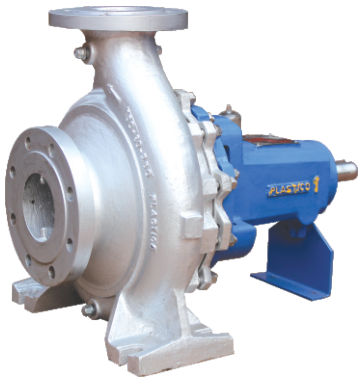
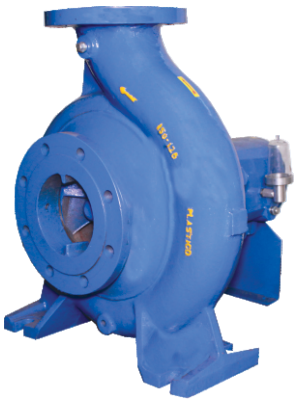
Plastico®

PPNP SERIES

CENTRIFUGAL PROCESS PUMP





Features

- Improved efficiency and improve NPSH requirement by better hydraulic design of impellers (vanes).
- Lower energy costs.
- Operating costs reduced by trimming the impeller diameter to match the specified duty point.
- Little wear, low vibration levels and excellent smooth running characteristics thanks to good suction performance and virtually cavitation-free operation across a wide operating range.
- Casing sealed reliably – even in varying operating conditions – by confined casing gasket Large variety of materials for perfectly matching the pump to the fluid handled. Large range of materials for many applications available as a standard
- Easy to dismantle casing cover and bearing bracket lantern screw are available.

Application

- Hot and cold water circulation, Cooling water circulation.
- Drip irrigation, Water supply and Building services.
- Thermic fluid, Jet dyeing, Volatile fluids, Heat exchanger.
- Condensate handling, Fire fighting system Environmental engineering, Marine, Refrigeration and Cooling tower installation etc.
- Chemicals, Petrochemicals, Pharmaceuticals, Refineries, Steel plant, Sugar, Paper, Laminates industries, Textiles, Rubber, Handling of Hydrocarbons, organic and inorganic chemicals, DM water, Food industries, Salt plants, Power plants and in industries such as Pulp, Fertilizer and other Process industries etc.
- Corrosive and Abrasive process chemicals like Acids, Alkalis, Solvents, Slurries, Crystallizing Liquids
- Nitric Ammonia Phosphate, Chemical effluents, etc.

Volute Casing

One piece self venting volute casing design with end suction and top centerline delivery connections. The pump feet are integrally cast into volute casing. The feet at bottom transfer residual pipe stress shortest possible route to the base plate and foundation.

Impeller

Depending on process parameters Closed or a semi open impellers are given for low NPSH requirements. Hydraulically balanced by back vanes, or in the case of large impeller diameters by balancing holes and wear rings on both sides. Reliable fixing of an impeller on the shaft by impeller nut.

Shaft & Bearings :

The shaft is guided in oil lubricated angular contact and cylindrical roller bearings. The alignment of bearings is ensured by appropriate centering and modern manufacturing methods. The shaft is fully protected from the liquid to be pumped by means of fully enclosed PTFE Gasket between the impeller nut-shaft and shaft sleeve. The properly dimensioned shaft exhibits minimum deflection at a stuffing box, resulting in long operational life for mechanical seals.

Shaft Sealing

Supplied with either gland packing or mechanical seals in a stuffing box with connection for sealing and cooling/flushing liquid. Simple change over from packing to a mechanical seal is possible with the aid of standardized conversion kits. Mechanical seal of various makes and seal faces MOC, unbalanced as well as balanced ones can be easily fitted in the standard stuffing box.

Bearing Frame

The entire range of pump models is covered in just four numbers of bearing frames.
All pumps belonging to a bearing frame have identical shaft, bearings, shaft sleeves and impeller fastenings. In addition to standard sight glass every bearing frame can be equipped with a constant level oiler. For pumping temperature more than 180˚C or 160˚C in case of steam jacketed pumps, a lubricating oil cooling circuit can be fitted in the of oil pumps bearing frames.

Parameters	Designed To Conform	DIN 24256 , ISO 2858 , EN 733
End connections		DIN 2533, DIN 2543, ASA150 or ANSI B-16.5
Working ranges	Speed 1450 rpm discharge up to 1100 m^3/hr heads up to 60 mts. Speed 2900 rpm discharge up to 380 m^3/hr heads up to 110 mts.	
Working Pressure	Grey Cast Iron Steel, Iron Cast stainless Steel , Alloy cast steel Depend Upon Pump Size And Pumping Temperature	16 Kg/cm^2 PRESSURE RATING 20 Kg/cm^2 PRESSURE RATING
Working Temperature Limits	Grey Cast Iron S.G , Iron Cast Alloy Cast Steel	From 200˚ max From 300˚ max From 350˚ max
Materials of Consutruction	Standard Design Special Design	Grey Cast Iron Cast Steel SS 316 SS 304 S.G Iron SS 304L CD4MCU SS 316L ALLOY 20 HASTALLOY B/C BRONZE NI HARD