



WHAT IS AN CENTRIFUGAL PUMP?



CENTRIFUGAL PUMP FUNCTIONS AND APPLICATIONS

DEFINITION OF CENTRIFUGAL PUMP

Centrifugal pump is a kinetic pump machine that converts mechanical energy into fluid energy by using centrifugal force or rotation. The centrifugal pump used as a liquid fluid transformation tool has a disc component or also known as an impeller. Impellers equipped with pump blades have a very vital influence on pump performance. Such as the number of blades and the influence of the inlet and outlet angles on the centrifugal pump blades that can affect the displacement performance of the liquid being pumped.

APPLICATION OF CENTRIFUGAL PUMP

Centrifugal pumps are pumps that are currently also widely needed by industrial circles. The use of centrifugal pumps is widely used in clean water (drinking water) treatment processes, water purification processes at a power plant, and water distribution in systems in the industrial world. Researchers and designers have done a lot of research on centrifugal pumps related to pump performance issues to the materials used, even from small components to large components / devices.

EXAMPLE OF CENTRIFUGAL PUMP

Examples of centrifugal pump types in grundfos CR pump types. This centrifugal pump is considered to be very superior in the field of industrial water pumps with excellent thrust pressure. This Grundfos CR model water pump is only specifically for clean water, not for waste and chemical liquids.



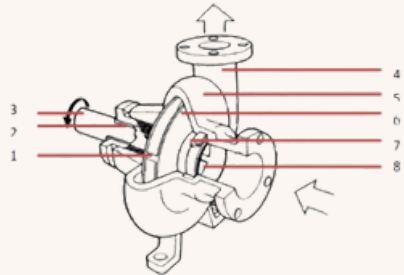


The Capability of Centrifugal Pump's Main Body



Parts of Centrifugal Pump

1. Valve
2. Packing
3. Shaft
4. Discharge Nozzle
5. Casing
6. Impeller
7. Bearing
8. Eye Of Impeller



FUNCTION OF EACH PART OF A CENTRIFUGAL PUMP

The function of the section for centrifugal pumps include:

- Valve, which is an impeller which certainly functions as a means of passage of liquid in the impeller.
- Packing is a function to prevent and reduce fluid leakage from the pump casing associated with the shaft.
- Shaft / Shaft is a function to continue the torque of the drive during operation and the fulcrum of the impeller and other rotating parts.
- Discharge Nozzle is a function of where the suction fluid exits rather than during pumping.
- Casing is a function to protect the elements in it and this is a casing that needs to be considered the same as for other types of submersible pumps.
- The impeller is used to convert mechanical energy from the pump into velocity energy in the fluid that is pumped continuously so that the fluid on the suction side will continuously enter the void due to the displacement of the fluid that entered before.
- Bearings function to withstand the load from the shaft so that it can rotate.
- Eye of impeller function to enter in the direction of the suction part of the impeller