



Flux Recovery Systems

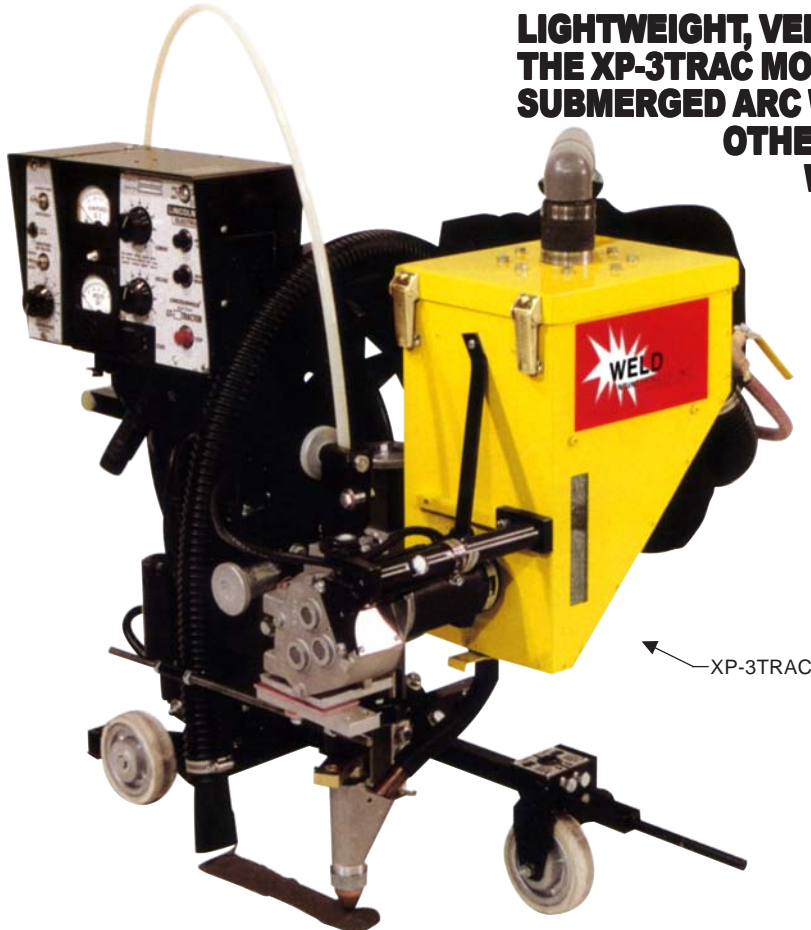




THE "ULTRA COMPACT"

XP-3TRAC**AIR POWERED
FLUX RECOVERY SYSTEM**

**LIGHTWEIGHT, VERY COMPACT, RUGGED AND POWERFUL;
THE XP-3TRAC MOUNTS EASILY ONTO MOST AUTOMATIC
SUBMERGED ARC WELDING TRACTORS. ALSO IDEAL FOR
OTHER APPLICATIONS WHERE SIZE AND
WEIGHT ARE IMPORTANT FACTORS.**



XP-3TRAC

XP-3TRAC mounted on Lincoln LT-7 tractor in butt weld position. This system represents standard XP-3TRAC packaging which includes NZ-1 nozzle, FHM-1 hose bracket, 5 ft. (1.5m) 1-1/2" (3.81 cm) hose, dust bag, mounting bracket for XP-3TRAC to LT-7 and XP-3TRAC recovery machine. (Note: consult factory for mounting packages for other welding tractors).

IMPORTANT FEATURES:

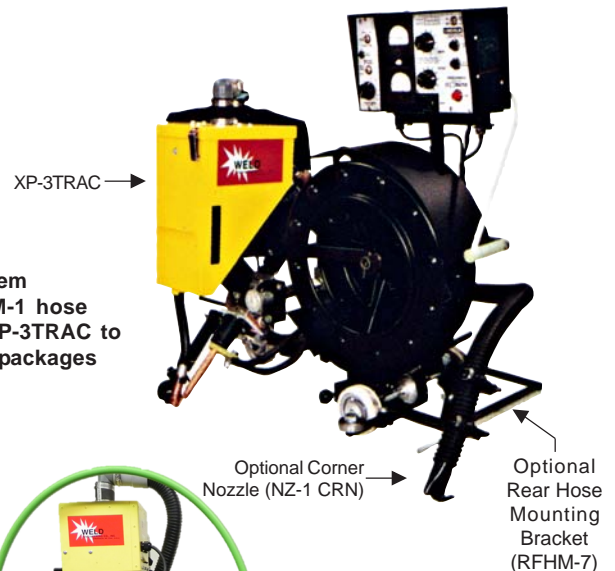
- Ultra lightweight and compact.
- Continuously feeds recovered flux to welding nozzle **without** need of any transfer valve.
- Slag, dust, and fines are automatically removed from recovered flux.
- No moving parts in air pump. Very efficient air pump produces higher vacuum; uses less air and is much quieter than most competitive models.

OPTIONAL ACCESSORIES:

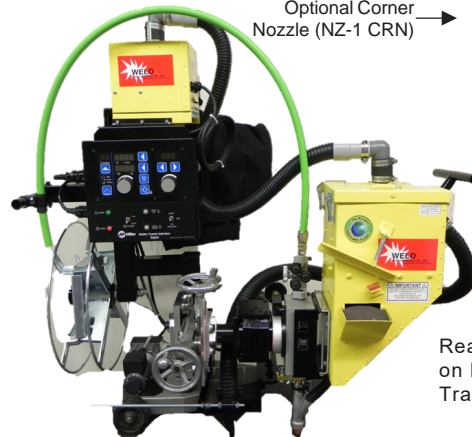
- RFHM-7 rear hose mounting bracket for LT-7 tractor. Use for fillet welding, or web to flange welds or when welding between tractor wheels.
- NZ-1 CRN corner weld pick-up nozzle.
- NZ-1 BUTT butt weld nozzle. (This nozzle drags on plate. Use with FHM-1ADJ hose bracket.)
- FHM - ADJ hose bracket. Allows NZ - 1 Butt nozzle to follow up / down contours of plate.

SPECIFICATIONS:

- **Weight Empty:** 15lbs (6.8Kg); total added wt. = 12 lbs. (5.4 kg) i.e., because Lincoln hopper is removed.
- **Capacity:** Same as standard LT-7 hopper; approx. 18lbs (8.2 Kg)
- **Dimensions:** 20-1/32"(50.9cm)H X 24-15/32"(62.2cm)W X 8-1/2"(21.6cm)D
- **Input Power:** Clean and dry, compressed air @ 70-100 psi (5-7 bar) @ 8 cfm (226 L/min.) No electric input required.
- **Comes Complete with** 5ft. (1.5 m) hose, nozzle, dust bag, mounting brackets for XP-3TRAC and hose mounting bracket... ready for installation!



XP-3TRAC

Optional Corner
Nozzle (NZ-1 CRN)Optional
Rear Hose
Mounting
Bracket
(RFHM-7)Ready to install
on Miller 3-Wheel
Tractor



THE "ULTRA COMPACT"

XP-3

AIR POWERED FLUX RECOVERY SYSTEM

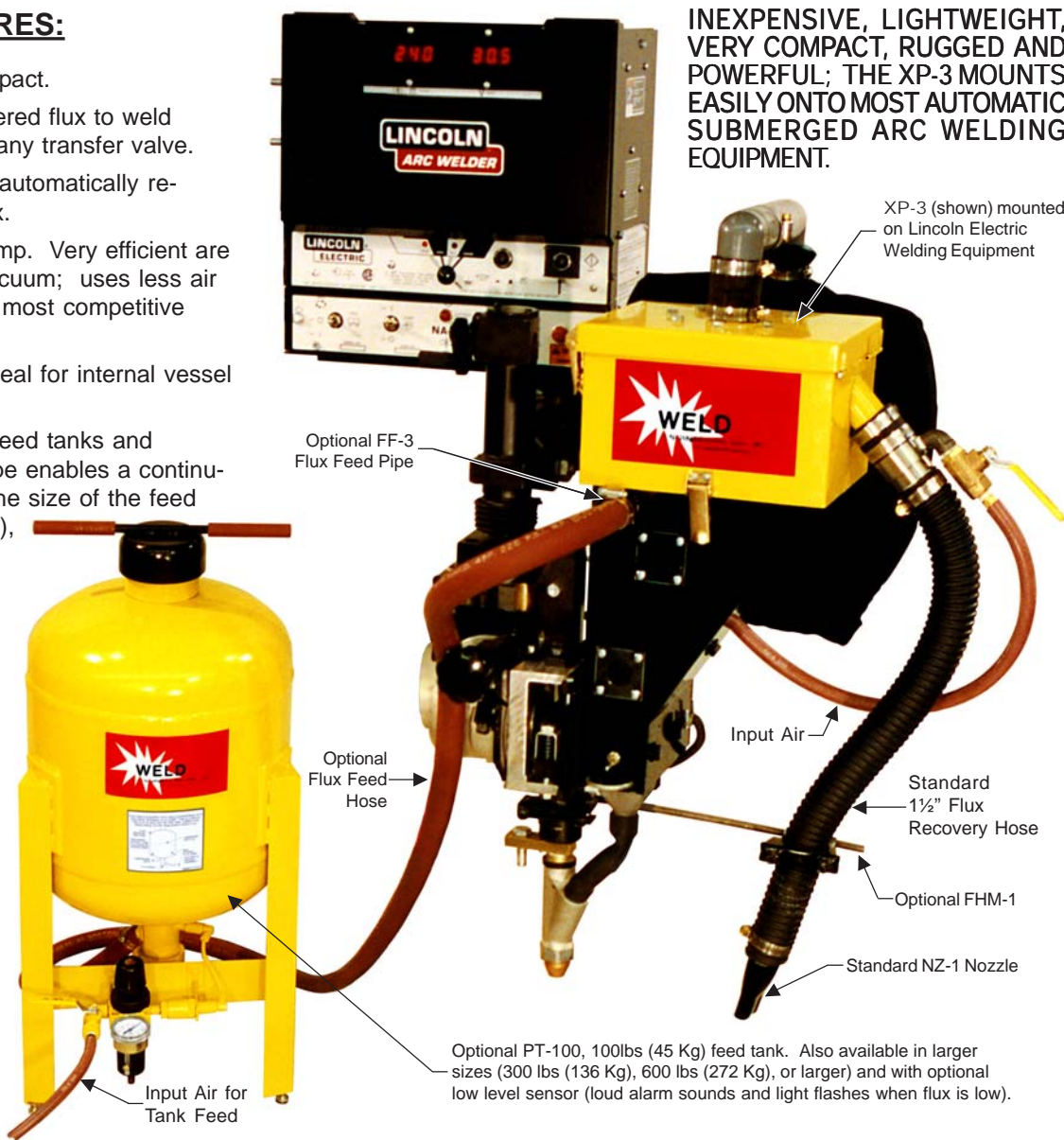
IMPORTANT FEATURES:

- Very lightweight and compact.
- Continuously feeds recovered flux to weld nozzle without need of any transfer valve.
- Slag, dust, and fines are automatically removed from recovered flux.
- No moving parts in air pump. Very efficient air pump produces higher vacuum; uses less air and is much quieter than most competitive models.
- Small size makes XP-3 ideal for internal vessel welding and flux recovery.
- Optional PT-"x"00 series feed tanks and optional FF-3 flux feed pipe enables a continuous flux supply equal to the size of the feed tank (i.e., 100 lbs (45 Kg), 300 lbs (136 Kg), 600 lbs (272 Kg) or larger).

OPTIONAL ACCESSORIES:

- Hose mounting brackets; FHM-1 (linear adjustment only) FHM-1-ADJ (linear and angular adjustment).
- Flux pickup nozzles; NZ-1 CRN corner nozzle, NZ-1 BUTT butt weld nozzle.
- AV-4 electric air valve.
- PT-"x"00 series pressure feed tank. Available in 100 lbs (45 Kg), 300 lbs (136 Kg), 600 lbs (272 Kg) or larger.
- FF-3 flux feed pipe. Automatically keeps hopper full of flux. Specify 1/2", 3/4", or 1" feed hose (need PT-"x"00 series feed tank).
- Flux feed hose. Available in 1/2", 3/4", 1", and 1 1/4" I.D. hose.

INEXPENSIVE, LIGHTWEIGHT, VERY COMPACT, RUGGED AND POWERFUL; THE XP-3 MOUNTS EASILY ONTO MOST AUTOMATIC SUBMERGED ARC WELDING EQUIPMENT.



SPECIFICATIONS FOR XP-3:

- **Weight (empty):** 15 lbs (6.8 Kg)
- **Dimensions:** 10.75"(27.3cm)H X 14.5"(36.8cm)W X 8.5"(21.6cm)D
- **Input Power:** Clean, dry, compressed air @70-100 psi (5-7 bar) @ 8 cfm (226 L/min.) No electric input required.
- **Complete with** 1 1/2" I.D. 4ft. (1.21 m) flux recovery hose, NZ-1 nozzle... ready for installation!

**RECYCLES
DUST! NO
EMPTYING!**

INTRODUCING THE... **XP-4T**

**AIR POWERED
FLUX RECOVERY SYSTEM**

IMPORTANT FEATURES:

- Lightweight and compact.
- Continuously feeds recovered flux to weld nozzle **without** need of any transfer valve.
- Slag is automatically removed from recovered flux.
- No moving parts in air pump. Very efficient air pump produces higher vacuum and uses less air and is much quieter than most competitive models.
- Vertical dust bag allows flux dust to be recycled back into the system.
- Optional PT-"x"00 series flux pressure feed tanks and optional FF-3 flux feed pipe enables a continuous flux supply equal to the size of the feed tank. (i.e., PT-100, PT-300, PT-600, or larger)

OPTIONAL ACCESSORIES:

- Hose mounting brackets; FHM-1ADJ (linear and angular adjustment), FHM-1 (linear adjustment only).
- Flux pickup nozzles; NZ-1 CRN corner nozzle, NZ-1 BUTT butt weld nozzle, NZ-1-4, 4" wide nozzle.
- AV-4 electric air valve.
- PT-"x"00 series pressure feed tank. Available in 100Lb. (45Kg) (PT-100), 300Lb. (136Kg) (PT-300), 600Lb. (272Kg) (PT-600) or larger.
- FF-3 flux feed pipe. Automatically keeps hopper full of flux. Specify ½", ¾", or 1" flux feed hose (need PT-"x"00 series feed tank).
- Flux feed hose. Available in ½", ¾", 1", and 1¼" I.D. hose.
- FH-1 or Heated HFH-1 Flux Hopper holds approximately 30Lb. of flux.

**RECYCLES FLUX DUST.
DOES NOT REQUIRE
ANY EMPTYING OF THE
DUST BAG.**



SPECIFICATIONS FOR XP-4T:

- **Weight (empty):** Approximately 16Lb. (7.3Kg)
- **Dimensions:** Approximately 12" (30.5cm) H x 21.2" (71.6cm) W x 8.5" (21.6cm) D
- **Input Power:** Clean, dry, compressed air: 70-100 psi (5-7 bar), 8 cfm (226 L/min.)
No electric input required.
- **Complete with** 1½" I.D. 4ft. (1.21m) flux recovery hose, NZ-1 nozzle... ready for installation!



POWERFUL, LIGHTWEIGHT!

APT-2 AIR POWERED

TRACTOR FLUX RECOVERY SYSTEM



SYSTEM SHOWN IS
APT-2 MOUNTED ON
LINCOLN LT-7
TRACTOR

LIGHTWEIGHT, RUGGED, AND POWERFUL. THE APT-2 MOUNTS EASILY ONTO MOST AUTOMATIC SUBMERGED ARC WELDING TRACTORS. ALSO IDEAL FOR OTHER APPLICATIONS WHERE SIZE AND WEIGHT ARE IMPORTANT FACTORS.

IMPORTANT FEATURES:

- Adds no oil or water to the flux and produces no damage to the recovered flux particles, since flux is never in compressed air stream.
- Vacuum air pump is on exhaust side and undesirable contaminants, fines and dust are discharged into a very efficient dust bag assembly.
- No moving parts in air pump and no internal filters to wear out.
- Very efficient air pump produces a higher vacuum, uses less air, and is quieter than most competitive models.
- Ultra-lightweight aluminum construction.
- New flux is easily added to APT-2 hopper through spout without interrupting weld, enabling indefinite weld length.

OPTIONAL ACCESSORIES:

- Rear hose mounting bracket (RFHM-7) for Lincoln LT-7 Tractor. Use when welding is done between wheels of tractor or when tractor is riding in 45° trough. (i.e. web to flange welds)

SPECIFICATIONS:

- **Weight (empty):** 18 lbs (Total added wt. = 16 lbs.)
- **Capacity:** Same as standard LT-7 hopper; approx. 18 lbs (8.2 kg)
- **Dimensions:** 28" H X 10" W X 8" D
- **Power Input :** Compressed air @70-100 psi, approximately 8 cfm (1/4" I.D. air line minimum).
- **Comes Complete with** 6 ft. hose nozzle, dust bag, mounting brackets for APT-2, and hose mounting brackets.
Ready for installation!



INTRODUCING THE REVOLUTIONARY

**MIGHTY-
MIGHT**

ALT-2

(Patented)

**WELDING TRACTOR
SUB-ARC FLUX
RECOVERY SYSTEM**

**REDUCE COST, CREATE A SAFER, HEALTHIER WORK ENVIRONMENT
WITH THE LIGHTWEIGHT, RUGGED AND POWERFUL ALT-2 FLUX
RECOVERY SYSTEM FOR SUBMERGED ARC WELDING TRACTORS.**

ALT-2 Vacuum
Power Source

ALT-2 Hopper /
Separator

ALT-2 mounted
on Lincoln LT-7
tractor

IMPORTANT FEATURES:

- Mounts directly to most Sub-Arc welding tractors.
- Ultra-lightweight aluminum construction.
- Modular two piece design enables good balance and minimizes weight on flux hopper.
- Powerful Electric Vacuum (1.9 hp) can meet your high flux recovery demands.
- Revolutionary (patented) Self Cleaning dust and fines filter enables hours of continuous operation.
- Dust and Fines collected in Two Stage dust bag.
- Flashing light tells operator when to clean dust bag for maximum efficiency.
- Direct recycling of flux back to ALT-2. Flux is transferred to hopper by manually actuating transfer valve.
- Fused slag is automatically separated from flux.
- New flux can be easily added without interrupting the welding process, enabling indefinite weld length.

ADVANTAGES:

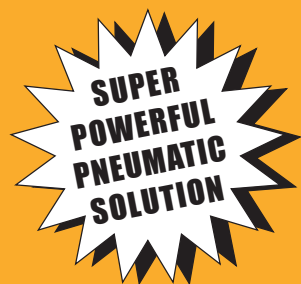
- Saves time and money by eliminating extra job recovering flux.
- Recovers all unfused flux.
- Introduces no oil or water into flux.
- Easy to install and operate.
- Fits almost any flux recovery application where weight and size are an important factor.

OPTIONAL ACCESSORIES:

- RFHM-7 rear hose mounting bracket for Lincoln LT-7 tractor. Use for fillet welding, or web to flange welds or when welding is between the tractor wheels.
- NZ-1 CRN corner flux pickup nozzles (includes right and left hand nozzles).
- NZ-1 BUTT butt weld nozzle. (This nozzle drags on plate. Use with FHM-1 ADJ hose bracket.)
- FHM-1 ADJ hose bracket. Allows NZ-1 BUTT nozzle to follow up/down contours of plate.

ALT-2 SPECIFICATIONS:

- **Weight / Dimensions:**
Hopper / Separator approx. 10lbs (4.5Kg) / 18.5" (47cm) H X 8.5" (21.6cm) W X 10.5" (26.6cm) D
Vacuum Power Source approx. 9lbs (4Kg) / 8" (20.3cm) H X 8" (20.3cm) W X 8" (20.3cm) D
- **Capacity:** Same as standard LT-7 hopper; approx. 18lbs (8.2Kg)
- **Electrical input:** Available for 115 Vac; 1 PH; 50/60 Hz or 220 Vac; 1 PH; 50/60 Hz
- **Comes Complete** with powerful electric vacuum source (1.9hp), flux hopper / separator, mounting brackets, FHM-1 hose bracket, flux recovery hose, NZ-1 flux pickup nozzle, dust bag, and vacuum hose between vacuum source and hopper / separator.
- **Ready for installation!**



THE REVOLUTIONARY

SUPER-AP-1

AIR POWERED

FLUX RECOVERY SYSTEM

MIGHTY-MIGHT "SUPER-AUTO-PNEUMATIC"

REDUCE COST, CREATE A SAFER, HEALTHIER WORK ENVIRONMENT WITH THE INEXPENSIVE, RUGGED AND POWERFUL SUPER-AP-1 (EQUIVALENT TO MANY 3 H.P. ELECTRIC VACUUMS). MOUNTS EASILY ONTO MOST AUTOMATIC SUBMERGED ARC WELDING EQUIPMENT.

IMPORTANT FEATURES:

- **Powerful Air Vacuum** (approximately twice as powerful as the standard AP-1 and equivalent to many 3 H.P. electric vacuums).
- **Adds no oil or water to the flux** and produces no damage to the recovered flux particles, since flux is never in the compressed air stream.
- **Vacuum air pump is on the exhaust side** and undesirable contaminants, fines, and dust are discharged into a very efficient dust bag assembly.
- **No moving parts** in air pump, and **no internal filters to wear out**.
- **Very efficient** air pump produces a higher vacuum, uses less air, and is quieter than most competitive air models.
- **Direct Recycling of Flux** back to lower hopper by depressing flux valve levers (one on each side of SUPER-AP-1).
- **Optional Automatic Flux Transfer Valve**, transfers flux to lower hopper without operator input. (Order SUPER-AP-1-E/P.)
- **Two Large Flux Sight Windows** (one on each side) indicate when operator must transfer flux to lower hopper by depressing flux valve lever.
- **Twice the Flux Capacity** of the standard AP-1.
(NOTE: Lower hopper determines Total Flux Capacity system can hold!)

SPECIFICATIONS:

- **Weight (empty):** 30 lbs (13.6 Kg)
- **Dimensions:** 27" (68.6 cm) H x 9-3/4" (24.8 cm) W x 22-7/8" (58.1 cm) D
- **Power Input:** Compressed air 14 cfm (396 lpm) @ 70-100 psi (4.8-6.9 bar), 1/4" (6 mm) I.D. Airline minimum. No electrical input required.
- **System** comes complete with 5 ft. (1.27m) 1-1/2" (3.8 cm) flux recovery hose, NZ-1 flux pick-up nozzle, mounting brackets, dust bag, and sight window for OEM hopper... ready for installation!



OPTIONAL ACCESSORIES:

- **FHM-1:** Flux hose mounting bracket.
- **FHM-1-ADJ:** Adjustable flux hose mounting bracket.
- **NOZZLES:**
 - NZ-1-4: 4" (10.2 cm) wide flux pick-up nozzle.
 - NZ-1-CRN: Corner weld flux pick-up nozzle, sold as pair 1L 1R.
 - NZ-1BUTT: Butt weld flux pick-up nozzle
- **PAS-1:** Portable flux hopper, easily converts automatic flux recovery system (SUPER-AP-1) into a portable recovery system. Includes 10ft. [2.54 m] of hose.
- **FP-1 Flux Port:** Enables adding new flux to Lincoln or Miller hopper without interrupting weld.
- **MAGSEP-1:** Magnetic separator.
- **Extra hose:** Available in 5 ft. (1.52 m) increments.
- **FH-1:** Flux hopper with flux filling port, approx. 35 lbs (15.8 kg) capacity, **SUPER-AP-1** mounts directly to this hopper.
- **HFH-1:** Same as **FH-1** except heated. 34-250°F (1-121°C) temperature range, **SUPER-AP-1** mounts directly to this hopper.
- **FH-1-60:** Flux hopper with flux filling port, approx. 60 lbs (27.2 kg) capacity, **SUPER-AP-1** mounts directly to this hopper.
- **HFH-1-60:** Same as **FH-1-60** except heated. 34-250°F (1-121°C) temperature range, **SUPER-AP-1** mounts directly to this hopper.
- **AV-4:** Electric air valve to remotely turn SUPER-AP-1 ON/OFF
- **AFV-32:** Automatic Flux Valve and Control
- **LAFV-32:** Replaces OEM Lincoln Hopper valve
- **MAFV-32:** Replaces OEM Miller Hopper valve
(Please contact Weld Engineering for technical assistance.)

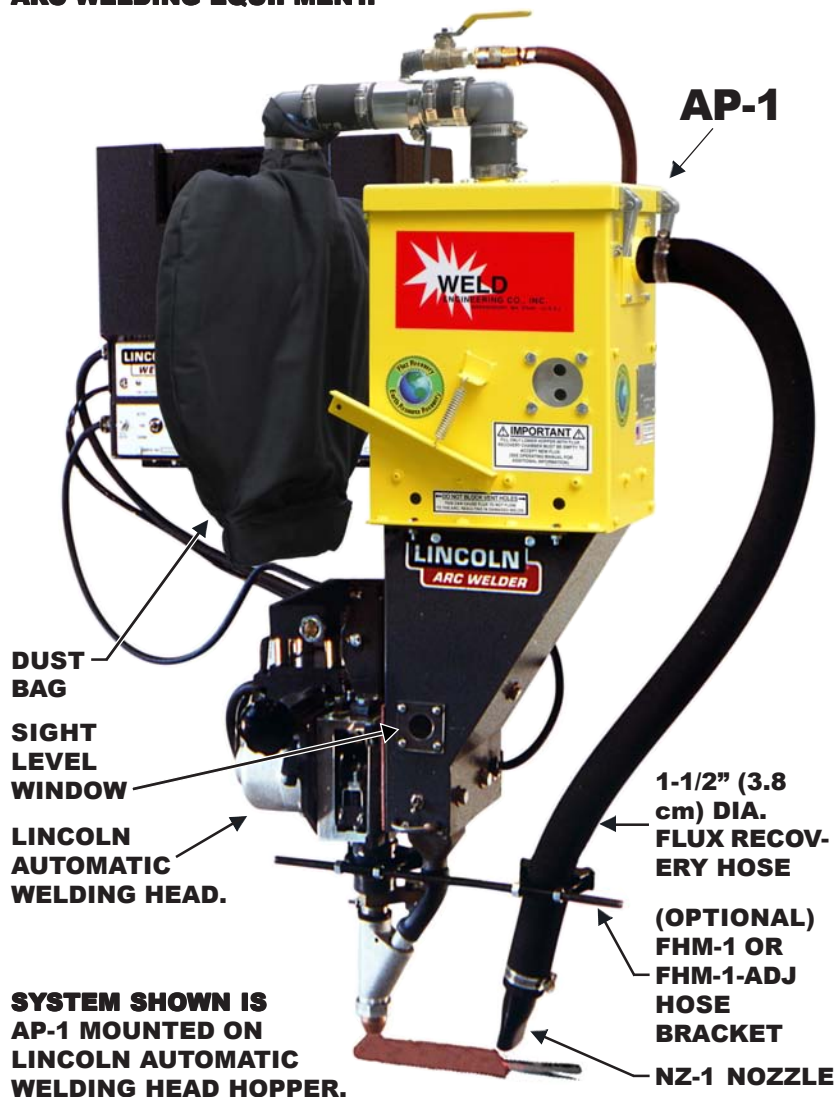


**AUTO-PNEUMATIC
MIGHTY-MIGHT
STANDARD DUTY
SUBMERGED ARC FLUX
RECOVERY SYSTEM**

AP-1

AIR POWERED FLUX RECOVERY SYSTEM

INEXPENSIVE, RUGGED, AND POWERFUL—THE AP-1 MOUNTS EASILY ONTO MOST AUTOMATIC SUBMERGED ARC WELDING EQUIPMENT.



CHECK THESE FEATURES:

- **Adds no oil or water to the flux** since flux is never in compressed air stream.
- **Vacuum air pump is on exhaust side** and undesirable contaminants, fines and dust are discharged into a very efficient dust bag assembly.
- **No moving parts** in air pump, and **no internal filters to wear out.**
- **Direct recycling** of flux back to hopper.
- **Sight window** in AP-1 and hopper for easy flux level indication.
- **Very efficient** air pump produces a higher vacuum, uses less air, and is quieter than most competitive models.
- **Versatile**, with **quick attach** options. See optional accessories below.

SPECIFICATIONS:

- **Input power:** compressed air @ 70-100 psi (4.8-6.9 bar), approximately 8 cfm (227 lpm) (1/4" [6 mm] I.D. Airline minimum).
No electrical input required.
- **Weight (empty):** Approx. 23 lbs (10.4 kg)
- **Dimensions:** 20-3/4" (52.7 cm) H x 18-11/16" (47.5 cm) W x 9-3/4" (24.8 cm) D
- **System** comes complete with 5 ft. (1.52 m) hose, hopper mounting brackets, sight window for hopper, dust bag, and NZ-1 flux pick-up nozzle...ready to run!
- **Flux capacity:** Determined by flux hopper (i.e. **Lincoln and Miller Standard Hopper** = 18 lbs [8.2 kg], **FH-1** = 35 lbs [15.8 kg])

OPTIONAL ACCESSORIES:

- **FHM-1:** Flux hose mounting bracket.
- **FHM-1-ADJ:** Adjustable flux hose mounting bracket.
- **NOZZLES:**
NZ-1-4: 4" (10.2 cm) wide flux pick-up nozzle.
NZ-1-CRN: Corner weld flux pick-up nozzle, sold as pair 1L 1R.
NZ-1BUTT: Butt weld flux pick-up nozzle
- **PAS-1:** Portable flux hopper, easily converts automatic flux recovery system (SUPER-AP-1) into a portable recovery system. Includes 10ft. [2.54 m] of hose.
- **FP-1 Flux Port:** Enables adding new flux to Lincoln or Miller hopper without interrupting weld.
- **MAGSEP-1:** Magnetic separator.
- **Extra hose:** Available in 5 ft. (1.52 m) increments.
- **FH-1:** Flux hopper with flux filling port, approx. 35 lbs (15.8 kg) capacity, **AP-1** mounts directly to this hopper.
- **HFH-1:** Same as **FH-1** except heated. 34-250° F (1-121° C) temperature range, **AP-1** mounts directly to this hopper.
- **FH-1-60:** Flux hopper with flux filling port, approx. 60 lbs (27.2 kg) capacity, **AP-1** mounts directly to this hopper.
- **HFH-1-60:** Same as **FH-1-60** except heated. 34-250° F (1-121° C) temperature range, **AP-1** mounts directly to this hopper.
- **AV-4:** Electric air valve to remotely turn AP-1 ON/OFF
- **AFV-32:** Automatic Flux Valve and Control
- **LAFV-32:** Replaces OEM Lincoln Hopper valve
- **MAFV-32:** Replaces OEM Miller Hopper valve
(Please contact Weld Engineering for technical assistance.)



ELECTRIC MIGHTY-MIGHT
STANDARD DUTY SUBMERGED ARC
FLUX RECOVERY SYSTEM
WITH PATENTED SELF-CLEANING
FILTER TECHNOLOGY

AS-4

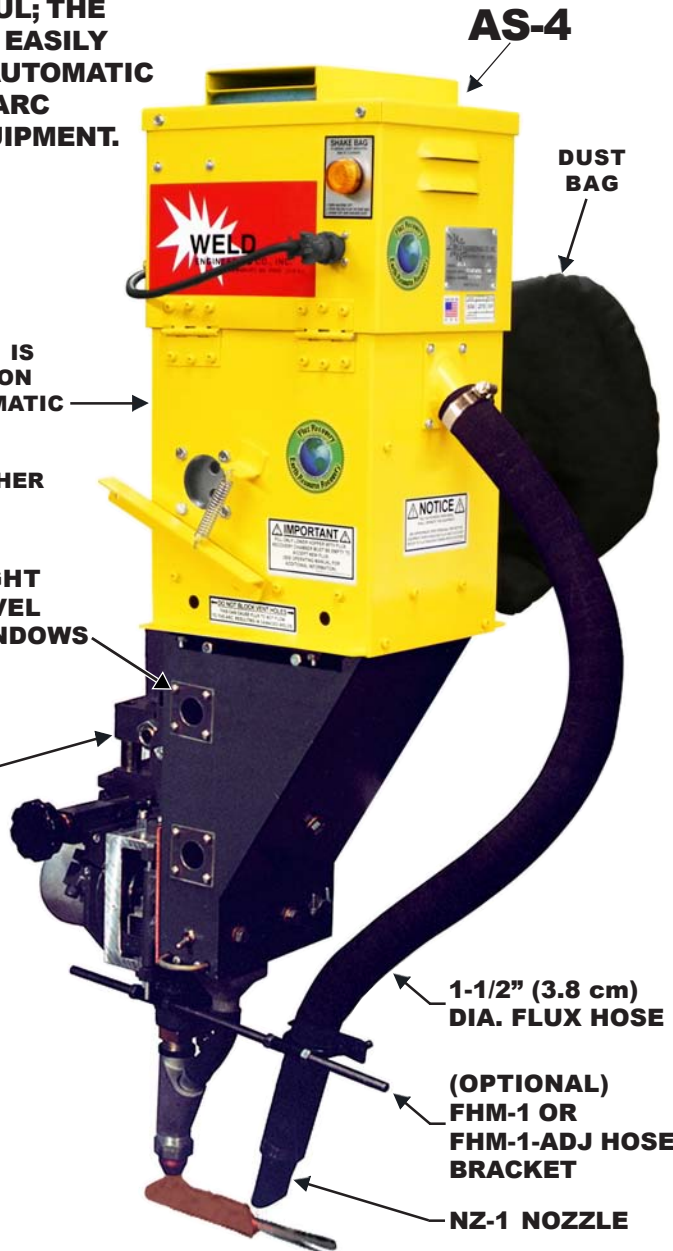
**ELECTRIC POWERED
FLUX RECOVERY SYSTEM**

**INEXPENSIVE, RUGGED,
AND POWERFUL; THE
AS-4 MOUNTS EASILY
ONTO MOST AUTOMATIC
SUBMERGED ARC
WELDING EQUIPMENT.**

**SYSTEM SHOWN IS
AS-4 MOUNTED ON
LINCOLN AUTOMATIC
WELDING HEAD
HOPPER. ALSO
MOUNTS ON OTHER
OEM HOPPERS.**

**SIGHT
LEVEL
WINDOWS**

**LINCOLN
AUTOMATIC
WELDING
HEAD.**



CHECK THESE FEATURES:

- **Powerful** electric vacuum.
- Revolutionary (patented) **self cleaning** dust and fines filter for hours of uninterrupted operation.
- **Flashing light** tells operator when to clean dust bag for maximum efficiency.
- **Remote control** on/off pendant turns AS-4 on and remotely.
- **Direct recycling** of flux back to hopper.
- Fused slag is **automatically separated** from flux.
- **Dust and fines** are collected in a dust bag for easy dumping.
- **Sight window** in AS-4 and hopper for easy flux level indication.
- **Versatile**, with **quick attach** options. (See accessories below.)

SPECIFICATIONS:

- **Input power:** 115v/1ph/ 60-50hz/9amps or 220v/1ph/60-50hz/4.5amps.
- **Weight (empty):** 36 lbs (16.3 kg)
- **Dimensions:** 20-1/8" (51.1 cm) H x 14-5/8" (37.1 cm) W x 14-1/2" (36.8 cm) D
- **System** comes complete with 5 ft (1.52 m) hose, hopper mounting brackets, sight window for hopper, dust bag, and NZ-1 flux pick-up nozzle.
- **Flux capacity:** Determined by flux hopper (i.e. **Lincoln Standard Hopper** = 18 lbs [8.2 kg], **FH-1** = 35 lbs [15.8 kg])

OPTIONAL ACCESSORIES:

- **FHM-1:** Flux hose mounting bracket.
- **FHM-1-ADJ:** Adjustable flux hose mounting bracket.
- **NOZZLES:**
 - NZ-1-4: 4" (10.2 cm) wide flux pick-up nozzle.
 - NZ-1-CRN: Corner weld flux pick-up nozzle, sold as pair 1L 1R.
 - NZ-1BUTT: Butt weld flux pick-up nozzle
- **PAS-1:** Portable flux hopper, easily converts automatic flux recovery system (AS-4) into a portable recovery system. Includes 10ft. [2.54 m] of hose.
- **FP-1 Flux Port:** Enables adding new flux without interrupting weld.
- **MAGSEP-1:** Magnetic separator.
- **Extra hose:** Available in 5 ft. (1.52 m) increments.
- **FH-1:** Flux hopper with flux loading port, approx. 35 lbs (15.8 kg) capacity, **AS-4** mounts directly to this hopper.
- **HFH-1:** Same as **FH-1** except heated. 34-250° F (1-121° C) temperature range, **AS-4** mounts directly to this hopper.
- **FH-1-60:** Flux hopper with flux filling port, approx. 60 lbs (27.2 kg) capacity, **AS-4** mounts directly to this hopper.
- **HFH-1-60:** Same as **FH-1-60** except heated. 34-250° F (1-121° C) temperature range, **AS-4** mounts directly to this hopper.
- **AFV-32 or AFV-2** Automatic Flux Valve and Control to turn flux flow on and off.
- **LAFV-32 or MAFV-32:** Replaces OEM Lincoln or Miller Hopper valve. (Please contact Weld Engineering for technical assistance.)



INTRODUCING THE REVOLUTIONARY MIGHTY- MIGHT

LPFR-3

(Patented)

**PRESSURE FEED AND
RECOVER SUB-ARC
FLUX RECOVERY
SYSTEM**

REDUCE COST, CREATE A SAFER, HEALTHIER WORK ENVIRONMENT WITH THE RUGGED AND POWERFUL LPFR-3 FLUX RECOVERY SYSTEM. SCREWS ONTO SUBMERGED ARC PRESSURE FEED TANK IN PLACE OF CAP.

LPFR-3 mounted
on Lincoln
semi-automatic
Submerged Arc
pressure feed
tank.

**Note: The LPFR-3 is also
available as the
AIR POWERED LPFR-3-A/P
(ask for details)!**



IMPORTANT FEATURES:

- **Screws on top** of tank in place of pressure cap in minutes!
- **Powerful Electric Vacuum** (1.9 hp) can meet your high flux recovery demands.
- **Revolutionary (patented) Self Cleaning** dust and fines filter enables hours of continuous operation.
- **Dust and fines collected** in **Two Stage** dust bag.
- **Flashing light** tells operator when to clean dust bag for maximum efficiency.
- **Flux is transferred** from upper recovery hopper to lower pressure tank by turning a hand wheel valve (pressure feeding of flux is stopped during transfer).
- **Fused slag** is automatically separated from flux.
- **Remote On/Off Pendant** at end of recovery hose (near pickup nozzle for ease of use).
- **Comes complete** with 15 ft (4.6 m) of vacuum hose, NZ-1 pickup nozzle and remote on/off pendant.

ADVANTAGES:

- **Saves time and money** by recovering unfused flux.
- **Introduces no oil or water into flux.**
- **Easy** to install and operate.
- **Fits** most manufacturer's flux tanks.

OPTIONAL ACCESSORIES:

- **MAGSEP-2** magnetic separator (replaces slag tray).
- **FV-1** flux shut off valve. Used to turn flux flow on and off in flux feed hose. Specify 1/2", 3/4" or 1" I.D. hose size.
- **TNOZ-XX"** pressure tank flux feeding nozzle (specify 1/2", 3/4" or 1" I.D. hose size). Used to change (increase) flux feeding rate by enabling larger I.D. hose size.
- **PFR-LD3 LID** is a lid for attachment to automatic welding head hopper (i.e. Lincoln NASS hopper) to allow pressure feeding flux directly to hopper.
- **LONGER RECOVERY HOSE** available in 20ft (6.1m) and 25ft (7.62m) lengths.

LPFR-3 SPECIFICATIONS:

- **Weight** : 60lbs (27.2Kg) empty.
- **Capacity**: Approx. 45lbs (20.4Kg) flux.
- **Dimensions**: 32" (81.cm) H X 13" (33cm) W X 13" (33cm) D.
- **Electrical input**: Available for 115 Vac; 1 PH; 50/60 Hz or 220 Vac; 1 PH; 50/60 Hz
- **Comes complete** with 15 ft (4.6 m) of vacuum hose, NZ-1 pickup nozzle and remote on/off pendant.
- **Ready for installation!**



PORTABLE FLUX RECOVERY

THE MIGHTY-MIGHT

PS-2 (ELECTRIC POWERED)

AND PS-2-A/P ~~AIR POWERED~~

INCREASE YOUR SUBMERGED ARC WELDING PROFITS WITH THE PORTABLE, MEDIUM DUTY PS-2 OR PS-2-A/P. (ASK US TO SEND YOU "THE PS-2 COST REDUCTION ANALYSIS" !)



PS-2
(ELECTRIC POWERED)

SPECIFICATIONS FOR PS-2:

- **Input Power:** 115v/ 1ph/ 60-50hz/ 9 amps or 220v/ 1ph/ 60-50hz/ 4.5 amps.
- **Weight:** 70lbs. (32kgs.).
- **Dimensions:** 54in. (137 cm) Hx 15in. (38 cm) D x 22 in. (56cm) W.
- **PS-2 Comes complete with** 15 ft. (4.6 m) of 1-1/2 in. (38mm) hose and pick-up nozzle and is ready to use.

OPTIONAL FEATURES FOR THE PS-2 AND PS-2-A/P:

- **MAGSEP-1, Magnetic Separator** (installs in place of the slag tray).
- **1-1/2 in. (38mm) I.D. Extra Hose:** For PS-2; 15 ft. (4.6 m), 20 ft. (6.1m), and 25 ft. (7.6 m) sections available. For PS-2-A/P 10 ft. (3m) and 15 ft. (4.6m) sections available.
- **Pick-up Nozzles:** Special nozzles available. Please consult factory.

* Please consult factory for maximum flux recovery capacity of PS-2 and PS-2-A/P. For heavy duty flux recovery, ask for information on our "Mighty-Mac" flux recovery systems.

ADVANTAGES:

- Saves time and money.
- Recovers all unused flux.
- Greatly reduces clean up time.
- Introduces no oil or water into flux (air or electric).
- Easy to use and maintain.
- Lightweight and easily moved (fits into crowded areas well).

FEATURES:

- Powerful electric or air vacuum can meet your medium duty flux recovery needs.*
- Revolutionary (patented) self cleaning dust filter in PS-2 and no internal filters in PS-2-A/P enables hours of uninterrupted operation.
- Flashing light tells operator when to clean dust bag (PS-2 only).
- Remote on / off control switch is attached to hose near nozzle, enabling operator to turn PS-2 on and off as needed. (PS-2 only).
- Dust and fines are collected in a bag for easy cleaning.
- Fused slag is automatically separated from reusable flux by internal slag tray.
- Holds approximately 75 lbs. (34 kgs.) of recovered flux.
- Flux slide valve on bottom of hopper enables easy transfer of recovered flux.



PS-2-A/P
(AIR POWERED)

SPECIFICATIONS FOR PS-2-A/P :

- **Input Power:** Compressed air @ 70-100 psi, approximately 8 - 10 cfm.
- **Weight:** 60lbs. (27kgs.).
- **Dimensions:** 54in. (137 cm) Hx 15in. (38 cm) D x 28in. (71cm) W.
- **PS-2 Comes complete with** 10 ft. (3 m) of 1-1/2 in. (38mm) hose and pick-up nozzle and is ready to use.



**THE 100 LB. PORTABLE FLUX
OVEN SERIES STORES AND
REBAKES SUBMERGED ARC
FLUX WHILE KEEPING IT HOT
AND DRY!**

TO SEE ALL OUR PRODUCTS, VISIT US AT OUR
WEB SITE : www.weldengineering.com

**{ PFO-100-AB &
PFO-100**

NOW WITH DIGITAL DISPLAY

THE COMPLETE AND READY-TO-USE PFO-100-AB (PROGRAMMABLE) AND PFO-100 PORTABLE FLUX OVENS STORE AND REBAKE SUBMERGED ARC FLUX, KEEPING IT MOISTURE FREE AND READY TO USE.

PFO-100-AB



Note: Also available in stationary 400lb and 700 lb. flux ovens with high temperature and/or automatic baking features.

IMPORTANT FEATURES:

- Typically holds over 100lb. (46 Kg) of flux. (Weight will vary depending on type and density of flux.)
- Powerful 1000 watt heating system. (Uses specially designed Low Watt Density elements to prevent localized overheating of flux.)
- Total and uniform heating of flux. (Heating elements extend through the flux, insuring total heat transfer.)
- Temperature range from 34°F (1.1°C) to 550°F (288°C).
- Accurate and easily adjusted Digital temperature control.
- Large digital temperature display for ease of use.
- High temperature fiber glass insulation for maximum efficiency.
- Removable debris and slag screen.
- Portable and easy to move.
- Flux valve on front of oven discharges hot flux quickly and easily into an appropriate high temperature container.

PFO-100-AB FEATURES:

- By a simple push of a button, the PFO-100-AB re-bakes flux at an adjustable temperature of 34°F (1.1°C) to 550°F (288°C) for an adjustable time (1 min. to 999hrs. factory set at 3hrs.).
- Automatically resets to an adjustable storage temperature of 34°F (1.10°C) to 550°F (288°C) after bake cycle.
- Holds at the storage temperature until the bake cycle button is pressed. This starts bake cycle over again.
- Large push buttons make operation very easy.

PFO-100



SPECIFICATIONS:

- **Input Power:** (1000 watt) 115V, 220V / 1ph / 60-50HZ
- **Dimensions:** 50.3"(128cm)H X 18"(46cm)W X 23.1"(59cm)D
- **Weight (Empty):** 124lb. (57 Kg) for PFO-100 and PFO-100-AB

PORTABLE HEAVY DUTY RECOVERY

FOUR (4) CHOICES FOR LOW COST MIGHTY-MAC "PORTABLE HEAVY DUTY FLUX RECOVERY SYSTEMS"

TO SEE ALL OUR PRODUCTS, VISIT US AT OUR
WEB SITE : WELDENGEERING.COM

PS-1500 (2 HP)
PS-3000 (4 HP)
PS-5000 (5.5 HP)
PS-7500 (7.5 HP)

REDUCE COST, CREATE A SAFER, HEALTHIER WORK ENVIRONMENT WITH THE HEAVY DUTY, RUGGED AND POWERFUL PORTABLE PS-1500, PS-3000, PS-5000 OR THE PS-7500 FLUX RECOVERY SYSTEM FOR CONTINUOUS HEAVY DUTY SUBMERGED ARC WELDING.

Note: Also available without wheels and a choice of flux hopper / separators for stationary mounting. Please see **SPS-1500, 3000, 5000, and 7500** product bulletin. "WE-SPS-1500-7500-01262013"



IMPORTANT FEATURES:

- **Vacuum sensing gauge** indicates when filter needs to be cleaned.
- **Dirty filter is semi-automatically cleaned** by high energy shock wave of air.
- **Dust is automatically collected** in dust drawer for easy removal.
- **"Micron" cartridge dust filter** is long lasting and easily replaced.
- **Super duty vacuum blower / TEFC motor assembly** has no "V" belts and are designed to run with **low maintenance**.
- **Blower turns at low speed** for long bearing life.
- **Oil free operation** unlike many competitive recovery vacuums.
- **Higher vacuum and more efficient** than other competitive products.
- **High abrasion wear points** in flux separator are inexpensive and easily replaced.
- **Designed for continuous duty, high demand** flux recovery applications.
- **Large 150 lb (68 Kg) hopper / separator** for flux storage.
- **Ball valve** for easy transfer of recovered flux to another container.
- **Flux level windows** in hopper enable easy estimate of recovered flux.

SPECIFICATIONS:

Weight (empty):

- **PS-1500;** Approx. 270 lbs (122Kg)
- **PS-3000;** Approx. 295 lbs (134Kg)
- **PS-5000;** Approx. 368 lbs (167Kg)
- **PS-7500;** Approx. 436 lbs (198Kg)

Dimensions:

- 54in (137cm) H X 38in (97cm) W X 24in (61cm) D
- 54in (137cm) H X 42in (107cm) W X 24in (61cm) D
- 54in (137cm) H X 44in (112cm) W X 24in (61cm) D
- 60in (152cm) H X 44in (112cm) W X 37in (93cm) D

Power input:

- 2 HP; 220 VAC; 1PH; 50-60 Hz or 200-220, 380-415, 460, 575 VAC; 50-60 Hz; 3 PH
- 4 HP; 200-220, 380-415, 460, 575 VAC; 50-60 Hz
- 5.5 HP; 200-220, 380-415, 460, 575 VAC; 50-60 Hz
- 7.5 HP; 200-220, 380-415, 460, 575 VAC; 50-60 Hz

- **Compressed air for all machines is for filter cleaning only:** < 1 cfm @ 70-100 psi (use min. 1/4" I.D. hose).

- **NOTE: PS Flux-Vacuums** come complete as shown above except for 1-1/2" or 2" Hose and NZ-1 or NZ-1-2 nozzle. There are many flux hopper / separators and accessories available. (Please contact factory for ordering assistance.)

OPTIONAL ACCESSORIES:

- **PS-1500, 3000, 5000 USES 1-1/2" FLUX RECOVERY HOSE;** PS-7500 USES 2" RECOVERY HOSE. Available in 10, 15, 20, and 25 FT lengths.
- **FLUX HOSE MOUNTING BRACKETS** (for use when permanently mounting pick-up nozzle over flux to be recovered): 1) **FHM-1** enables linear hose adjustment. 2) **FHM-1ADJ** enables linear and angular hose adjustment.
- **NOZZLES FOR 1-1/2" HOSE:** **NZ-1, NZ-1BUTT** for butt welds*, **NZ-1CRN** for left and right hand corners* - sold as a pair, and **NZ-1-4** four inch wide nozzle.
- **NOZZLES FOR 2" HOSE:** **NZ-1-2, NZ-1-2BUTT** for butt welds*, **NZ-1-2CRN** for left and right hand corners* - sold as a pair, and **NZ-1-2-4** four inch wide nozzle.
*NOTE: Must use **FHM-1ADJ** hose bracket for butt and corner nozzles.
- **MAGNETIC SEPARATOR: MAGSEP-100**
- **FD-1** adjustable flux dam. Used to support flux on cylindrical weldments.



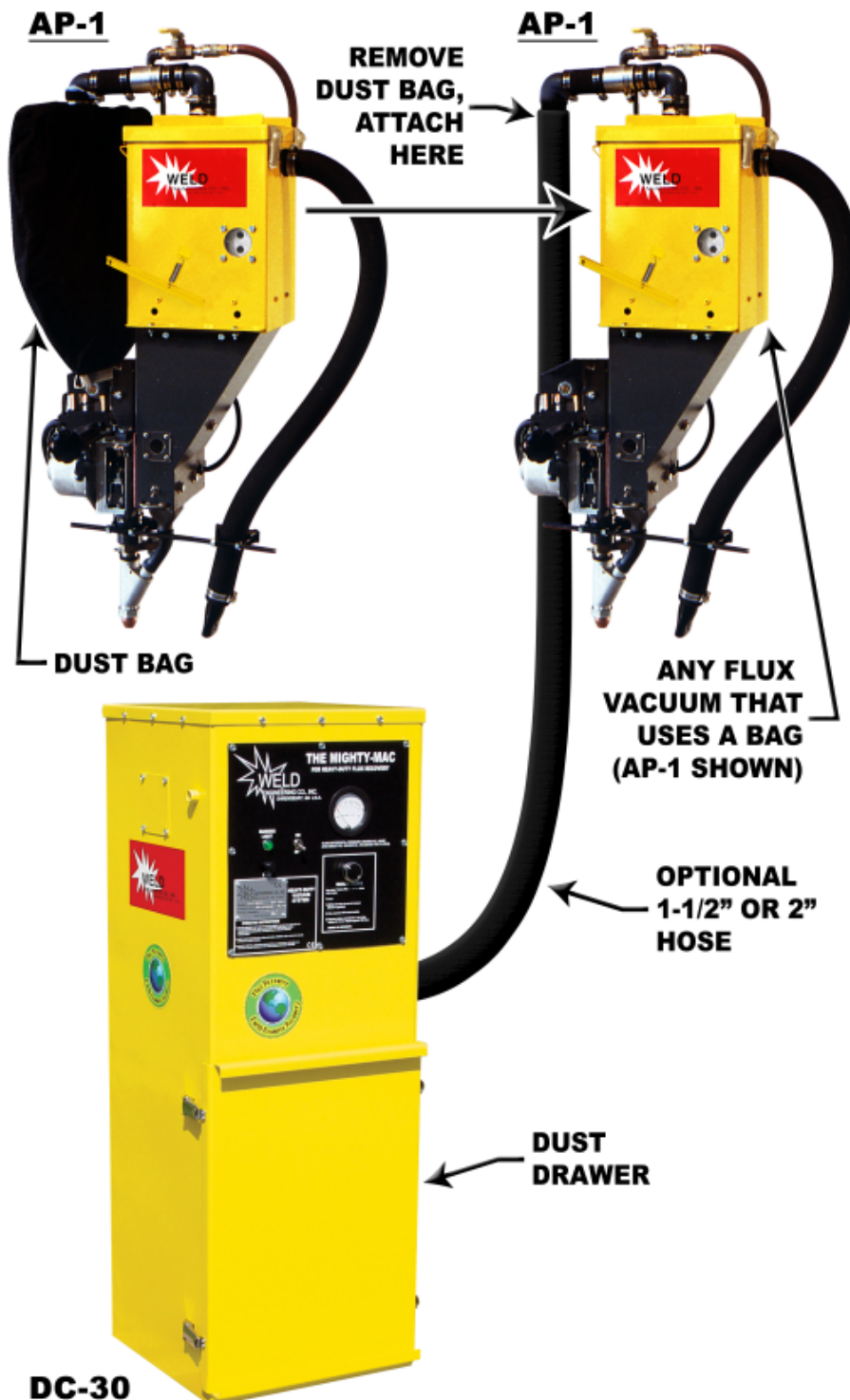
**THE DC-30 DUST COLLECTOR IS A
PERMANENT REPLACEMENT FOR
THE TRADITIONAL DUST BAG.**

TO SEE ALL OUR PRODUCTS, VISIT US AT OUR
WEB SITE : WELDENGINEERING.COM

DC-30

DUST COLLECTOR

THE DC-30 IS A COMPLETE SEMI-AUTOMATIC DUST COLLECTION UNIT, CONNECTING DIRECTLY TO THE AIR PUMP, SUPER AIR PUMP, OR MOTOR BOX ON STANDARD FLUX RECOVERY SYSTEMS.



IMPORTANT FEATURES:

- Vacuum sensing gauge indicates when filter needs to be cleaned.
- Dirty filter is semi-automatically cleaned by high energy shock wave of air.
- Dust is automatically collected in dust drawer for easy removal.
- "Micron" cartridge dust filter is long lasting and easily replaced.
- Dust drawer holds many times more dust than a standard dust bag.
- Filter lasts much longer than a standard dust bag.

PARTS & ACCESSORIES:

- 1-1/2" and 2" Hose. Sold in 5 ft. increments.
- Removable vacuum inlet.
- Dust filter.

COMPATIBLE SYSTEMS:

- AP-1, AP-1-E/P
- SUPER-AP-1, SUPER-AP-1-E/P
- AS-4, AS-4-E/P
- PS-2, PS-2-A/P, SUPER-PS-2-A/P
- PFR-3, PFR-3-A/P, SUPER PFR-3-A/P
- SUPER FH-100-A/P, SUPER HFH-100-A/P
- SUPER FH-100-A/P-E/P
- SUPER HFH-100-A/P-E/P

SPECIFICATIONS:

- Weight (empty): 190 lbs (86Kg)
- Dimensions: 34 in (86cm) H X 34 in (86cm) W X 19 in (48cm) D
- Power input: 115 or 220 VAC.
- Compressed air for all machines is for filter cleaning only: < 1 cfm @ 70-100 psi (use min. 1/4" I.D. hose).



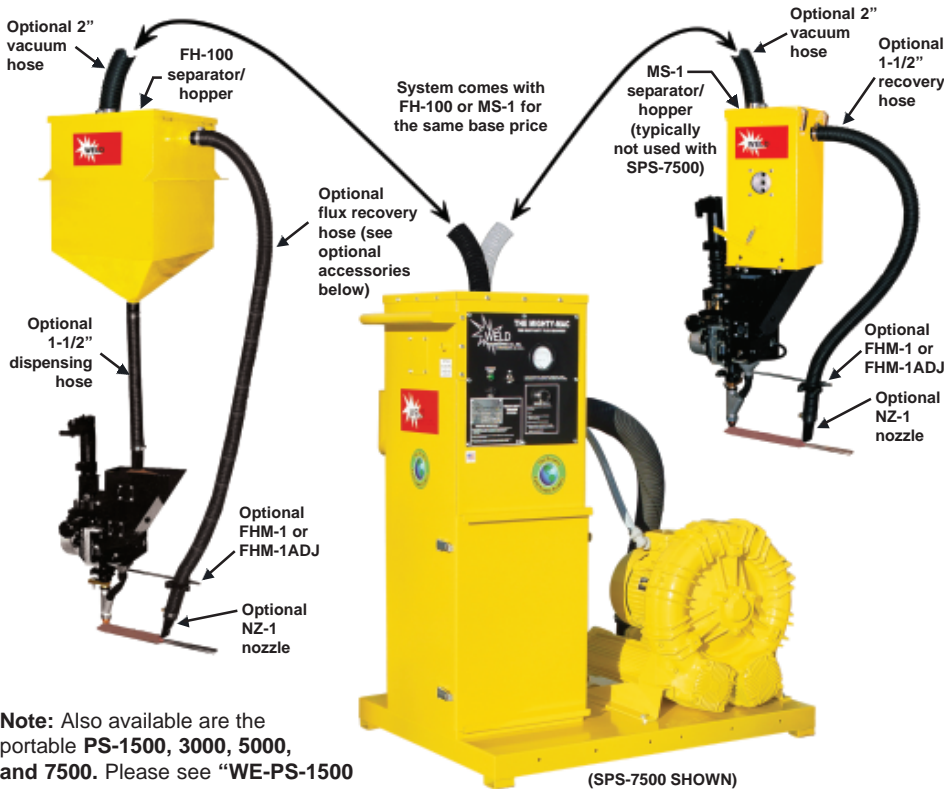
FOUR (4) CHOICES FOR LOW COST MIGHTY-MAC “STATIONARY HEAVY DUTY FLUX RECOVERY SYSTEMS”

TO SEE ALL OUR PRODUCTS, VISIT US AT OUR
WEB SITE : WELDENGEERING.COM

**SPS-1500 (2 HP)
SPS-3000 (4 HP)
SPS-5000 (5.5 HP)
SPS-7500 (7.5 HP)**

THE SPS-1500, 3000, 5000, AND 7500 COME COMPLETE WITH SEMI-AUTOMATIC DUST COLLECTION UNIT AND YOUR CHOICE OF EITHER THE FH-100 (150 LBS CAPACITY) FLUX HOPPER/SEPARATOR OR THE MS-1 SEPARATOR AT NO EXTRA COST.

The continuous duty vacuum blower/motor unit and semi-automatic dust collection unit are mounted on a sturdy undercarriage. 1-1/2" and 2" hose and optional accessories are priced separately.



Note: Also available are the portable **PS-1500, 3000, 5000, and 7500**. Please see “**WE-PS-1500-7500-01262013**” product bulletin.

IMPORTANT FEATURES:

- **Vacuum sensing gauge** indicates when filter needs to be cleaned.
- **Dirty filter is semi-automatically cleaned** by high energy shock wave of air.
- **Dust is automatically collected** in dust drawer for easy removal.
- **“Micron” cartridge dust filter** is long lasting and easily replaced.
- **Super duty vacuum blower / TEFC motor assembly** has no “V” belts and are designed to run with **low maintenance**.
- **Blower turns at low speed** for long bearing life.
- **Oil free operation** unlike many competitive recovery vacuums.
- **Higher vacuum and more efficient** than other competitive products.
- **High abrasion wear points** in flux separator are inexpensive and easily replaced.
- **Designed for continuous duty, high demand** flux recovery applications.
- **Large 150 lb (68 Kg) hopper / separator** for flux storage.
- **Slide valve** for easy transfer of recovered flux to another container.
- **Flux level windows** in hopper enable easy estimate of recovered flux.
- **Lighter and more compact** than other competitive units.

SPECIFICATIONS:

Weight (empty):

- **SPS-1500;** Approx. 190 lbs (86Kg)
- **SPS-3000;** Approx. 215 lbs (98Kg)
- **SPS-5000;** Approx. 288 lbs (131Kg)
- **SPS-7500;** Approx. 340 lbs (155Kg)
- **MS-1;** Approx. 26 lbs (12Kg)
- **FH-100;** Approx. 49 lbs (22Kg)

Dimensions:

- 34in (86cm) H X 34in (86cm) W X 19in (48cm) D
- 44in (112cm) H X 34in (86cm) W X 19in (48cm) D
- 44in (112cm) H X 34in (86cm) W X 19in (48cm) D
- 48in (121cm) H X 39in (97cm) W X 28in (70cm) D
- 22in (56cm) H X 10in (25cm) W X 10in (25cm) D
- 30in (76cm) H X 19in (48cm) W X 19in (48cm) D

Power input:

- 2 HP; 220 VAC; 1PH; 50-60Hz or 200-220, 380-415, 460, 575 VAC; 50-60Hz; 3 PH
- 4 HP; 200-220, 380-415, 460, 575 VAC; 50-60 Hz
- 5.5 HP; 200-220, 380-415, 460, 575 VAC; 50-60 Hz
- 7.5 HP; 200-220, 380-415, 460, 575 VAC; 50-60 Hz

- **Compressed air for all machines is for filter cleaning only:** < 1 cfm @ 70-100 psi (use min. 1/4" I.D. hose).

OPTIONAL ACCESSORIES:

- **SPS-1500, 3000, 5000 USES 1-1/2" FLUX RECOVERY HOSE; SPS-7500 USES 2" FLUX RECOVERY HOSE.** Sold in 5 ft increments.
- **FLUX HOSE MOUNTING BRACKETS:** 1) **FHM-1** enables linear hose adjustment. 2) **FHM-1ADJ** enables linear and angular hose adjustment.
- **NOZZLES FOR 1-1/2" HOSE:** **NZ-1, NZ-1BUTT** for butt welds*, **NZ-1CRN** for left and right hand corners* - sold as a pair, and **NZ-1-4** four inch wide nozzle.
- **NOZZLES FOR 2" HOSE:** **NZ-1-2, NZ-1-2BUTT** for butt welds*, **NZ-1-2CRN** for left and right hand corners* - sold as a pair, and **NZ-1-2-4** four inch wide nozzle.
*NOTE: Must use **FHM-1ADJ** hose bracket for butt and corner nozzles.
- **MAGNETIC SEPARATORS:** **MAGSEP-100** (for FH-100) and **MAGSEP-1** (for MS-1)
- **FD-1** adjustable flux dam. Used to support flux on cylindrical weldments.
- **Please consult factory for many other options and accessories available.**



THE PT-100 AND HEATED HPT-100 100 PRESSURE FEED TANKS

{PT-100 & HPT-100

TO SEE ALL OUR PRODUCTS, VISIT US AT OUR
WEB SITE : WELDENGEERING.COM

THE PT-100 AND HPT-100 FLUX PRESSURE FEED TANK SERIES AUTOMATICALLY PRESSURE FEEDS FLUX TO THE WELDING EQUIPMENT'S FLUX HOPPER, GREATLY INCREASING THE SYSTEM'S FLUX CAPACITY.

PT-100



PT-100 AND HPT-100 FEATURES:

- 100lb. capacity flux pressure feed tank. Also available in 300lb., 600lb., 1000lb., 1200lb., 2000lb., etc. Other sizes available per customer request.
- Internal flux cone allows entire contents of tank to feed.
- Air input shut off valve, pressure regulator, and oil/water trap.
- Flux feeding nozzle (T-NOZ) on bottom of tank allows flux to feed smoothly and consistently. Available for 1/2", 3/4", 1", and 1 1/4" I.D. flux feed hose.

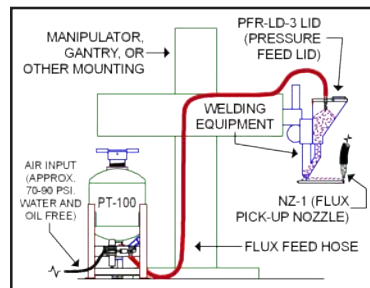
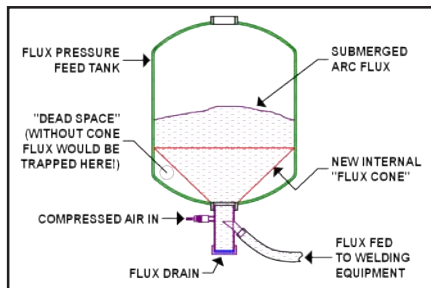
HPT-100 FEATURES:

- The heated HPT series (shown right) heats flux to 250° F (121° C). Higher temperatures are available.
- Tank is encased in cabinet with high temperature insulation for safety.

OPTIONAL FEATURE:

- Low level sensor alerts operator when flux is low with loud alarm and flashing yellow light.

HPT-100



SPECIFICATIONS:

- **Input:** PT-100 and HPT-100 both require clean and dry air at 70-90psi. HPT-100 also requires 115V, 220V, 460V / 1ph / 50-60HZ (1500 watt). Other voltages available. Input power varies with tank size.
- **Dimensions:** 37"(94cm)H X 18.3"(47cm)W X 20.7" (53cm)D for PT-100 and 37"(94cm)H X 22.2"(57cm)W X 30.2" (77cm)D for HPT-100. Larger unit dimensions vary.
- **Weight (empty):** 102lb. (46.3 Kg) for PT-100. 140lb. (64 Kg) for HPT-100.
- **Consult factory for specifications on our larger units.**

**PRESSURE
FEEDS AND
RECOVERS!**

THE PRESSURE FEED AND RECOVERY EQUIPMENT SERIES CREATES UNIQUE VERSATILITY FOR MANY SUBARC WELDING APPLICATIONS.

{ PFR-3000 & HPFR-3000 }

TO SEE ALL OUR PRODUCTS, VISIT US AT OUR
WEB SITE : WELDENGINEERING.COM

THE COMBINATION FLUX PRESSURE FEED AND RECOVERY EQUIPMENT SERIES PRESSURE FEEDS FLUX TO THE WELDING EQUIPMENT AND RECOVERS FLUX TO BE FED BACK INTO THE FEED TANK.

**PFR-3000-300
WITH SENSOR**

PFR-3000



IMPORTANT STANDARD FEATURES:

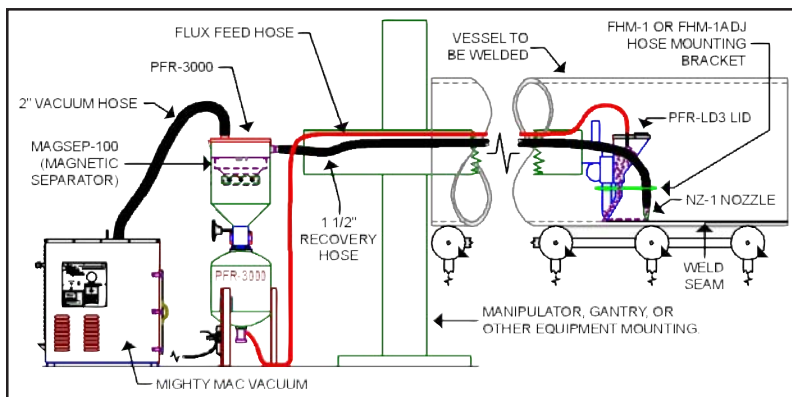
- Stores recovered flux in 200lb., 300lb., or larger hopper.
- Stores and pressure feeds new or recovered flux using a 100lb., 300lb., or larger pressure feed tank.
- Separates out slag, fines, and magnetic particles (when the optional MAGSEP-100 magnetic separator is installed).
- Allows direct transfer from upper hopper/separator to the pressure feed tank via valve or the optional FTV-3000 automatic valve.
- Pressure feed tank feeds flux via hose to welding equipment.
- Feeds and recovers from a distance using hoses, allowing the welding equipment free of any additional clearance.

OPTIONAL FEATURES:

- The heated HPFR series (shown right) heats flux to 250°F (121°C). Tank is encased in insulated cabinet for safety.
- MAGSEP-100 magnetic separator filters out magnetic particles.
- FTV-3000 auto valve automatically transfers flux from hopper to tank (shown far right).
- Low level sensor alerts when flux is low.

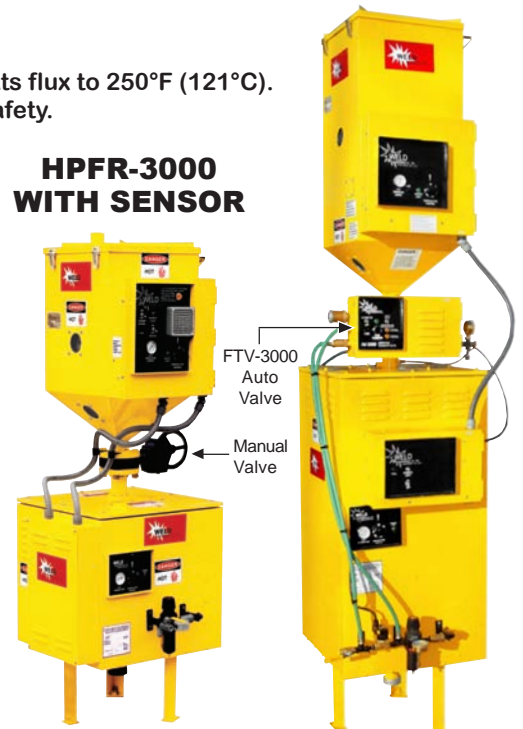
SUGGESTED ITEMS:

Other accessories and equipment (shown below) include a Mighty-Mac vacuum, 2" vacuum hose, flux feed hose (in 1/2", 3/4", 1", and 1 1/4" I.D.), 1 1/2" recovery hose, FHM-1 or FHM-1ADJ flux hose mounting bracket, PFR-LD-3 lid to pressure feed to welding hopper, and NZ-1 flux pick-up nozzle.



**HPFR-3000-300
WITH FTV-3000**

**HPFR-3000
WITH SENSOR**



FTV-3000
Auto Valve
Manual Valve

SPECIFICATIONS:

- **Input Air:** Clean and dry at 70-100psi.
- **Dimensions:** 63.8"(162cm)H X 18.3"(47cm)W X 18.7"(48cm)D for standard PFR-3000. Larger or heated unit dimensions vary.
- **Weight:** 195lb. (89Kg) for standard PFR-3000. Larger or heated unit weights vary.

**NEW
PRODUCT!**

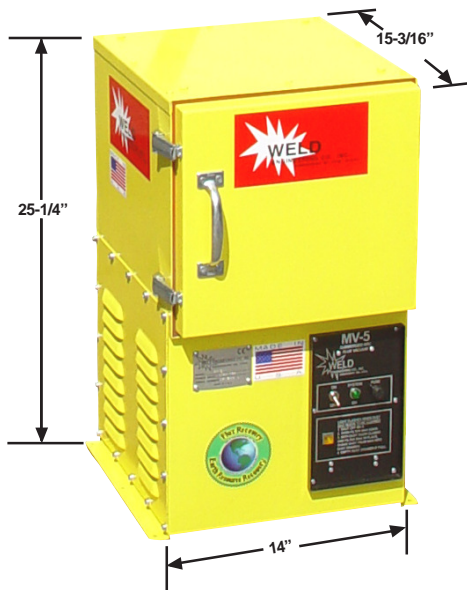
- *SMALL HEAVY DUTY ELECTRIC FLUX VAC.
- *COMES WITH FHMV5-100 FLUX HOPPER.
- *PERFECT FOR GIRTH WELDERS.
- *VERY QUIET. NO HIGH PITCH SOUND.
- *115 VAC PLUGS INTO MOST WELDERS (6.7 to 8 AMPS).
- *DUST FALLS INTO REMOVABLE DUST PAN.
- *VERY LOW MAINTENANCE.

TO SEE ALL OUR PRODUCTS, VISIT US AT OUR
WEB SITE : WELDENGINEERING.COM

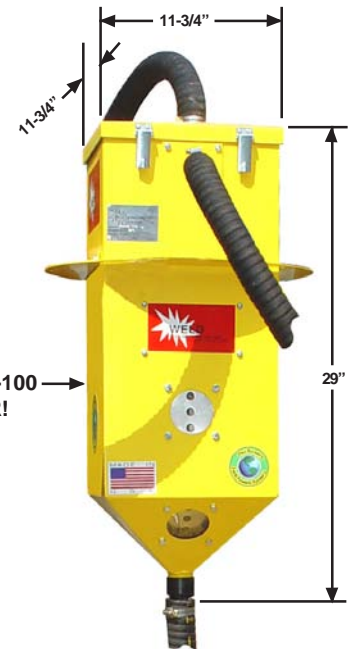
MV-5

**(SUPER QUIET 3/4 HP FLUX
VACUUM SYSTEM
IDEAL FOR GIRTH WELDERS)**

MV-5 VACUUM

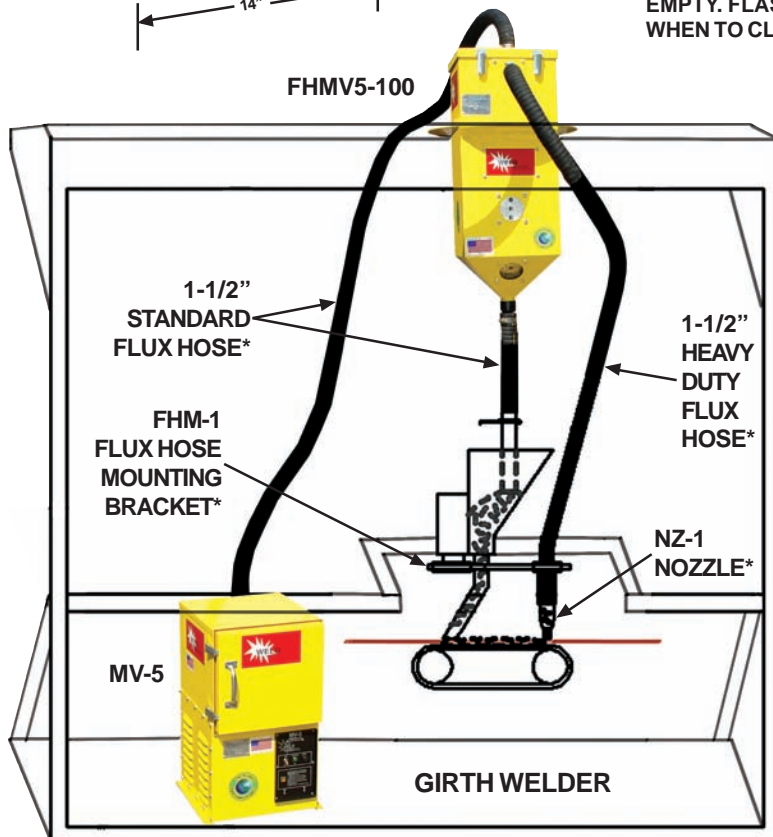


EASY DUST CLEANING.
SHAKE BAG, PULL OUT DUST PAN AND
EMPTY. FLASHING LIGHT TELLS YOU
WHEN TO CLEAN.



FHMV5-100 FLUX HOPPER.
100 LB. CAPACITY. WILL FIT 16"
ROUND MOUNTING HOLE.

FHMV5-100



SPECIFICATIONS:

- Input Voltage: 115V / 1 Ph / 60 Hz / 6.7 To 8 Amps
- Dimensions: See approximate dimensions above.
- Weight: MV-5 vacuum: 93 lbs (42.18 kg)
FHMV5-100 Hopper: 38 lbs (17.24 kg)
- Comes With FHMV5-100 FLUX HOPPER.

*Optional Accessories. Hoses, flux hose mounting bracket, and nozzle sold separately. Call factory for full optional accessories list.

**NEW
PRODUCT!**

TO SEE ALL OF OUR PRODUCTS,
VISIT US AT:
www.weldengineering.com

FTV-3000

(AUTOMATIC TRANSFER VALVE
FOR PFR-3000, HPFR-3000
EXISTING AND NEW)



OPTIONAL
LOW LEVEL
SENSOR.

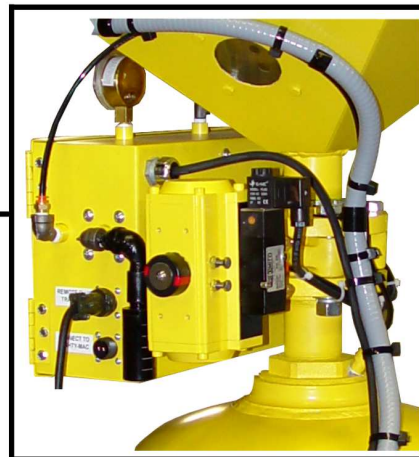
FTV-3000
AUTOMATIC
FLUX
TRANSFER
VALVE.

PFR-3000

Automatically Transfers Flux from the upper
hopper to the Lower Pressure Tank with a push of a
button on the control or Remote Pendant.

Easy to Install in the Field on Existing or factory
installed on New PFR-3000 and HPFR-3000.

NEW PRODUCT



REAR VIEW OF FTV-3000
AUTOMATIC FLUX
TRANSFER VALVE ADDED
TO A PFR-3000.

**NEW
PRODUCT!**

THE MIGHTY-MAC-5000X-MILL SUPER HEAVY DUTY FLUX RECOVERY VACUUM

TO SEE ALL OUR PRODUCTS, VISIT US AT OUR
WEB SITE : WELDENGEERING.COM

Typical applications are Pipe Mills or any super duty flux recovery where automatic recovery and cleaning of large amounts of flux and low maintenance is important.

The new **Mighty-Mac-5000X-MILL Super** heavy duty flux recovery vacuum and dust collector offers **great new features**: • **EXtremely** rugged and durable. • **EXtremely** easy to maintain because large door to filters open with the flick of latches, and all internal covers are easily removed. • **EXtremely** safe; micron filters remove particles below one (1) micron, making the air you breath much cleaner. • **The Mighty-MacX** System also provides **auto sensing** dust cleaning logic. The filters are always **automatically** pulse cleaned as they become dirty (with no operator input)!



MM-5000X-MILL
Super Duty
Automatic Vacuum

MIGHTY-MAC SPECIFICATIONS:

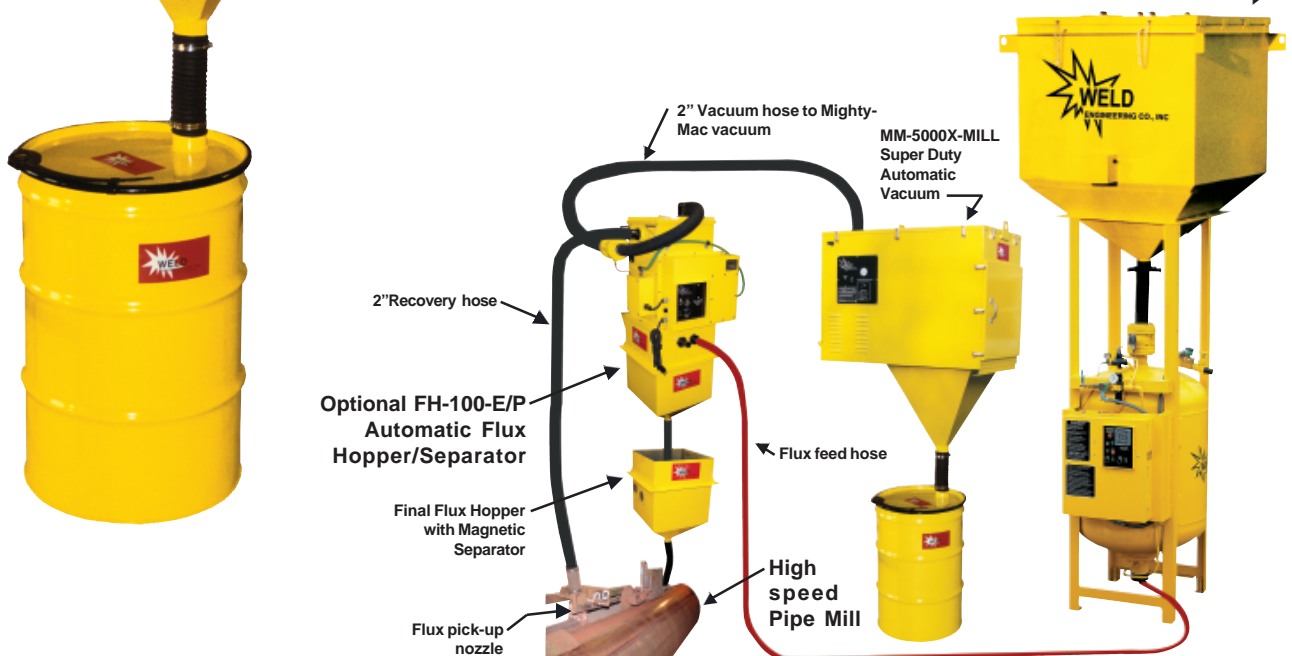
- **Weight:**
MM-5000X-MILL (5.5 HP): 540 lbs (245 Kg)
 - **Dimensions :** 60" (152 cm) H x 45-1/8" (115 cm) W x 27-3/4" (70 cm) D
 - **Electrical input:** Available for 200-230, 460, 575 Vac; 3PH; 60 Hz or 220, 380-415 Vac; 3PH; 50 Hz
 - **Compressed air** (for filter cleaning only):
< 1 cfm @ 70-100 psi (use min. 1/4" I.D. hose).
 - **NOTE:** Hose, valves, flux separators and other flux storage and feed accessories must be ordered separately.
- Please request "TB-MM-708" Systems Manual for complete system configuration information. (Please contact factory for ordering assistance.)



Filter replacement
is quick and easy.

Optional 4000 LB Flux Storage
Hopper with 1200 LB Tank
auto flux feed system (keeps
FH-100-E/P Flux Hopper/
Separator constantly full).

Optional FD-55
Dust Drum with
Hose Assembly



FOR OTHER OPTIONAL ACCESSORIES:

- Please request "TB-MM-708" Systems Manual for complete system configurations. (Please contact the factory for ordering and engineering assistance.)

**NOW
UP TO
7.5 HP**

**THREE SIZES FOR THE
EXTREME FLUX RECOVERY
WITH FULLY AUTOMATIC
OPERATION!**

**TO SEE ALL OUR PRODUCTS, VISIT US AT OUR
WEB SITE : WELDENGINEERING.COM**

**MIGHTY-MAC-3000X (4 HP)
MIGHTY-MAC-5000X (5.5 HP)
AND THE
MIGHTY-MAX-7500X (7.5 HP)**

The **Mighty-Mac-3000X, Mighty-Mac-5000X, and Mighty-Mac-7500X** heavy duty flux recovery vacuum and dust collector offers **Great features**: • **EXtremely** rugged and durable. • **EXtremely** easy to maintain because large door to filters open with the flick of latches, and all internal covers are easily removed. • **EXtremely** safe; micron filters remove particles below one (1) micron, making the air you breath much cleaner. • The **Mighty-MacX** System also provides **auto sensing** dust cleaning logic. The filters are always **automatically** pulse cleaned as they become dirty (with no operator input)!

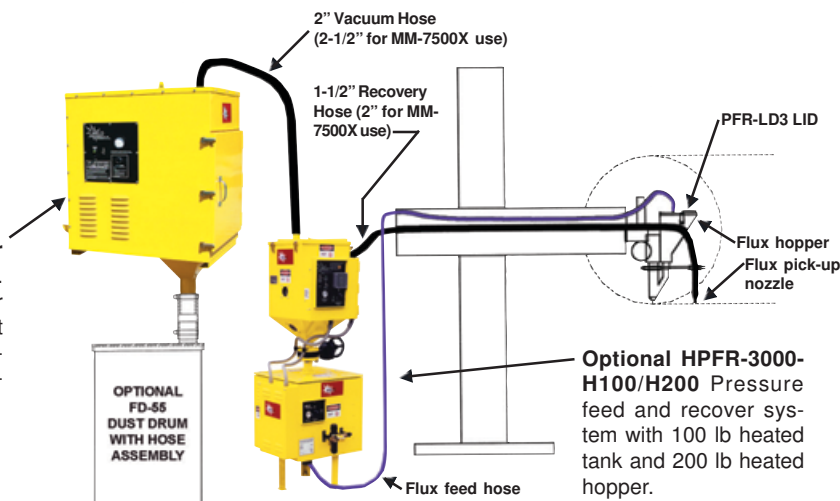
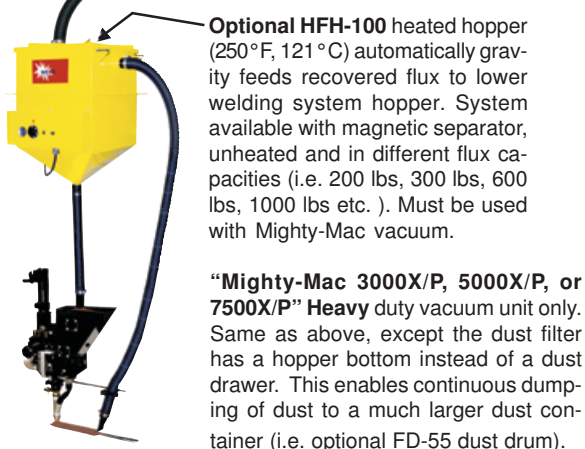
MIGHTY-MAC SPECIFICATIONS:

- **Weight:**
MM-3000X (4 HP): 325 lbs (147.4 Kg)
MM-5000X (5.5 HP): 331 lbs (150.1 Kg)
MM-7500X (7.5 HP): 384 lbs (174.2 Kg)
- **Dimensions:**
MM-3000X/5000X: 34" (86.4 cm) H x 31" (78.7 cm) W x 25" (63.5 cm) D.
MM-7500X: 34" (86.4 cm) H x 34" (86.4 cm) W x 25" (63.5 cm) D
- **Electrical input:** Available for 200-230, 460, 575 Vac; 3PH; 60 Hz or 220, 380-415 Vac; 3PH; 50 Hz
- **Compressed air** (for filter cleaning only): < 1 cfm @ 70-100 psi (use min. 1/4" I.D. hose)
- **NOTE:** Hose, valves, flux separators and other flux storage and feed accessories must be ordered separately. **Please request "TB-MM-708", Systems Manual** for complete system configuration information. **(Please contact factory for ordering assistance.)**

Mighty-Mac 3000X, 5000X, or 7500X



HFH-100
2" Vacuum hose to
Mighty-Mac vacuum



FOR OTHER OPTIONAL ACCESSORIES:

- **Please request "TB-MM-708" Systems Manual** for complete system configurations. **(Please contact the factory for ordering and engineering assistance.)**



**THE HEAVY DUTY MIGHTY-MAC-1500X
IS AN EFFICIENT, RUGGED, CLEAN,
AND LOW MAINTENANCE VACUUM
AND DUST COLLECTOR.**

TO SEE ALL OUR PRODUCTS, VISIT US AT OUR
WEB SITE : WELDENGINEERING.COM

MM-1500X (2HP)

THE HEAVY DUTY MIGHTY-MAC-1500X VACUUM AND DUST COLLECTOR IS SPECIFICALLY DESIGNED FOR RUGGED, CONTINUOUS USE, ALSO EFFICIENT, CLEAN, AND VERY LOW MAINTENANCE.

MIGHTY-MAC-1500X FEATURES:

- Compact size for ease of mounting when size and weight are important.
- More powerful and efficient than competing vacuums.
- Dusty filter automatically cleaned by high energy shock waves of air. Requires no operator input.
- Removes particles as small as one micron in size, making the air you breathe much cleaner.
- Dust is collected in large dust drawer or dust drum (when MM-1500X/P is ordered) for easy dust removal .
- Motor has a very long bearing life and no V-belts to replace; thus, making it very low maintenance.
- High abrasion wear points are easily replaceable.
- Powerful 2 HP TEFC 3 phase or 1 phase motor.
- Oil-free filter eliminates messy oil changes.
- Filter is easily replaced when necessary.
- Large gauge shows if system is running at peak performance and accurately determines when filter is clogged.
- Quiet operation.

MM-1500X vacuum attached to HAMX-50 automatic mixing hopper/separator that is being pressure fed flux by heated HPT-100 (250°F, 121°C) flux feed tank.



SIDE PANEL PULLS OUT TO EMPTY
DUST DRAWER OR CHANGE FILTER

2" Vacuum Hose to
Mighty-Mac Vacuum

Optional HFH-100 heated hopper/separator (250°F, 121°C) gravity feeds to welding system hopper. System available with magnetic separator, unheated hopper, and in different flux capacities (i.e. 200 lb., 300lb., 600lb., 1000lb., etc.).



COMPONENTS SOLD SEPARATELY:

The **Mighty-Mac-1500X** can be used with MS-1 or MS-1-E/P separators; FH-100, HFH-100, FH-100-E/P, or HFH-100-E/P hopper/separators; PFR-3000 or HPFR-3000 pressure feed and recovery systems; and HAMX-50 or HPFR-HAMX-3000 heated automatic mixing systems.

For detailed system configurations, see the TB-MM708 manual.
Please consult our factory for complete engineering assistance.

SPECIFICATIONS:

- **Input Air:** < 1 cfm @ 70-100 psi (clean and dry from 1/4" I.D. hose)
- **Input Voltage:** 230V, 460V, 575V / 3ph / 60HZ; 220V, 380V, 415 / 3ph / 50HZ; and 230V / 1ph / 50-60HZ
- **Dimensions:** 23"(86.4cm)H X 28"(78.7cm)W X 16"(63.5cm)D
- **Weight:** 186lb. (84 Kg)



***THE HTS-700-850° SUPER OVEN
GREATLY REDUCES H₂O CON-
TENT IN FLUX TO BELOW 0.05% BY
WEIGHT. HEATING UP TO 850°F
(454°C)!***

TO SEE ALL OUR PRODUCTS, VISIT US AT OUR
WEB SITE : www.weldengineering.com

HTS-700-850° SUPER OVEN

THE COMPLETE AND READY TO USE HTS-700-850° SUPER OVEN BAKES FLUX UP TO 850°F (454°C) TO GREATLY REDUCE H₂O CONTENT IN FLUX UP TO 0.05% BY WEIGHT¹ AND AUTOMATICALLY RESETS TO A PRESET STORAGE TEMPERATURE.

IMPORTANT FEATURES:

- Typically holds over 700lb. (318 Kg) of flux.²
- Powerful; 4500 watts of heating power.
- Specially designed elements prevent the localized overheating of flux.
- Total and uniform heating of flux. Heating elements extend through the flux, insuring total heat transfer. Most flux particles are not more than 3" from a heating element.
- By a simple push of a button, the HTS-700-850° bakes flux at an adjustable temperature of 34°F (1.1°C) to 850°F (454°C) for an adjustable time (0 to 999 hrs., factory set at 3 hrs.).
- Automatically resets to an adjustable storage temperature of 34°F (1.1°C) to 850°F (454°C) after bake cycle.
- Pressing re-bake button starts re-bake cycle over again.
- Holds at the storage temperature until the re-bake button is pressed.
- Digital control provides accurate temperature control and highly visible, bright numbers.
- High temperature fiberglass insulation for maximum efficiency.
- Removable debris and slag screen.
- Designed to reduce H₂O content in flux to below 0.05% by weight.¹
- Designed to eliminate "hydrogen assisted cracking" in high yield steels.
- Flux valve on front of oven discharges hot flux quickly and easily to an appropriate high temperature container.
- Note: Portable HTP-100-850° 100 lb (46 Kg) flux oven is also available.

SPECIFICATIONS:

- **Input Power:** (4500 watt) 220V / 1ph / 50-60HZ and 380-415, 460V / 3ph / 50-60HZ standard. Other voltages available.
- **Dimensions:** 71in.(180cm)H X 39in. (99cm)W X 44in(112cm)D
- **Weight (Empty):** 514lb. (233 Kg)





***THE HTP-100-850° SUPER OVEN
GREATLY REDUCES H₂O CON-
TENT IN FLUX TO BELOW 0.05%¹
BY HEATING UP TO 850°F (454°C)!***

TO SEE ALL OUR PRODUCTS, VISIT US AT OUR
WEB SITE : www.weldengineering.com

HTP-100-850° SUPER OVEN

THE COMPLETE AND READY TO USE HTP-100-850° SUPER OVEN BAKES FLUX AT 850°F (454°C) TO GREATLY REDUCE H₂O CONTENT IN FLUX TO APPROXIMATELY 0.05% BY WEIGHT¹ AND AUTOMATICALLY RESETS TO A PRESET STORAGE TEMPERATURE.

IMPORTANT FEATURES:

- Typically holds over 100lb. (46Kg) of flux.²
- Powerful; 1500 watts of heating power.
- Specially designed elements prevent the localized overheating of flux.
- Total and uniform heating of flux. Heating elements extend through the flux, insuring total heat transfer. Most flux particles are not more than 3" from a heating element.
- By a simple push of a button, the HTP-100-850° bakes flux at an adjustable temperature of 34°F (1.1°C) to 850°F (454°C) for an adjustable time (0 to 999 hrs, factory set at 3 hrs).
- Automatically resets to an adjustable storage temperature of 34°F (1.1°C) to 850°F (454°C) after bake cycle.
- Pressing re-bake button starts re-bake cycle over again.
- Holds at the storage temperature until the re-bake button is pressed.
- Digital control provides accurate temperature control and highly visible, bright numbers.
- High temperature fiberglass insulation for maximum efficiency.
- Removable debris and slag screen.
- Designed to reduce H₂O content in flux to below 0.05% by weight.¹
- Designed to eliminate "hydrogen assisted cracking" in high yield steels.
- Flux valve on front of oven discharges hot flux quickly and easily to an appropriate high temperature container.
- Note: Stationary HTS-700-850° 700 lb (318 Kg) flux oven is also available.

SPECIFICATIONS:

- **Input Power:** (1500 watt) 220V / 1ph / 50-60HZ and 380-415, 460V / 3ph / 50-60HZ standard. Other voltages available.
- **Dimensions:** 57"(145cm)H X 28"(71cm)W X 29"(74cm)D
- **Weight (Empty):** 280lb. (127 Kg)



WELD

ENGINEERING CO., INC.

Excellence Since 1979

HAMX AUTOMATIC FLUX MIXING SYSTEMS

CONTROLS RATIO OF NEW FLUX TO RECOVERED FLUX

HOW THE HAMX SYSTEM WORKS:

- It must be used with Mighty-Mac vacuum unit (MM-1500X, MM-3000X, MM-5000X, SPS-1500, SPS-3000, SPS-5000)
- Load New Flux into the "New Flux" side of the hopper.
- Begin Recovering flux.
- Automatically a preset ratio of New Flux to recovered Flux will feed to the welding torch.
- Both New and Recovered flux are stored in heated compartments at a desired temperature to 250° F (121 °C).

ADVANTAGES:

- Eliminates costly labor of manually mixing flux.
- Eliminates throwaway of unmixed recovered flux.
- Eliminates operator error in mixing the right proportions of flux.
- Increases profitability and productivity.
- Improves weld quality.
- Optional magnetic separation available.

Gravity feeds mixed flux to the welding torch and recovers unfused flux back to the hopper to be mixed with new flux. Holds approximately 25 lbs of new flux and approximately 25 lbs of recovered flux. Actual storage capacities may vary with flux density. Other capacities available based on customer requirements.

Hose attaches to M-MAC VACUUM

HAMX-50



Hose attaches to M-MAC VACUUM

HPFR-HAMX-3000



Pressure feeds mixed flux to the small hopper at the welding torch and recovers unfused flux at the arc back to the HPFR-HAMX-3000 hopper to be mixed with new flux. (Holds 50 lbs of new flux and 50 lbs of recovered flux. The heated pressure tank holds 100 lbs of mixed flux). Other capacities available based on customer requirements.

Hose attaches to M-MAC VACUUM

HPFR-HAMX-3000-H150-H300



Flux pressure feeds welding torch hopper.

Flux pressure feeds welding torch hopper.

Larger version of the HPFR-HAMX-3000 (Holds 150 lbs of new flux and 150 lbs of recovered flux. The heated pressure tank holds 300 lbs of mixed flux). Other capacities available based on customer requirements.

**KEEP FLUX
EXTRA HOT
AND DRY!**

**THE 700 LB. HIGH TEMPERATURE
FLUX OVEN SERIES STORES AND
REBAKES LARGE VOLUMES OF
SUBMERGED ARC FLUX WHILE
KEEPING IT EXTRA HOT AND DRY!**

TO SEE ALL OUR PRODUCTS, VISIT US AT OUR
WEB SITE : WELDENGINEERING.COM

**{FO-700HT-AB &
FO-700HT**

THE COMPLETE AND READY-TO-USE FO-700HT-AB (PROGRAMMABLE) AND FO-700HT FLUX OVENS STORE AND RE-BAKE 700 LB. OF SUBMERGED ARC FLUX, KEEPING IT MOISTURE FREE AND READY TO USE.

FO-700HT-AB



FO-700HT-AB FEATURES:

- By a simple push of a button, the FO-700HT-AB re-bakes flux at an adjustable temperature of 32°F (0°C) to 700°F (371°C) for an adjustable time (1 min. to 999 hrs., factory set at 3 hrs.).
- Automatically resets to an adjustable storage temperature of 32°F (0°C) to 700°F (371°C) after bake cycle.
- Holds at the storage temperature until the re-bake button is pressed. Pressing re-bake button starts re-bake cycle over again.
- Simple control and Push Buttons make operation easy.

SPECIFICATIONS:

- Input Power: (4500 watt) 220V / 1ph / 50-60HZ and 460V / 3ph / 50-60HZ standard. Other voltages available.
- Dimensions: 67.1"(171cm)H X 32.1"(82cm)W X 32.1"(82cm)D
- Weight (Empty): 460lb. (209 Kg) for FO-700HT and FO-700HT-AB

IMPORTANT FEATURES:

- Typically holds over 700lb. (318 Kg) of flux. (Weight will vary depending on type and density of flux.)
- Powerful 4500 watt heating elements. (Uses specially designed elements to prevent localized overheating of flux.)
- Total and uniform heating of flux. (Heating elements extend through the flux, insuring total heat transfer. Most flux particles are not more than 3" from a heating element.)
- Temperature range from 32°F to 700°F (0°C to 371°C).
Accurate Digital temperature display and control.
- Large Digital display indicates temperature in both °F and °C for ease of use.
- High temperature fiber glass insulation for maximum efficiency.
- High temperature paint (where necessary).
- Removable debris and slag screen.
- Fork lift rails make moving oven easy.
- Flux valve on front of oven discharges hot flux quickly and easily to an appropriate high temperature container.
- Note: Portable 100 lb. and stationary 400 lb. flux ovens are also available.



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