

The SALA series of
Heavy duty slurry pumps
type VASA HD





Pumps designated for the most demanding applications

Horizontal pumps type VASA HD

Metso's heavy duty slurry pumps are designated for the most tough applications in the mineral processing industry.

The excellent hydraulic design guarantees maximum efficiency throughout the life of the generously sized wear parts.

Design

The shaft with its oversized roller bearings is assembled in a cartridge type bearing housing which is bedded in a fabricated pump frame. The stuffing box housing is attached to the same pump frame to assure total concentricity between shaft and sealing arrangement. The impeller is fixed to the shaft by a taper and a key, assuring safe attachment even at reverse rotation and still providing easy replacement.

The vertically split high pressure casing allows operation of up to five pumps in series with standard pumps.

Shaft sealing arrangements are glandpacked, water-flushed stuffing box or dynamic "expeller" seal. Both alternatives supported by pump-out vanes on the impeller. The stuffing box version has a double protection against slurry entering.

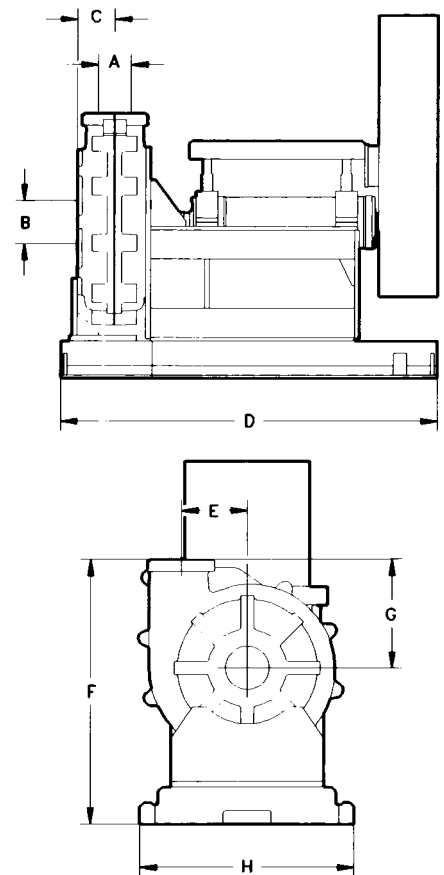
Wear parts

The VASA HD pump is protected by wear parts in natural rubber or High Chrome Iron (SHR). In the same casing unit a soft natural abrasion resistant rubber liner or hard metal lining can be assembled. The parts are completely interchangeable. This means that an elastomer lined casing can for instance be equipped with a high chrome impeller and suction liner to give minimum operating cost. The outstanding hydraulic design of the impeller gives maximum efficiency throughout its operational life.

Service

The unique "crow-bar operated" slide-base design in combination with the pumps "back-pull-out" feature minimizes down time for inspection and/or replacement of impeller and shaft seal details.

Even the inlet liner can be replaced without disconnecting suction or discharge pipes.



Applications

The VASA HD range of pumps is primarily designed for the most demanding applications within the mineral processing industry.

Typical applications are primary mill discharge, cyclone feed and tailings disposal.

The pumps, exceptionally high efficiency and heavy duty wear parts, make them ideal for all applications where such qualities are wanted.

Installation

The slide-base arrangement eliminates the need for separate foundations. A large adjustable overhead motor bed plate is an integral part of the pump frame.

Motor size

Motor size and V-belt drive varies with the pump application.

Necessary data for calculating pump speed and motor power are:

Flow (l/min, GPM or alike)

Liquid density (kg/m³)

Total discharge head (m, ft)

Definition of pump

VASA HD is the type designation where "HD" stands for heavy duty.

The figures state the size according to the following:

507	–	150
Impeller dia. in cm	Height of vanes in cm	Discharge connection mm

Dimensions mm

Pump size	Discharge	Inlet								Weight excl. motor and drive, kg		
		A	B	C	D	E	F	G	H	Max. motor	Rubber	SHR
VASA HD 302-50	50	63	85	465	180	539	229	528	22 kW	170	215	
VASA HD 364-80	80	100	163	1270	230	755	310	620	45 kW	570	470	
VASA HD 455-100	100	150	150	1460	268	960	400	800	55 kW	1020	1250	
VASA HD 507-150	150	200	170	1720	300	1220	500	980	160 kW	1800	2000	
VASA HD 7010-200	200	250	240	2000	475	1615	655	1230	200 kW	3200	4100	
VASA HD 5311-250	250	300	336*	1720	350	1410*	638*	980	160 kW	2100	2600	
VASA HD 8515-350	350	400	283	2850	590	2100	810	1560	450 kW	7300		
VASA HD 9015-350	350	400	283	2850	590	2100	810	1560	450 kW		9100	

*Inlet and discharge adapter

Dimensions are preliminar and can be changed without further notice.

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