

Vertical Spindle/Cantilever Pump

SAMengineering

Customised Pump Solutions



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SAMCO's vertically submerged pumps are specifically designed for handling liquids with abrasive solids in suspension and severe pumping problems such as corrosion, abrasion and temperature extremes. Cantilever options are also available.

CPO-V, CP-V: ANSI B73.1 standard process pumps

CPW-V, CPP-V: Pulpy solids and corrosives

HM-V-Process: Abrasive solids and slurries

CSR-V, VTX-V Vortex Impeller: Wastewater, sludge, liquids with solids

The SAMCO Wet Pit Sump Pumps have been created for use in the following applications:

- Coal preparation
- Coal pile runoff sump
- Mineral fibre slurry
- Steel mill scale handling
- Mill effluent
- Clarifier underflow
- Aggregate handling
- Chemical
- Pulp and paper
- Food
- Air pollution control systems
- Mine dewatering
- Taconite slurry
- Processed ore handling
- Plant floor drain sumps
- Sludge handling
- River water supply
- Petrochemical
- Brewing
- Wastewater

**Wet Pit Sump Pump:
Standard Design Features and Options**

SEALED BEARING COLUMN: The pressurised column design is standard on all units with fluted cutless rubber or phenolic bearings also available.

A clean source of external liquid is introduced into the top bearing at a pressure of 100 kPa. A lip-seal type arrangement affords the method of pressurising the column and prevents the entrance of the pumped liquid into the column assembly. (Not applicable to cantilever pumps.)

PUMP LENGTHS: Pump lengths are available in vertical spindle and vertical cantilever.

SUPERIOR HYDRAULIC CHARACTERISTICS: Superior hydraulic characteristics are designed into SAMCO Pumps, resulting in top efficiencies. All pumps have sloping characteristic curves with constantly rising head to shut-off.

RUGGED CASING: Standard casings are made of material selected to handle abrasion and/or corrosion and hard or soft solids in suspension.

RENEWABLE WEAR PLATES: Renewable wear plates are available on all pumps except CPO-V models.

IMPELLERS: Impellers can be open, enclosed, vortex or shearpeller to suit the application. The use of balance holes and pressure balance vanes reduce hydraulic thrust and stuffing box pressure.

IMPELLER ADJUSTMENT: The axial impeller running clearances are pre-set at the factory. These clearances can be easily maintained throughout the life of the pump by simple adjustment.

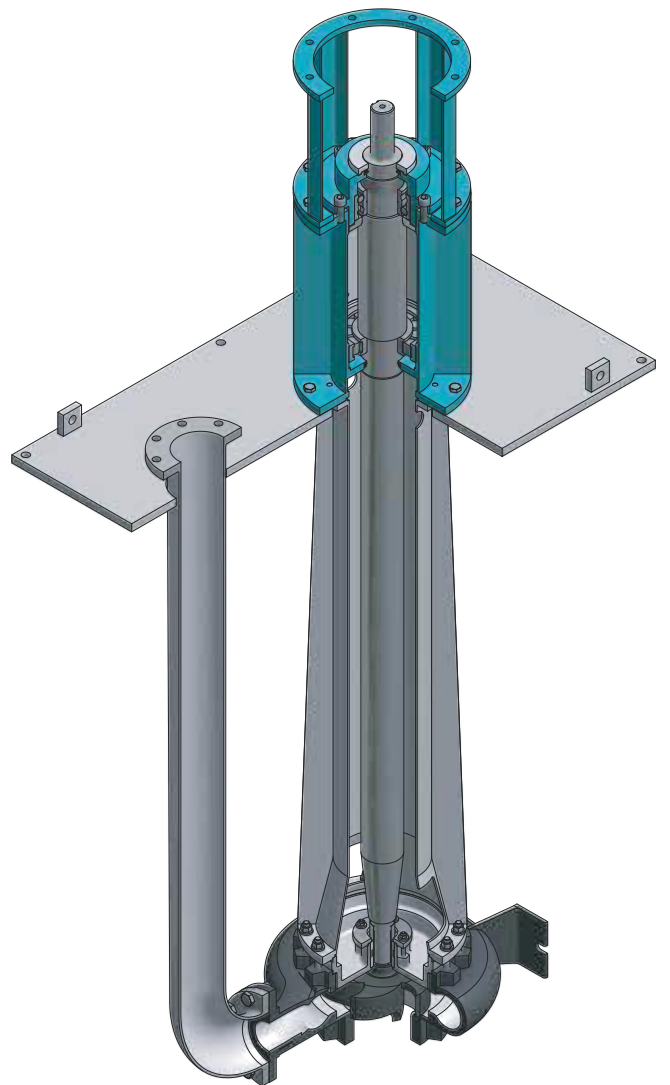
SHAFT: SAMCO pump shafts are either made from high-strength carbon steel through duplex stainless steels, and are accurately machined and of sufficient size to transmit full driver output. Renewable shaft sleeves of stainless steel are also available.

MATERIALS OF CONSTRUCTION: All pumps can be manufactured in various materials to suit specific applications.

TYPICAL VERTICAL SPINDLE



TYPICAL CANTILEVER





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