RESICAST.. Since, 1982

Gala No 6
Gafoor Khan Estate, Opposite Best Depot
L.B.S Marg, Kurla (West)
MUMBAI - 400070
eMail: info@resicast.in; kfresi@rediffmail.com
Contact: +91 7989768742, +91 7330665572
www.resicast.in

Corrosion Resistant Centrifugal Pump - Non Metallic

MOC: Silica Epoxy, Graphite

Product Overview

RESICAST pumps boast of silica epoxy (thermoset) construction using proprietary vacuum molding manufacturing process & curing system to provide a centrifugal pump in material of construction which is reasonably strong mechanically as well as corrosion resistant to many aggressive chemicals. With 40+ years of composite pump design & manufacturing experience we provide a quality pump line with best in class durability & efficiency.

Design Features

RESICAST type designed specifically for corrosive chemical service. Capacities up to 100 m3/hr. Total Head up to 50 meters. Temperatures up to 130 Deg C(depending up fluid & concentration)

Casing & Backplate

Heavy Silica Epoxy construction without any MS plate to support makes it suitable for corrosive duty

Impeller

Standard Semi Open & Close type impeller cast integral with shaft & hence chances of joints being corroded is eliminated . All parts of the impeller coming in contact with service fluid are silica EPOXY , damage due to reverse rotation is eliminated. Options for sleeves also available on customer request.

Shaft & Shaft Seal .

Teflon bellow- Ceramic stationary mechanical seal is provided as standard. Plug -in shaft design allows for dismantling the whole pump in minimum time without disturbing the bearings.

Bearing Frame, Bearings and Couplings

Heavy bearings on the drive shaft housed in a rugged cast iron bearing frame provides solid support to ensure long bearing life.Liberally designed Love Joy coupling provided as standard.

RESICAST Advantage

Highly engineered composite pump, we have developed a special "Polymer Concrete " / "Ceramic" epoxy silica composite & are the one of the oldest & only manufacturers of such pumps in the country .

Unmatched mechanical strength & wear resistance in non metallic pumps ensures your pumps have longer life similar to metallic pumps. We use novolac thermoset resins used in demanding applications like ship propellers & aerospace structures.

Highest efficiency in non metallic pumps: Lower coefficient of thermal expansion of epoxy leading to smaller clearances & custom molding/machining (not mass production of standard casings) ensures that we deliver up to **20%** higher efficiency then most thermoplastic (PP, PVDF, PFA) pumps in the market. Upon replacement with Resicast pump you can recover your investment in 6-12 months.

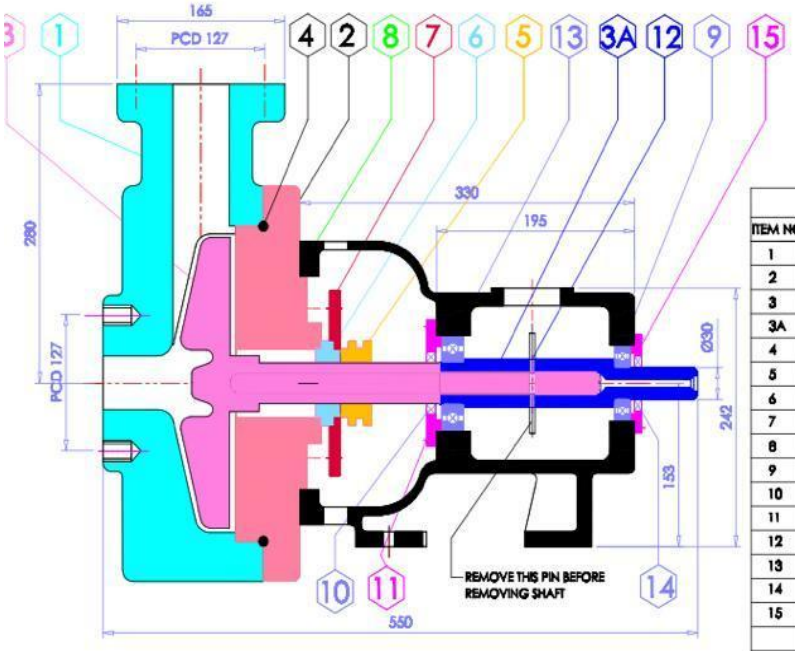
Breakthrough design with fewer parts: Integrally molded single piece shaft impeller, no separate liner concern, no separate impeller lock nut, gasket, no need for a separate shaft sleeve. Total part count ½ of other pumps in the market

Easy maintenance coupled with modular design for component interchangeability ensure lower spares inventory & no need for skilled fitters

Resicast Pump Value Proposition - Power Savings viz a viz Thermoplastic Pumps (PP, PVDF etc)				
Head (mtr)	**30**	**30**	**30**	**30**
Flow (m3/hr)	**72**	**54**	**40**	**25**
Resicast (HP)	**15**	**12.5**	**10**	**7.5**
Reputed PP,PVDF_Co. (HP)	**20**	**15**	**12.5**	**10**
Operating Load	75%	75%	75%	75%
Operating Hrs per day	20	20	20	20
Operating Days Per Month	20	20	20	20
Per Month Resicast Power Consumption (KW hr)	3358	2799	2239	1679
Per Month Reputed PP,PVDF_Co.Power Consumption(KW hr)	4478	3358	2799	2239
Per Month Resicast Power Consumption (@ 10 cents per unit)	26866	22388	17910	13433
Per Month Reputed PP,PVDF_Co.Power Consump.(@ Rs 8 per unit)	35821	26866	22388	17910
Savings with Resicast Pump (12 months) -Rs/Per Pump	**Rs. 107463**	**Rs. 53731**	**Rs.53731**	**Rs. 53731**

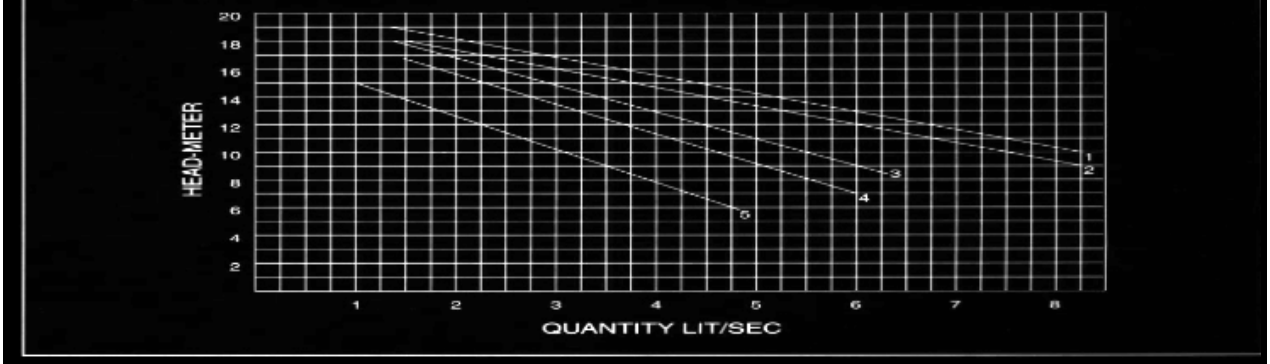
General Arrangement Drawing

(EP/50/XX & EP/65/XX)

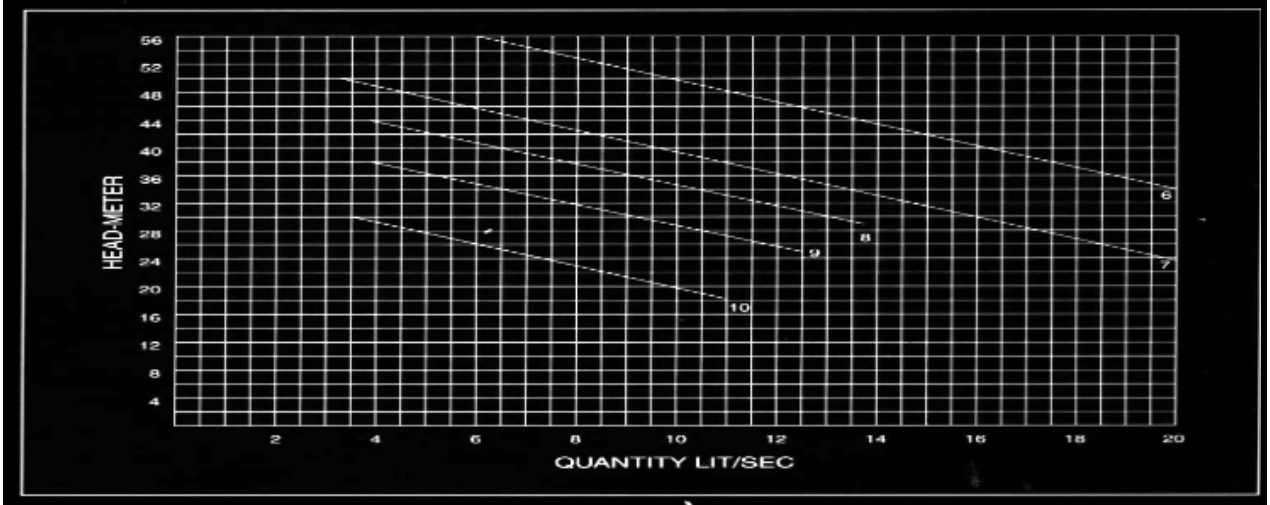


PART LIST		
ITEM NO	DESCRIPTION	M.O.C.
1	PUMP CASING	COMPOSITE (EPOXY SILICA)
2	END/BACK PLATE or STUFFING BOX	COMPOSITE (EPOXY SILICA)
3	IMPELLER WITH KNURLING SHAFT	COMPOSITE (EPOXY SILICA+ En8)
3A	DRIVE SHAFT	M.S.
4	BACK PLATE O-RING CORD	NEOPRENE WITH PTFE COVER
5	ROTARY UNIT OF MECHANICAL SEAL	GLASS FILLED TEFLON
6	STATIONARY CERAMIC RING	CERAMIC
7	HOLDING PLATE	BACKALITE SHEET
8	BEARING HOUSING	C.I.
9	BALL BEARING	6306
10	OIL SEAL	NEOPRENE /VITTON
11	BEARING COVER	C.I.
12	LOCKING BOLT/PIN	M.S.
13	BALL BEARING	6308
14	OIL SEAL	NEOPRENE /VITTON
15	BEARING COVER	C.I.

Pump Performance Curves



Sr. No.	Model	Impeller Dia	H. P.	RPM
1	EP-50/24	240 mm	5 HP	1440
2	EP-50/23	230 mm	5 HP	1440
3	EP-50/22	220 mm	3 HP	1440
4	EP-50/21	210 mm	3 HP	1440
5	EP-50/19	190 mm	2 HP	1440



Sr. No.	Model	Impeller Dia	H. P.	RPM
6	EP-75/190	190 mm	20 HP	2800
7	EP-75/170	170 mm	10 HP	2800
8	EP-65/160	160 mm	7.5 HP	2800
9	EP-50/150	150 mm	5 HP	2800
10	EP-45/150	135 mm	3 HP	2800

Chemical Compatibility

Typical applications where Epoxy resin provides good resistance are as follows:

- Acetaldehyde
- Acetone
- Acetic Acid
- Ethyl, Methyl, Amyl and Benzyl Alcohols
- Aluminium Chloride
- Aluminium Fluoride
- Alum
- Barium Carbonate
- Barium Chloride
- Barium Sulfide
- Benzaldehyde
- Benzene
- Bezoic Acid
- Butyric Acid
- Calcium Carbonate
- Calcium Chlorate
- Calcium Hydrochlorite
- Carbon Tetra Chloride
- Citric Acids
- Fatty Acids
- Ferric Chloride
- Ferric Nitrate
- Ferrous Chloride
- Ferrous Sulfate
- Hexene
- Hydrobromic Acid
- Hydrochloric Acid - 33%
- Hydrofluoric Acid
- Hydrogen Peroxide
- MCB
- Nitric Acid (10% solution)
- Phosphoric Acid
- Potassium Carbonate
- Potassium Chloride
- Sodium Bicarbonate
- Sodium Bisulfate
- Sodium Carbonate
- Sodium Hydroxide (20%)
- Sodium Hypochloride
- Spent Acid
- Stearic Acid
- Sulfuric Acid (10% - 98%)
- Zinc Chloride

3/4

*** Please check with us for compatibility of your service fluid, compatibility can change based on temperature & fluid concentration**