

# Paint Pumps: types and uses in industrial finishing

Paint pumps are widely used in industrial finishing. Paint pumps can be divided by what generates its power, by mechanism, by the pressure they can develop and by suitable application.



### By driven power

- 1.- Pneumatic pumps
- 2.- Electrical pumps
- 3.- Hydraulic pumps



### By pressure

- 1.- High ( 3000 psi up to 8500 psi)
- 2.- Medium (500 psi up to 3000 psi)
- 3.- Low (0 to 500 psi)



### By mechanism

- 1.- Piston pumps
- 2.- Diaphragm pumps
- 3.- Positive displacement pumps



### Application

- 1.- Atomization
- 2.- Paint Circulation
- 3.- Fluid Transfer



### Piston pumps

Piston pumps are used especially to move very viscous or high pressure fluids. Piston pumps are pneumatic pumps that can be of low, medium and high pressure, as required by the application to be used.

Piston pumps can also be subdivided into:

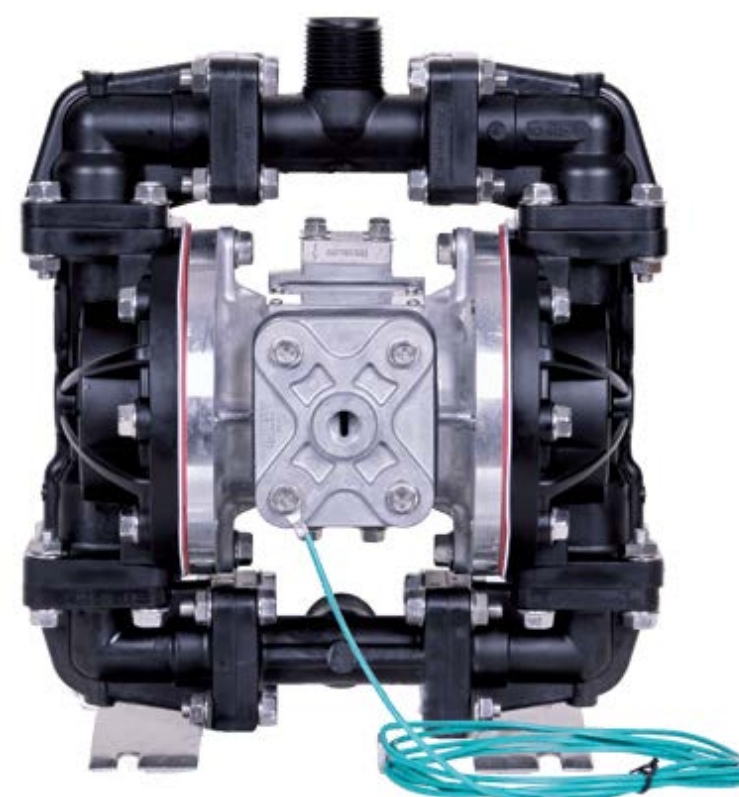
- Radial piston pumps
- Axial piston pumps
- Angled barrel piston pumps (Vickers)
- Angular push plate piston pumps (Denison)

### Diaphragm pumps

Diaphragm pumps have 1 or 2 diaphragms that have elastic walls that are pushed by a central axis. With each stroke the increase in pressure pushes the contents outwards. Usually they are low priced and maintenance is also economical.

Diaphragm pumps can be subdivided into:

- Mechanical diaphragm pumps
- Electric diaphragm pumps
- Hydraulic diaphragm pumps
- Pneumatic diaphragm pumps



### When using pumps for industrial finishing applications...

there is a number of other equipment needed. In many cases you will need hoses, both fluid and air filters, regulators, tanks and, of course, spray guns. Some brands, like Binks, have all the equipment you could need for your operation in one single package: an outfit.



### How to choose the right pump for your job?



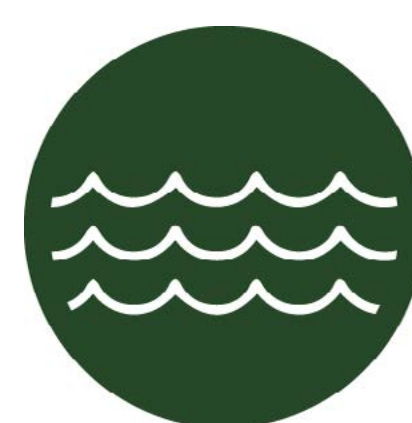
#### Coating type

The right coating for the application is usually determined by the object or surface to be painted.



#### Application type

Is different the equipment necessary for a small operation in a wood shop than the required for a naval manufacturing company.



#### Flow required

This is defined for the coating chose, how far is the paint deposit from the application point and how much pressure is needed.