

**Horizontal Centrifugal Pump  
Back Pull Out Design  
ISO 2858 / DIN 24256 STANDARD**



**Applications:**

Chemical & Process Industries  
Petrochemical & Refineries  
Fertilizer  
Paper / Pulp  
Soap & Detergent  
Thermic Fluid / Hot Oils  
Solvents  
Distilleries  
ETP / WTP  
Pharmaceuticals

**Range of Coverage:**

Capacity : 700 m<sup>3</sup>/hr at 1450 RPM  
: 200 m<sup>3</sup>/hr at 2900 RPM  
Pressure : 16 Bar  
Head : 120 metres  
Temperature : - 35°C to 250°C

**Material of Construction :**

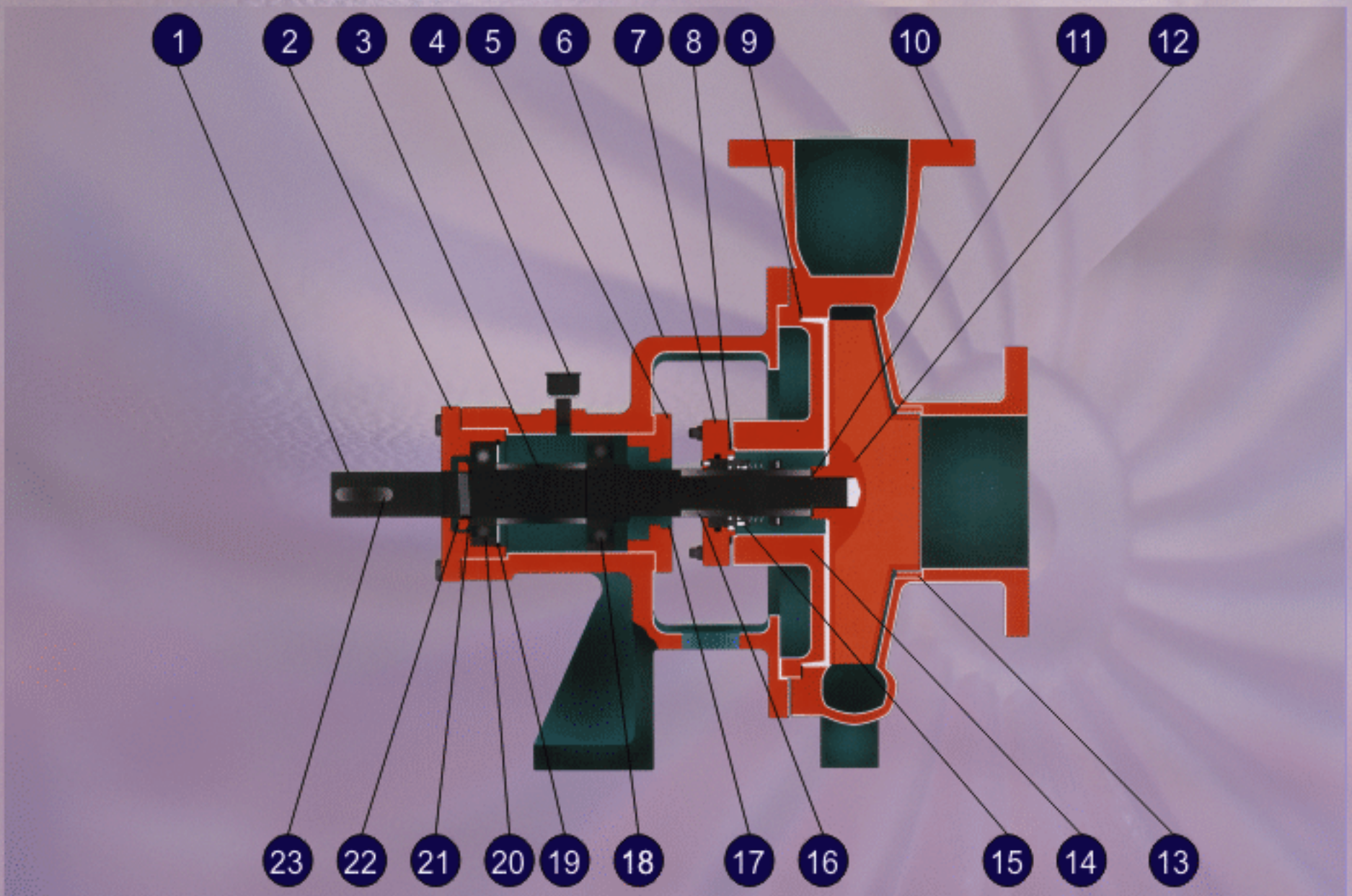
All wettable parts of the pump are available in Stainless Steel to CF8, CF8M specification, Alloy - 20, Hastelloy - B / C , Cast Steel, Cast Iron, Gun metal, Bronze and other materials depending on the application.



k e m p r o p u m p s

# Part List and Material of Construction

Part No.	Part Description	Material of Construction									
		Cast Iron	Cast Steel	CF8 S.S.304	CF8M S.S.316	CD4MOu S.S.316	Alloy 20 S.S.316	Monel S.S.316	Nickel S.S.316	Haste Alloy B & C S.S.316	Titanium S.S.316
1	Shaft	EN-8	EN-8	S.S.304	S.S.316	S.S.316	S.S.316	S.S.316	S.S.316	S.S.316	S.S.316
2	Bearing Cup					Cast Iron					
3	Bearing Spacer					M.S.					
4	Grease Cup					Steel					
5	Oil Seal Housing					Cast Iron					
6	Bearing Housing					Cast Iron					
7	Gland/Glandplate	Cast Iron	Cast Steel	S.S.304	S.S.316	CD4MOu	Alloy 20	Monel	Nickel	Haste Alloy	Titanium
8	Washer					Teflon					
9	Gasket (Casing)					CAF-40 / Teflon					
10	Casing	Cast Iron	Cast Steel	S.S.304	S.S.316	CD4MOu	Alloy 20	Monel	Nickel	Haste Alloy	Titanium
11	Washer (Impeller)					Teflon					
12	Impeller	Cast Iron	Cast Steel	S.S.304	S.S.316	CD4MOu	Alloy 20	Monel	Nickel	Haste Alloy	Titanium
13	Casing Wear Ring	S.S.304	S.S.304	S.S.304	S.S.316	CD4MOu	Alloy 20	Monel	Nickel	Haste Alloy	Titanium
14	Stuffing Box	Cast Iron	Cast Steel	S.S.304	S.S.316	CD4MOu	Alloy 20	Monel	Nickel	Haste Alloy	Titanium
15	Shaft Sealing					PTFE Impregnated packings/Grafil Packings/Carbon Impregnated Asbestos Packings.					
	Shaft Sealing(Optional)					Single Seal ,Internal type / Single Seal, External type / Double Mechanical Seal					
16	Shaft-Sleeve	S.S.304	S.S.304	S.S.304	S.S.316	Alloy 20	Alloy 20	Monel	Nickel	Haste Alloy	Titanium
17	Oil Seal					Rubber					
18	Deep Groove Ball Bearing					FAG / SKF make.					
19	Cirdip , Internal type.					Steel					
20	Deep Groove Ball Bearing					FAG / SKF make.					
21	Bearing Lock Washer					Steel					
22	Bearing Lock Nut					Steel					
23	Key					EN - 24.					



## Design Features

Single stage, horizontal End Suction type.

Back pull out design for ease of maintenance without disturbing suction/delivery pipe lines and electrical connection.

Maximum dimensional interchangeability and flexibility of application over a wide range of corrosive, erosive & slurry services.

Grease / Oil lubricated bearing.

Rigid Bearing Housing design reduces effect of pipe loads on pump / motor shaft alignment thereby assuring longer bearing and seal life.

Maximum shaft deflection less than 0.05 mm at face of the stuffing box ensures long seal and bearing life and low maintenance.

Impellers are of Open / Semi-open(for handling liquid with suspended solids) & closed type.

Semi-open impellers have back-vanes which reduce stuffing box pressure.

Impellers are dynamically balanced. Less noise, no vibration.

External impeller adjustment gives a constant head. Hence maintaining the original high efficiency.

Pump casing assembly is hydrostatically tested to a minimum of 1.5 times the shut-off pressure.

Fully confined gasket at casing joint protects alignment fit from liquid.

Self Venting : Top centerline discharge for air handling i.e. no air locking.

Shaft-Sealing by gland-packing or mechanical seal with provision for flushing liquid.

Larger clearance between the mechanical seal and seal chamber provides better circulation of the liquid thereby reducing temperature at the seal faces and keeps the solid particles away from the seal.

In a Taper bore seal chamber the vortex created by the mechanical seal pushes the solids and vapors away from it. Self venting in seal chamber due to its configuration. Solids slide down over the tapered portion. Efficient heat removal, seal faces are well lubricated.

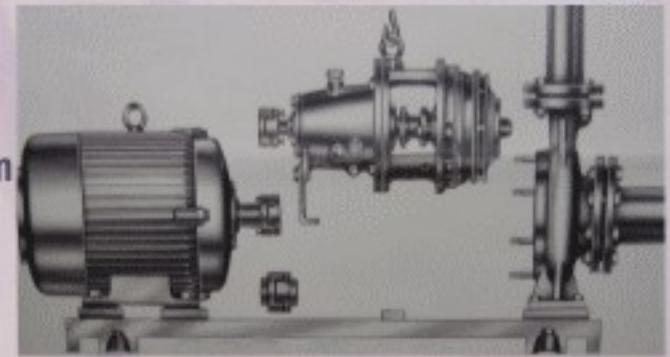
Both types of seal chamber listed above increase the life of the mechanical seal.

Compatibility with any mechanical seal without much modification of the pump.

Flanges as per ISO 2084 or could be made as per any standard to meet all range of requirement.

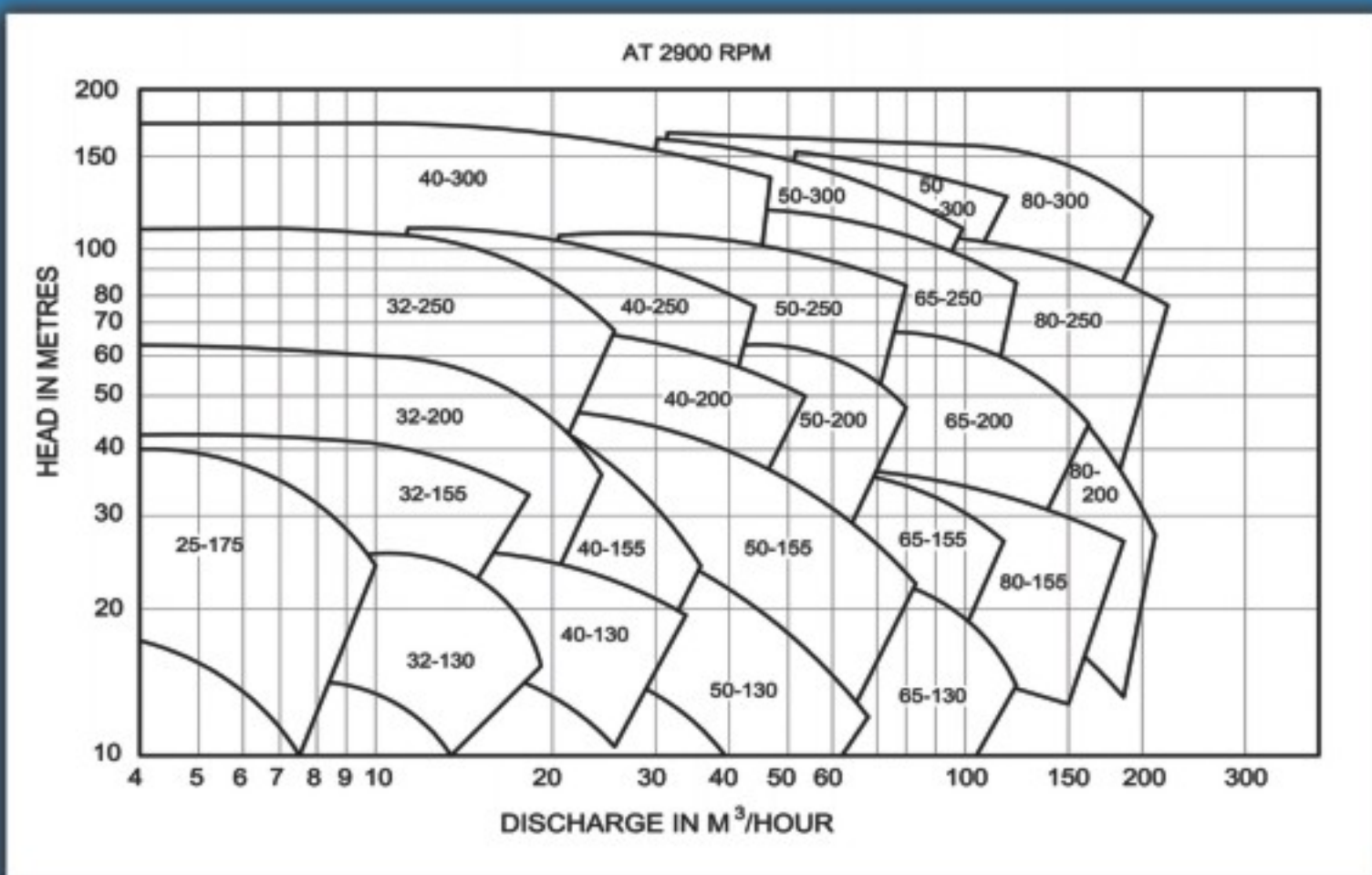
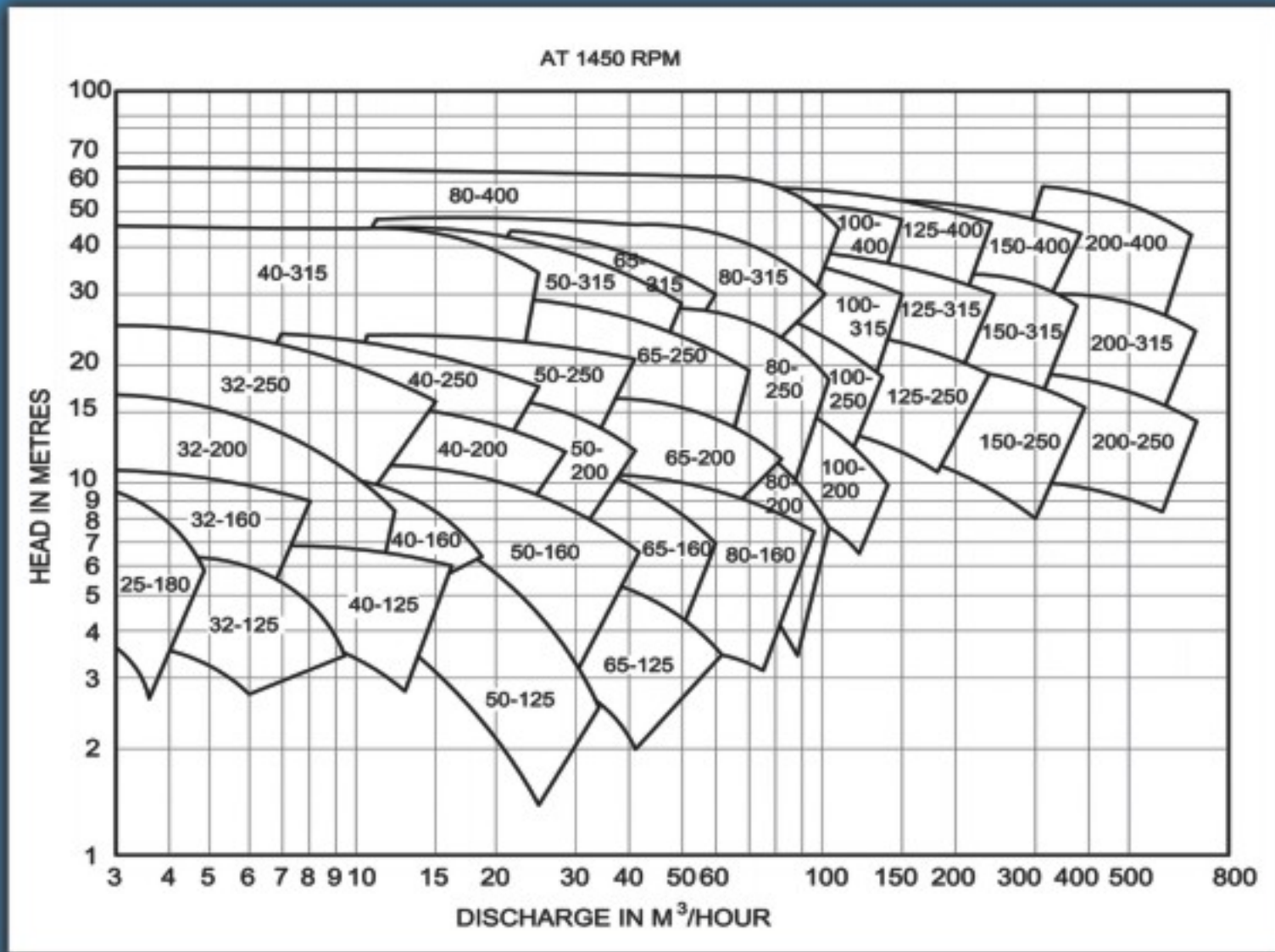
Integral feet.

Expert and skilled selection of materials to achieve a high rate of corrosion resistance.



# Performance

The range chart shows performance at 50 cycle speeds of 1450 rpm and 2900 rpm. Every pump is individually tested for performance at our works before despatch. A test report and curve are available on request.



Manufactured by :

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