SLURRY PUMP. TYPE-VASA HD

At MSEL we believe in constantly reinventing ourselves. And in line with this we are always on the lookout for new avenues and opportunities.

McNally Sayaji Engineering Limited (MSEL), with factories in Kumardhubi, Asansol, Bangalore and Baroda, is one of the country’s leading manufacturer of Crushing, Screening, Milling, Material Handling and mineral processing and other heavy equipment, serving the core sectors of the economy. These sectors include Coal, Mining, Power, Steel, Ports, Cement, Aluminium and Non-Ferrous Metals.

All manufacturing units of MSEL are ISO 9001-2008 certified with well established quality assurance department supported by modern testing facilities and managed by a team of highly experienced professionals.

MSEL has branch offices at Kolkata, Bangalore, Chennai, Delhi, Mumbai, Hyderabad, Nagpur, Vishakhapatnam, Kochi, Vijaywada, Coimbatore. This makes MSEL capable to render comprehensive customer support.

MSEL has inducted technology over the years through strategic alliances and developed focused R&D and Design & Development teams, who offer optimum and cost effective solutions to meet customer needs.
APPLICATION

The pumps are primarily designed for pumping abrasive slurries and therefore their main applications are in following sectors:
- Mineral Processing
- ETP
- Ceramics
- Chemical
- Cement
- Paper
- Granite
- Rare Earth & Sand
- Steel plant for Mill Scale, Slag Granulation, Scrubber Dust
- Thermal Power Stations for Fly Ash/Bottom Ash Slurry Applications

CONSTRUCTIONAL FEATURES

HD pumps are equipped with wear parts in Hi-Crome, Natural rubber & alloys of Stainless steel. Synthetic rubber qualities furnished on request. The Hardness of Hi crome ranges from 550-650 BHN. Standard double sealed stuffing box with alloyed shaft sleeve. Optional Expeller Version available. The Overhead mounted adjustable motor base plate (Piggy) makes the installation very compact with simple belt tensioning, & requires a minimum of floor space. It also eliminates the need for any special foundation for motor.

SALIENT FEATURES
- Low speed Impeller leading to high wear life
- Double casing arrangement comprising twin outer casing & wear resistant casing liner
- Robust construction & suitable for handling tough slurries

<table>
<thead>
<tr>
<th>PUMP SIZE</th>
<th>DISCHARGE A</th>
<th>INLET B</th>
<th>C</th>
<th>D</th>
<th>MAX E</th>
<th>F</th>
<th>G</th>
<th>H</th>
<th>MAX MOTOR KW</th>
<th>WEIGHT EXCL.</th>
<th>MOTOR KG</th>
</tr>
</thead>
<tbody>
<tr>
<td>VASA HD 302-50</td>
<td>90</td>
<td>63</td>
<td>121</td>
<td>465</td>
<td><strong>150</strong></td>
<td>539</td>
<td>229</td>
<td>518</td>
<td>11</td>
<td>160</td>
<td>175</td>
</tr>
<tr>
<td>VASA HD 400-100</td>
<td>100</td>
<td>150</td>
<td>150</td>
<td>1460</td>
<td>1990</td>
<td>2000</td>
<td>500</td>
<td>980</td>
<td>160</td>
<td>1900</td>
<td>1250</td>
</tr>
<tr>
<td>VASA HD 507-150</td>
<td>150</td>
<td>200</td>
<td>170</td>
<td>1720</td>
<td>2200</td>
<td>300</td>
<td>500</td>
<td>980</td>
<td>160</td>
<td>1800</td>
<td>2000</td>
</tr>
<tr>
<td>VASA HD 507-150</td>
<td>200</td>
<td>250</td>
<td>170</td>
<td>1720</td>
<td>2200</td>
<td>300</td>
<td>500</td>
<td>980</td>
<td>160</td>
<td>1800</td>
<td>2000</td>
</tr>
<tr>
<td>VASA HD 507-150</td>
<td>300</td>
<td>250</td>
<td>170</td>
<td>1220</td>
<td>2200</td>
<td>300</td>
<td>500</td>
<td>980</td>
<td>160</td>
<td>1800</td>
<td>2000</td>
</tr>
</tbody>
</table>

McNally Sayaji Engineering Limited

Sales Office: Kolkata P +91-33-40111300; F +91-33-40111317 | Bangalore P +91-80 41153781-83; F +91-80 41153784 | Chennai M +91-9500011660 | F +91-044-22431309 | Mumbai M +91-22 26397641 | Hyderabad P +91-040-27204366; F +91-040-2720361 | Nagpur M +91-9422114059; F +91-712-2535089/2560097 | Vishakhapatnam P +91-981-2551534 | Kochi P +91-9846034839; F +91-484-2405914 | Vijayawada M +91-9440320583 | Coimbatore M +91-987890318.
Crusher | Screen | Grinding Mill | Feeder | Conveyor | Wagon Tippler | Pulley & Idler | Port Crane | Stacker Reclaimer | Mobile/Mkt Mounted Crushing & Screening Plant | Slurry Pump | Thickener | Floatation Cell | Pressure Vessel | Equipment for Iron Ore, Steel, Cement, Power, Coal & Other Non-Ferrous Metal Processing Plants
MBE SLURRY PUMP
Sumps Pump Type VASA G

MBE sump pumps are designed for abrasive slurry service and feature simple maintenance and robust construction.

SIMPLE INSTALLATION

The larger units are normally bolted to a permanent baseplate. Free suspension in the sump by the lifting yoke is preferred for the smaller pumps. Both shaft bearings are located in a cylinder which is normally located above the baseplate for accessibility and protection. Special designs giving extended length with the baseplate above the bearings are available on request.

MBE also supplies a series of submersible pumps with pumping elements from the VASA G range.

CANTILEVER DESIGN

The VASA G pump has no stuffing box, submerged shaft seals or bearings. This guarantees minimum maintenance and eliminates any requirements for sealing or flushing water.

BEARING ASSEMBLY

A rigid shaft is fitted with roller bearings for 60,000 hours minimum life. Impeller clearance is maintained by external axial adjustment of the shaft and bearing housing assembly, the bearings have double protection against penetration of slurry.

WEAR PARTS

Standard pumps are normally supplied with parts in transfer moulded natural rubber, High chromium iron. Other materials such as synthetic rubbers, polyurethanes and stainless steels are also available for most pump sizes. Wear parts in different materials are fully interchangeable. For selection of the optimum pump type and combination of materials, contact MBE.

MBE SUMP PUMPS ARE AVAILABLE IN SEVERAL BASIC TYPES.

Type 1 Semi-open impeller and pump casing with spray holes (type "S"). Part of the pumped slurry is returned to the sump. This not only agitates solids in the sump but also de-aerates the pump to prevent air-blocking.

Type 2 Closed impeller and flanged pump inlet which allows fitting of an extended suction pipe to increase the pump working depth.

Type 3 Semi-open impeller with extended shaft and slurry agitator (type "A"). This design is particularly suited for coarse, rapid settling solids.
MBE SLURRY PUMP
Vertical Type SPV

Simplification maintenance
Simplicity itself. A hammer and a few minutes is all you need to open even the largest SPV-pump.

LAY-OUT FLEXIBILITY
The pump, pump-ump and motor are integrated to one self-contained unit. Simple to install and connect. No alignment or special foundations required.

WEAR PARTS
The SPV-pumps have easily replaceable wear parts. Standard wear parts are available in soft wear resistant rubber or Hi-chrome alloy. The design of MBE pumps enables us to offer a combination of materials for optimum performance.

NO GLAND SEAL
No shaft seal means no sealing water. No tightening of glands and no replacement of worn shaft sleeves.

BEARING ASSEMBLY
Cartridge type with grease lubricated roller bearings rated for more than 60,000 operating hours. All bearings are above the sump.

SMOOTH OPERATION
The open pump design with a vertical inlet prevents air blocking. If the pump temporarily should run dry, air desorbs upwards through the inlet.

WEAR PARTS IN THE SPV - PUMP
- Inlet
- Impeller
- Pump casing or lining
MBE SLURRY PUMP
Cone Pump Type SPVC

Purpose built for frothy suspensions

MBE cone pump is designed to increase the pumpability of frothy suspensions. The principle of operation is partly similar to that of cyclone separation. Air is separated from the slurry in a vortex created by the impeller rotation and the tangential inlet to the pump's conical sump. This results in a more efficient pumping at higher capacities and smoother operation.

SIMPLE INSTALLATION

Because the pump, the sump and the motor are integrated to one unit, there is no levelling or special foundation required.

NO STUFFING BOX

The pumps operate without stuffing box or other submerged shaft seals, which further simplifies maintenance and eliminates any requirement for seal water.

BEARINGS

The robust bearing assembly is fitted with grease lubricated roller bearings. All bearings are rated for more than 60,000 running hours and are placed well above the slurry level.

WEAR PARTS

Standard wear parts are available in soft natural rubber or Hi-chrome alloy. The design of the MBE pumps allows combination of different wear part materials to be used in order to optimize the service life of the wear parts. The SPVC pumps have a built in raise and lowering mechanism for the pump casing to enable the wear parts to be easily accessible. The largest pumps, however, require an external lifting device.

MBE has a long and varying experience in the pumping of frothy liquids. With our wide equipment range, we can assist in solving your particular pumping problem.

WEAR PARTS IN THE SPVC - PUMP

Inlet
Impeller
Pump casing or lining