

ANSI  
Centrifugal Pumps  
for  
Processing  
Industry





## VISION

To be a solution provider in the industry, with Persistent innovation and customer focus.

## ABOUT US

Incepted in 2009 at Valsad (Gujarat, India), Chemitek is the leading manufacturer of a commendable and premium quality array of Chemical Process Pumps. Chemitek was started by a team of Technocrats having vast experience in Process Industry. The Innovative Products have put Chemitek in front role for handling aggressive Media. Most of the products supplied by Chemitek are custom designed for specific applications. Chemitek cover a full range of metallic & non-metallic process pumps which comprises of various transfer pumps and process pumps. These pumps are used for handling of various kinds of acids, alkalies & solvents and handling of various corrosive & toxic chemicals.

## QUALITY ASSURANCE

As a chemical pump manufacturer, we focus on quality and reliability supported by efficient and timely after-sales service. At Chemitek we combine innovative design and material to yield a high quality product. Our team comprises of experienced and qualified design and production personnel. Our wide range of pumps are recognized for its low consumption of power, highest efficiency and reliability.

## CUSTOMER SERVICE

Pump economics are dedicated by availability. Customer service is a matter of attitude. Our team of experienced engineers & technicians are expert in locating trouble sources, finding positive solutions and restoring normal pump operation fast and efficiently. Chemitek offers complete service package from pump commissioning, training of operations & maintenance team and repair services. We are at your site in no time to support you consistently with effective solutions. Chemitek see to it that customers pump are always running.

## TECHNOLOGY: CENTRIFUGAL

### 2009 SERIES ANSI/ASME B73.1 CENTRIFUGAL PUMPS

The 2009 model is available in wide range of sizes, capacities and materials to fit virtually any process-fluid application. With more than 30 selections and multiple design options, we've got your application covered - for abrasives, corrosive media.

#### FEATURES & BENEFITS

- ASME (ANSI) B73.1-compliance.
- **INVESTMENT CAST** wetted parts.
- Magnetic drain plug.
- Extra-large capacity epoxy-coated oil sump.
- Registered alignment between frame and adapter.
- Standard and low-flow models available.
- Heavy-duty power frames.
- Fully open impellers with rear adjustment capability.
- Wide variety of mechanical seal options.
- Dynamically balanced impellers.

#### TECHNICAL DATA

- Max. temperature: 371°C (700°F).
- Three stuffing-box options available.
- Multiple port sizes available.
- Multiple seal-flush plans available.
- Base plates available in various MOC
- Certified testing as per Hydraulic Institute and material certifications per ASTM.

#### MOC

- Cast Steel (WCB)
- SS304 (CF8)
- SS316 (CF8M)
- SS316L (CF3M)
- Hastelloy-B
- Hastelloy-C
- Alloy20
- Super Duplex
- Nickel CZ 100
- MONEL
- Ni-Hard
- CD4MCU

\*Super Alloys / Exotic Alloys as per Client Requirements.

#### INDUSTRIES SERVED

- Automotive
- Breweries
- Cement
- Chemical
- Desalination
- Dyes & Intermediates
- Dairy
- Fertilizer
- Fluorochemical
- Food Processing
- Grain Processing
- Liquid Waste Processing
- Metal Finishing
- Oil & Gas
- Petrochemical
- Pharmaceutical
- Poultry Processing
- Power Generation
- Pulp & Paper
- Refineries
- Semiconductor
- Speciality Chemical
- Sugar & Allied Products
- Steel
- Textile
- Water Treatment

Upholding  
**Excellence**  
in pump Industry



## STANDARD FEATURES

### CASING

- > Top discharge
- > Self venting
- > Back pull-out
- > Thickness exceeds ANSI B73.1 specifications for better life

### FLANGE

- > Standard 150 lb. FF flanges, 300 lb. flanges available.

### IMPELLER

- > Standard investment casting open impeller Design.
- > Adjustment of clearance is easy when wear & tear takes place.
- > Ideal for corrosive & abrasive liquid.

### OIL SUMP DESIGN

- > Increased oil capacity for better heat transfer.
- > Contoured Internal Slope for positive collection of metal contaminants by magnetic drain plug.
- > Copper finned cooler for high process temperature from 171°C to 371°C

### BEARING FRAME

- > Heavy duty design to reduce the loads on shaft.

### SHAFT & BEARING

- > Heavy duty shaft design for minimum deflection.
- > Designed for toughest services.
- > Maximum 0.05 mm deflection at stuffing box face at maximum load.
- > Exceeds ANSI B73.1 bearing life specification requirement

### SHAFT SEALING

- > Multiple seal chamber for maximum sealing flexibility
- > Accommodate all mechanical seal manufacture's Components and ANSI cartridge seal configurations.
- > Supports the full array of CPI seal support system options.
- > Ensures superior leak protection with maximum heat dissipation, maximizing seal life & pump reliability.

### CONSTANT LEVEL OILER

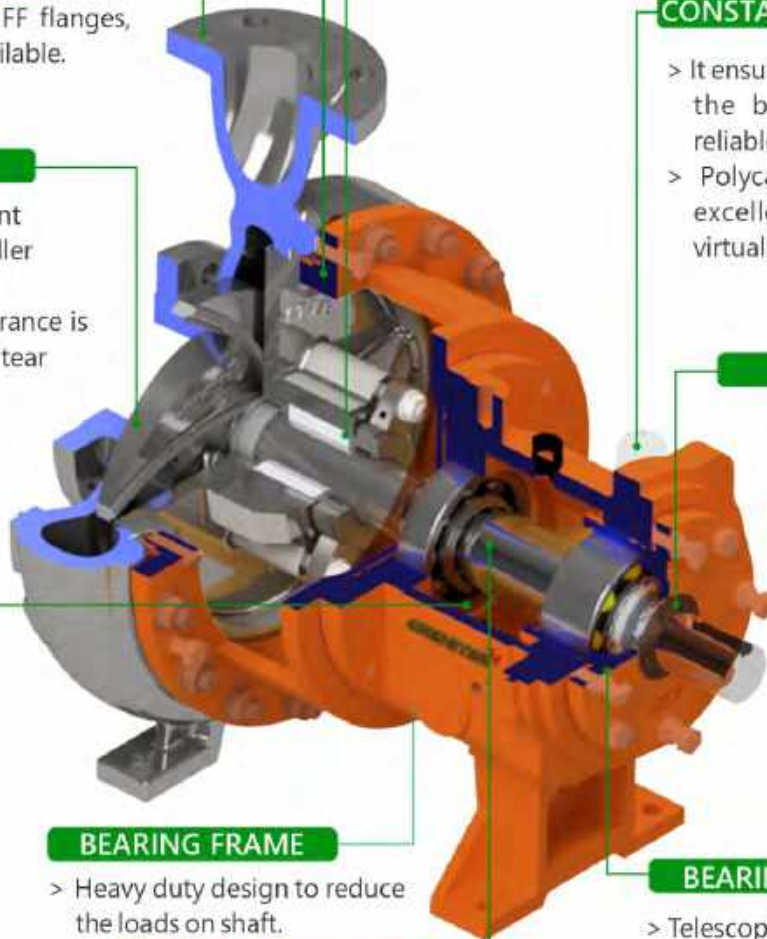
- > It ensures sufficient oil level in the bearing housing for reliable lubrication.
- > Polycarbonate dome offer excellent visibility and its virtually unbreakable.

### OIL SEAL

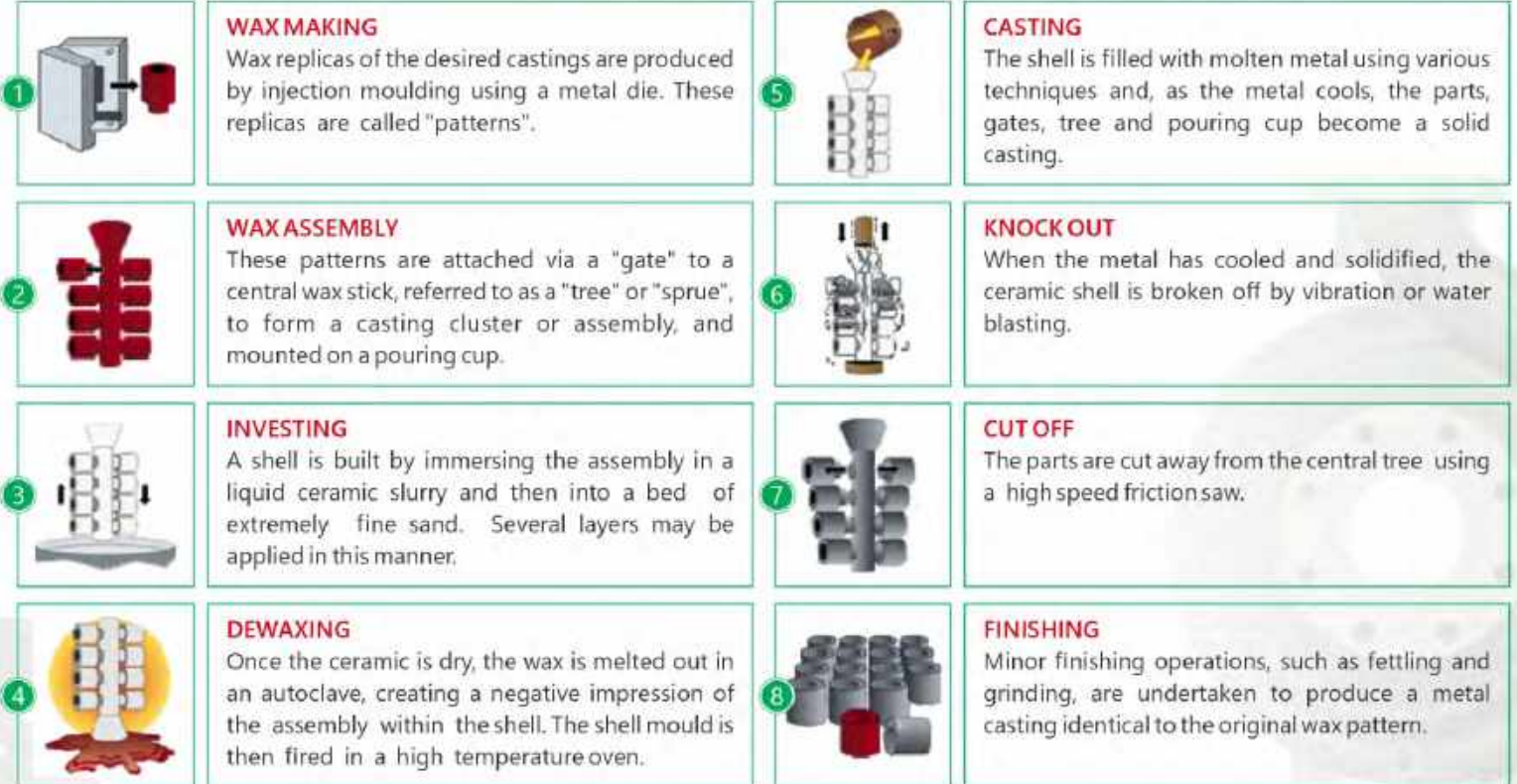
- > Standard NBR/labyrinth oil seal to protect oil against contamination and extend the bearing & shaft life.

### BEARING HOUSING

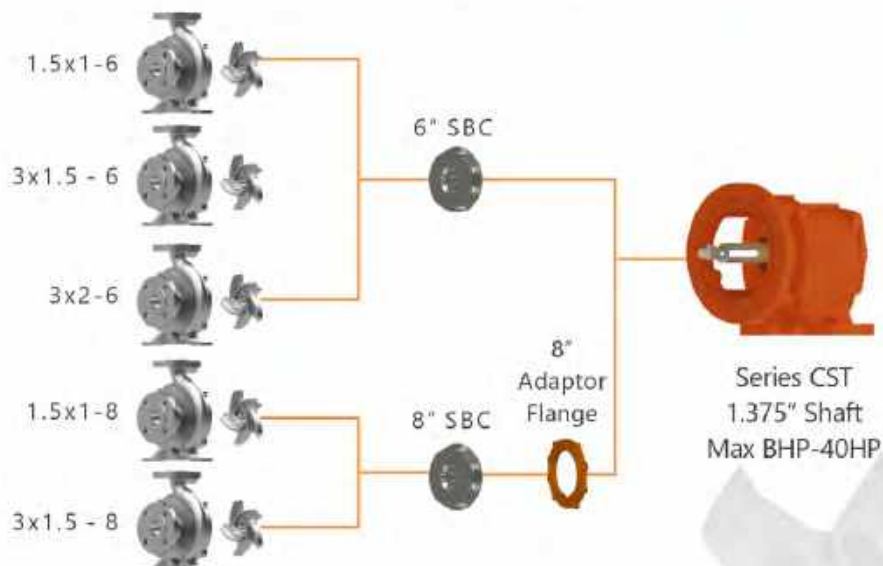
- > Telescopic Design
- > Easy Impeller adjustment.



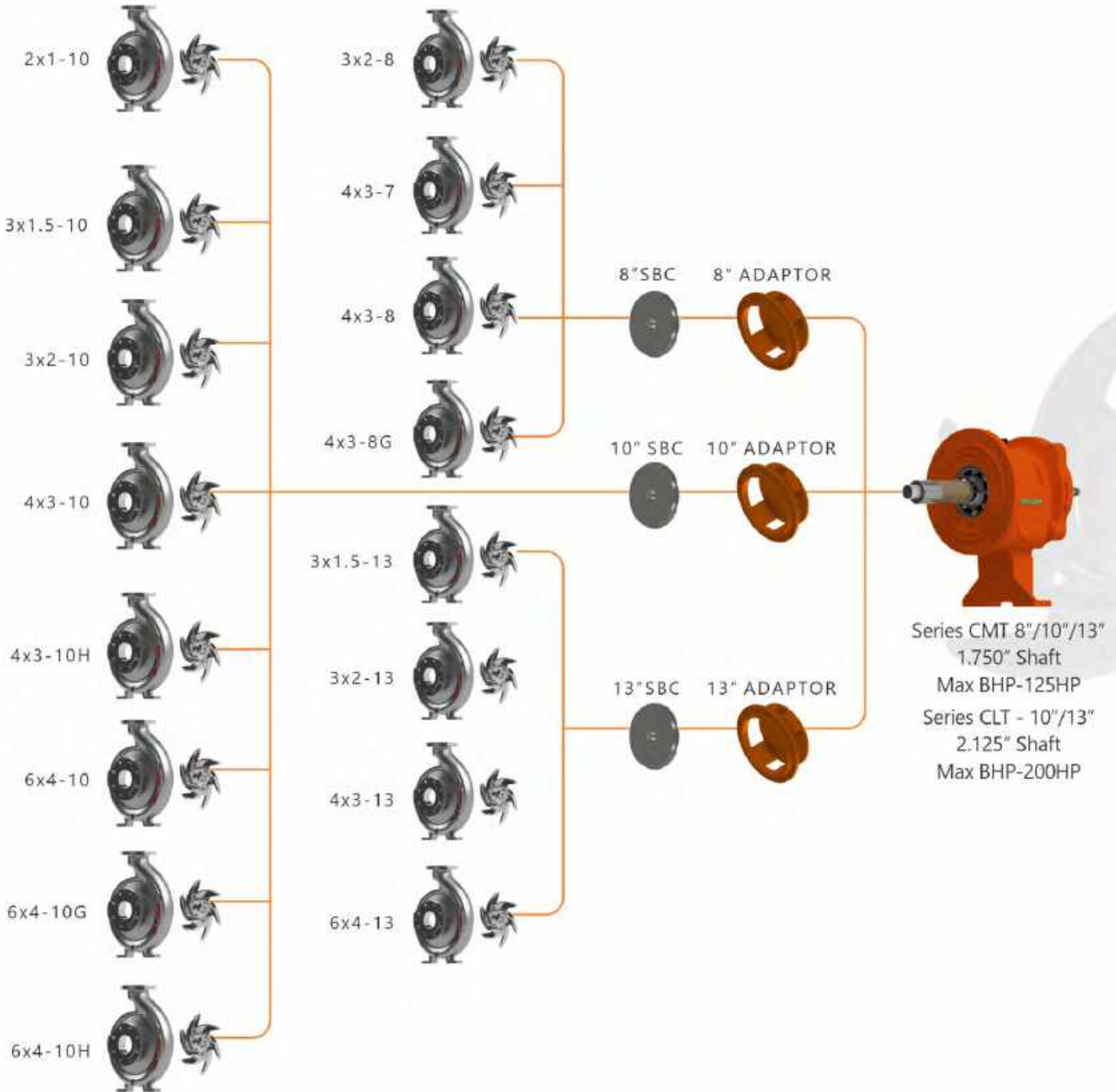
## INVESTMENT CAST (WAX LOSS) PROCESS



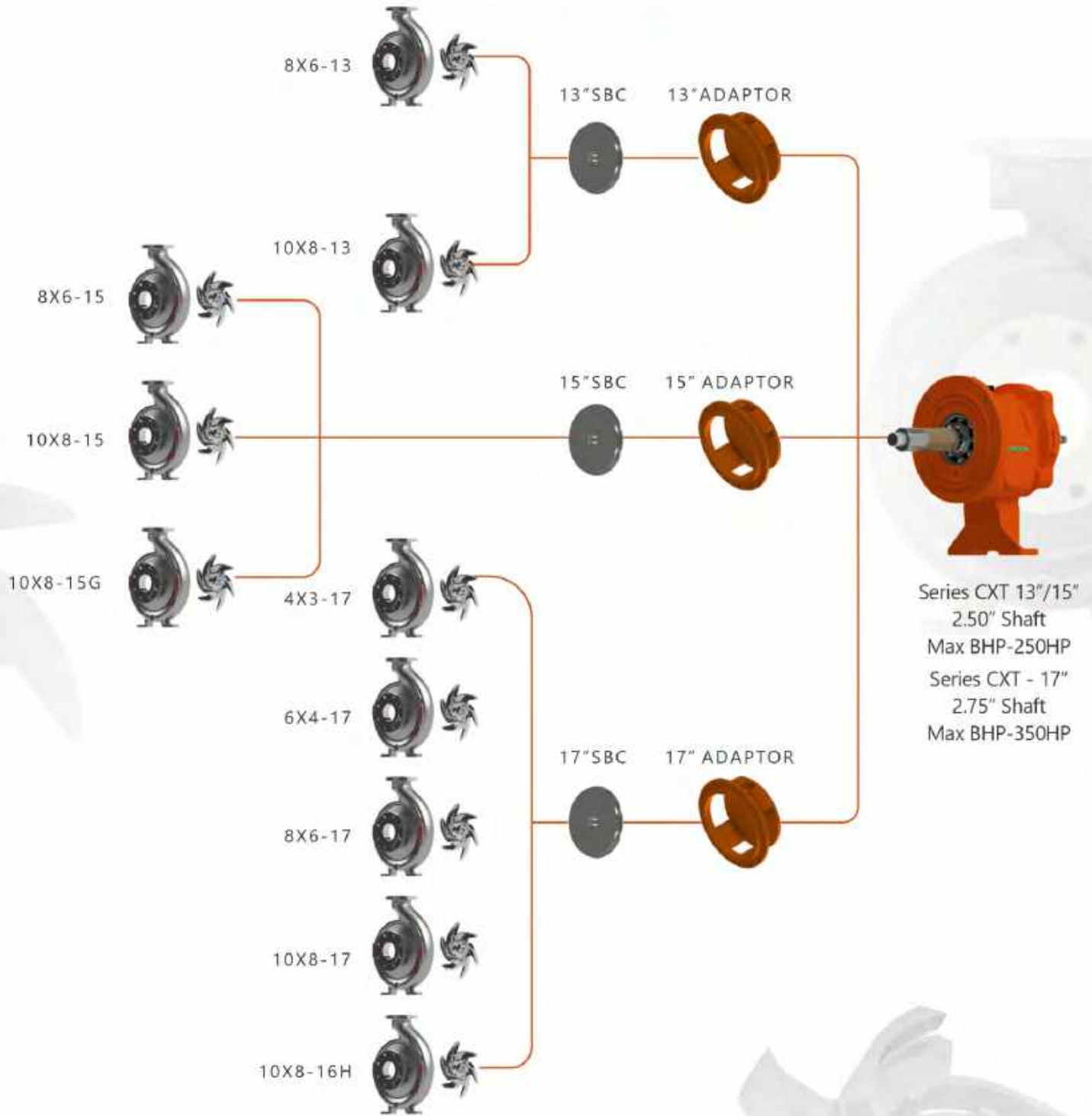
## COMPONENT INTERCHANGEABILITY CST



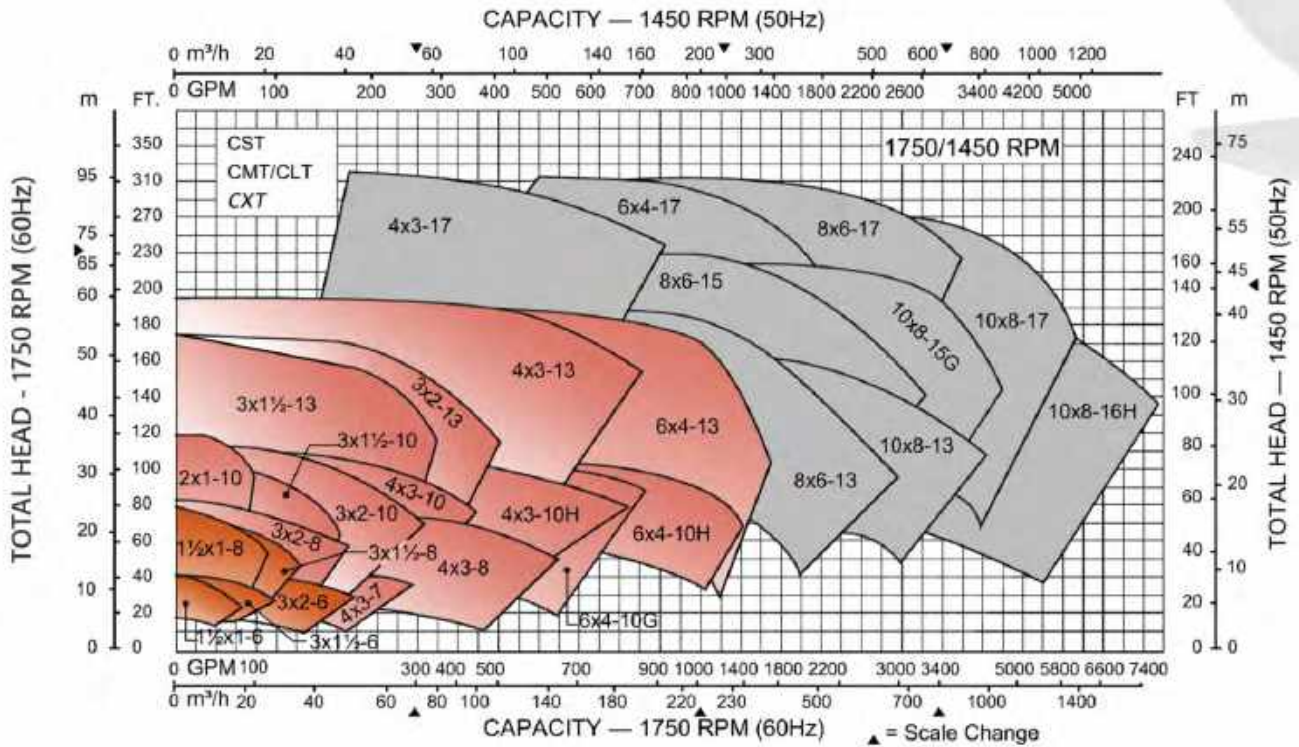
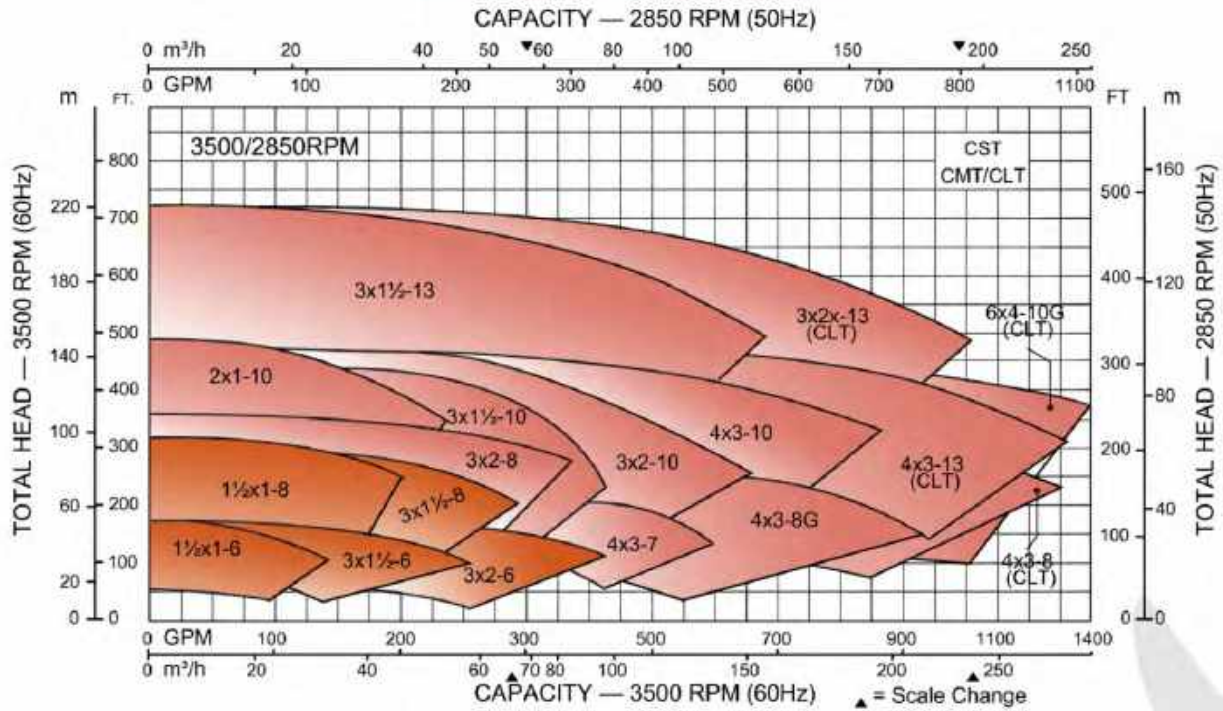
**COMPONENT INTERCHANGEABILITY CMT / CLT**



## COMPONENT INTERCHANGEABILITY CXT

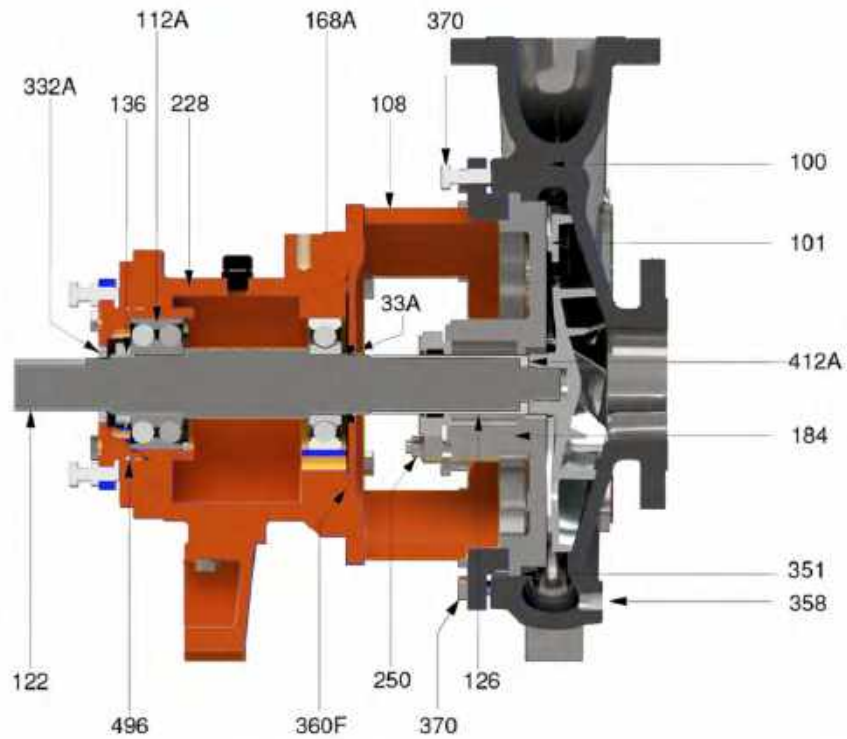


## HYDRAULIC COVERAGE





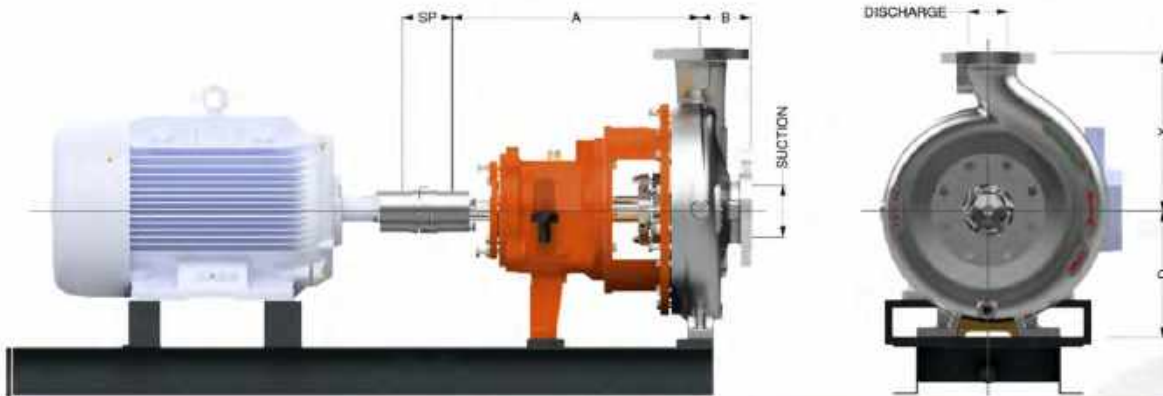
## CROSS-SECTIONAL VIEW



ITEM NUMBER	PART NAME	MATERIAL							
100	CASINNG	SS316	WCB	CD4MCu	ALLOY 20	MONEL	NICKEL	HASTELLOY B/C	DUPLEX 2A,5A,6A
101	IMPELLER	SS316	WCB	CD4MCu	ALLOY 20	MONEL	NICKEL	HASTELLOY B/C	DUPLEX 2A,5A,6A
109	LANTERN RING	GLASS-FILLED PTFE							
109	STUFFING BOX PACKING	PTFE IMPREGNATED FIBERS / TIWA NON ASBESTOS							
108	FRAME ADAPTOR	CAST IRON (DUCTILE IRON)							
112A	THRUST BEARING	DOUBLE ROW ANGULAR CONTACT**							
122	SHAFT	SAE4140				SS316			
126	SHAFT SLEEVE	SS316	WCB	CD4MCu	ALLOY 20	MONEL	NICKEL	HASTELLOY B/C	DUPLEX 2A,5A,6A
136	BEARING LOCKNUT AND LOCK WASHER	STEEL							
168A	RADIAL BEARING	SINGLE ROW DEEP GROOVE							
184	STUFING BOX COVER (PACKED BOX)	DUCTILE IRON	SS316	CD4MCu	ALLOY 20	MONEL	NICKEL	HASTELLOY B/C	DUPLEX 2A,5A,6A
184	SEAL CHAMBER (MECHANICAL SEAL)	DUCTILE IRON	SS316	CD4MCu	ALLOY 20	MONEL	NICKEL	HASTELLOY B/C	DUPLEX 2A,5A,6A
228	BEARING FRAME	CAST IRON (DUCTILE IRON)							
250	GLAND	SS316		CD4MCu	ALLOY 20	MONEL	NICKEL	HASTELLOY B/C	DUPLEX 2A,5A,6A
370H	STUD/NUT, COVER-TO-ADAPTOR	SS304							
319	OIL LEVEL INDICATOR	POLYCARBONATE / ALUMINIUM							
332A	LABYRINTH OIL SEAL (OUTBOARD)/OIL SEAL	STAINLESS STEEL / BRONZE / NBR							
333A	LABYRINTH OIL SEAL (INBOARD)/OIL SEAL	STAINLESS STEEL / BRONZE / NBR							
351	CASING GASKET	PTFE / GRAPHITE							
358	CASING DRAIN PLUG (OPTIONAL)	STEEL	SS316		ALLOY 20	MONEL	NICKEL	HASTELLOY B/C	DUPLEX 2A,5A,6A
360F	O-RING, FRAME-TO-ADAPTOR	BUNA							
370	CAP SCREW, ADAPTOR-TO-CASING	STEEL							
412A	O-RING, IMPELLER	GLASS-FILLED PTFE							
418	JACKING BOLT	SS304							
469B	DOWEL PIN, FRAME-TO-ADAPTOR	STEEL							
496	O-RING, BEARING HOUSING	BUNA RUBBER							

\* Different metallurgy available as per Client requirements.

## DIMENSION CHART CST/CMT/CLT/CXT/CSP/CLP



**PUMP DIMENSIONS AND WEIGHT**

(Dimensions are in mm (inches), weights in kg)

STD	GROUP	PUMP SIZE	ANSI DESIGNATION	SUCTION SIZE	DISCHARGE SIZE	X	A	B	D	SP	WEIGHT BARE PUMP
ANSI / ASME B73.1	CST	1.5X1-6	AA	38 (1.5")	25 (1")	165 (6.5")	343 (13.5")	102 (4")	132 (5.25")	95 (3.75")	50
		3X1.5-6	AB	75 (3")	38 (1.5")	165 (6.5")	343 (13.5")	102 (4")	132 (5.25")	95 (3.75")	55
		3X2-6	AC	75 (3")	50 (2")	165 (6.5")	343 (13.5")	102 (4")	132 (5.25")	95 (3.75")	55
		1.5X1-8	AA	38 (1.5")	25 (1")	165 (6.5")	343 (13.5")	102 (4")	132 (5.25")	95 (3.75")	60
	3X1.5-8	AB	75 (3")	38 (1.5")	165 (6.5")	343 (13.5")	102 (4")	132 (5.25")	95 (3.75")	65	
	CMT / CLT	3X2-8	A60	75 (3")	50 (2")	242 (9.5")	495 (19.5")	102 (4")	210 (8.25")	95 (3.75")	120
		4x3-7	A70	100 (4")	75 (3")	280 (11")	495 (19.5")	102 (4")	210 (8.25")	95 (3.75")	120
		4X3-8	A70	100 (4")	75 (3")	280 (11")	495 (19.5")	102 (4")	210 (8.25")	95 (3.75")	130
		4X3-8G	A70	100 (4")	75 (3")	280 (11")	495 (19.5")	102 (4")	210 (8.25")	95 (3.75")	130
		2X1-10	A05	50 (2")	25 (1")	216 (8.5")	495 (19.5")	102 (4")	210 (8.25")	95 (3.75")	125
		3X1.5-10	A50	75 (3")	38 (1.5")	216 (8.5")	495 (19.5")	102 (4")	210 (8.25")	95 (3.75")	125
		3X2-10	A60	75 (3")	50 (2")	242 (9.5")	495 (19.5")	102 (4")	210 (8.25")	95 (3.75")	125
		4X3-10	A70	100 (4")	75 (3")	280 (11")	495 (19.5")	102 (4")	210 (8.25")	95 (3.75")	130
		4X3-10H	A40	100 (4")	75 (3")	318 (12.5")	495 (19.5")	102 (4")	254 (10")	95 (3.75")	135
		6X4-10	A80	150 (6")	100 (4")	343 (13.5")	495 (19.5")	102 (4")	254 (10")	95 (3.75")	170
		6X4-10G	A80	150 (6")	100 (4")	343 (13.5")	495 (19.5")	102 (4")	254 (10")	95 (3.75")	170
		6X4-10H	A80	150 (6")	100 (4")	343 (13.5")	495 (19.5")	102 (4")	254 (10")	95 (3.75")	170
		3X1.5-13	A20	75 (3")	38 (1.5")	267 (10.5")	495 (19.5")	102 (4")	254 (10")	95 (3.75")	150
		3X2-13	A30	75 (3")	50 (2")	292 (11.5")	495 (19.5")	102 (4")	254 (10")	95 (3.75")	160
	4X3-13	A40	100 (4")	75 (3")	318 (12.5")	495 (19.5")	102 (4")	254 (10")	95 (3.75")	165	
	6X4-13	A80	150 (6")	100 (4")	343 (13.5")	495 (19.5")	102 (4")	254 (10")	95 (3.75")	200	
	CXT	8X6-13	A90	200 (8")	150 (6")	406 (16")	708 (27.875")	152 (6")	368 (14.5")	132 (5.25")	280
		10X8-13	A100	250 (10")	200 (8")	457 (18")	708 (27.875")	152 (6")	368 (14.5")	132 (5.25")	335
		8X6-15	A110	200 (8")	150 (6")	457 (18")	708 (27.875")	152 (6")	368 (14.5")	132 (5.25")	320
		10X8-15	A120	250 (10")	200 (8")	483 (19")	708 (27.875")	152 (6")	368 (14.5")	132 (5.25")	360
		10X8-15G	A120	250 (10")	200 (8")	483 (19")	708 (27.875")	152 (6")	368 (14.5")	132 (5.25")	350
		10X8-16H	A120	250 (10")	200 (8")	483 (19")	708 (27.875")	152 (6")	368 (14.5")	132 (5.25")	460
		4x3-17	-	100 (4")	75 (3")	406 (16")	708 (27.875")	152 (6")	368 (14.5")	132 (5.25")	290
		6X4-17	A105	150 (6")	100 (4")	406 (16")	708 (27.875")	152 (6")	368 (14.5")	132 (5.25")	320
		8X6-17	A110	200 (8")	150 (6")	457 (18")	708 (27.875")	152 (6")	368 (14.5")	132 (5.25")	370
10X8-17		A120	250 (10")	200 (8")	483 (19")	708 (27.875")	152 (6")	368 (14.5")	132 (5.25")	400	
NON ANSI	CSP	40X25-150	-	40 (1.5")	25 (1")	165 (6.5")	345 (13.5")	102 (4")	132 (5.25")	95 (3.75")	40
		80X50-150	-	75 (3")	50 (2")	165 (6.5")	345 (13.5")	102 (4")	132 (5.25")	95 (3.75")	45
		40X25-200	-	40 (1.5")	25 (1")	165 (6.5")	345 (13.5")	102 (4")	132 (5.25")	95 (3.75")	45
		80X40-200	-	75 (3")	40 (1.5")	165 (6.5")	345 (13.5")	102 (4")	132 (5.25")	95 (3.75")	45
	80X50-200	-	75 (3")	50 (2")	165 (6.5")	345 (13.5")	102 (4")	132 (5.25")	95 (3.75")	45	
	CLP	32X25-130	-	32 (1.25")	25 (1")	132 (5.25")	330 (13")	70 (2.75")	100 (3.93")	95 (3.75")	25
32X25-180		-	32 (1.25")	25 (1")	146 (5.74")	335 (13")	70 (2.75")	132 (5.19")	95 (3.75")	30	

## HIGH AND LOW TEMPERATURE CAPABILITY

### HT ANSI METALLIC 2009 SERIES

High Temperature Process Pumps



### HT NON-METALLIC SERIES

High Temperature Process Pumps



OPTIONS ARE READILY AVAILABLE FOR HIGH AND LOW TEMPERATURE APPLICATIONS OR WHERE PUMPAGE TEMPERATURE MUST BE CONTROLLED.

### JACKETED SEAL CHAMBER



Maintains proper temperature control of sealing environment. Ideal for maintaining temperature for services such as molten Sulphur and polymerizing liquids.

### JACKETED CASING



Economical jacket provides practical method of heating or cooling the casing. Excellent heat transfer characteristics.

### BEARING FRAME FINNED COOLER



MOC : Copper  
Directly cools oil for lower bearing operating temperature. Requires minimum cooling water. Corrosion resistant construction. Recommended for temperatures over 171°C (350°F)

Providing  
**Solution**  
to aggressive media





Delivering  
**High Reliable**  
**Time - Tested**  
Products

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