically for that purpose.

E.H. Wachs ID mounted products include our field proven SDB Small Diameter Beveler series and the related FF Flange Facing series. These machines offer incredible flexibility by utilizing common components where users can order and configure the machine as an SDB beveler, an FF flange facer or as both, so one machine can take the place of two.

Wachs best selling EP 424 is the ideal machine for heavy wall applications. It's available in three models, the basic Form Tool model and the Deluxe and Premium Single Point models that features our exclusive, patented AutoFeed system. The AutoFeed mechanism allows the user to select and change the bevel angle on the fly, the fastest and most precise way to create bevels, compound bevels and J Preps on the toughest steel and high alloy materials.

It's the perfect machine for newer or less experienced operators to deliver professional results right from day one. And like the convertible SDB series the EP 424 can be used to face large diameter flanges up to 24in (610 mm) OD., or up to 36in (914mm) with its optional single point tool slide.





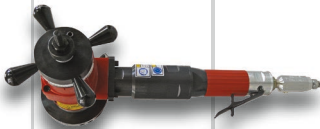




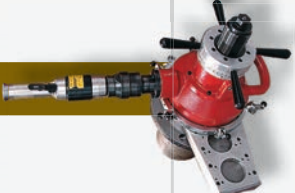
E.H. Wachs EP 424 End Prep with AutoFeed performs pipe end preps & flange facing



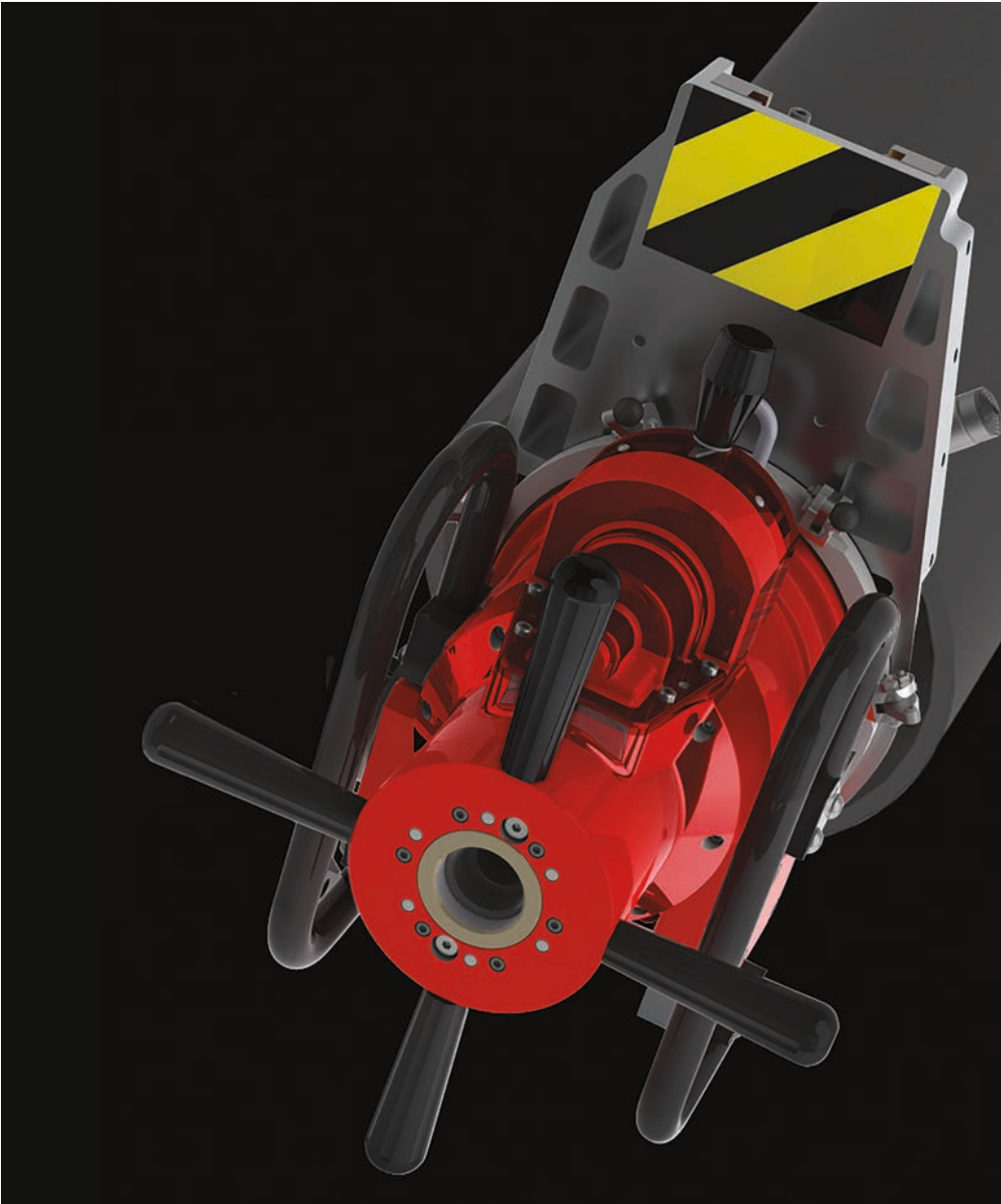
E.H. Wachs SDB End Prep performs pipe end preps & can be converted for flange facing



# ID Mounted Machine Ranges

	½in (13mm)	4in (102mm)	8in (203mm)	12in (305mm)	16in (406mm)	24in (610mm)	36in (914mm)
EP 424 END PREP	EP 424 FORM TOOLING 						
	EP 424 SINGLE POINTING 						
SDB SMALL DIAMETER BEVELER	SDB 103						
	SDB 206						
	SDB 412						
	FF 206						
FF FLANGE FACER	FF 313						
	FF 424						

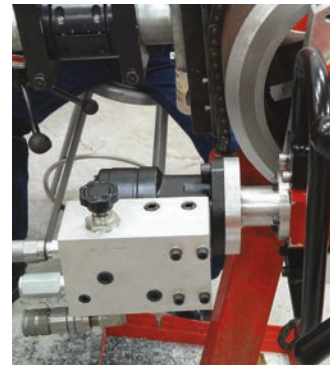
## EP 424 End Prep Machines



EP 424 is compact yet powerful



Patented AutoFeed mechanism



Hydraulic (shown), Electric & Pneumatic drive options

### Machines from 4-24in (DN 100-600) OD

#### Available with Patented AutoFeed Mechanism

The Wachs EP 424 with the AutoFeed system is a precision ID mount end prep machine tool designed to bevel, compound bevel, J prep, face and counterbore pipe, fittings and valves. The EP 424 machines any bevel or compound bevel without templates, incline tool slides or work stoppage.

It's powerful enough to form tool from 4-14in (DN 100-350) and single point from 8-24in (DN200 - 600) up to a 6.5in (165 mm) wall thickness. The EP 424 can single point and face flanges up to 36in utilizing its optional tool slide. With its patented AutoFeed system the EP 424 is the most advanced end prep machine tool in the industry.



# EP 424 End Prep

Prior to the EP 424, most end prep machines required a mechanical template or incline tool slide to reproduce the specific and complex preps called for by today's processes. With Wachs AutoFeed system, it's now possible to dial in the exact prep needed for your application. Select the bevel angle and the land that works best for your application, without work stoppages or additional components. More versatile and powerful than any other machine of its kind, the Wachs EP 424 sets the standard in user friendly large diameter end prep machines.

## Features

- Safe cold cutting process, eliminates heat affected zone
- Lathe machining delivers precise compound bevels and consistent lands
- EP 424 eliminates the need for accessory templates or external tool slides
- Fast setup and prep with standard self-centering mandrel legs
- Corrosion resistant finishes on all components for extreme environments
- Fully enclosed bearings and drive gears for safety and durability
- Hardened alloy steel components, larger gear sets for high work loads
- Lightweight yet rigid aluminum housing enhances portability
- Low friction bearing system provides maximum stability, eliminating chatter

## Design Capabilities

- Machine perfect preps from OD 4in - 24in (DN100 - 600)
- Form tool pipe from OD 4in - 14in (DN 100-350)
- Single point machining from OD 8in - 24in (DN 100-600)
- Single point Up to 36in (DN 900) with optional slide
- Fully modular construction for one man set-up and operation

## Specifications

### System function:

ID mount end prep machine tool designed to bevel, compound bevel, J-prep, face and counterbore pipe, fittings and valves

### Capacity OD:

4-24in (DN 100-600)

Up to 36in (DN 900) with optional slide

### Drive options:

Hydraulic, pneumatic or electric

### Pneumatic requirements:

95ft<sup>3</sup>/min at 90 psi

(2.7m<sup>3</sup>/min at 6.2 BAR)

### Hydraulic requirements:

8gal/min at 1500 psi

(30l/min at 103 BAR)

**Feed method:** AutoFeed system with dial control or fully manual

### Feed rate:

Variable feed rate, user adjustable

### Feed stroke (axial):

2.8in (71.1 mm)

### Construction:

Lightweight aluminum housing, oversize hardened alloy steel fully enclosed gear sets, high capacity bearings, rigid mandrel legs, captivated hardware

**Finish:** Multistage bright red enamel finish plus black oxide and clear coated components

### Machine rotating speed:

0-14rpm (variable)

**Tooling:** Accepts standard Wachs single point beveling and form tools, high speed steel or carbide tooling

**Tool slots:** Form tooling or single point tooling (varies by model)

**Packaging:** Heavy duty storage case

### Length:

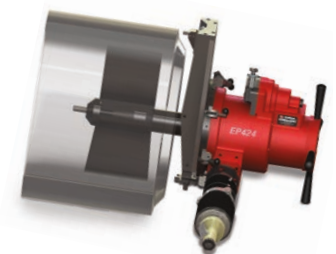
Without Mandrel 12.35in (314 mm)

With Mandrel 26.75in (680 mm)

**Weight:** Full modular construction with each module under 31.75 kg (70 lb), total weight with storage case 71.67 kg (158 lb)



EP 424 Flange Facing with single point machine slide



Cross section of EP 424 mounted for single pointing



EP 424 Single Point Deluxe with form tooling rotating head



Faces flanges up to 36in (914 mm) with optional slide



# EP 424 End Prep

## Pneumatic

ACM AIR  
REMOTE  
CONTROL  
MODULE



3hp PNEUMATIC  
STRAIGHT DRIVE  
MOTOR

## Hydraulic

HPU  
HYDRAULIC  
POWER UNITS



HYDRAULIC  
DRIVE MOTOR



## Electric

EPD  
ELECTRIC  
POWER DRIVE



EPD  
REMOTE  
CONTROL



EPD  
MOTOR



EIBENSTOCK HD

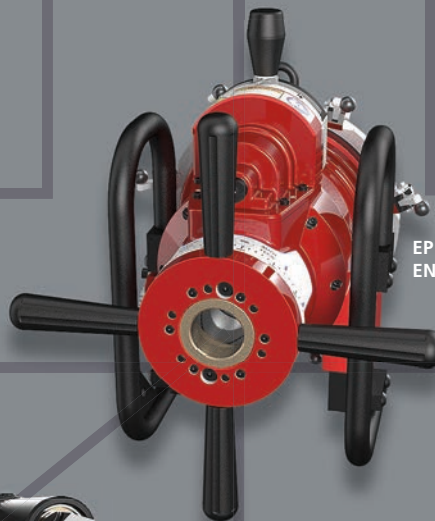


POWER BOX

REMOTE  
CONTROL

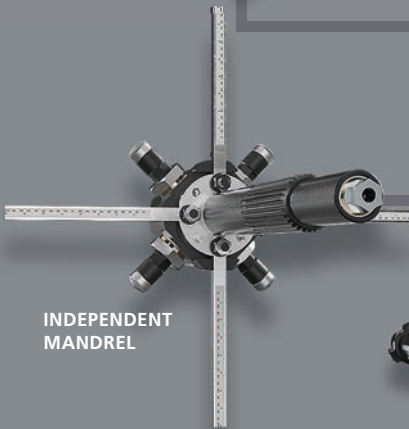


EIBENSTOCK  
HD DRIVE  
MOTOR



EP 424  
END PREP

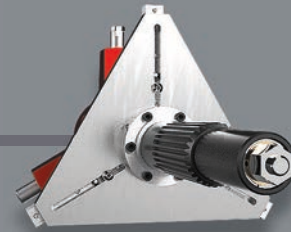
INDEPENDENT  
MANDREL



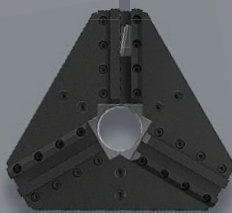
STANDARD  
MANDREL



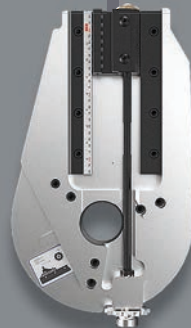
ELBOW MANDREL



FORM TOOL ROTATING HEAD



SINGLE POINTING SLIDE



36in SINGLE POINTING SLIDE



# EP 424 End Prep

## EP 424 Kits

EP 424 Form Tool Basic			EP 424 Single Point Deluxe			EP 424 Single Point Premium			
PNEUMATIC DRIVE	HYDRAULIC DRIVE	ELECTRIC DRIVE ADAPTER	PNEUMATIC DRIVE	HYDRAULIC DRIVE	ELECTRIC DRIVE ADAPTER	PNEUMATIC DRIVE	HYDRAULIC DRIVE	ELECTRIC DRIVE ADAPTER	
		Form Tooling Rotating Head Assembly 4-16in OD (102-406 mm)							
				Single Point Slide ID 4.24-24in OD (108-610 mm)					
			Standard Self-Centering Mandrel ID 3.27-15.96in (83-405 mm)						
				Standard Self-Centering Mandrel ID 14.87-23.64in (378-600 mm)					
						Independent Mandrel ID 8.5-22.6in (215.9-574 mm)			
					AutoFeed				
Code	981 000 010	981 000 020	981 000 030	981 000 070	981 000 080	981 000 090	981 000 040	981 000 050	981 000 060
Part #	81-000-01	81-000-02	81-000-07	81-000-05	81-000-06	81-000-09	81-000-03	81-000-04	81-000-08

\*Electric models include electric drive motor adapter only. Eibenstock HD and EPD drives sold separately

### Standard equipment

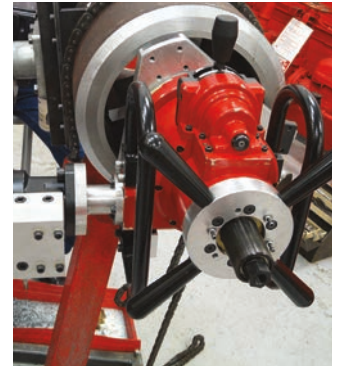
- Tool slide or rotating head (varies by kit)
- Heavy duty storage case
- Standard mandrel
- Extension leg kit
- Self squaring mounting system
- Operating hand tools
- Operation manual

### Optional equipment

- Independent mandrel for mitters or elbows
- Elbow Mandrel
- Electric drive motors with remote control options
- ATM Air Treatment Module for pneumatic drive
- ACM Remote Control Module for pneumatic drive
- Interchangeable tool slides
- 36in Single Point Slide
- Genuine Wachs tooling
- AutoFeed Upgrade kit for Form Tool Basic Model

### Mandrels

DESCRIPTION	APPLICATIONS	PART #
Standard Mandrel	Flange Facing, Single Pointing, & Form Tooling	81-303-00
Independent Mandrel	Flange Facing, Single Pointing, Form Tooling, & Miter Beveling for straight pipe	81-305-00
Elbow Mandrel	Flange Facing, Single Pointing, Form Tooling, & Miter Beveling for mounting to curved sections of pipe and junctions	81-315-00



EP 424 single point deluxe beveling with form tool rotating head



EP 424 single pointing deluxe prepping heavy wall pipe



Self-centering standard mandrel



Independent Mandrel

## EP 424 Single Point AutoFeed Upgrade

Converts form tool model to single point model.

### Includes

- Single point radial tool slide for ID 4.25in (108 mm) to OD 24in (609.6 mm)
- (165 mm (6.5in) slide travel)
- AutoFeed axial feed gear box for bevel generation up to 45°
- Chuck leg extensions for ID range 14.87in - 23.64in (377.7-600 mm)
- Self squaring mounting system and extensions for ID range 7.6-22.6in (193-574 mm)
- Dial indicator system
- Operating hand tools
- Storage case
- Manual

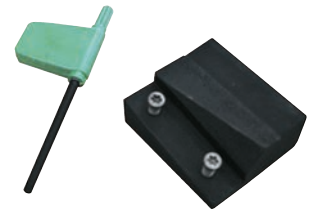
## EP 424 Form Tooling - Facing Holders & Inserts

DESCRIPTION	CODE	PART #
Facing tool insert holders, axial		
Facing tool insert holder (low range) includes: <ul style="list-style-type: none"> <li>• 1 tool holder (56-198-01)</li> <li>• 2 insert screws (56-190-00)</li> <li>• 1 wrench (56-191-00)</li> </ul>	956 708 010	56-708-01
Facing tool insert holder (high range) includes: <ul style="list-style-type: none"> <li>• 1 tool holder (56-198-02)</li> <li>• 2 insert screws (56-190-00)</li> <li>• 1 wrench (56-191-00)</li> </ul>	956 708 020	56-708-02
Tool inserts for facing and beveling		
Premium grade HSS insert (2 sided). For facing and beveling. For use with SDB 206, 412 and EP 424 insert holders.	956 711 010	56-711-01
Carbide 2 sided insert. For facing and beveling. For use with SDB 206 and 412 insert holders.	956 712 010	56-712-01
Facing insert holder kit for axial facing and beveling 37.5°		
Insert holder kit for axial facing and beveling 37.5° includes: <ul style="list-style-type: none"> <li>• 1 low range facing insert holder (56-708-01)</li> <li>• 1 high range facing insert holder (56-708-02)</li> <li>• 1 bevel insert holder 37.5° (56-709-03)</li> </ul> For SDB, SDB 412 and EP 424.	956 710 010	56-710-01
Screw and wrench		
Screw, insert	956 190 000	56-190-00
Insert screw torx wrench	956 191 000	56-191-00
Customized tools ground to customer specification (specific Code to be assigned upon receipt of order)		
Custom HSS facing tool bit (form tool)	ON REQUEST	56-SPT-02
Custom form tool or single point insert holder	ON REQUEST	56-SPT-10

## EP 424 Form Tooling - Bevel Holders & Inserts

DESCRIPTION	CODE	PART #
Bevel tool insert holder kits		
Bevel tool insert holder kit 30° includes: <ul style="list-style-type: none"> <li>• 1 holder (56-199-02)</li> <li>• 2 insert screws (56-190-00)</li> <li>• 1 wrench (56-191-00)</li> </ul>	956 709 020	56-709-02
Bevel tool insert holder kit 37.5° includes: <ul style="list-style-type: none"> <li>• 1 holder (56-199-03)</li> <li>• 2 insert screws (56-190-00)</li> <li>• 1 wrench (56-191-00)</li> </ul>	956 709 030	56-709-03
"J-Prep" bevel tool insert holder kit* 20° (low range) includes: <ul style="list-style-type: none"> <li>• 1 holder (56-199-01)</li> <li>• 2 insert screws (56-190-00)</li> <li>• 1 wrench (56-191-00)</li> </ul>	956 709 010	56-709-01

\*Use with 956 708 010 facing insert holder for 0.040in (1 mm) land extension.



Facing tool insert holder (high range)



Premium grade HSS insert (2 sided)



Insert holder kit for axial facing and beveling 37.5°



Form Tool Insert Holder

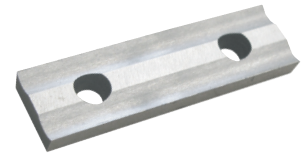


## EP 424 Form Tooling - Bevel Holders & Inserts

DESCRIPTION	CODE	PART #
"J-Prep" bevel tool insert holder kit 20° (high range) includes: • 1 holder (56-199-05) • 2 insert screws (56-190-00) • 1 wrench (56 191 00) <i>Use with 56-708-01 facing insert holder for 0.040in (1 mm) land extension.</i>	956 709 050	56-709-05
Insert holder kit includes: • 1 low range facing insert holder (56-708-01) • 1 high range facing insert holder (56-708-02) • 1 bevel insert holder 37.5° (56-709-03) <i>For SDB 206, SDB 412 and EP 424.</i>	956 710 010	56-710-01
Compound bevel form tool 10° x 37.5°	956 707 000	56-707-00
<b>Inserts for facing and beveling</b>		
Premium grade HSS insert (2 sided). <i>For use with SDB 206, 412 and EP 424 insert holders.</i>	956 711 010	56-711-01
Carbide 2 sided insert. <i>For use with SDB 206 and 412 insert holders.</i>	956 712 010	56-712-01
Premium grade HSS 2 sided 3/32 radius "J" bevel insert. <i>For use with 56-709-01 and 56-709-05 insert holders.</i>	956 711 020	56-711-02
Carbide 2 sided 3/32 radius "J" bevel insert. <i>For use with 56-709-01 and 56-709-05 insert holders.</i>	956 712 020	56-712-02
<b>Screw and wrench</b>		
Screw, insert	956 190 000	56-190-00
Insert screw torx wrench	956 191 000	56-191-00
<b>Customized tools ground to customer specification</b>		
Custom HSS bevel tool bit single angle (form tool).	ON REQUEST	56-SPT-01
Custom HSS bevel tool bit compound angle (form tool).	ON REQUEST	56-SPT-03
Custom HSS bevel tool bit single angle "J" (form tool).	ON REQUEST	56-SPT-04
Custom HSS bevel tool bit compound angle "J" (form tool).	ON REQUEST	56-SPT-05

## EP 424 Counterbore & ID Tooling

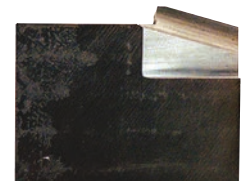
DESCRIPTION	CODE	PART #
<b>ID deburring tools</b>		
ID deburring tool 10° 0.150in (3.81 mm) required between mandrel and ID.	956 702 010	56-702-01
ID deburring tool 10° 0.449in (11.4 mm) required between mandrel and ID.	956 702 020	56-702-02
ID deburring tool 10° 0.762in (19.4 mm) required between mandrel and ID.	956 702 030	56-702-03
<b>Counterbore tools</b>		
Counterbore tool taper 4:1 0.315in (8 mm) required between mandrel and ID.	956 705 010	56-705-01
Counterbore tool taper 4:1 0.875in (22.2 mm) required between mandrel and ID.	956 705 020	56-705-02
Counterbore tool taper 4:1 1.375in (35 mm) required between mandrel and ID.	956 705 030	56-705-03
Counterbore tool taper 4:1 3/8 x 3/8in (9.5 x 9.5 mm) <i>Use with single point beveling tool holder.</i>	956 713 000	56-713-00
Counterbore tool taper 4:1 <i>For SF204/3-SF1420/3</i>	960 700 040	60-700-04
Tool Holder kit counterbore	956 715 000	56-715-00
<b>Customized tools ground to customer specification</b>		
Custom HSS tool bit ID deburring	ON REQUEST	56-SPT-06
Custom HSS tool bit counterboring	ON REQUEST	56-SPT-07



Premium grade HSS insert (2 sided)



Counterbore tool taper 4:1



Counterbore tool taper 4:1



Tool Holder kit counterbore

## DuoEdge Insert Tooling

E.H. Wachs DuoEdge Insert Tooling is a system of portable machine tool holders and inserts designed to replace larger, more expensive traditional tooling.

It offers considerable cost savings over traditional tooling without sacrificing the longevity of the cutting edge or the quality of the finished prep.

- Multiple cutting edges for minimal work interruption
- Each cutting edge costs on average one third the cost of a traditional bit
- No need to sharpen tooling, saving time, labor and shipping
- Small size of inserts makes them easy to store or carry in your pocket
- Tool Holders are reusable, inserts are interchangeable between holders
- End prep holder is reversible to a high and low range position
- Precision ground, super smooth surface finish
- Reduced friction for longer life
- Chip curl edge designed to clear swarf
- Eliminates expensive and time consuming conventional tool resharpener
- Unlike conventional tooling DuoEdge has two cutting edges per insert
- On average costs 1/3 the price of conventional tooling per edge
- Optimal mix of sharpness and durability
- Supplied with 0.5in tool radius for stronger edges and a better finish
- Superior to competitors off the shelf repurposed CNC tooling
- Multiple materials offered, HSS, premium coated HSS and carbide steel

DESCRIPTION	APPLICATION	MATERIAL	CODE	PART #
DuoEdge Single Point Holder	Single pointing	Heat treated steel	981 702 000	81-702-00
DuoEdge Insert Single Pack	Carbon steel	HSS	981 701 010	81-701-01
DuoEdge Insert 10-Pack	Carbon steel	HSS	981 701 100	81-701-10
DuoEdge Premium Single Pack	Stainless steel	HSS Premium	981 701 009	81-701-00P
DuoEdge Premium 10-Pack	Stainless steel	HSS Premium	981 701 109	81-701-10P
DuoEdge Insert Single Pack	High-temp alloys	Carbide	981 703 010	81-703-01
DuoEdge Insert 10-Pack	High-temp alloys	Carbide	981 703 100	81-703-10
DuoEdge Insert Single Pack	R 2.4 mm/.094in J-Prep	HSS	981 704 010	81-704-01
DuoEdge Insert Single Pack	R 3.2 mm/.125in J-Prep	HSS	981 705 010	81-705-01
DuoEdge Insert Single Pack	R 4.8 mm/.188in J-Prep	HSS	981 706 010	81-706-01
DuoEdge Insert Single Pack	R 6 mm/.236in J-Prep	HSS	981 707 010	81-707-01

## Legacy EP 424 Single Point Tooling

Legacy Tool holders		
<b>Single point beveling tool holder, low range.</b> For OD 4.25-23.62in (108-600 mm) for EP 424. For EP 424, FF313 and FF424.	956 424 000	56-424-00
<b>Single point beveling tool holder, high range.</b> For OD 7.25-24in (184-609.6 mm) for EP 424. For EP 424, FF313 and FF424.	956 424 010	56-424-01
Legacy Tool bit		
<b>Standard HSS tool bit 3/8 x 3/8in (9.5 x 9.5 mm).</b> For single point facing, beveling and flange facing. For use with EP 424, LCSF/3, FF, SWR and SDSF machines.	952 701 010	52-701-01



DuoEdge Tooling Single Point Insert



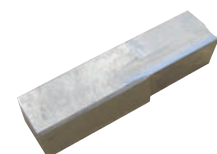
DuoEdge inserts, 10 pack



DuoEdge Single Point Holder



Legacy single point beveling tool holder



Legacy standard HSS tool bit 9.5 x 9.5 mm

## SDB Small Diameter Beveler



Box header beveling with SDB



SDB pipe end preparation



SDB end prepping  
pressure vessel

### Fast, Easy Setup - Self-Centering Design

E.H. Wachs SDB line of small diameter bevelers have been engineered for fast, precise onsite facing, beveling, compound beveling and counterboring of light and heavy wall pipe, tube or casing. Proven workhorses, they set up quickly with a self-centering mandrel and chuck assembly mounting to the pipe ID.

Using high strength heat treated steel on the mandrel with aluminum components to save weight without sacrificing strength, one person can setup, operate and create a perfect weld prep in minutes. With optional conversion kits the SDB can be reconfigured to an FF series flange facer.





# SDB 103 End Prep

## Pipe End Preparation Machines

- Compact, lightweight design for one person set up and operation
- Self-centering ID mandrel assures perfect end preps
- Face, bevel, counterbore
- Convertible to FF series with optional flange facing kit

## SDB 103

The SDB 103 end prep handheld beveling machine delivers maximum power and performance for fast, accurate weld preps on pipe and tube from ID 0.875in (22.2 mm) to OD 4.5in (114.3 mm). Face, bevel and counterbore simultaneously on carbon, stainless and high alloy steels.

Extremely versatile, the SDB 103 allows you to prep boiler tubes, heavy wall pipe, thick wall tubing, and elbows. With optional FF kit face flanges ID 2in (50.8 mm) to OD 6in (152.4 mm).



SDB 103

SPECIFICATIONS	SDB 103
Machine capacity	0.875in - 4.500in (22.2-114.0 mm)
Standard equipment	<ul style="list-style-type: none"><li>• Heavy duty drive (air or electric)</li><li>• Standard mandrel ID 1.16-4.18in (29.5-106 mm)</li><li>• 7 sets of leg extensions</li><li>• Operating hand tools</li><li>• Watertight storage case</li><li>• Manual</li></ul>
Shipping weight (est.)	40 lb (18 kg)
Shipping dimensions (est., without accessories)	25 x 22 x 9in (635 x 558.8 x 228.6 mm)

## SDB 103 Beveler Kits

DESCRIPTION	DRIVE TYPE	PIPE ID TO OD	CODE	PART #
SDB 103/3	Pneumatic	0.88-4.5in (22-114 mm)	916 000 010	16-000-01
SDB 103/3	Electric 110 V, 50 Hz	0.88-4.5in (22-114 mm)	916 000 020	16-000-02
SDB 103/3	Electric 220 V, 50 Hz	0.88-4.5in (22-114 mm)	916 000 030	16-000-03

## SDB/FF Flange Facer Conversion Kits for SDB 103

DESCRIPTION	CODE	PART #
<b>BEVELER CONVERSION KIT</b> Converts FF 206 to SDB 103/3 end prep machine to face, bevel, compound bevel and counterbore pipes with Ø 1- 4in (25.4-101.6 mm). Includes: <ul style="list-style-type: none"><li>• 1 standard rotating head</li><li>• 1 standard mandrel ID 1.16in - 4.18in ( 29.5-106 mm)</li><li>• 7 sets of leg extensions</li><li>• 1 felt wiper</li><li>• Fasteners</li></ul>	916 420 000	16-420-00
<b>FLANGE FACER CONVERSION KIT</b> Converts SDB 103/3 to FF 206 flange facing machine for flanges ID 2in (50.8 mm) to OD 6in (152.4 mm). Includes: <ul style="list-style-type: none"><li>• 1 single point flange facing tool slide</li><li>• 1 independent "short perch" mandrel</li><li>• 7 sets of leg extensions ID 1.95in - 4.11in (49.5-104.4 mm)</li></ul>	916 421 000	16-421-00



SDB to FF Conversion Kit: head, mandrel, legs, & fasteners

# SDB 206 End Prep

## SDB 206

The SDB 206 makes fast work of end preps on pipe and tube from ID 1.91in (48.5 mm) to OD 6.625in (168.3 mm). Compact and lightweight, its design requires only 2.25in (57 mm) of radial clearance – making it the ideal tool for use in tight places.

No other machine of this type can perform as many different jobs: face, bevel, counterbore (simultaneously if desired), compound bevel and (with optional FF kit) faces flanges from ID 3in (76.2 mm) to OD 13in (330.2 mm).

SPECIFICATIONS	SDB 206
Machine capacity	1.910in - 6.625in (48.5-168.0 mm)
Standard equipment	<ul style="list-style-type: none"> <li>• Heavy duty drive (air, electric or hydraulic)</li> <li>• Standard mandrel ID 2.27-6.58in (57.7-167 mm)</li> <li>• 10 sets of leg extensions</li> <li>• Operating hand tools</li> <li>• Watertight storage case</li> <li>• Manual</li> </ul>
Shipping weight (est.)	115 lb (52 kg)
Shipping dimensions (est., without accessories)	12 x 32 x 21in (305 x 813 x 533 mm)



SDB 206

## SDB 206 Beveler Kits

DESCRIPTION	DRIVETYPE	PIPE ID TO OD	CODE	PART #
SDB 206/2	Pneumatic	1.91-6.63in (49-168 mm)	956 000 010	56-000-01
SDB 206/2	Electric 110 V, 50 Hz	1.91-6.63in (49-168 mm)	956 000 020	56-000-02
SDB 206/2	Electric 220 V, 50 Hz	1.91-6.63in (49-168 mm)	956 000 040	56-000-04
SDB 206/2	Hydraulic	1.91-6.63in (49-168 mm)	956 000 030	56-000-03

## SDB/FF Flange Facer Conversion Kits for SDB 206

DESCRIPTION	CODE	PART #
<b>BEVELER CONVERSION KIT</b> Conversion kit FF 313 to SDB 206/6 end prep machine. Includes: <ul style="list-style-type: none"> <li>• 1 standard rotating head</li> <li>• SDB 206 mandrel</li> <li>• 7 sets of leg extensions</li> <li>• 1 felt wiper</li> <li>• Fasteners</li> </ul>	956 420 000	56-420-00
<b>FLANGE FACER CONVERSION KIT</b> Converts model SDB 206/2 to FF 313 flange facing machine. For flanges with ID 3in (76.2 mm) to OD 13in (330 mm). Includes: <ul style="list-style-type: none"> <li>• 1 single point flange facing tool slide</li> <li>• 3-jaw independent "short perch" mandrel</li> <li>• 18 sets of leg extensions ID 3.00in - 10.08in (76.2-256 mm)</li> </ul>	956 421 000	56-421-00



Form tooling to single pointing conversion kit

# SDB 412 End Prep

## SDB 412

The SDB 412 is a portable pipe end prep machine designed to face, bevel, counterbore (simultaneously) and compound bevel ID 3.80in (96.5 mm) to OD 12.75in (323.9 mm) pipe, up to 1.125in (29 mm) wall thickness.

Face flanges with optional FF kit ID 4in (101.6 mm) to OD 24in (609.6 mm). The heavy duty yet compact design of the SDB 412 requires minimal operating clearances. The SDB 412 is designed for one person handling, setup and operation.

SPECIFICATIONS	SDB 412
Machine capacity	3.800in - 12.750in (96.5-323.9 mm)
Standard equipment	<ul style="list-style-type: none"><li>• Heavy duty drive (air, electric or hydraulic)</li><li>• Standard mandrel ID 3.80-12.02in (96.5-305 mm)</li><li>• 8 sets of leg extensions</li><li>• Operating hand tools</li><li>• Watertight storage case</li><li>• Manual</li></ul>
Shipping weight (est.)	308 lb (140 kg)
Shipping dimensions (est., without accessories)	25 x 47 x 18in (635 x 1.194 x 457 mm)

## SDB 412 Beveler Kits

DESCRIPTION	DRIVETYPE	PIPE ID TO OD	CODE	PART #
SDB 412/2	Pneumatic	3.8-12.75in (97-324 mm)	966 000 010	66-000-01
SDB 412/2	Hydraulic	3.8-12.75in (97-324 mm)	966 000 030	66-000-03
SDB 412/2	Electric 220 V, 50 Hz	3.8-12.75in (97-324 mm)	966 000 020	—

## SDB/FF Flange Facer Conversion Kits for SDB 412

DESCRIPTION	CODE	PART #
<b>BEVELER CONVERSION KIT</b> Converts FF 424 to SDB 412/2 portable pipe and tube prepping machine to face, bevel, compound bevel and counterbore pipes with Ø 4in - 12in (102-305 mm) Includes: <ul style="list-style-type: none"><li>• 1 standard rotating head</li><li>• 1 standard mandrel ID 3.8in - 12.02in (96.5-305 mm)</li><li>• 8 sets of leg extensions</li><li>• 1 felt wiper</li><li>• fasteners</li></ul>	966 420 000	66-420-00
<b>FLANGE FACER CONVERSION KIT</b> Converts SDB 412/2 to FF 424 flange facing machine. For flanges with ID 4in (101.6 mm) to OD 24in (609.6 mm). Includes: <ul style="list-style-type: none"><li>• 1 single point flange facing tool slide</li><li>• 3-jaw independent "short perch" mandrel</li><li>• 23 sets of leg extensions ID 3.78in - 20in (96-508 mm)</li></ul>	966 421 000	66-421-00

## Hydraulic Power Units

For available Hydraulic Power Unit options, see page 76.

## Air Control Module

Air Control Module "ACM", see page 74.

## Cutting Lubrication

Cutting lubrication "KSS-TOP", see page 53.



SDB 412



Electric Hydraulic Power Unit



Air Control Module ACM provides remote control for pneumatic operation



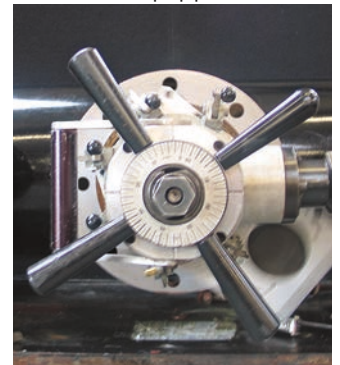
## FF Flange Facer



Lathe quality surface finish



Based on powerful  
SDB end prep platform



Convertible to  
SDB series end prep

### Fast, Easy Setup - Self-Centering Design

Now anyone can produce a lathe quality surface finish on flat, raised or recessed face flanges in minutes. Based on the powerful Wachs SDB series ID mount end prep machines, the Wachs FF series flange facers offer a rugged yet lightweight and compact design that allows them to fit into tight quarters.

With the addition of the SDB conversion kit, the FF models can be converted into SDB series machines, allowing them to face, bevel, compound bevel and counterbore. Field proven industry workhorses, they are easy to setup with self-centering mandrels and easy to operate.



# FF Flange Facer

Wachs FF series flange facers are based on the powerful and versatile SDB series of bevelers. Simple to operate, they mount to the pipe ID and are self-centering. Specify the SDB conversion kit to add bevel, facing and counterbore capabilities.

- Fast, easy setup – self-centering design
- Simple operation, light-weight and compact
- Record groove, RMS 500, 250, 125
- Converts to SDB beveler series with optional SDB conversion kit

## Model FF 206

Flange facing machine for facing flat, raised or recessed face flanges from ID 2in (50.8 mm) through OD 6in (152.4 mm) up to a 2in (DN50) 150# flange.

## Model FF 313

Flange facing machine for facing flat, raised or recessed face flanges from ID 3in (76.2 mm) through OD 13in (320.2 mm) up to a 6in (DN150) 400# flange.

## Model FF 424

Flange facing machine for facing flat, raised or recessed face flanges from ID 4in (101.6 mm) through OD 24in (609.6 mm) up to a 16in (DN400) flange.

SPECIFICATIONS	FF 206	FF 313	FF 424
Machine capacity (Pipe ID to OD)	2-6in (50.8-152.4 mm)	3-13in (76.2-330.2 mm)	4-24in (101.6-609.6 mm)
Standard equipment	<ul style="list-style-type: none"> <li>• Heavy duty drive (air or electric)</li> <li>• 3-jaw independent "short perch" mandrel ID 1.95in - 4.11in (49.5-104.4 mm)</li> <li>• 7 sets of leg extensions</li> <li>• Single point flange facing tool slide</li> <li>• Tooling package</li> <li>• Watertight storage case</li> <li>• Operating hand tools</li> <li>• Manual</li> </ul>	<ul style="list-style-type: none"> <li>• Heavy duty drive (air, electric or hydraulic)</li> <li>• 3-jaw independent "short perch" mandrel ID 3in - 10.08in (76.2-256 mm)</li> <li>• 18 sets of leg extensions</li> <li>• Single point flange facing tool slide</li> <li>• Tooling package</li> <li>• Watertight storage case</li> <li>• Operating hand tools</li> <li>• Manual</li> </ul>	<ul style="list-style-type: none"> <li>• Heavy duty drive (air, electric or hydraulic)</li> <li>• 3-jaw independent "short perch" mandrel ID 3.78in - 20in (96-508 mm)</li> <li>• 23 sets of leg extensions</li> <li>• Single point flange facing tool slide</li> <li>• Tooling package</li> <li>• Watertight storage case</li> <li>• Operating hand tools</li> <li>• Manual</li> </ul>
Shipping weight (est.)	47 lb (21.3 kg)	180.8 lb (82 kg)	
Shipping dimensions (est., without accessories)	25 x 22 x 9in (635 x 559 x 229 mm)	12 x 32 x 12in (305 x 813 x 305 mm)	

MODEL	DRIVETYPE	PIPE ID TO OD	CODE	PART #
FF 206	Pneumatic	2-6in (50.8-152.4 mm)	916 000 330	16-000-FF
FF 206	Electric 110 V, 50 Hz	2-6in (50.8-152.4 mm)	ON REQUEST	ON REQUEST
FF 206	Electric 220 V, 50 Hz	2-6in (50.8-152.4 mm)	ON REQUEST	ON REQUEST
FF 313	Pneumatic	3-13in (76.2-330.2 mm)	956 000 330	56-000-FF
FF 313	Electric 110 V, 50 Hz	3-13in (76.2-330.2 mm)	ON REQUEST	ON REQUEST
FF 313	Electric 220 V, 50 Hz	3-13in (76.2-330.2 mm)	ON REQUEST	ON REQUEST
FF 313	Hydraulic	3-13in (76.2-330.2 mm)	ON REQUEST	ON REQUEST
FF 424	Pneumatic	4-24in (101.6-609.6 mm)	966 000 330	66-000-FF
FF 424	Electric 110 V, 50 Hz	4-24in (101.6-609.6 mm)	ON REQUEST	ON REQUEST
FF 424	Electric 220 V, 50 Hz	4-24in (101.6-609.6 mm)	ON REQUEST	ON REQUEST
FF 424	Hydraulic	4-24in (101.6-609.6 mm)	966 000 340	66-000-FH
FF 424	SDB 412/2 + FF 424 (Set)	4-24in (101.6-609.6 mm)	966 000 040	66-000-04



FF Flange Facer 206



FF Flange Facer 313



FF Flange Facer 424

## Mandrels & Accessories for SDB 103

DESCRIPTION	CODE	PART #
<b>Standard mandrel.</b> For ID 1.16in - 4.18in (29.5-106 mm). Without leg extension sets.	916 303 000	16-303-00
<b>Standard mandrel.</b> For ID 1.16in - 4.18in (29.5-106 mm). Includes: 7 sets of leg extensions.	916 409 000	16-409-00
<b>3-jaw independent "short perch" mandrel.</b> For ID 1.95in - 4.11in (49.5-104 mm). Includes: 7 sets of leg extensions. Minimum .75in straight run required. To rigid mount on fittings, flanges, elbows and valves.	916 414 000	16-414-00
<b>Small ID accessory mandrel.</b> For ID 0.875in - 1.25in (22-31.75 mm). Includes: <ul style="list-style-type: none"> <li>• 1 rotating head 3.13in (79.5 mm).</li> <li>• 1/4in (4 x 6.35 mm) shank style tool slots. 2 sets of leg extensions for ID mounting ranges: 0.875-1.125in (22-28.6 mm) and 1- 1.25in (25.4-31.75 mm)</li> <li>• 1 mandrel</li> <li>• 1 draw bar nut</li> <li>• 1 drawbar</li> <li>• Fasteners</li> </ul>	916 401 000	16-401-00



SDB 103 / FF 206  
Mandrel Kit

## Mandrels & Accessories for SDB 206

DESCRIPTION	CODE	PART #
<b>Standard mandrel "new style 2009"</b> For ID 2.27- 2.92in (58-74 mm). Without leg extension sets.	956 430 010	56-430-01
<b>Standard mandrel "new style 2009"</b> For ID 2.27in - 6.77in (58-172 mm) Includes: 7 sets of leg extensions.	956 430 000	56-430-00
<b>Standard range leg extension kit</b> For standard mandrel "new style 2009". For ID 2.75in - 6.77in (70-172 mm).	956 430 020	56-430-02
<b>Upgrade for obsoleted mandrel 956 401 010.</b> Requires return of the 956 401 010 mandrel and the following items to be in good reusable condition to complete the upgrade: 956 188 000 956 035 000 956 036 000 956 024 020 956 025 000 Estimate for repair will be given for any items not acceptable to complete the conversion.	956 310 000	56-310-00
<b>Small ID accessory mandrel.</b> For ID 1.91in - 2.46in (48.5-62.5 mm).	956 402 010	56-402-01
<b>Extender kit "new style 2009" for mandrel 956 430 000.</b> Includes: <ul style="list-style-type: none"> <li>• 4 sets of leg extensions for ID 6.71in - 9.04in (170-229.6 mm)</li> <li>• 1 rotating head (8in).</li> </ul>	956 407 020	56-407-02
<b>Small 3-jaw independent "short perch" mandrel.</b> For ID 2in - 3.25in (50.8-82.5 mm). Includes 3 sets of leg extensions. To rigid mount on fittings, flanges, elbows and valves.	956 416 010	56-416-01
<b>3-jaw independent "short perch" mandrel.</b> For ID 3in - 6.08in (76.2-154 mm). Includes 8 sets of leg extensions. Minimum .75in (19.05 mm) straight run required. To rigid mount on fittings, flanges, elbows and valves.	956 414 010	56-414-01
<b>Extension adapter hub.</b> For ID 6in - 10.1in (152.4-256.5 mm). Includes 10 sets of leg extensions. For 3-jaw independent "short perch" mandrel 956 414 010.	956 415 000	56-415-00
<b>Single point flange facing tool slide.</b> For flanges with ID 3in (76.2 mm) to OD 13in (330 mm).	956 404 000	56-404-00



SDB 206 / FF 313  
Mandrel Kit



## Mandrels & Accessories for SDB 412

DESCRIPTION	CODE	PART #
<b>Standard mandrel.</b> For ID 3.80-12.02in (96.5-305 mm). Excludes leg extension sets.	966 301 010	66-301-01
<b>Standard mandrel.</b> For ID 3.80-12.02in (96.5-305 mm). Includes 8 sets of leg extensions.	966 407 010	66-407-01
<b>3-jaw independent "short perch" mandrel.</b> For ID 3.75-12.80in (95-325 mm). Includes 13 sets of leg extensions. Minimum .75in straight run required. To rigid mount on fittings, flanges, elbows and valves.	966 414 010	66-414-01
<b>Extension adapter hub.</b> For ID 12.72-20in (323-508 mm). Includes 10 sets of leg extensions. For 3-jaw independent "short perch" mandrel 966 414 010.	966 415 000	66-415-00
<b>Leg set replacement</b> Includes: • 3 chuck legs (66-084-00) • 1 complete set of extension leg assemblies from 0.5-4in (12.7-101.6 mm)	966 411 000	66-411-00



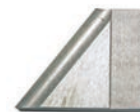
SDB 412 / FF 424 Mandrel Kit

## Facing/Beveling/Counterboring Tools for SDB 103

DESCRIPTION	CODE	PART #
<b>FF Flange facing tool insert holder.</b>	956 714 010	56-714-01
<b>FF Flange facing tool insert</b> for holder (56-714-01). Carbide.	960 702 000	60-702-00
<b>Facing tool (non-wedgelock)</b> for ID 1.16-3in (29.5-76.2 mm).	926 410 020	26-410-02
<b>Facing tool (non-wedgelock)</b> for ID 2.3-4.18in (58.4-106 mm).	926 410 030	26-410-03
<b>Facing tool (non-wedgelock)</b> Carbide tipped. Max. wall 0.75in (19.05 mm).	926 410 040	26-410-04
<b>Custom HSS facing tool bit (non-wedgelock)</b> Ground to customer specification.	ON REQUEST	26-SPT-01
<b>Bevel tool 37.5° (non-wedgelock).</b> For ID 1.16-3in (29.5-76.2 mm).	926 411 010	26-411-01
<b>Bevel tool 37.5° (non-wedgelock).</b> For ID 2.3-4.18in (58.4-106 mm).	926 411 020	26-411-02
<b>Bevel tool 37.5° (non-wedgelock).</b> For ID 2.14-2.7in (54.4-68.6 mm).	926 411 030	26-411-03
<b>Bevel tool carbide 37.5° (non-wedgelock).</b>	926 411 040	26-411-04
<b>Bevel tool bit 20° "J" 3/32 radius (non-wedgelock).</b> For ID 1.35-4in (34.3-101.6 mm). Use with facing tool 926 410 020 for 0.03in (0.76 mm) land extension.	926 713 000	26-713-00
<b>Custom HSS single angle bevel tool bit (non-wedgelock).</b> Ground to customer specification.	ON REQUEST	26-SPT-02
<b>Custom HSS "J-Prep" bevel tool bit (non-wedgelock).</b> Ground to customer specification.	ON REQUEST	26-SPT-06
<b>Universal beveling and facing tool 37.5° (non-wedgelock).</b> For ID 1.5-3in (38.1-76.2 mm).	926 413 010	26-413-01
<b>Universal beveling and facing tool 37.5° (non-wedgelock).</b> For ID 2.2-3.8in (55.9-96.5 mm).	926 413 020	26-413-02
<b>Custom HSS combination facing and beveling tool bit (non-wedgelock).</b> Ground to customer specification.	ON REQUEST	26-SPT-04
<b>Small ID deburring tool (non-wedgelock).</b> 0.186in (4.7 mm) required between mandrel and ID.	926 412 010	26-412-01
<b>Medium ID deburring tool (non-wedgelock).</b> 0.43in (10.9 mm) required between mandrel and ID.	926 412 020	26-412-02
<b>Large ID deburring tool (non-wedgelock).</b> 0.68in (17.3 mm) required between mandrel and ID.	926 412 030	26-412-03
<b>Combo 30° taper counterbore and facing tool (non-wedgelock)</b> 0.326in (8.3 mm) required between mandrel and ID.	926 426 000	26-426-00
<b>Custom HSS ID deburring tool (non-wedgelock).</b> Ground to customer specification.	ON REQUEST	26-SPT-03
<b>Custom HSS counterboring tool bit (non-wedgelock).</b> Ground to customer specification.	ON REQUEST	26-SPT-05



Medium ID deburring tool (non-wedgelock)



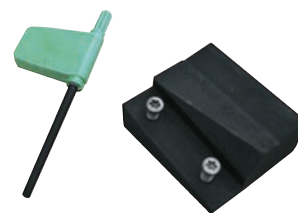
Bevel tool 37.5° (non-wedgelock)



3/32 radius 2-sided "J-Prep" bevel tooling insert (Premium)

## Facing and Beveling Tools for SDB 206 & SDB 412

DESCRIPTION	CODE	PART #
<b>Facing tool insert holder (low range) includes:</b> • 1 holder (56-198-01) • 2 insert screws (56-190-00) • 1 wrench (56-191-00)	956 708 010	56-708-01
<b>Facing tool insert holder (high range) includes:</b> • 1 holder (56-198-02) • 2 insert screws (56-190-00) • 1 wrench (56-191-00)	956 708 020	56-708-02
<b>Premium grade HSS insert (2 sided).</b> For facing and beveling. For use with SDB 206, SDB 412 and EP 424 insert holders.	956 711 010	56-711-01
<b>Carbide 2 sided insert.</b> For facing and beveling. For use with SDB 206 and SDB 412 insert holders.	956 712 010	56-712-01
<b>Insert holder kit includes:</b> • 1 low range facing insert holder (56-708-01) • 1 high range facing insert holder (56-708-02) • 1 bevel insert holder 37.5° (56-709-03) For use with all SDB 206, SDB 412 and EP 424.	956 710 010	56-710-01
<b>Custom HSS facing tool bit (form tool).</b> Ground to customer specification.	ON REQUEST	56-SPT-02
<b>Custom facing insert holder.</b> Ground to customer specification.	ON REQUEST	56-SPT-09
<b>30° bevel tool insert holder kit includes:</b> • 1 holder (56-199-02) • 2 insert screws (56-190-00) • 1 wrench (56-191-00)	956 709 020	56-709-02
<b>Bevel tool insert holder kit 37.5° includes:</b> • 1 holder (56-199-03) • 2 insert screws (56-190-00) • 1 wrench (56-191-00)	956 709 030	56-709-03
<b>"J" bevel tool insert holder kit 20° (low range) includes:</b> • 1 holder (56-199-01) • 2 insert screws (56-190-00) • 1 wrench (56-191-00) Use with facing insert holder 56-708-01 for .04in (1 mm) land extension	956 709 010	56-709-01
<b>"J" bevel tool insert holder kit 20° (high range) includes:</b> • 1 holder (56-199-05) • 2 insert screws (56-190-00) • 1 wrench (56-191-00) Use with facing insert holder 56-708-10 for .04in (1 mm) land extension	956 709 050	56-709-05
<b>Premium grade HSS insert (2 sided). For facing and beveling.</b> For use with SDB 206, SDB 412 and EP 424 insert holders.	956 711 010	56-711-01
<b>Premium grade HSS insert (2 sided) 3/32 radius "J" bevel insert.</b> For use with 56-709-01 and 56-709-05 holders.	956 711 020	56-711-02
<b>Carbide insert (2 sided). For facing and beveling.</b> For use with SDB 206 and SDB 412 insert holders.	956 712 010	56-712-01
<b>Carbide insert (2 sided) 3/32 radius "J" bevel.</b> For use with 56-709-01 and 56-709-05 insert holders.	956 712 020	56-712-02
<b>Compound bevel form tool 10° x 37.5°.</b>	956 707 000	56-707-00
<b>Insert holder kit includes:</b> • 1 low range facing insert holder (56-708-01) • 1 high range facing insert holder (56-708-02) • 1 bevel insert holder 37.5° (56-709-03) For use with SDB 206, SDB 412 and EP 424.	956 710 010	56-710-01
<b>Legacy single point beveling tool holder.</b> For EP 424, FF 313 and FF 424, low range. EP 424 for OD 4.25in - 23.62in (108-600 mm).	956 424 000	56-424-00
<b>DuoEdge single point tooling</b>	-	-



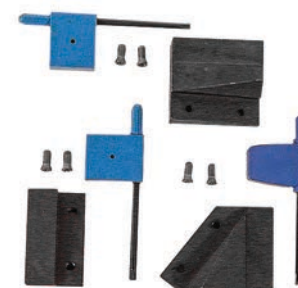
Facing tool insert holder (high range)



Bevel tool insert holder kit 37.5°



Premium grade HSS insert (2 sided)



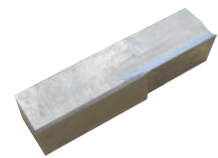
Insert Holder Kit 56-710-01

## Beveling and Counterboring Tools for SDB 206 & SDB 412

DESCRIPTION	CODE	PART #
Legacy single point beveling tool holder. For EP 424, FF 313 and FF 424, high range. EP 424 for OD 7.25in - 24in (184-609.6 mm)	956 424 010	56-424-01
Custom HSS single angle bevel tool bit (form tool). Ground to customer specification	ON REQUEST	56-SPT-01
Custom HSS compound angle bevel tool bit (form tool). Ground to customer specification	ON REQUEST	56-SPT-03
Custom single angle "J" bevel tool bit (form tool). Ground to customer specification	ON REQUEST	56-SPT-04
Custom HSS compound angle "J" bevel tool bit (form tool). Ground to customer specification	ON REQUEST	56-SPT-05
Custom bevel angle insert holder. Ground to customer specification	ON REQUEST	56-SPT-08
10° ID deburring tool. 0.15in (3.8 mm) required between mandrel and ID	956 702 010	56-702-01
10° ID deburring tool. 0.449in (11.4 mm) required between mandrel and ID	956 702 020	56-702-02
10° ID deburring tool. 0.762in (19.4 mm) required between mandrel and ID	956 702 030	56-702-03
4:1 Taper counterbore tool. 0.315in (8 mm) required between mandrel and ID	956 705 010	56-705-01
4:1 taper counterbore tool. 0.875in (22.2 mm) required between mandrel and ID	956 705 020	56-705-02
4:1 taper counterbore tool. 1.375in (35 mm) required between mandrel and ID	956 705 030	56-705-03
Custom HSS ID deburring tool bit. Ground to customer specification	ON REQUEST	56-SPT-06
Custom HSS counterbore tool bit. Ground to customer specification	ON REQUEST	56-SPT-07



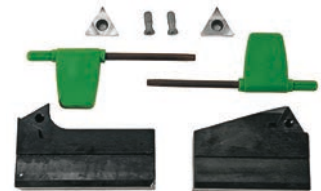
Legacy single point beveling tool holder



Legacy standard HSS tool bit  
9.5 x 9.5 mm

## Flange Facing Tools for FF 206

DESCRIPTION	CODE	PART #
Carbide insert. For beveling and flange facing For use with insert holder 956 714 010	960 702 000	60-702-00
Carbide insert tool holder kit For single point beveling and flange facing includes: • 1 holder (16-042-00) • 1 flag wrench (56-191-00) • 2 retaining screws (60-231-01) • 5 inserts (60-702-00)	916 701 000	16-701-00



Flange facing tool kit

## Flange Facing Tools for FF 313 & FF 412

DESCRIPTION	CODE	PART #
Flange facing tool kit includes: • 1 low range insert tool holder (56-195-00) • 1 high range insert tool holder (56-194-00) • 2 tool inserts (56-710-00) • 2 insert retaining screws (56-190-00) • 1 screw wrench (56-191-00)	956 418 010	56-418-01
Tool insert for flange facing (high and low range)	956 710 000	56-710-00
Custom form tool or single point insert holder. Ground to customer specification	ON REQUEST	56-SPT-10



Flange facing tool insert

## Hydraulic Power Units

For available Hydraulic Power Unit options, see page 76.

## Air Control Module

Air Control Module "ACM", see page 74.





3hp & 4hp pneumatic  
6B spline drive motors



Powerful HPU-20 with standard  
remote control pendant



New Eibenstock HD available with or  
without remote control

### Power Delivery Solutions for Pipe Cutting & Beveling

E.H. Wachs offers a wide variety of power drive motor options including electric, hydraulic and pneumatic. All Wachs machine tools require a smooth, controllable power source, essential to produce the precision weld preps needed for high quality, repeatable welds.

Many Wachs machines can be operated with multiple drive types, while others are designed for a single or specialized drive type. Whichever machine you purchase or rent, OD or ID mounted, Wachs has the optimum power solution for your application.



## ACM Air Control Module with Remote Control For MDSF, SDSF, EP 424, SDB/FF, and LCSF

E.H. Wachs Air Control Module (ACM) is two accessories in one, an ATM Air Treatment Module that regulates and conditions the incoming air supply to protect valuable air motors, and a remote control device that allows the operator the freedom to move away from the machine. The ACM allows operators to cut and bevel pipe up to 7.9 m (26 feet) away, significantly reducing fatigue while moving the operator a safer distance from the workpiece, important in highly restricted or potentially hazardous environments.

- All air design, with no other power source required
- Compact, self contained; controls and hoses go in the strong, watertight case
- Lockable case with wheels and telescoping handle for easy transport
- Lightweight, ergonomic remote for operator comfort
- 1.8 m (6 foot) remote umbilical provides the operator unencumbered movement and optimum positioning
- Pressure regulator locks at desired pressure; 116 psi (8 BAR) maximum setting
- Dual unit pressure gauge for quick visual confirmation of supply pressure
- Vented non-marring quick disconnect with easy push to connect and one handed disconnection
- Durable 6m (20 foot) air line for any operating position and improved safety

### Easy Operation

Everything needed to quickly set up and start operating remotely is contained inside the case. The ACM uses the large "Chicago" style air coupler for our split frame and end prep machines, and includes the required adapters to control the SDSF and other machines that use a smaller air connector.

### Safety Features

- Lockable shut-off for supply isolation
- Pressure relief system
- Shut-off vents trapped system pressure
- Emergency stop shuts off and dumps air motor supply
- Operator reset required following main pressure failure or emergency stop activation, preventing dangerous movement

### Specifications

- **Air Power Requirements:**  
ACM - 1.84 m<sup>3</sup>/min at 6.3 BAR (65 cfm; 90-232 psi) compressed air supply
- **Packaging:** Heavy duty storage case, transport with handle and wheels
- **Dimensions:** 457 x 500 x 305 mm (18.0 x 19.7 x 12.0in)
- **Materials:** Rugged ultra high-impact copolymer resin case & steel control panel
- **Weight:** 15.4 kg (34 lb)

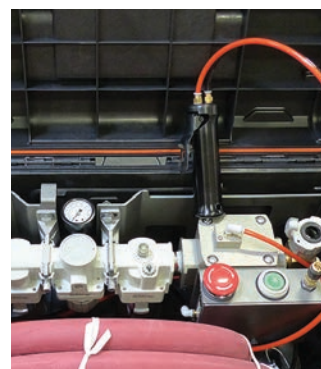
### Standard equipment

- Integrated control module
- 1.8 m (6ft) remote cord
- 6 m (20ft) air hose
- Remote hand controller
- Heavy Duty Transport/Storage Case
- Operating Instructions

ITEM	CODE	PART #
Air Control Module ACM for pneumatic motors	969 410 101	69-4101-01



Air Control Module ACM  
for pneumatic motors



Ergonomic fingertip control  
with safety stop button



ACM controlling Split Frame

## ATM Air Treatment Modules

Pneumatic power is the first choice of most field machinists, but untreated air can be rough on even the toughest air motors. Strongly recommended, Wachs ATM Air Treatment Modules condition and regulate incoming air, extending motor life.

DESCRIPTION	CODE	PART #
Air Treatment Module ATM (Non-CE)	926 407 000	26-407-00
Air Treatment Module for DynaPrep MDSF	969 410 000	69-4100-00
Air Treatment Module Remote for DynaPrep MDSF	969 410 100	69-4101-00

## Pneumatic Drive Motors

Wachs offers an expanded range of pneumatic, hydraulic and electric drive motor options with the power and durability for form tooling, single pointing and other cutting uses.

DESCRIPTION	IMPERIAL	METRIC	CODE	PART #
1.5hp Pneumatic	1.5 hp	1.1 kW	969 435 200	69-4352-00
2.5hp LCSF Pneumatic Reversible	2.5 hp	1.9 kW	960 401 001	60-4010-01
3hp Pneumatic Motor Right Angle with Handle	3 hp	2.2 kW	969 435 100	69-4351-00
3hp Pneumatic Motor Right Angle	3 hp	2.2 kW	969 435 300	69-4353-00
3hp Right Angle Reversible	3 hp	2.2 kW	969 435 301	69-4353-01
4hp Pneumatic Motor	4 hp	3.0 kW	969 435 500	69-4355-00
4hp Pneumatic Motor with Handle	4 hp	3.0 kW	969 435 600	69-4356-00

## DynaPrep MDSF Pneumatic Meter-Out Kits

Meter-out kit consisting of exhaust manifold, speed control, and muffler. Controls (meters) the airflow on the exhaust (out) side to yield high torque, low rpm operation for high alloy materials like stainless steel and Inconel. Where extra torque and precise speed control at slow speeds is required, consider a meter-out kit for your air motor. It is the ideal upgrade for machining stainless steel and other corrosion resistant alloys.

DESCRIPTION	CODE	PART #
3 hp Meter-Out Adapter Kit	969 436 000	69-4360-00
4 hp Meter-Out Adapter Kit	969 436 100	69-4361-00



Air Treatment Module ATM



Pneumatic drive motors are available with straight & right angle drives



3hp Meter-Out Adapter Kit



# POWER Hydraulic

MODEL	ENGINE	GPM/LPM	FRAME TYPE	OIL COOLER	FUEL	HYD OIL (USABLE)	HYD RELIEF PRESSURE	FILTRATION	LENGTH	WIDTH	HEIGHT	WEIGHT
HCM-2G	11 HP Gas	7 GPM (26 LPM)	Cart Mount	None	1.6 GAL (6.1 LTR)	5.0 gal (19 ltr)	1500 PSI (103 BAR)	10 MICRON RETURN LINE CANISTER TYPE	26.5in (67cm)	20in (51cm)	27.5in (70cm)	143 lb (65 kg)
HCM-3E4	15 HP Electric	15 GPM (57 LPM)		Air to Oil with Fan	N/A	4.0 gal (15.4 ltr)			1800 PSI (124 BAR)	27.5in (70cm)	24.5in (62cm)	31.5in (80cm)
HCM-3E3							39in (99cm)			29in (73.7cm)	36.5in (93cm)	520 lb (236 kg)
HCM-D23	23 HP Diesel			18 GPM (68 LPM)	Trolley Mount	AIR to OIL	5.0 GAL (18.9 LTR)		5.0 gal (19 ltr)	46.5in (104cm)	21in (53.3cm)	28in (71cm)
HPU-20	20 HP Electric	N/A	30 gal (114 ltr)							1500 PSI (103 BAR)	43.7in (110cm)	31.5in (80cm)
HSM-SQ	15 HP Electric			15 GPM (57 LPM)	Skid		5.0 gal (19 ltr)					

## Hydraulic Power Units

### Gasoline HPU Model HCM-2G (14-000-08)

11 H.P. Honda gasoline engine driven hydraulic cart mounted power unit, with electric start, hour meter, spark arrestor, low oil level shut down and oil cooler.

Rated for 10 GPM @ 1500 PSI (37.9 LPM @ 103 BAR)

### Diesel HPU Model HCM-D23 (14-000-33)

23 H.P diesel engine driven hydraulic cart mounted power unit, with electric start, hour meter, fuel gauge, spark arrestor, low oil level shut down and oil cooler.

Rated for 15 GPM @ 1800 PSI (56.8 LPM @ 124 BAR)

### Electric HPU Model HCM-3E4-50 (14-000-28)

15 H.P. 415-440V 50Hz (IP44 rated) 3 phase electric motor driven hydraulic cart mounted power unit, with electric motor switch and oil cooler.

Rated for 15 GPM @ 1500 PSI (56.8 LPM @ 103 BAR)

### Electric HPU Model HCM-3E3-50 (14-000-29)

15 H.P. 380V 50Hz (IP44 rated) 3 phase electric motor driven hydraulic cart mounted power unit, with electric motor switch and oil cooler.

Rated for 15 GPM @ 1500 PSI (56.8 LPM @ 103 BAR)



Cart Mounted, Gasoline Fueled Hydraulic Power Unit



Diesel D23 Hydraulic Power Unit



Electric Hydraulic Power Unit

## Hydraulic Hose Set & Accessories

DESCRIPTION	PART #
45 foot X 1/2in Hydraulic Hose Set W/Quick Disconnects (Not for use with Trav-L-Cutter Model HE)	03-404-00
45 foot 5/8in Hydraulic Hose Set including 4 sets M/F Quick Disconnects. (For use with Trav-L-Cutter Model HE)	02-408-00
20 Foot 1/2in Hydraulic Hose Set	09-406-00
Female Hydraulic Disconnect (1)	09-025-00
Male Hydraulic Disconnect (1)	09-026-00

## Heavy Duty Electric Model HPU-20 (14-000-35)

380-480v Electric Motor Driven Remote Controlled Hydraulic Power Unit.

### Standard Features

- UL Listed NEMA 4 Electrical Controls Power (50/60HZ 3 Phase)
- 380-480V 3 phase input power
- Over temp shut off
- Low oil light
- Remote pendant control with a 12 ft and a 50 ft extension cable
- Remote stop / start and flow control
- Removable base with non-marring casters
- Five (5) point rigging / lifting system
- Heat exchanger complete with digital readout
- Ultra quiet helical hydraulic gear pump
- Powder coat finish
- Operating manual

### Specifications

- 52.5in H x 26in W x 34.75in L
- 20HP 3 phase electric motor
- 30 gal tank capacity
- 850 lb operating weight with base & hydraulic oil
- Factory Pressure Relief Setting 1800 psi (124 BAR)
- Variable Flow from 4-18 GPM (15-68 l/min)
- Electric Power Requirements 380-480v (3 Phase)  
50/60Hz @ 30 Amps
- Sound level 62db at full flow

*Note HPU is shipped without Hydraulic Oil.*

## Skid Mount Electric SafeQuip Model HSM-SQ [900 002 011]

15 HP 440V 50/60 Hz, 32A 11 kW (IP55 rated) 3 phase electric motor driven skid mounted heavy duty hydraulic power unit. Designed to meet current CE European standards and guidelines, the SafeQuip features a handheld remote pendant to control the main functions including variable speed control.

### Standard Features

- 15HP electric 3 phase motor
- Hour meter, oil cooler and oil leakage sump
- IP55 protection against dust and water ingress
- Solid frame with lifting eyes to protect hardware
- Remote start, stop, speed control, emergency stop
- Remote control cable length: 16.4 ft (5m)
- Rated for 15 GPM @ 1500 PSI (56.8 LPM @ 103 BAR)

## Hydraulic Drive Motors

Easily control the flow of hydraulic fluid to your machine's pinion housing.

Tool-free connection allows the 6B spline drive and face gear to slide into place, providing consistent torque. This heavy duty, rugged design works in tight spaces.

DESCRIPTION	CODE	PART #
MDSF Hydraulic Drive Motor	969 425 800	69-4358-00
EP 424 Hydraulic Drive Motor	981 310 000	81-310-00



Heavy Duty Electric HPU-20



SafeQuip Skid Mounted Electric HPU



Hydraulic drive motor

## EPD Electric Power Drive

E.H. Wachs Electric Power Drive (EPD) is a self-contained, compact electric drive system that's an alternative to traditional pneumatic and hydraulic drives, for larger field portable machine tools. Lightweight and easily transportable Wachs EPD is powerful enough for all but the most demanding applications. Developed in Germany to world class standards, the EPD is ideal for the power generation, oil & gas and pipeline distribution industries. Highly efficient, it eliminates the energy loss inherent in converting electric power to pneumatic or hydraulic, requiring less hardware.

Wachs Electric Power Drive is a complete system that includes the electric drive motor, power supply/controller and remote control pendant. Weighing less than 16.5 kg (36 lb) the electric power controller is housed in a small suitcase sized housing sealed to IP65 moisture and dust resistance standards. The high frequency electric drive motor is a lightweight (9 kg (19.8 lb) yet powerful design that uses a quick, tool-free mounting system.

### EPD Motor Features:

- Premium construction for durability
- Maintenance free brushless design
- Moisture and dust resistant to IP65
- High torque output at low speed
- High voltage and current spike protection
- Rated for high continuous operating temperatures
- Over temperature protective thermal switch
- Overload clutch on drive motor

### EPD Power Controller

The EPD power controller drives the high frequency electric motor, and is available for 220 V single phase and 380V-480V 3 phase.

### EPD Power Controller Features:

- Small design size utilizing high frequency technology
- Highly portable unit
- Versatile tool-free quick connection for machine mounting
- 220V (Single Phase), 380V-480V 3-Phase (4 kW- 8 kW); optionally with 230V or 380-480V cable
- Moisture and dust resistant to IP65
- Error codes display
- Service reminder for gear, oil, and seal changes
- High torque at low speed
- Over temperature protection

### Remote Control Features:

- Emergency Stop
- Speed control
- Hold-to-run control
- Start and Stop control



Power controller is compact & portable



EPD powerful electric drive motor with tool-free mounting system



Remote control pendant with speed control & emergency stop



Tool-free mount makes installation and removal easy.



## Specifications

ELECTRIC POWER DRIVE EPD	220V 1 PHASE	380-480V 3-PHASE	PART #
EPD Electric Power Motor			EPM8
Powder coated AC high frequency inertia brushless motor with aluminum housing and gear box, high voltage, current spike and over temperature protected. Output speed infinitely variable.			
Power	4 kW at 230 V with cables (at 220 V approx. 40% lower speed)	8 kW at 400 V with cables	
Speed (RPM)	160/250 RPM		
Frequency	50-60 Hz		
Amps	15-20 A		
Weight	9.0 kg / 19.8 lb		
Electric Power Controller			EPB 480
16.4 foot (5 m) power cord and motor cables. Power cord ships without wall plug, user installation required.			
Power	8-12 KW		
Frequency	50-60 Hz		
Amps	15-20 A		
Weight	16.5 kg / 36.38 lb		

### Standard Equipment:

- Electric Power Motor
- Electric Power Controller
- Remote Control
- Power supply cable (version dependent)
- Hard-shell carrying case
- Operating instructions

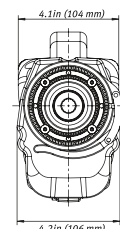
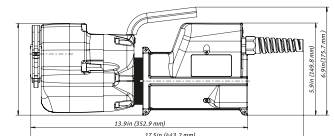
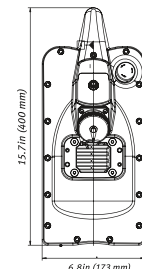
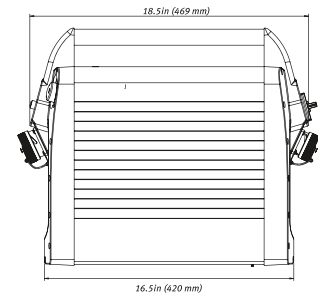
DESCRIPTION	VERSION	CODE	PART #
EPD for DynaPrep MDSF	220 V Single Phase	960 133 501	69-4357-01
EPD for DynaPrep MDSF	380-480 V 3-Phase		69-4357-03
EPD for LCSF	220 V Single Phase	900 007 002	60-452-01
EPD for LCSF	380-480 V 3-Phase	900 007 001	60-452-03
EPD for EP 424 (Requires Adapter)	220 V Single Phase	900 007 004	60-452-01
EPD for EP 424 (Requires Adapter)	380-480 V 3-Phase	900 007 003	60-452-03
EP 424 adapter for pneumatic and hydraulic machines*		981 500 000	81-500-00

\* Add EPD for EP 424 separately.

## Electric Drive Motors

E.H. Wachs German manufactured Eibenstock electric drives represent the pinnacle of precision electric drive motors. These HD drive motors are more compact yet more powerful, and perfectly matched to drive our DynaPrep MDSF split frames. In addition they can be used to power Split Frames, SDB 206 and 412 end preps plus FF 313 and 424 flange facers. Smooth, quiet, and powerfully efficient they pack a large amount of power in a relatively compact package. Available with machine control, remote control pendant or full remote control pendant and trip in 110V and 220V models.

DESCRIPTION	PART #
Eibenstock HD Electric Drive-110V, MDSF	69-4340-00
Eibenstock HD Electric Drive-220V, MDSF	69-4341-00
Eibenstock HD Electric Drive-110V with remote pendant (requires controller box)	69-4342-00
Eibenstock HD Electric Drive-220V with remote pendant (requires controller box)	69-4343-00
Eibenstock HD 110v with remote pendant, electric remote trip, controller box	69-4344-00
Eibenstock HD 220v with remote pendant, electric remote trip, controller box	69-4345-00
Eibenstock Legacy Drill-style Electric Drive Assembly-110V, LCSF	SPG-489-4110
Eibenstock Legacy Drill-style Electric Drive Assembly-220V, LCSF	SPG-489-4220



Provides electric power with remote control options available

## Choosing the Best Drive Option

E.H. Wachs offers a wide variety of power drive options, including pneumatic, hydraulic and electric. Here are a few things to consider when selecting the appropriate drive for your application.

### Pneumatic Power

Pneumatic is the most popular choice due to the wide availability of compressed air, and offers good power characteristics and controllability. Where extra torque is desired consider a meter-out kit for your air motor.

### Hydraulic Power

Hydraulic power is the most uniform across a given power range, regardless of the rpm of the machine tool. It is a clean, sealed power source ideal for use in hostile environments including airborne salt spray, sand, and partial or full immersion in mud or water.

### Electric Power

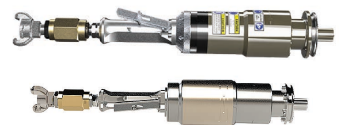
The best choice where airborne or fluid contamination is highly undesirable, such as in high purity and power generation applications is electric power. Drives with remote control options are available in 110v, 220v, and 480v models.

### Remote Control

E.H. Wachs offers remote control options available across all three drive types.



Electric Power Drive (EPD)

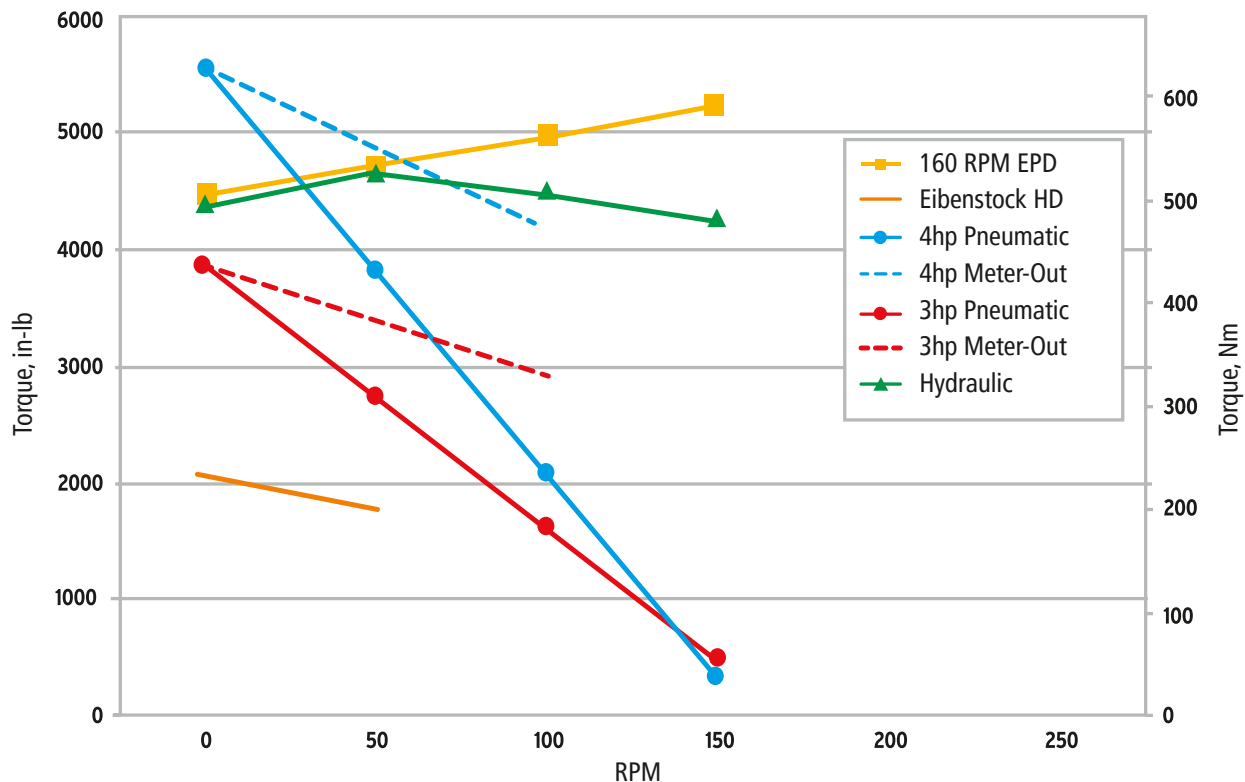


Pneumatic drive motors



Hydraulic drive motors

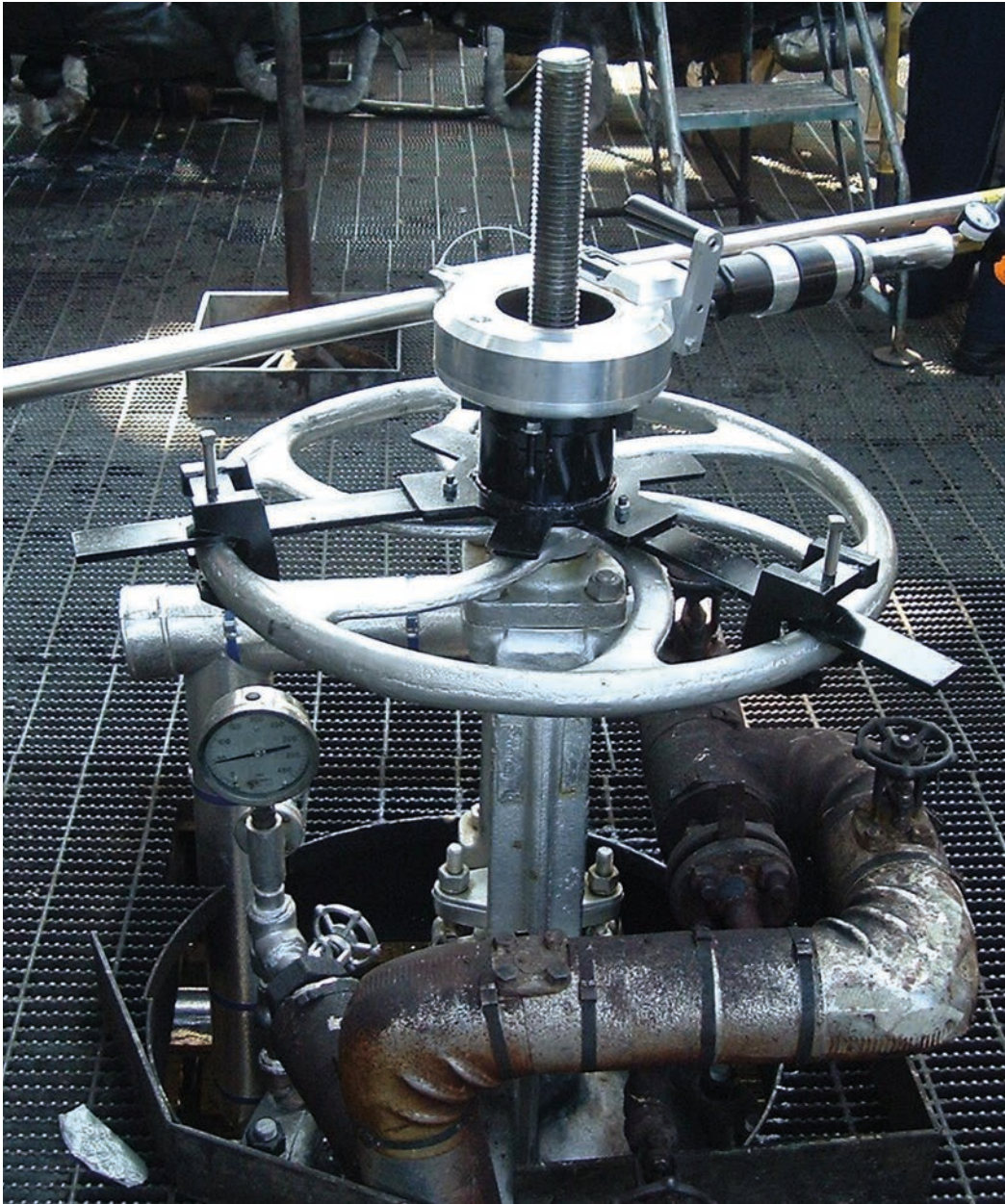
## DynaPrep MDSF Drive Motor Torque Comparison Electric, Pneumatic, & Hydraulic Drive



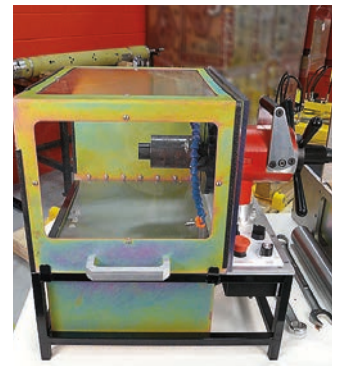
Although initially providing more torque at slow speeds, the pneumatic drive shows a reduction in torque with an increase in speed. Hydraulic power is the most uniform across a given speed range.



## SPECIALTY Machines



Weld Coupon loaded, ready for prep



Weld Coupon Station



RS-2 Rising Stem Valve Exerciser

### Special Jobs Call for Special Machines

E.H. Wachs has a long history of creating specialized machines for unique or challenging machining tasks. Our RS-2 and P-2 handheld operators are the ideal tool for operating or exercising handwheel and rising stem valves, and are available in three drive types. The P-2 is offered in your choice of high torque or high speed models.

Wachs Weld Coupon Station is specially designed for training organizations to teach end prep beveling skills while saving and reusing practice coupons. Genuine Wachs tooling is available in both Legacy style and DuoEdge holder and insert, which offers one of the lowest costs per cut in the industry. If you need help with a difficult machining project contact your local E.H. Wachs representative – we probably have a tool for the job.





# RS-2 Valve Operator

## Powered Valve Turning & Operation

Turning valves and valve handwheels is an important job for maintaining pipeline infrastructure. An organization can have hundreds or even thousands of valves that must be controlled, or in some industries “exercised”, the process of running a valve through its full cycle to prevent sticking or freezing caused by factors such as tuberculation.

The RS-2 (Rising Stem 2) Portable Valve Operator for rising and non-rising stem valves delivers up to 800 lb-ft torque and a maximum of 55 rpm for fast, reliable opening and closing of water, wastewater, pipeline and petro-chemical valves.

## Highly Versatile

The RS-2, designed with operator health in mind, spares arm and back injuries associated with manually turning large, stubborn or frozen industrial valves. The RS-2 offers a range of adapters and accessories to suit most applications, including PIV (Post Indicator Valves). There’s a 1in (25.4 mm) square drive adapter, dedicated handwheel adapters and a universal handwheel adapter to fit most common handwheels.

## Multi-Functional Valve Operator

- Available in hydraulic, pneumatic or electric Drive
- Operate all rising & non-rising stem valves from 6-60in (152.4-1524mm)
- 4in (106.1mm) hub opening for operating rising stem valves
- Mount to any handwheel with Universal Handwheel Adapter
- Forward and reverse operation. Variable speed control
- Built in easy view LCD counter
- 55 rpm high-speed operation for valves requiring several hundred turns
- 800 lb-ft torque for difficult valves

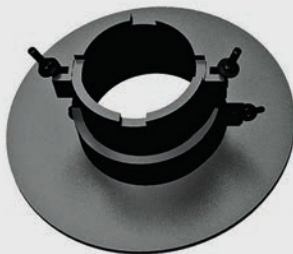
## Available Models

DRIVE TYPE	POWER REQUIREMENTS	MOTOR CONTROLS	PART #
Pneumatic	60 cfm @ 90 psi	Variable speed; Forward and reverse dial	78-000-03
Electric	110 volt AC (15 amps or 3500 watt generator)	Variable speed; Adjustable torque control Forward and reverse control valve	78-000-01
Hydraulic	8 gpm @ 1800 psi	Variable speed; Adjustable torque control Forward and reverse control valve	78-000-04

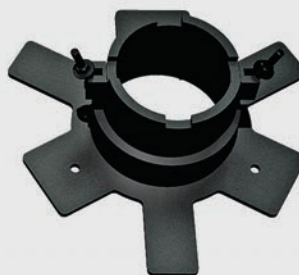
## RS-2 Handwheel Adapter

For using the rising stem valve operator with standard handwheels.

MODEL	PART #
RS2 Dedicated Handwheel Adapter - Stays on handwheel for quick operation	P13-017-4007-00
RS2 Universal Handwheel Adapter	P13-017-4008-00



RS2 Dedicated Handwheel Adapter  
P13-017-4007-00



RS2 Universal Handwheel Adapter  
P13-017-4008-00



RS2 Rising Stem Valve Operator  
electric model shown



RS2 with Handwheel Adapter



RS2 operating rising stem valve



Allows for 2-person operation

# P-2 Valve Operator

## Convenient Handheld Operation of Handwheel Valves

E.H. Wachs® powered handheld valve turners/operators are built for quick operation and exercising of valves. Available in pneumatic, hydraulic and electric drive the P-2 is powerful and highly portable for quick, efficient operation of most valves, handwheel valves and post indicator valves (PIV).

The E.H. Wachs® P-2 (Pow-R-Drive 2) handheld valve turning machine is the ideal solution for organizations dealing with critical valves of any sort, including fire prevention and water material handling systems. It's lighter, faster and more powerful than any other machine of its kind and helps eliminate arm and back injuries associated with attempting to manually turn large or stuck valves.

The P-2 offers increased productivity, operator efficiency and valve protection. It's compact size and light weight make it the perfect tool for hard to reach valves, valve turning/exercising and fast shut downs, delivering controlled power to operate valves 6" (152.4mm) and up.

The P-2 is available in both high speed HS and high torque HT models, in pneumatic, hydraulic, or electric drive. An optional universal handwheel adapter allows the P-2 to operate non-rising stem handwheels.

### P-2 Features

- Lightweight, rugged construction
- Easy setup and operation
- Convenient finger tip control
- LCD counter, VITALS compatible
- VITALS offers precise torque control
- Pneumatic, hydraulic or electric

### Available Models

DRIVE TYPE	TORQUE	SPEED	PART #
Electric 110V	500 ft-lb	20 rpm	11-000-07
Electric 220V	500 ft-lb	20 rpm	11-000-10
Pneumatic	500 ft-lb	26 rpm	11-000-08
Hydraulic	500 ft-lb	24 rpm	11-000-09
Electric 110V	500 ft-lb Vitals torque control	20 rpm	11-000-17
Electric 220V	500 ft-lb Vitals torque control	20 rpm	11-000-20
Hydraulic	500 ft-lb Vitals torque control	20 rpm	11-000-19
Electric 110V	800 ft-lb	10 rpm	11-000-02
Electric 220V	800 ft-lb	10 rpm	11-000-05
Pneumatic	800 ft-lb	13 rpm	11-000-03
Hydraulic	800 ft-lb	12 rpm	11-000-04
Electric 110V	800 ft-lb Vitals torque control	10 rpm	11-000-12
Electric 220V	800 ft-lb Vitals torque control	10 rpm	11-000-15
Hydraulic	800 ft-lb Vitals torque control	12 rpm	11-000-14

## P-2 Handwheel Adapter

Size adjustable solution for using the P-2 with Standard Handwheels

MODEL	PART #
P-2 Handwheel Adapter	11-401-00



P-2 Handwheel Adapter



P-2 Electric 110V Model



P-2 Pneumatic Model



P-2 Hydraulic Model



Vitals torque control available on select models.



P-2 Electric shown with Handwheel Adapter

# WELD Coupon Station

## Save Thousands Making Your Own Coupons

E.H. Wachs Weld Coupon Station is a self contained tool designed for machining weld preps onto ordinary pre-cut pipe sections, creating weld ready coupons.

Wachs Coupon Station will machine virtually any prep including bevels, compound bevels and J-preps on carbon steel, stainless steel, alloy steel and aluminum pipe and tubing. It is available in two models, Basic and Deluxe.

The Basic model includes the standard mandrel to satisfy a 2.75in OD coupon. The deluxe model includes the optional mandrel assembly to counterbore from 2.26in to 6.63in ID (57.4 - 168.4 mm). It's capable of handling all common coupon sizes up to "Super Coupons" with 2.75in OD (69.9 mm) and 5/8in wall (15.9 mm) and up to a 6in (DN150) schedule 80.

## Save Your Coupons

Wachs Coupon Station will quickly pay for itself in time and material savings. For example, if you purchased and discarded 2,000 coupons per year at the current average cost of \$10 each, by using the Prep Station you'd save nearly \$20,000 and enjoy an extremely rapid return on your investment. Order your Weld Coupon Station today and you'll see that with Wachs, it pays to save your coupons.

## Coolant System

Designed to mount on a bench or cart, the Coupon Station is built around E.H. Wachs powerful SDB 206/2 ID mounted machine tool, the finest of its kind. A totally self contained unit, it features a clear splash proof enclosure with a recirculating coolant system that dramatically extends tooling life.

A screened chip collection tray protects against coolant contamination. Safe, clean and easy to use the Weld Coupon Station features precision external controls to effortlessly make the perfect weld prep in minutes.

## Specifications

**Machining Capacity:** Common coupon sizes up to "Super Coupons" with 2.75in (69.9 mm) OD and 5/8in wall (15.9 mm) using included mandrel; with optional accessories up to 6in Schedule 80 (ND150)\*

**Feed Rate:** .083in (2.1 mm) per revolution

**Feed Stroke:** 2.5in (63.5 mm) usable feed travel w/ .001in (.025 mm) feed scale

**Chucking Capacity (ID):**

2in (50.8 mm) pipe schedule 10, 40, 80, xx, super coupon

**Controls:**

On/Off, Manual Clamp, Manual Feed, E-Stop, Speed & Coolant Shut-Off

**Drive:** Electric 110 V/AC @ 15 Amp - 60 Hz

**Tooling:** Included 37.5 degree tooling holder kit, Genuine Wachs 56-711-01 high speed steel tooling with 2 precision ground cutting edges

**Dimensions:**

Length 21in (533.4 mm) x Width 18in (457.2 mm) x Height 21in (533.4 mm)

**Weight:** Without coolant 105 lb (47.6Kg)



Weld Coupon Station



Coupon shown with weld-ready bevel



Welded coupon – reusable

MODEL	CODE	PART #
Basic Weld Coupon Station	908 089 401	P08-089-401
Deluxe Weld Coupon Station	908 089 402	P08-089-402



## Better Value

Genuine Wachs Tooling offers better value than imitation or universal tooling. Made specifically for E.H. Wachs machine tools, they fit perfect, hold an edge longer and can be resharpened multiple times. They deliver the precision finishes and speed you expect and deserve from E.H. Wachs equipment. Work stoppages from inexpensive tooling are only part of the reason Wachs tooling is the better value.

The tooling material selected is as important as the profile in delivering a superior machined surface. We have decades of experience manufacturing the best performing, longest lasting tooling for our machines.

Illustrated here are the basic types offered, simplified for clarity. Wachs offers an extensive lineup of tooling, bits and blades for most applications. To maintain the peak performance of your Wachs machines, always specify Genuine Wachs Tooling.

Precisely engineered and fabricated with superior high-strength materials, Wachs tooling is designed for today's higher speeds, heavier feed rates, and exotic materials. The result is precise cuts, longer tooling life and maximum productivity.

## DuoEdge™ Holder & Insert System



For the lowest cost-per-cut specify DuoEdge Tooling (where applicable).

### BLADES



SLITTING



OD BEVEL



RECIPROCATING

### OD MOUNT BITS



INSIDE BEVEL



OUTSIDE BEVEL



DOUBLE BEVEL



PARTING



SINGLE POINT TAPER



COUNTERBORE



COMPOUND BEVEL



J-PREP



SINGLE POINT, INSERT



FACING



BEVEL, INSERT

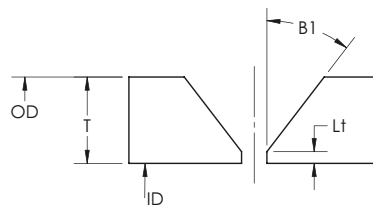
## Custom Tooling

While Genuine Wachs Tooling works for many applications, we understand the need for custom tooling for specific applications and needs that arise in the field.

Please provide as much information possible about the project regarding customized tooling for manufacturing to spec for the best results.

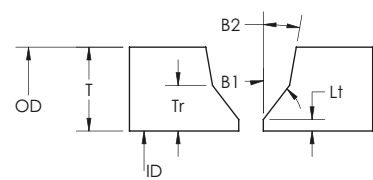
## Single Bevel

Required	T
OD	Lt
ID	B1



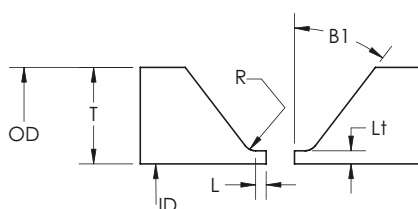
## Compound Bevel

Required	T
OD	Lt
ID	B1
B2	Tr



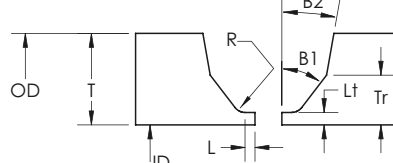
## J-Prep

Required	T
OD	Lt
ID	B1
L	R



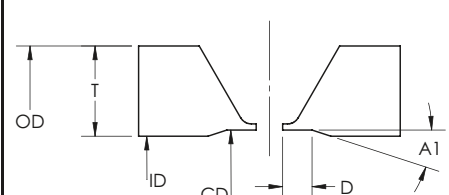
## Compound J-Prep

Required	T
OD	B1
ID	B2
T	L
L1	Tr
R	



## Counterbore

Required	T
OD	T
ID	D
CD	A1





## Factory Service

Wachs machines are made to work, and built tough to take it. But any machine, even heavy duty ones like ours, may require servicing over time. At E.H. Wachs great service is only a phone call away. Arrange to send us your machine - we'll evaluate it and send you back a no cost recommendation to repair, upgrade, refurbish or replace it. A written quotation is furnished for your approval before any work is begun.

When it comes time for replacement parts or service for your Wachs equipment, trust it to the people who know it best - E.H. Wachs®. If your machine is showing the effects of age or heavy usage, consider replacement parts, our factory repair service or a complete refurbishing to like new condition.



## Single Source

Nobody is better at supporting their machines after the sale than Wachs, your single source for consumables, OEM replacement parts and factory service. In addition to Genuine Wachs Tooling, our parts department offers a complete inventory of common replacement parts. From simple nuts and bolts to the most complex assemblies, our parts department quickly ships your order to minimize downtime.

## Repair, Upgrade, Refurbish

Wachs refurbishing restores your machine to perform and look like new. Wachs factory repaired or refurbished machines are backed with a full replacement parts warranty. Our state of the art major repair and upgrade facility is located in Lincolnshire, IL, with regular parts and service available at our Sales, Service, and Rental Centers located in Illinois, California, Louisiana, New Jersey, South Carolina, Texas, Canada, the UK, Germany, India, and the UAE.

## Genuine Parts & Service

- Complete Parts Inventory
- Genuine Wachs Tooling
- Factory Repair & Upgrades
- Complete Refurbishing
- New Part Warranty



Before



After





### Complete Support

E.H. Wachs personnel are available for onsite instruction, safety training and equipment maintenance anywhere around the world. Experienced professionals, they're expert in all aspects of Wachs equipment, from specifying machines and tooling to training your team on their effective use. For advanced training, consider specialized courses at the E.H. Wachs Training Center.

### At Your Location or Ours

As the premier manufacturer of portable cutting and weld prep machine tools, E.H. Wachs is best qualified to train your personnel on the proper operation of our products. That's the reason Wachs specialists are available, at your location or ours, for training and instruction on operating and maintaining our precision machine tools.

### E.H. Wachs Training Center

For the ultimate in training the E.H. Wachs Training Center, located at our facility in Lincolnshire, Illinois, offers comprehensive courses for all our products. It's the premier hands-on learning experience for pipe cutting and weld preparation technologies, and is ideal for field machinists in the oil and gas, power generation, petrochemical and related industries.

Your E.H. Wachs instructors are not just academics – all of them have real world experience and participate in the design, development and evolution of these advanced machines. This gives our people unique insight into the latest industry trends, procedures and techniques.

### Hands-On Training

At our facility the focus is on classroom education and hands-on training in the operation of portable machine tools. Structured to enhance safe operation, we'll review the setup and operation of Wachs advanced remote control options for all drive motor types. You'll leave with a comprehensive understanding of the industry, plus detailed knowledge and skill in the use and maintenance of these state of the art machines.







## Available Worldwide

When it makes more sense to rent than to buy, virtually the entire product lineup of Wachs and Orbitalum are available for rental on a daily, weekly or monthly basis. We maintain a large inventory of machines, welding systems and accessories ready to ship from our Sales, Service, and Rental Centers to virtually any spot on the globe, including remote or offshore locations.

## Factory Rentals

Factory rentals are great for short term usage such as emergency repair projects, scheduled turnarounds or power generation outages. Individually inspected and tested before shipment, our machines and welding systems arrive configured for your exact application. Many clients start with renting our products and find them so powerfully productive they choose to purchase.

Offering more than just equipment and tooling, ITW-OCW Sales, Service & Rental Centers are staffed with expert technical product specialists to help you quickly specify the right machine, power source and tooling for your application. Renting with us gives you access to the entire range of technical support and engineering expertise that we're renowned for.

## Unrivalled Support

Our rental equipment is available in many locals on a next day basis through our 24 hour on call service. Call today and we'll ship today. Wachs Split Frames, Trav-L-Cutters, Guillotine Saws, EP 424 end prep machines, Orbitalum GF series tube saws, 165 series orbital welding systems with weld heads are all in stock ready for immediate shipment. In fact virtually every product we manufacture is available as a factory rental.

We're available 24/7 to help with questions, problems or any additional equipment or supplies needed to complete your project. Other options for managing your equipment rentals are available, up to and including specially trained factory onsite technicians to help manage and maintain our machines, or instruct your workforce on their proper use.

# ITW Partners



## **ITW** WELDING

The ITW Welding group serves the global welding industry with superior products, and unparalleled service. The group includes leading manufacturers of weld prep machine tools, filler metals, welding machines, induction heating equipment, and welding consumables, components and accessories for a wide variety of applications. [ITWWelding.com](http://ITWWelding.com)



ITW Welding offers a full line of industrial quality welders from Miller Electric Mfg. Co., headquartered in Appleton, Wisconsin. Miller is a leading worldwide manufacturer of Miller arc welding and cutting equipment, delivering ruggedly reliable equipment of the highest quality. The Welding Components group includes Bernard MIG-Guns, Weldcraft TIG-Torches, Tempil temperature markers, and Smith Equipment, combining four well known suppliers for welding accessories. [MillerWelds.com](http://MillerWelds.com)



Hobart Brothers based in Troy, Ohio features a full line of filler metals for applications ranging from mild steel and low alloy steel to stainless steel. Available products include stick electrodes, solid wires and flux cored wires in a variety of diameters and packaging. All Hobart brand filler metals feature superior arc performance and selections are available for fast-freezing or self-peeling slag, low hydrogen weld deposits, high deposition rates and efficiencies, and x-ray quality welds. [HobartBrothers.com](http://HobartBrothers.com)

## Our ITW Partners

When you partner with us you're not only partnering with the industry leader in portable weld preparation machine tools and orbital welding systems, you're partnering with ITW, the industry leader in advanced welding technologies.


ITW has a market leading portfolio of best in class brands offering reliable and responsible products for the markets we serve.

When reliability matters...  
We're there.



Forging the Tools  
for Excellence



 **Corporate Locations**  
★ **Sales Locations**

## UNITED STATES

### ITW-OCW US Headquarters

**E.H. Wachs®**  
600 Knightsbridge Parkway  
Lincolnshire, IL 60069 USA  
T: +1.847.537.8800  
F: +1.847.520.1147  
Toll Free: 800.323.8185

### Northeast

#### Sales, Service & Rental Center E.H. Wachs

1001 Lower Landing Road, Suite 208  
Blackwood, New Jersey 08012 USA  
T: +1.856.579.8747  
F: +1.856.579.8748

### Southeast

#### Sales, Service & Rental Center E.H. Wachs

171 Johns Road, Unit A  
Greer, South Carolina 29650 USA  
T: +1.864.655.4771  
F: +1.864.655.4772

### West Coast

#### Sales, Service & Rental Center E.H. Wachs

5130 Fulton Drive, Unit J  
Fairfield, California 94534 USA  
T: +1.707.439.3763  
F: +1.707.439.3766

### Gulf Coast

#### Sales, Service & Rental Center E.H. Wachs

2220 South Philippe Avenue  
Gonzales, LA 70737 USA  
T: +1.225.644.7780  
F: +1.225.644.7785

### Houston South

#### Sales, Service & Rental Center E.H. Wachs

3414 Lilac Unit E  
Pasadena, Texas 77505 USA  
T: +1.713.983.0784  
F: +1.713.983.0703

### Houston North

#### Sales & Technical Center E.H. Wachs

15331 Vantage Parkway East  
Houston, Texas 77032 USA  
T: +1.920.831.4720  
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## GERMANY

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Contact your local ITW Orbital Cutting & Welding representative  
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