

Vertical Acid Pumps

Hayward Gordon has been recognized internationally for manufacturing molten sulphur pumps with patented steam jacket design, that keeps our pumps working where others fail. We manufactured our first vertical pump for chemical service back in 1960 and today our engineered design is second to none.

Hayward Gordon Vertical Acid Pumps are specifically designed for reliability in harsh environments with a wide variety of materials of construction, bearing materials, shaft seals and bearing lubrication options. Sizes offered accommodate flows up to 3000 GPM at heads up to 300 feet with setting lengths up to 23 feet.

The shaft seal is not exposed to the liquid being pumped. A simple lip seal is sufficient if the tank is at atmospheric pressure. A low pressure stuffing box is employed for tanks that operate near atmospheric pressure. For applications where the tank is under a moderate pressure or vacuum a deeper stuffing box is available with provision with a lantern ring for use with an external sealing medium such as instrument air. For higher pressure applications a variety of mechanical seals can be fitted to the pump shaft.

The intermediate bearings are lubricated by the pumped fluid if relatively clean with an optional clean fluid flush if abrasives are present.



Applications for Hayward Gordon vertical acid pumps include:

- Fertiliser Production
- Cathodic Dip Coating
- Flue Gas Desulfurization Slurries
- Sulphuric Acid Production
- Chlorine Pumping
- Methyl Chloride Production
- Ammonia Pumping
- Metal Pickling
- Chlorine Drying
- Toluene Nitration
- Concentrated Nitric Acid
- Hydrochloric Production
- Acrylonitrile Production
- Bromine Pumping
- Sulphur Trioxide Transfer

VERTICAL ACID PUMPS

Hayward Gordon will match the right pump for your application with custom features and a wide range of materials including:

ASTM: A743 304SS CF-8

An austenitic chromium nickel stainless steel

- ammonium nitrate and hot nitric acid at medium concentrations

ASTM: A743 316SS CF-8M

An austenitic chromium nickel molybdenum stainless steel

- organic liquids, 50% caustic soda, phosphoric acid, dry chlorine, liquid sulphur

ASTM: A890 CD4MCu

A ferric austenitic duplex stainless steel

- crude phosphoric acid, hot sea water, chlorides, flue gas desulfurization slurries

ASTM: A743 Alloy 20 CN-7M

A high alloy stainless steel with a nickel, chromium content with molybden and copper

- 70% caustic soda, sulphuric acid at all concentrations, sulphuric acid pickling solutions, phosphoric acid and solutions with a high chloride content

ASTM: A494 Hastelloy C276 CW-12MN

A highly corrosion resistant nickel-based alloy for special applications

- liquids containing high chloride, hydrochloric acid, flue gas desulfurization liquids, heavily contaminated phosphoric acid, hypochlorite and solutions with oxidising chlorides

ASTM: A890 Alloy 2205 CD3MN

A ferric austenitic duplex stainless steel material alloy for special applications with a high resistance to corrosion combined with high strength resulting in excellent resistance to chloride stress corrosion cracking

- this material can be very useful in aggressive environments for pump shafting



Learn more about our Vertical Acid Pumps @ www.haywardgordon.com