



**ANSI B73.1 M (ASA 150)**



**ISO 2858 / 5199**

**PERFORMANCE IS EVERYTHING**

**Investa Pumps Pvt. Ltd** was established in the year 1996, since then it has been producing **ANSI STD CHEMICAL PROCESS PUMPS**, catering to a wide spectrum of chemical industries. With the setup of new manufacturing facility in Gujarat, Investa pumps now produces an entire range of **ANSI series & ISO series** Pumps in Semi-open & Closed Impeller Constructions, having almost **80 Models** to offer in various Materials of Construction. With the dream & vision of **Mr. K.N. SHAH (FOUNDER - ANTICO GROUP)**, the company was started by **Mr. D.N. SHAH** to cater to some of the finest process engineering requirements.



## TYPE OF PUMPS:

(i) ANSI B 73.1 M ( ASA 150 ) -

Semi-open type Impeller

**RANGE OF COVERAGE**

Max Capacity = 1000 m<sup>3</sup>/hr  
Max Head = 150mts  
Temperature: -210°C to 260°C  
Working Pressure: 2550 kPa



(ii) ISO 2858 / 5199 -

Closed type Impeller

**RANGE OF COVERAGE**

Max Capacity = 1000m<sup>3</sup>/hr  
Max Head = 150mts  
Temperature: -210°C to 260°C  
Working Pressure: 2550 kPa

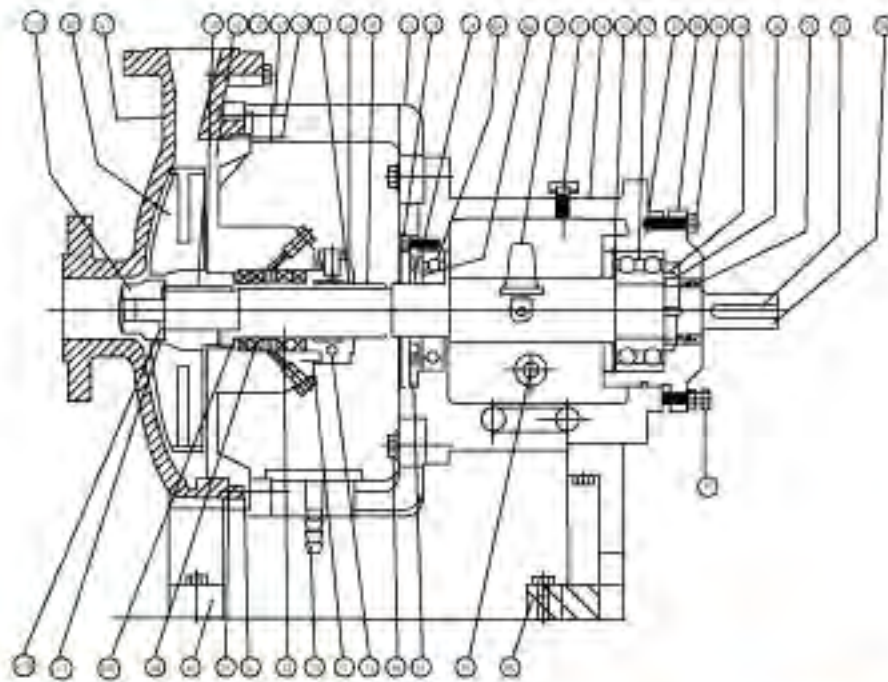


(ii) Self Priming Pumps -

Vertical In - Line



## SECTIONAL VIEW



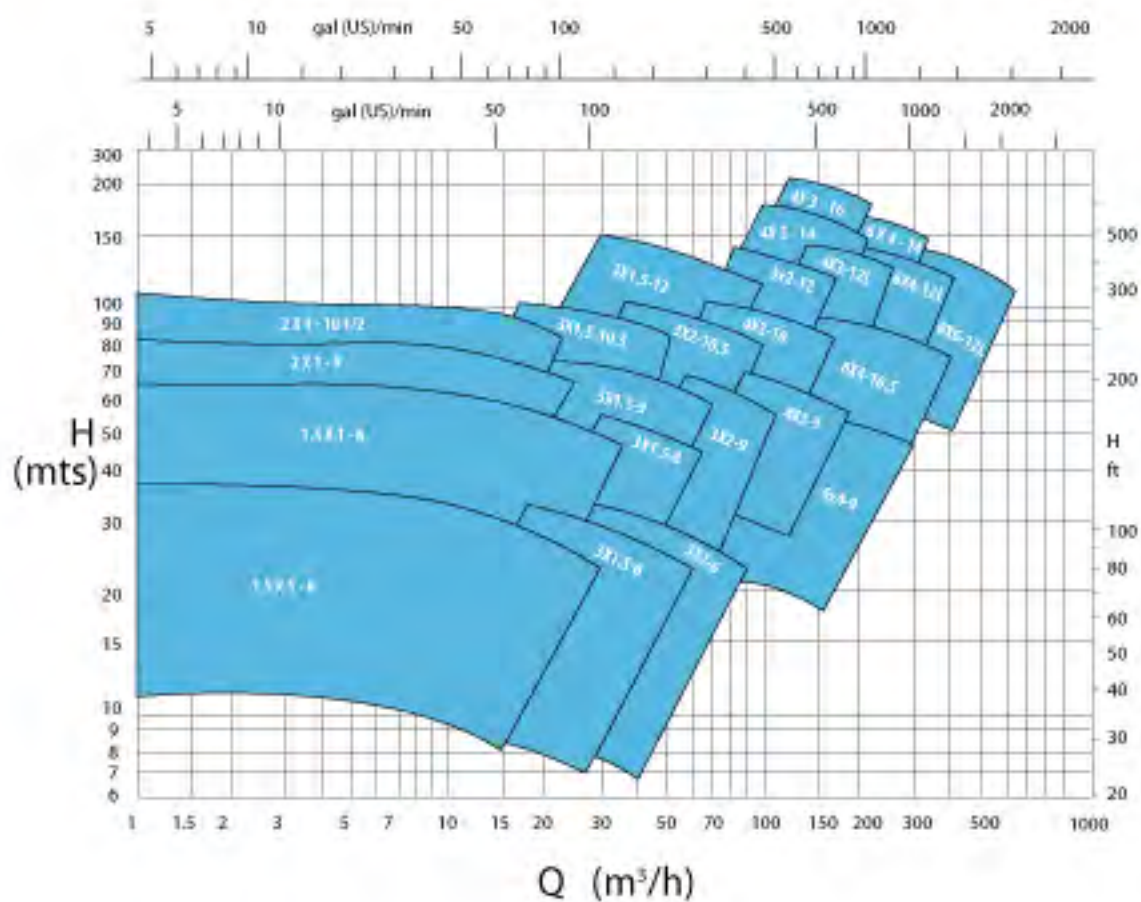
Part No.	Description	STANDARD MATERIAL						
		CS	CF8M	CF3M	CD4MCu	CN7M	HC	HB
01	Casing	CS	CF8M	CF3M	CD4MCu	CN7M	HC	HB
02	Stuffing Box Cover / Back Plate	CS	CF8M	CF3M	CD4MCu	CN7M	HC	HB
03	Impeller	CS	CF8M	CF3M	CD4MCu	CN7M	HC	HB
03A	Impeller Nut	CS	CF8M	CF3M	CD4MCu	CN7M	HC	HB
03B	Nut Gasket				PTFE			
04	Shaft	EN8			S.S. 316			
05	Support Foot				CI			
+06	Stuffing Box Packing				TIWA / GRAFOIL / PTFE			
+07	Shaft Sleeve	SS410	CF8M	CF3M	CD4MCu	CN7M	HC	HB
+07A	Sleeve Gasket				PTFE			
+08	Impeller Key				S.S. 316			
+09	Bearing Inboard				Steel			
10	Gland Pusher	CS	CF8M	CF3M	CD4MCu	CN7M	HC	HB
+11	Gland Pusher Seal Ring				PTFE			
+12	Bearing Outboard				Steel			
+13	Retaining Ring / Circlip				Steel			
14	Bearing Frame				CI			
15	Bearing Oil Drain Plug				Steel			
16	Bearing Lock Nut				Steel			
+17	Impeller Seal Ring				PTFE			
+18	Lantern Ring				Glass Filled PTFE			
19	Bearing Cover Out board				CI			
+20	O-Ring				Neoprene			
21	Deflector				S.S. 304			
22	Oil Breather				Steel			
23	Key-Coupling Side				S.S. 316			
+24	Oilseal Inboard				Buna Rubber			
+25	Oilseal Outboard				Buna Rubber			
26	Bearing Lock Washer				Steel			
+27	Adaptor				CI			
+28	Gasket Casing to St.Box Cover				PTFE			
29	Constant Level Giller				Polycarbonate / Aluminium			
30	Stud/Nut-Casing				Steel			
31	Bolt-SBCvr to Gland				Steel			
32	Stud/Nut-SBCvr to Bearing Frame				Steel			
33	Stud/Nut-gland				Steel			
34	Bolt-Brg Cover to Brg Frame				Steel			
35	Bolts/Jam Nut impeller Adj.				Steel			
+36	Bolts - adpt to brg frame				Steel			
+37	Jack Bolt				Steel			
38	Drip Tray				S.S. 304			
+39	Bearing Cover Inboard				CI			
+40	Casing Leg				CI			
+41	Impeller Nut Lock Washes							

<sup>1</sup> Parts normally stocked by customers for emergency repairs.      + Only in series - MD

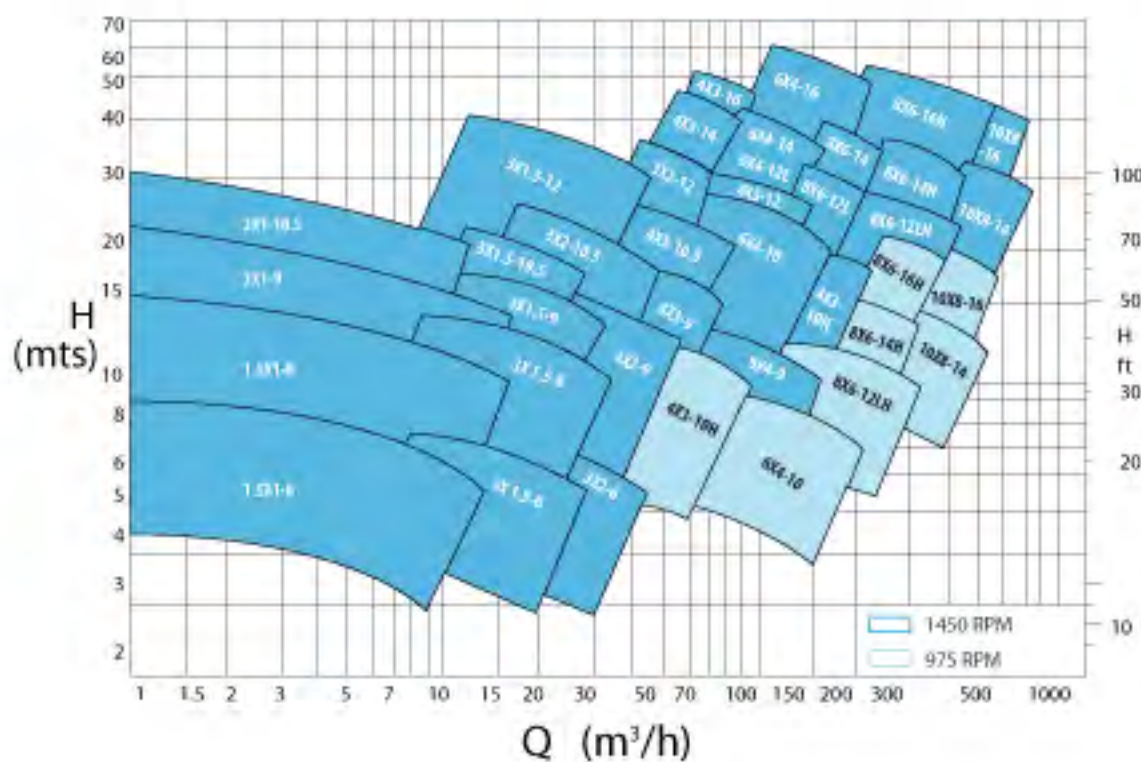
• 4 nos required when pump is supplied with mechanical seal

# HYDRAULIC COVERAGE

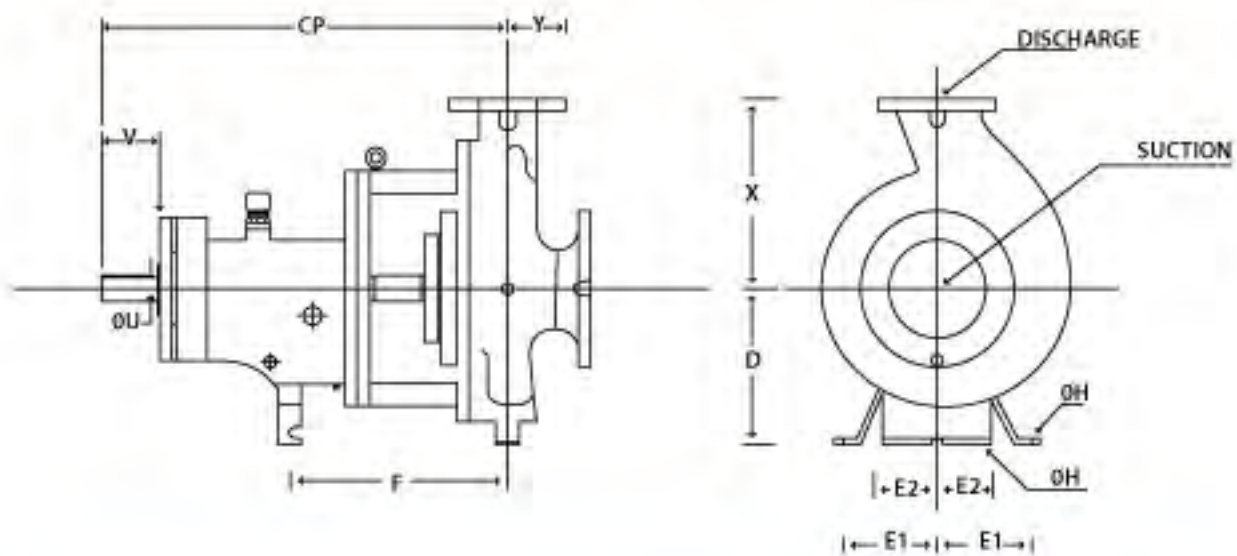
## 2900 RPM



## 1450 RPM

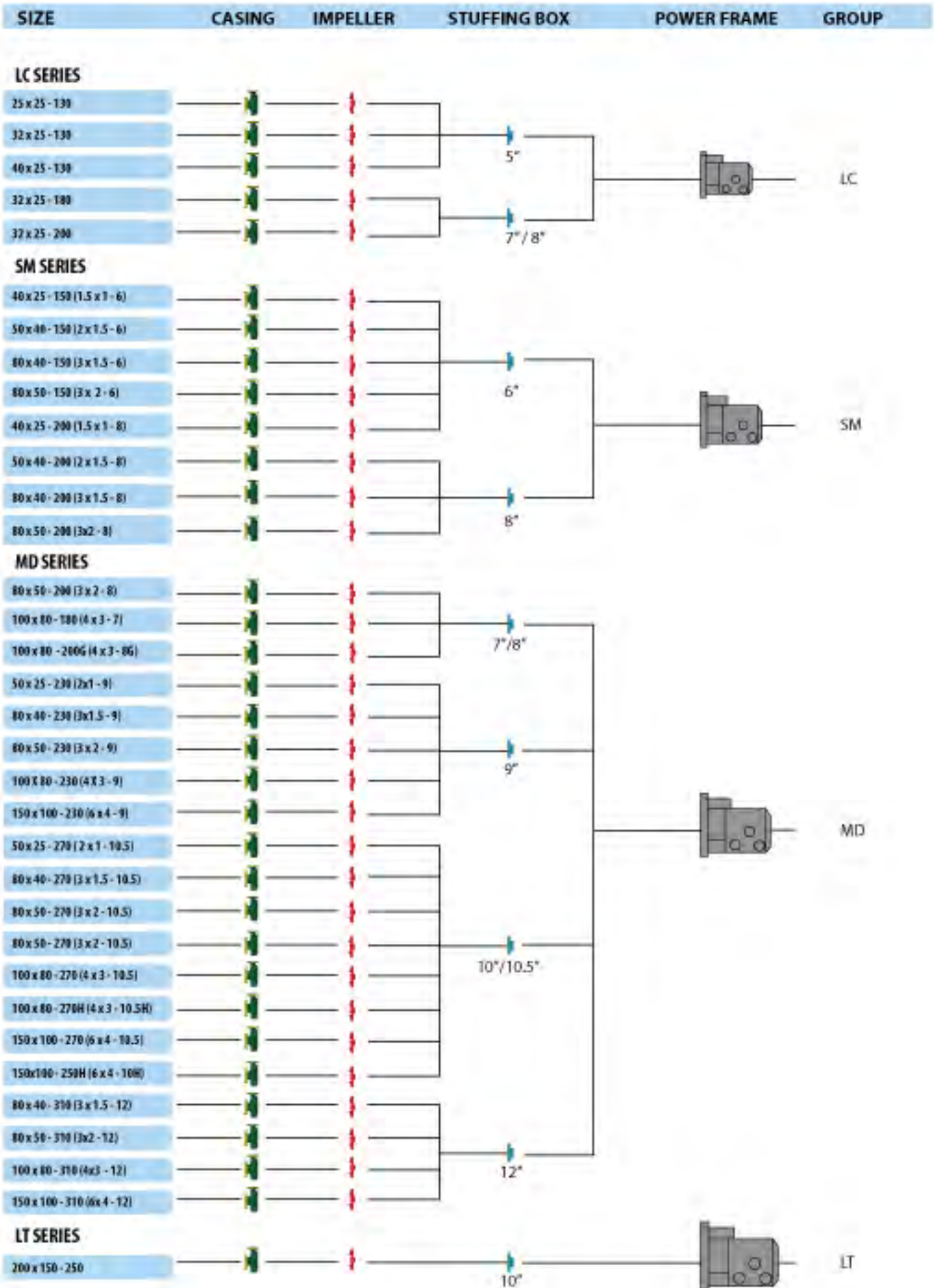


# DIMENSIONS

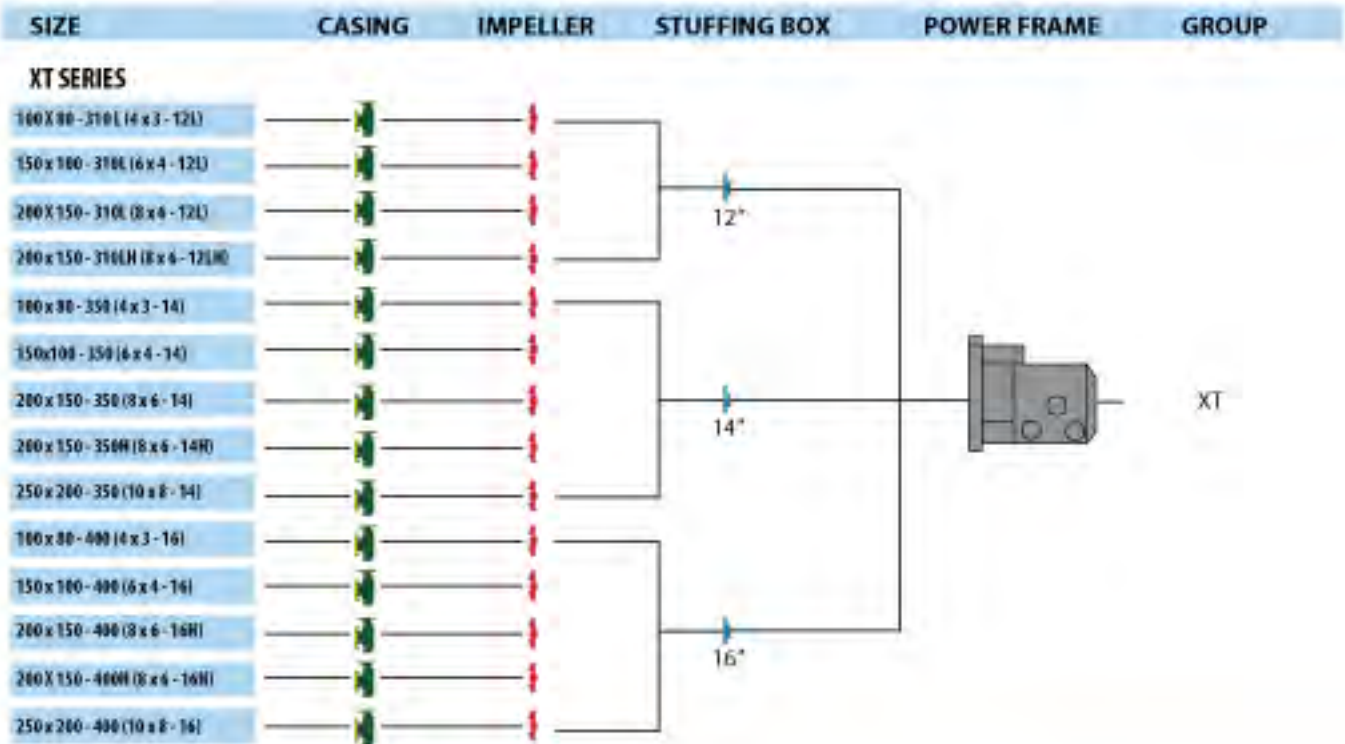


	Models	D	X	Y	CP	U	V	PUMPFEET			
								F	E1	E2	H
SCP - LC	40X25 - 130	132	145	75	330	22	50	180	---	77.5	M10
	32X25 - 130	100	125		190						
	25X25 - 130		145								
	32X25 - 180	132	165		335						
	32X25 - 200										
SCP - SM	40X25 - 150 (1 1/2X1 - 6)	132	165	100	345	22	50	185	80	---	M12
	80X40 - 150 (3X1 1/2 - 6)										
	80X50 - 150 (3X2 - 6)										
	40X25 - 200 (1 1/2X1 - 8)										
	40X25 - 200 (3X1 1/2 - 8)										
SCP - MD	50X25 - 230 (2X1 - 9)	210	215	100	500	28	67	320	125	92	M12
	80X40 - 230 (3X1 1/2 - 9)		240								
	80X40 - 230 (3X2 - 9)		280								
	100X80 - 230 (4X3 - 9)	255	315								
	150X100 - 230 (6X4 - 9)	255	315								
	100X80 - 270 (4X3 - 10H)	255	345								
	150X100 - 250 (6X4 - 10)										
	50X25 - 270 (2X1 - 10 1/2)	210	215								
	80X40 - 270 (3X1 1/2 - 10 1/2)		240								
	80X50 - 270 (3X2 - 10 1/2)		280								
	100X80 - 270 (4X3 - 10 1/2)		315								
	150X100 - 270 (6X4 - 10 1/2)		265								
	80X40 - 310 (3X1 1/2 - 12)	255	290								
	80X50 - 310 (3X2 - 12)		315								
	100X80 - 310 (4X3 - 12)		345								
150X100 - 310 (6X4 - 12)	280	315									
100X80 - 310 (4X3 - 12L)		345									
150X100 - 310 (6X4 - 12L)		370									
200X150 - 310 (8X6 - 12L)	315	405									
200X150 - 310 (8X6 - 12LH)		345									
100X80 - 350 (4X3 - 14)	280	370									
150X100 - 350 (6X4 - 14)		405									
200X150 - 350 (8X6 - 14)		460									
200X150 - 350 (8X6 - 14H)	370	460									
250X200 - 350 (10X8 - 14)		405									
250X200 - 350 (10X8 - 14)	315	405									
150X100 - 400 (6X4 - 16)		460									
200X150 - 400 (8X6 - 16)	370	505									
200X150 - 400 (8X6 - 16H)											
200X150 - 400 (10X8 - 16)											

# MODULAR INTERCHANGEABILITY



# MODULAR INTERCHANGEABILITY



## STUFFING BOX OPTIONS



**Standard Bore :**  
Designed for packing.  
Also accommodates Mechanical Seals.



**Big Bore :** Enlarged chamber for increased seal life through improved lubrication & cooling.



**Taper Bore (Conical Stuffing Box) :** Lower Seal face temperatures, self-venting & draining. Solids & Vapours circulated away from seal faces.

	Water Based liquids with flush	Entrained Air or Vapour	Solids 0-10% No Flush	Solids Greater than 10% with flush	Slurries 0-5%	High Boiling point Liquids No flush	Self-Venting & Draining	Seal Face Heat Removal
SB	A	C	C	B	C	C	C	C
BB	A	B	C	A	C	C	B	A
TB	A	A	A	C	A	A	A	A

A - Ideally Suited B- Acceptable C- Not Recommended

## DYNAMIC SEALING ARRANGEMENT ( EXPELLER DESIGN)



1. For Handling slurries /solids upto 35 - 40%
2. Eliminates use of Slurry Mechanical Seals and also eliminates pumpage contamination and product dilution.

## JACKETED CASING & STUFFING BOX.



For Handling Liquids having High Boiling Points & Low Melting Points.

## BEARING SEALING OPTIONS

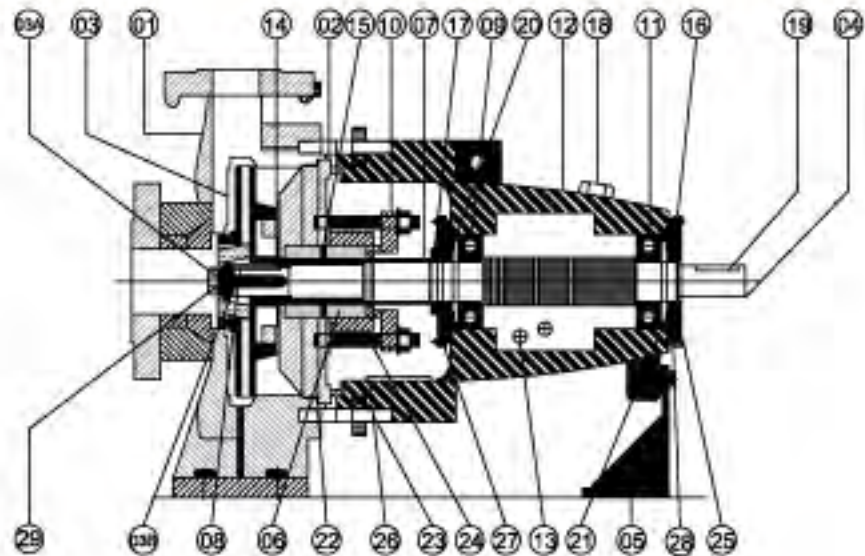


**Lybrynth Seals or Bearing Protectors** can be provided for higher bearing life. It also provides maximum protection against containments and the corrosive effects of seal leakage or environmental conditions. Any known make can be provided.



CROSS SECTIONAL DRAWING

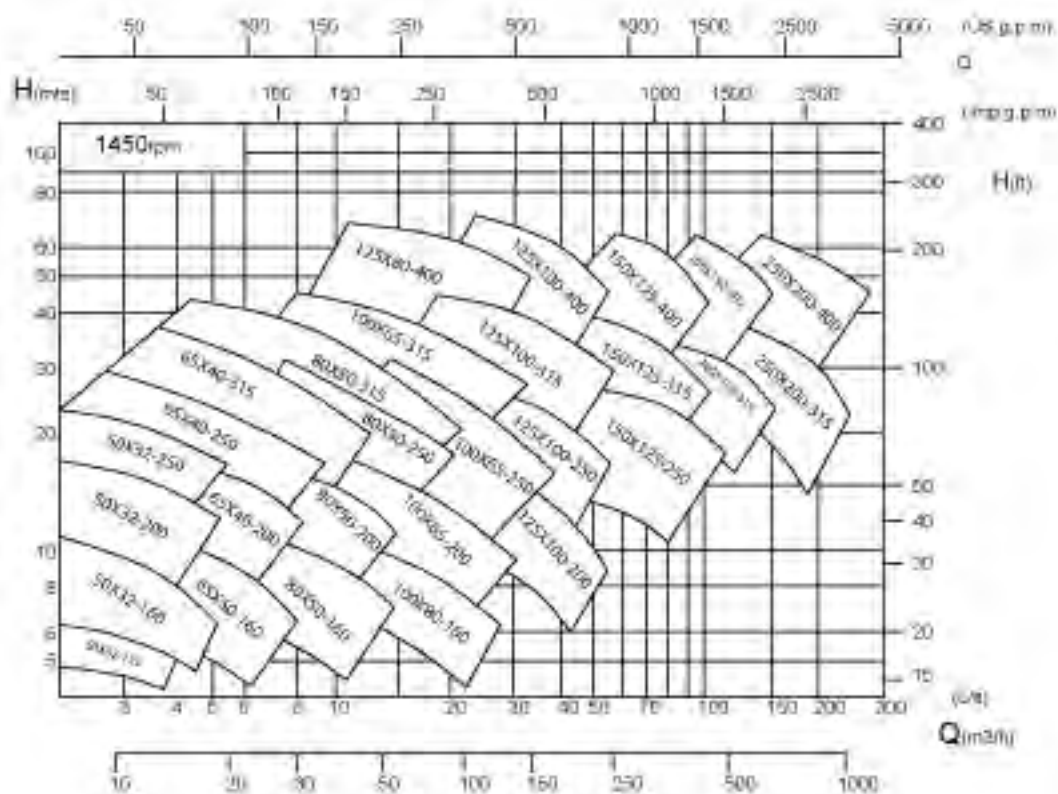
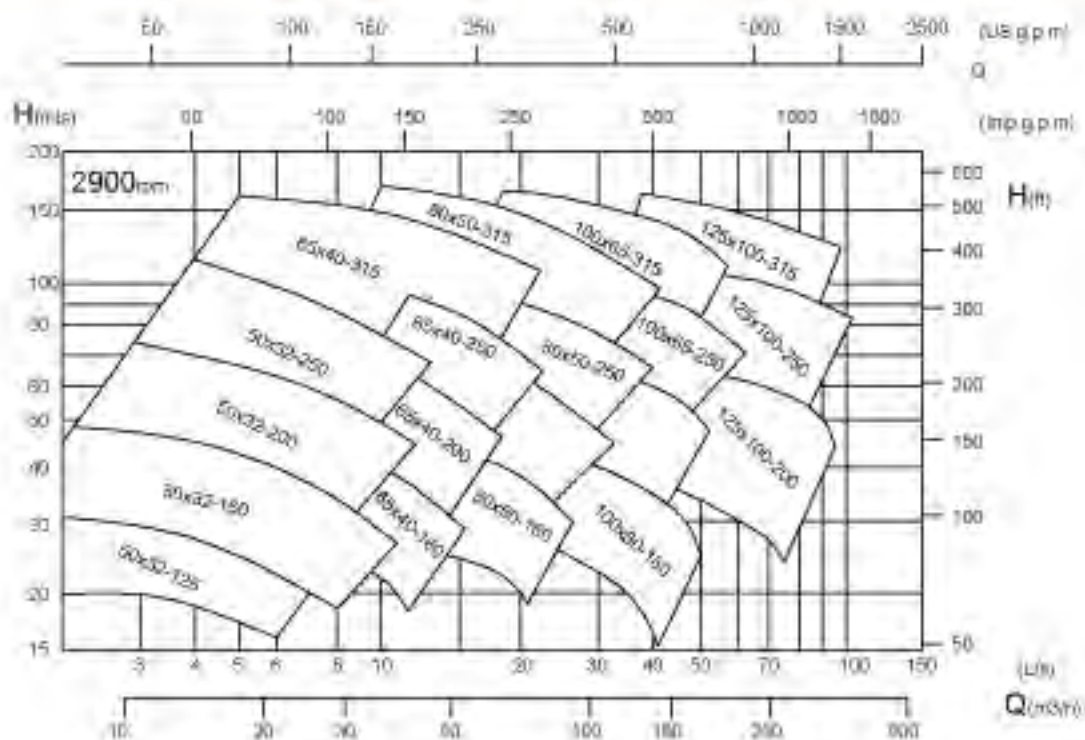
Investa pumps ventures into new CIP series in closed impeller construction with ISO 2858 dimensions.



PART NO	DESCRIPTION	STANDARD MATERIAL						
		CS	CF8M	CF3M	CD4MCu	A-20	HC	HB
01	CASING	CS	CF8M	CF3M	CD4MCu	A-20	HC	HB
02	STUFFING BOX / BACK PLATE	CS	CF8M	CF3M	CD4MCu	A-20	HC	HB
03	IMPELLER	CS	CF8M	CF3M	CD4MCu	A-20	HC	HB
03A	IMPELLER NUT	CS	CF8M	CF3M	CD4MCu	A-20	HC	HB
03B	NUT GASKET	PTFE						
04	SHAFT	EN-19	SS-316					
05	SUPPORT FOOT	SGI						
06	STUFFING BOX PACKING	TWA / GRAFOIL / PTFE						
07	SHAFT SLEEVE	SS-316	CF8M	CF3M	CD4MCu	A-20	HC	HB
08	IMPELLER KEY	SS-316						
09	BEARING IN BOARD	STEEL						
10	GLAND PUSHER	CS	CF8M	CF3M	CD4MCu	A-20	HC	HB
11	BEARING OUT BOARD	STEEL						
12	BEARING FRAME	C.I.						
13	BEARING OIL DRAIN PLUG	STEEL						
14	IMPELLER SEAL RING	PTFE						
15	LANTERN RING	GLASS FILLED PTFE						
16	BEARING COVER OUT BOARD	C.I.						
17	DEFLECTOR	S.S-304						
18	OIL BREATHER	STEEL						
19	KEY COUPLING SIDE	SS-316						
20	OIL SEAL IN BOARD	BUNA RUBBER						
21	OIL SEAL OUT BOARD	BUNA RUBBER						
22	GASKET CASING TO ST. BOX COVER	PTFE						
23	STUD NUT CASING	STEEL						
24	BOLT - SBC <sub>v</sub> TO GLAND	STEEL						
25	BOLT-BRG COVER TO BRG FRAME	STEEL						
26	DRIP TRAY	SS-304						
27	BEARING COVER IN BOARD	C.I.						
28	OIL PAPER GASKET	PAPER MATERIAL						
29	O RING FOR IMP BOLT	VITON						

\* Note: CAST IRON pumps are available for all Cooling Tower Applications.  
Wear rings of different sizes are provided in all ISO 2858 / 5199 models of pumps.  
MOC of Wearings:- Brass / CC 50

# HYDRAULIC COVERAGE



# MODULER INCHANGEBILITY

SIZE	CASING	IMPELLER	STUFFING BOX	POWER FRAME	GROUP
<b>CIP SERIES (0)</b>					
32 x 25 - 130					Series - (0)
32 x 25 - 150					
32 x 25 - 180					
40 x 25 - 200					
<b>CIP - SERIES (I)</b>					
50 x 32 - 125					Series - I
50 x 32 - 160					
65 x 40 - 125					
65 x 40 - 160					
80 x 50 - 160					
50 x 32 - 200					
65 x 40 - 200					
80 x 50 - 200					
<b>CIP - SERIES (II)</b>					
50 x 32 - 250					Series - II
65 x 40 - 250					
80 x 50 - 250					
65 x 40 - 315					
80 x 50 - 315					
100 x 80 - 160					
100 x 65 - 200					
100 x 65 - 250					
<b>CIP - SERIES (III)</b>					
100 x 65 - 315					Series - III
125 x 80 - 400					
125 x 100 - 200					
125 x 100 - 250					
125 x 100 - 315					
125 x 100 - 400					
150 x 125 - 250					
150 x 125 - 315					
150 x 125 - 400					
<b>CIP - SERIES (IV)</b>					
200 x 150 - 315					Series - IV
200 x 150 - 400					
250 x 200 - 315					
250 x 200 - 400					

# DIMENSIONS

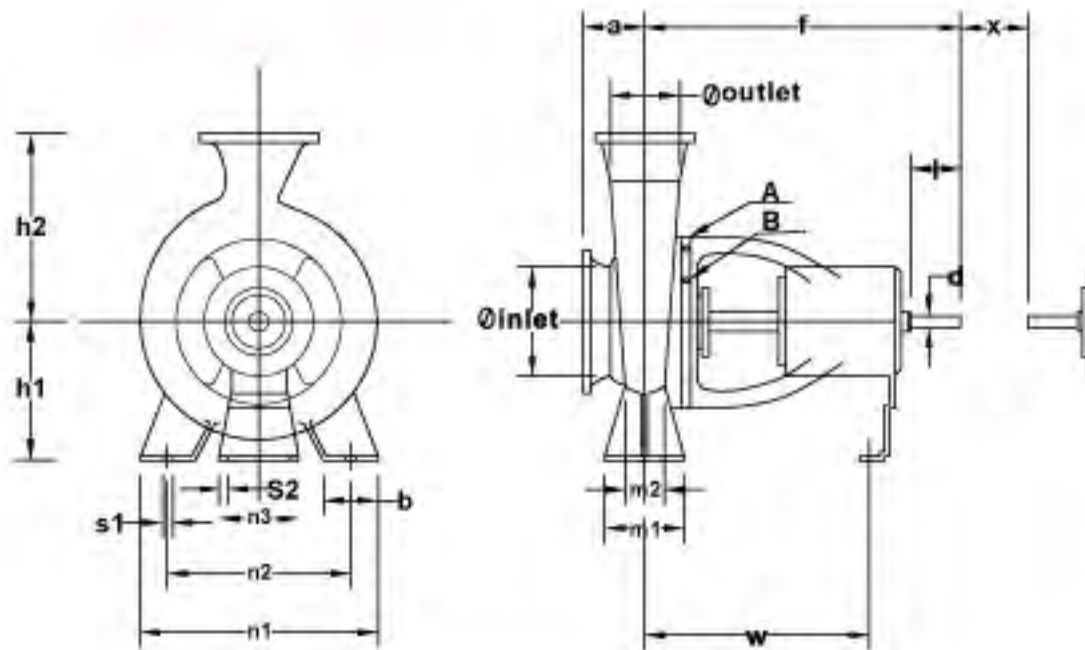


TABLE-Normal duty point and dimension

Size designation			Nominal duty point		Dimension in millimeters																						
Ø Inlet mm	Ø Outlet mm	Ø Impeller (nominal) mm	n		Pump				Support						Clearance Holes for bolts		w	d	l	w'							
			1450min/7	2900min/7	Q	H	Q <sub>1</sub>	H <sub>1</sub>	a	f	h1	h2	b	m1	m2	n1					n2	n3	S1	S2			
			l/m <sup>3</sup>	m	m <sup>3</sup> /h	m																					
50	32	125	6.3	5	20	90	385	112	140	50	100	74	190	140	100	255	M12	M12	24	90	100						
50	32	160		8	32			132	160				160	180					200	250		320	250	320	250	32	80
50	32	200		12.5	50			160	180				225	65					125	95		320	250	320	250	32	80
50	32	250	20	80	160	500	180	225	65	125	95	320	250	320	250	32	80	100									
65	30(40)	125	12.5	5	20	90	385	112	140	50	100	74	210	160	110	285	M12	M12	24	90	100						
65	30(40)	160		8	32			132	160				160	180					200	250		265	212	320	250	32	80
65	40	200		12.5	50			160	180				225	65					125	95		345	280	370	32	80	
65	40	250	20	80	160	500	200	250	65	125	95	345	280	370	32	80	100										
80	65(80)	125	25	5	20	100	385	132	160	50	100	74	240	190	110	285	M12	M12	24	90	100						
80	65(80)	160		8	32			160	200				160	180					225	265		212	320	250	32	80	
80	50	200		12.5	50			160	180				225	65					125	95		345	280	370	32	80	
80	50	250	20	80	160	500	200	250	65	125	95	345	280	370	32	80	100										
80	50	315	32	125	125	500	225	280	65	125	95	345	280	370	32	80	100										
100	80(65)	125	50	5	20	100	385	160	200	65	125	95	260	212	110	285	M12	M12	24	90	100						
100	80(65)	160		8	32			160	180				225	260					212	320		250	320	250	32	80	
100	65	200		12.5	50			160	180				225	65					125	95		360	280	370	32	80	
100	65	250	20	80	160	500	200	250	65	125	95	360	280	370	32	80	140										
100	65	315	32	125	125	530	225	280	80	160	130	400	315	500	370	M16		42	110	180							
125	80	400	80	50	160	530	280	355	80	160	130	435	355	500	370	M16		42	110	180							
125	100	200	12.5	50	160	125	500	200	80	160	130	360	280	500	370	M16		32	80	140							
125	100	250	20	80	160	500	225	280	80	160	130	400	315	500	370	M16		42	110	180							
125	100	315	32	125	125	530	250	315	80	160	130	400	315	500	370	M16		42	110	180							
125	100	400	50	160	160	530	280	355	100	200	150	500	400	500	370	M20		42	110	180							
150	125	250	20	80	160	530	280	355	80	160	130	400	315	500	370	M16		42	110	180							
150	125	315	32	125	125	530	280	355	80	160	130	400	315	500	370	M16		42	110	180							
150	125	400	50	160	160	530	315	400	100	200	150	500	400	500	370	M20		42	110	180							
200	150	250	20	80	160	530	280	375	100	200	150	500	400	500	370	M20		42	110	180							
200	150	315	32	125	125	530	280	375	100	200	150	500	400	500	370	M20		42	110	180							
200	150	400	50	160	160	530	315	450	100	200	150	500	400	500	370	M20		42	110	180							

## MAG DRIVE PUMP SERIES



Investa Pumps now offers the new I-Mag Series of Pumps which are Magnetically Coupled Pumps for Highly Cryogenic & Toxic Liquids. These pumps are available up to 25 HP.

These pumps are available in ISO 2858 /5199 Dimensions

Available in NDFeBd / SmCo Rare earth Magnet.

## POWER SAVER OPTIONS | 32x25 - 130 | 32x25 - 150 | 32x25 - 180 | 40x25 - 200



The new Power Saver Options offers pumps running at 1.5 HP/2HP at 2900 rpm for handling clear solvents for the Active Pharma Ingradient (API) Market.

## SERVICE COVERAGE

### GENERAL APPLICATION INSTALLATION LIST

INDUSTRY	EXAMPLES OF SERVICES		
Chemical	Sulphuric Acid	Brine	Nitric Acid
	Sodium Hydroxide	Chlorosulphonic Acid	Maleic
	Hydrochloric Acid	Ethanol	Citric Acid
	Acetic Acid	Phosphoric Acid	Sodium Acetate
	Ammonium Chloride	Oleum	Vinyl Acetate
Petrochemical	Butadiene	Vinyl Chloride	Formaldehyde
	Benzene	Ethylene Glycol	Phenol
	Toluene	Maleic Anhydride	Styrene
	Ammonia	Acrylonitrile	Ethylene Oxide
	Methanol	Urea	Xylene
Pulp & Paper	Showers Water	Sodium Hypochlorite	Green Liquor
	White Water	Fresh Liquor	Dregs Washer
	Chlorine Dioxide	Black Liquor	White Liquor
Brewing	Sprage Water	Reclaim Water	Alcohol Washes
	Hot / Cold Wort	MASH	Yeast Brink
	Chilled Water	Blow Back Beer	Sulphuric Acid
	Beer	Spent Grain Liquor	Caustic
Primary Metals	Copper Sulphate	Sodium Sulphate	Copper
	Sodium Cyanide	Ferric Chloride	Ammonium Sulphate
	Chromic Acid	Ferrous Sulphate	Silver Cyanide
General	Condensate	Hot Oil	River Water
	Deionized Water	Wine	Pond Water
	Showers Water	Sugar Cane Juice	Cooling Tower Water

## MATERIAL CROSS REFERENCE CHART

<b>Material</b>	<b>ASTM Casting Grade.</b>
Cast Steel	WCB
SS-304	CF8
SS-316	CF8M
SS-316L	CF3M
CD4MCu	CD4MCu
Alloy - 20	CN7M
Carpenter 20	CK-20
Duplex SS	Grade 4A,5A,6A
Hastelloy B	N12MV
Hastelloy C	CW12MW
Nickel (100%)	CZ-100
MONEL	M-35
Ni-Hard	Ni-Hard(Ni-Resistance)



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**Distributor:**

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