TORISHIMA

TDX

Torishima Dewatering Pumps

PT Torishima Pump Mfg Indonesia
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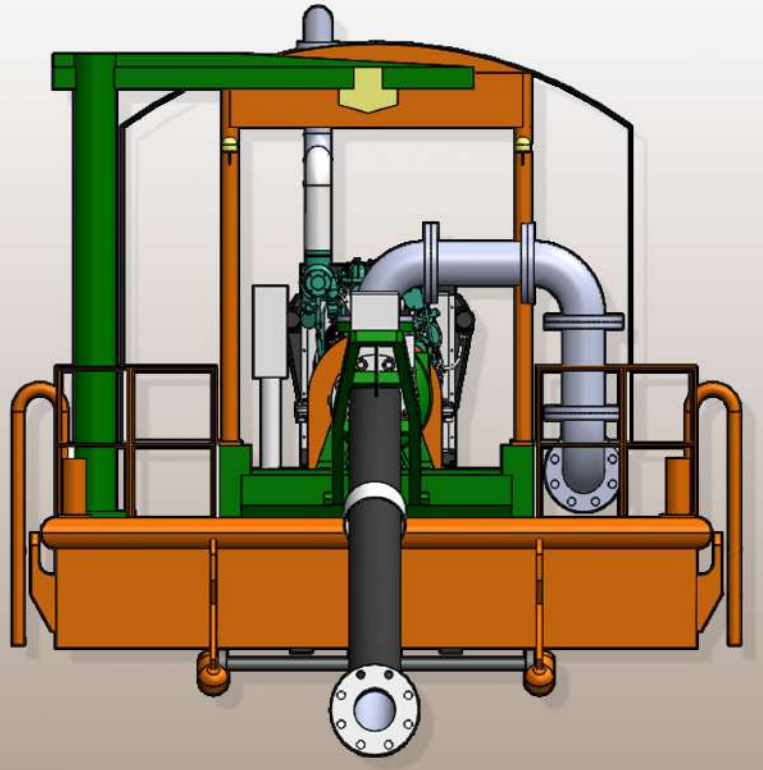

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PT TORISHIMA PUMP MFG INDONESIA

INTRODUCTION

Torishima Pumps have TKDN certification (Domestic Component Level) according to Government value standard.

Since 1984 PT Torishima Guna Indonesia has established strong sales and distribution network by building dealership and other sales channels, which in turn can serve all our customers needs. By using state-of-the-art manufacturing facilities, we are capable of producing world-class indsutrial pump product ranges including End Suction, Multi Stage High Pressure, Double Suction and Vertical Mixed Flow Pumps.

Inside Factory

With manufacturing depth starting from our own group casting process until finish pump, we have the total control over the product quality.

Assembly Facilities

We assemble with base frame, flushing system, cooling system and controller. We built complete system of Dewatering pump set, fire fighting packages and booster set.

Test Pump Facility

The facility is equipped with PLC system and control panel, connected to instrument and control valve installed on the testing facility. Pump testing process can be done automatically and all measurement data can be directly entered into pump data sheet required by customers. It will create a quick and efficient performance test process.

- Pump Test Capacity : Up to 7.200 M /Hr
- Pressure : Up to 200 bar (3000 psi)
- Electricity : Up to 1250 kVA
- Hydrostatic Test : Pressure Up to 700 bar (10.000 psi) (Chart recorder available)
- Dynamic Balancing Test : Up to 3.0 Tons

TORISHIMA DEWATERING PUMP

Torishima dewatering pump is designed for underground and surface mining dewatering, as well as general purpose dewatering.

TDX Model

Features

- Back Pull Out Design
- Closed , Radial Impeller Fitted with Protective Wear Ring
- Outdoor Design
- High Efficiency 3D Impeller
- Single Acting Mechanical Seal
- Low NPSH and Wide Application Range

Torishima TDX model is dewatering pump made with cast iron and duplex stainless steel body. Torishima TDX pump can with stand the most demanding heavy duty conditions found in construction, aggregate and mining applications. Completed with pump and diesel engine driver or electric motor as option, mounted on a pontoon. To fulfill the needs, we provide 3 types of pump to run our dewatering system.

Benefits of our pumps:

- Proven reliability
- High eeficiency designs ensure lowest operating cost
- Robust design allows for long system life with minimal maintenance
- Optimized total cost of ownership
- Stable Operation
- Handling Various Liquids and Temperature
- Excellent Parts Interchangeability
- Simple Maintenance

Applications

Mining Slurry Applications

Hardrock Mining / Industrial Commodities
Dig, Concentrate, Process

- Bauxite / Alumina
- Coal
- Copper
- Diamonds
- Phosphate
- Sand and Gravel
- Dredging
- Gold
- Iron Ore
- Metal Refineries
- Titanium
- Tunneling
- Zinc
- Oil Sands
- Nickel

Mining Non Slurry Applications

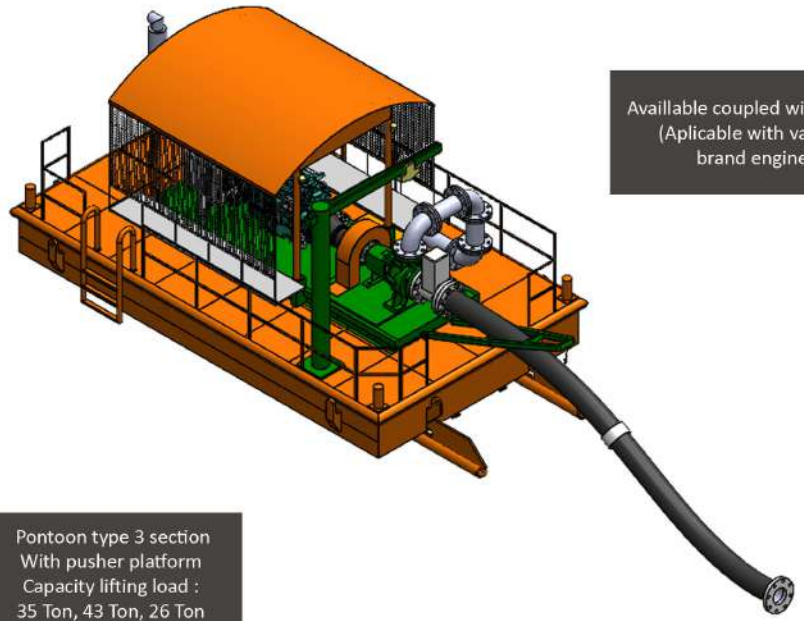
- Auxiliary Circuits
- Chemical Treatment
- Dewatering
- Water Supply
- Fire Fighting Sysrem

Detail Information

	TDX 100	TDX 150	TDX 200
Hydarulic Data (Duty Point)			
Flow	Max 466.7 m^3/h	Max 1125 m^3/h	Max 1300m^3/h
	Rated 300 m^3/h	Rated 600 m^3/h	Rated 830 m^3/h
	Min 115.45 m^3/h	Min 275 m^3/h	Min 323 m^3/h
Head	Max 76.1 mWC	Max 105 mWC	Max 144 mWC
	Rated 70 mWC	Rated 100 mWC	Rated 130 mWC
	Min 57.11 mWC	Min 71.63 mWC	Min 99 mWC
Impeller	Max 429 mm	Max 537 mm	Max 537 mm
	Duty 377 mm	Duty 537 mm	Duty 537 mm
	Min 343 mm	Min 430 mm	Min 441 mm
NPSHr Duty (m)	2.9 m	4.8 m	5.17 m
Eficiency Duty (%)	77%	76%	79%
Shaft Power on Duty (kW)	74 kW	215 kW	372 kW
Impeller Type	Closed	Closed	Closed
Shaft Sealing	Gland Packing	Gland Packing	Gland Packing
Bearing Lubrication	Oil Lube	Oil Lube	Oil Lube
Pressure Rating	10 Bar	16 Bar	16 Bar
Min. Fluid Temperature	-50 °C	-50 °C	-50 °C
Max. Fluid Temperature	80 °C	80 °C	80 °C
Max. Solid Size	21 Mm	33 Mm	37 Mm
Max. Slurry Concentration (ppm)	200 ppm	200 ppm	200 ppm
Dimensions			
Suction Port	DN200 JIS 20K RF	DN250 JIS 20K RF	DN250 JIS 20K RF
Discharge Port	DN150 JIS 20K RF	DN200 JIS 20K RF	DN200 JIS 20K RF
Materials			
Casing	Duplex Stainless Steel (1.4460)	Duplex Stainless Steel (1.4460)	Duplex Stainless Steel (1.4460)
Casing Cover	Duplex Stainless Steel (1.4460)	Duplex Stainless Steel (1.4460)	Duplex Stainless Steel (1.4460)
Impeller	Duplex Stainless Steel (1.4460)	Duplex Stainless Steel (1.4460)	Duplex Stainless Steel (1.4460)
Shaft	Duplex Stainless Steel (1.4460)	Duplex Stainless Steel (1.4460)	Duplex Stainless Steel (1.4460)

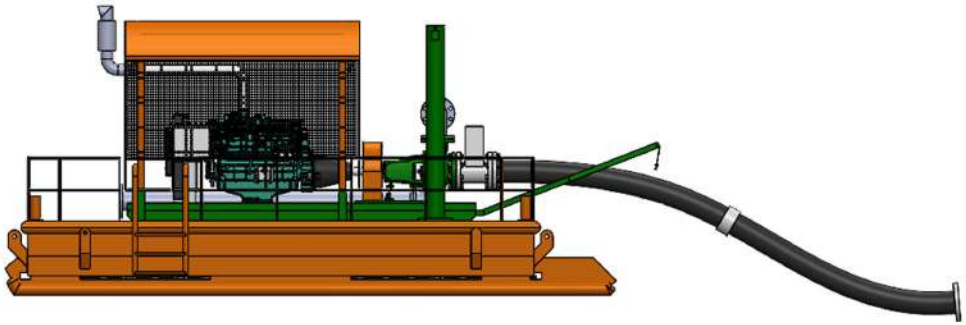
**) Available for another pump size*
**) metres of water column (mWC)*

Dewatering Pumpset
Production with variant engine drive



Availlable coupled with engine (Aplicable with variant brand engine)

Pontoon type 3 section
With pusher platform
Capacity lifting load :
35 Ton, 43 Ton, 26 Ton



**) Custom pontoon available as request*

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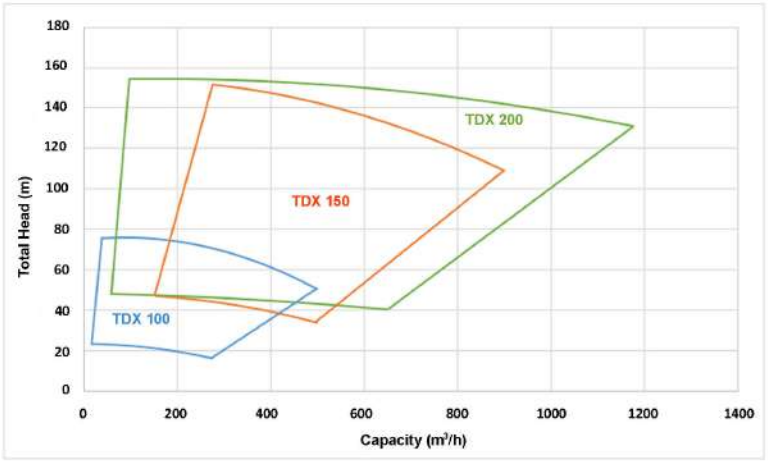
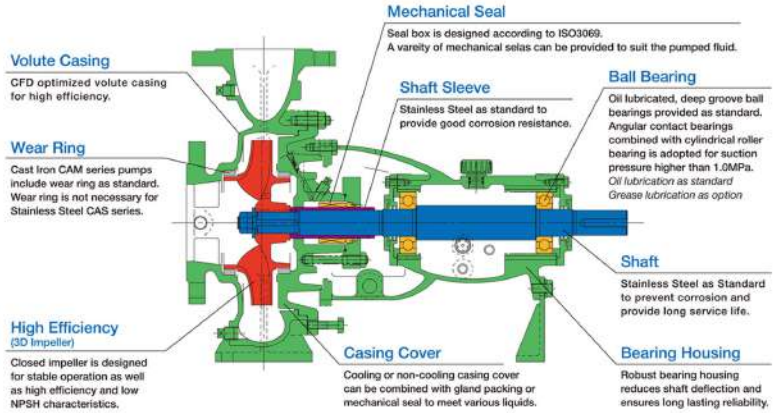
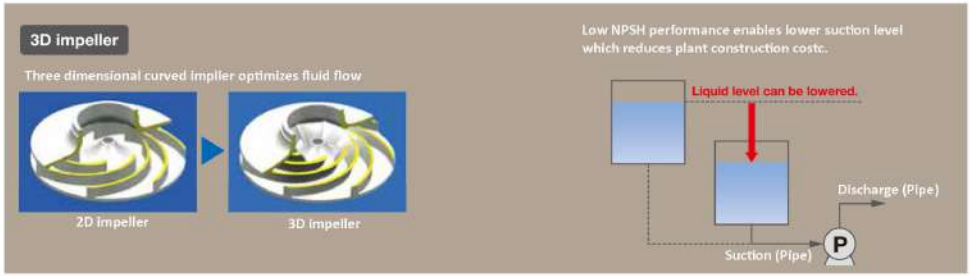
Pump Curve Information



Pump Design Features



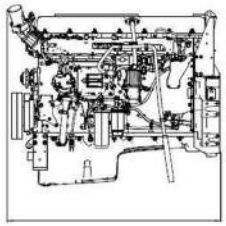


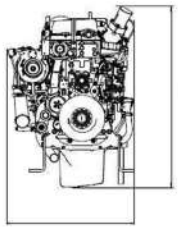
Engine Information

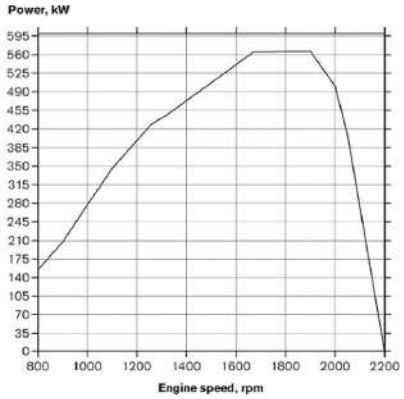
Engine Description	
No of Cylinders	In-line 6
Working Principle	4-stroke
Displacement	16,12 litres
Bore x stroke	144 x 165 mm
Compression ratio	17 : 1
Weight	1437 kg (excl. Oil and coolant)
Piston speed at 1500 rpm	
Piston speed at 1800 rpm	
Camshaft	
Pistons	
Connection rods	
Crankshaft	
Oil capacity	36 litres

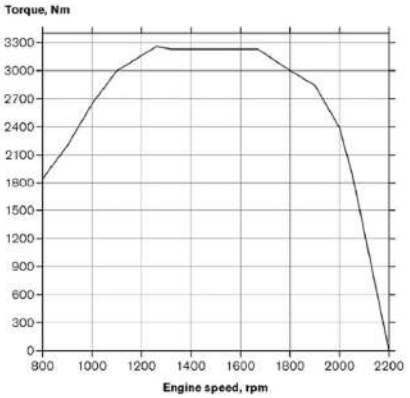
Features
→ Proven and straight-forward design
→ High power and torque already at low engine speed
→ Compact, simple installation and easy to service

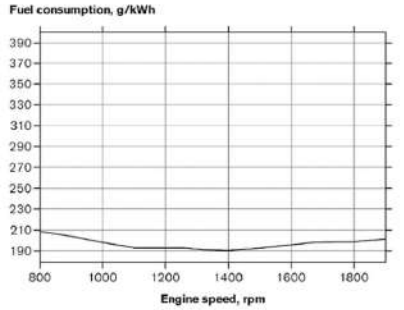
*) reference only











*) Available for another brand engine