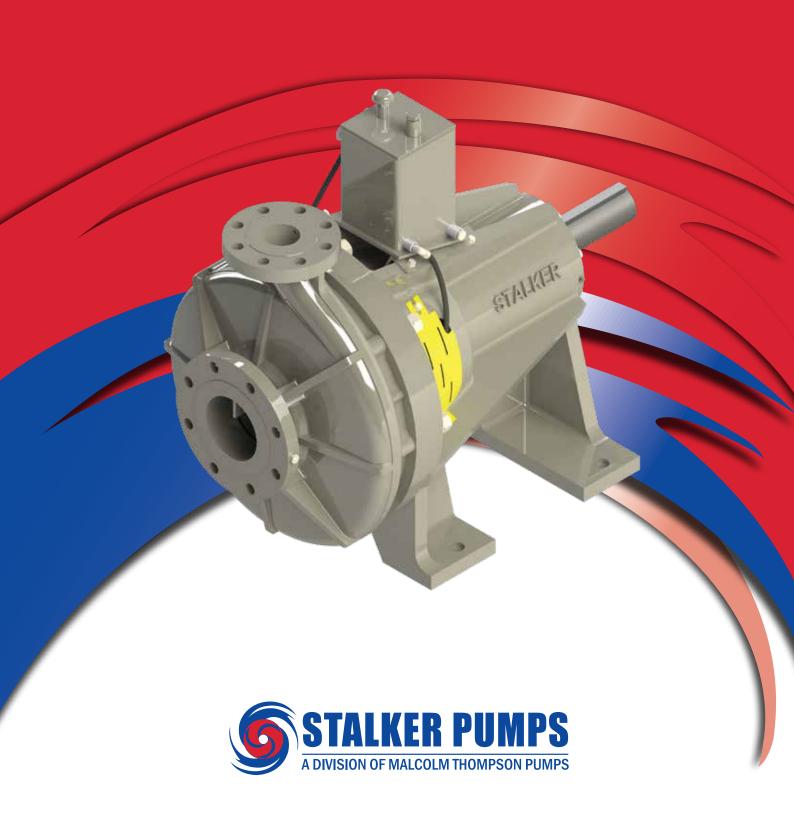
# SHD Series

Super Heavy Duty End Suction Bare Shaft Pumps



#### **Features**

#### Wear Rings

- Fitted as standard in volute and back plate
- Various material options available

#### Cartridge Seal

- 30 bar rated
- Duplex SS body
- SIC/SIC/Viton
- Single mechanical grease lubricated cartridge seal fitted as standard

#### Barrier Fluid Tank (Optional)

- High quality SS316 barrier fluid tank with glycol quench for cartridge seal
- · Ideal for dewatering applications

#### Shaft sleeve

 SS316 shaft sleeve fitted as standard, upgrades available

#### Bearing assembly

 Super heavy duty design, to withstand axial and radial loads making it ideal for series applications with positive inlet pressure

#### Double Spigot Impeller

- Double spigot impeller
- Thread mounted on shaft with locating step bore for superior performance

# High Pressure Flanges

- ANSI Class 300 flanges standard
- Other options available

#### **Ribbed Castings**

 Heavy duty ribbed castings to withstand high pressure series applications, along with wall thickness of castings to suit high wear applications

#### Fasteners

- Grade 8.8 M20 bolts connecting volute/back plate assembly
- Engineered to handle high pressures

#### Shaft

- 4140 chrome steel bar
- Low alloy high tensile hardened and tempered steel
- Ideal material for highly stressed component applications

#### Integrated Cast Feet

- One piece design incorporating the mounting feet in bearing pedestal
- Ultra-robust to withstand drive power load and forces

## **Material Options**

Our SHD pumps come in a range of material options, starting from ductile iron (SG) for general industrial dewatering and transfer applications, upgradable to stainless steel 316 and exotic materials to suit high corrosion and high wear applications, like H3C stainless steel, 27% chrome iron, duplex and super duplex stainless steel.

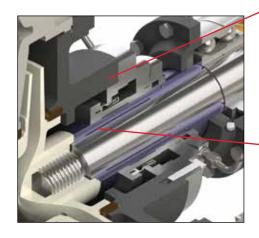
SG Iron / SG Iron / SS316	27% Chrome Iron / 27% Chrome Iron / SS316							
SG Iron / SS316 / SS316	27% Chrome Iron / H3C / SS316							
All SS 316 construction	All Duplex SS construction							
H3C / H3C / SS316	All Super Duplex SS construction							

## **Foundry**

We are one of the last remaining pump suppliers in Australia with a foundry on site, giving us complete control of the end to end manufacturing process. We manufacture both a stocked range of pumps and custom designed pumps and pumping systems. Our foundry enables us to provide complete flexibility, including manufacturing high quality castings from customer supplied patterns. We can also cast pumps in more than 19 types of ferrous and non-ferrous metals.







#### **Seal Chamber**

Engineered seal chamber with extra heavy duty castings and wall thickness to handle high pressures, accommodates minimum 30bar seal, upgradable to 60bar. Outstanding wear handling characteristics in high wear/highly corrosive applications, where localised swirl effect caused by rotating seal parts in seal chamber results in wear of seal chamber walls.

#### **Shaft Sleeves**

2 piece, replaceable shaft wear sleeves, 0-ring sealed, fitted for ease of service and low maintenance costs. Shaft sleeves handle all wear and corrosion, eliminates requirement to change shaft with wet end. Standard construction in SS316, upgradable to duplex and super duplex materials.

## **Cartridge Seal Lubrication**

Grease kit fitted to cartridge seal, as standard. Pressurised grease feed into seal via SS316 tubing, grease purge on other end.





## **Barrier Fluid Tank for Glycol Seal Quench**

Full SS316 construction barrier fluid tank available as optional upgrade for liquid quench and lubrication of the standard seal, or used with a dry run seal in auto priming applications.

Fitted with a fluid level gauge with inbuilt thermometer for visual inspection and monitoring.

## **Super Heavy Duty Bearing Assembly**

Double angular contact bearings in back to back arrangement on non-drive end for handling axial and thrust loads. Ideal for high pressure and series applications with positive suction pressure.

Heavy duty roller bearing on drive end for radial loads and better transmission of power from motor at high speeds, reducing load transfer and better handling of misalignment.

RTD points predrilled as standard for temperature monitoring of bearings.





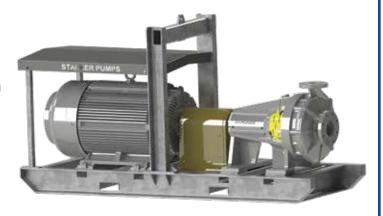


## **Diesel Driven Dewatering Unit**

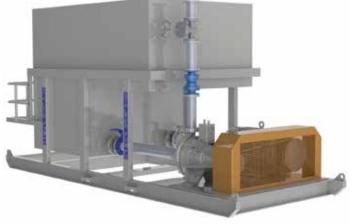
- Heavy duty skid base frame with inbuilt bunded fuel tank
- Auto prime suction tee unit and dry run mechanical seal fitted as optional
- Single point lifting frame, four point towing eyes and tie down locations, heavy duty rear bump bar
- Suction boom, discharge pipework and valving
- Various engine and controller options, Cummins, CAT, Deutz, Kohler, Murphy, Kensho etc
- Work lights, beacon light, mechanical fuel gauge, fuel filler/ breather, emergency stop, fire extinguisher, battery isolator, starter isolator
- Pressure gauges, pressure transducer, flow meter, fire extinguisher

# Underground Mine Dewatering Skid

- Mild steel hot dip galvanised, SS304 or SS316 materials of construction option
- Pump and motor mounted on machined pads with jacking lugs to assist for motor alignment
- Laser cut precision base is highly customisable and eliminates restrictions to footprint and centre heights compared to conventional fabrication techniques
- Optional sun roof and single point lifting frame
- Portable design makes it easy to install and be used across multiple site locations



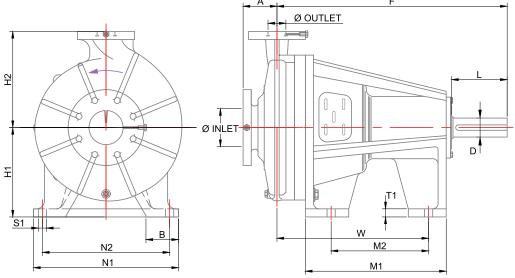
# **Underground Mine Dewatering Pod**



- Pump construction in 27% chrome iron volute and back plate, H3C Impeller, fitted with 30 bar seal and barrier tank
- Customisable pod size and pump combination to suit individual application
- Belt drive to reduce footprint and customise RPM, direct coupled optional
- 2 pump parallel or series setup available
- Various options available for surface treatment of pod to suit the application and environment
- Customised valving, monitoring and control equipment options available



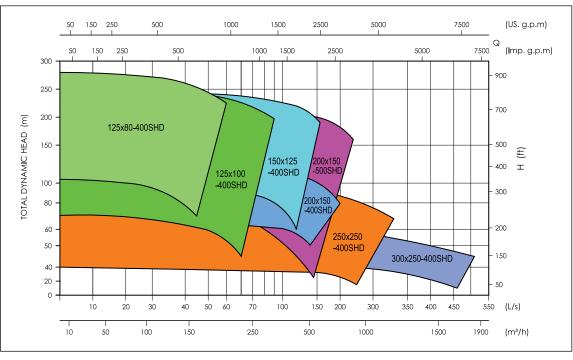
# **Pump Dimensions**



Pump Size				Pump Dimensions				Mounting Dimensions							Bolt Holes	Shaft End	
Model	Inlet	Outlet	А	F	H1	H2	Н3	В	M1	M2	N1	N2	T1	W	S1	D	L
125 x 80-400SHD	125	80	125	850	330	355	-							560			
125 x 100-400SHD	125	100	140	850	330	362	-							560			
150 x 125-400SHD	150	125	150	850	330	410	-							560		Ø70	
200 x 150-400SHD	200	150	180	883	330	460	-	120	520	360	535	470	30	593	M30		200
200 x 150-500SHD	200	150	170	883	376	517	-							593			
250 x 250-400SHD	250	250	200	877	355	500	25							587		Ø75	
300 x 250-400SHD	300	250	180	893	412	605	82							603		Ø75	

All dimensions are stated in millimetres.

## **Performance Curve**



All dimensions are stated in millimetres.



