

# SPARE IMPELLERS

# Introduction

impellers are precisely manufactured as per the defined industry standards under the stern surveillance of our adept workforce using high class raw material and progressive techniques. These impellers are installed in cooling fan highly appreciated for their dimensional accuracy, easy installation and durability by our renowned clients. Impellers are perfectly manufactured with the use of premium grade raw material and modern technologies under the strict vigilance of deft technocrats at sound production unit in accordance with defined industry standards. Apart from this, the provided impellers are widely acclaimed for their easy installation and fine finish. These impellers are used in centrifugal fan as a component.

# Types Of Impellers



Open Impeller



Semi-Open  
Impeller

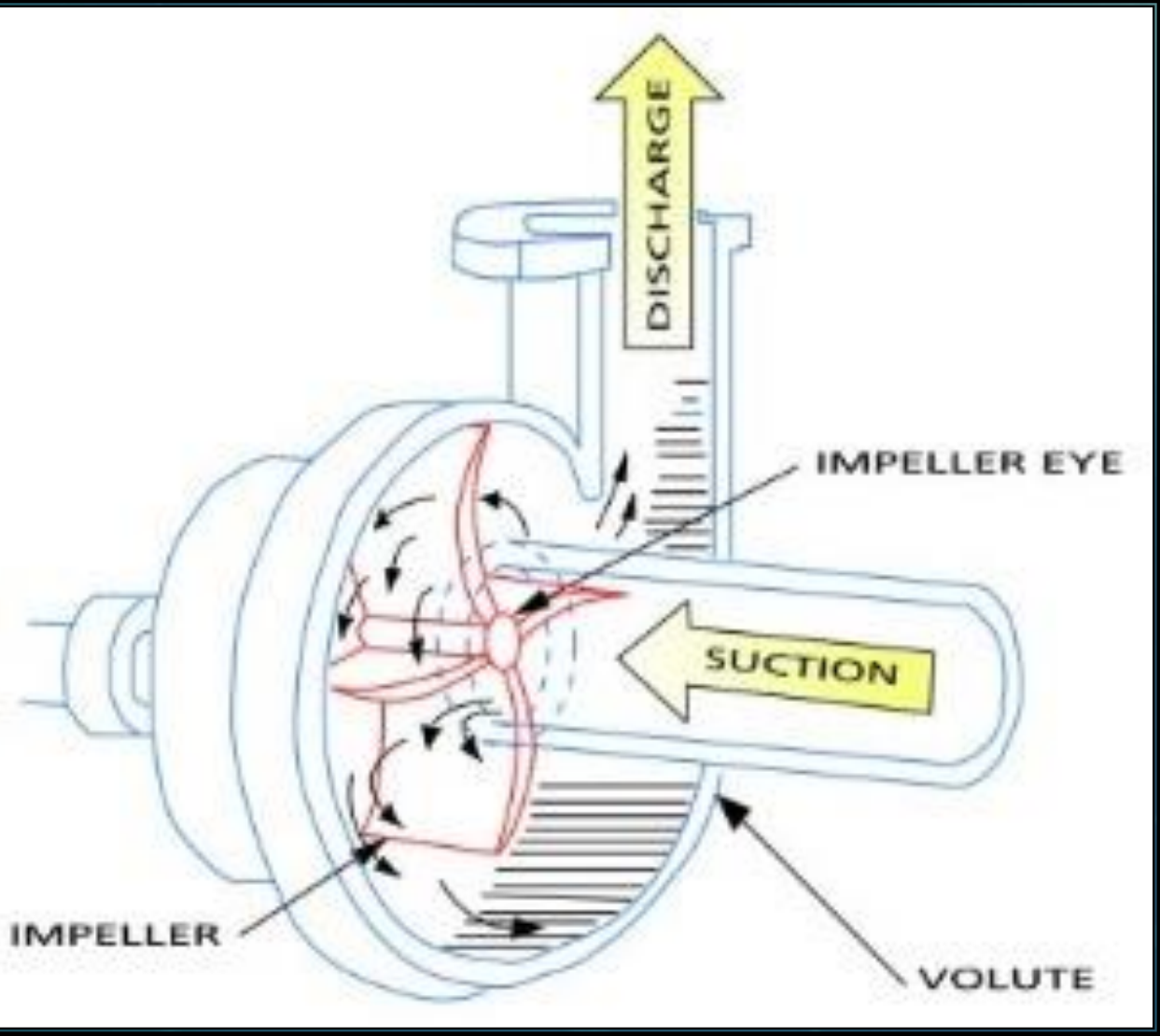


Closed Impeller

# Process

- Centrifugal pumps are used to induce flow or raise pressure of a liquid. Its working is simple. At the heart of the system lies impeller. It has a series of curved vanes fitted inside the shroud plates.
- The impeller is always immersed in the water. When the impeller is made to rotate, it makes the fluid surrounding it also rotate. This imparts centrifugal force to the water particles, and water moves radially out.
- Since the rotational mechanical energy is transferred to the fluid, at the discharge side of the impeller, both the pressure and kinetic energy of the water will rise.

- At the suction side, water is getting displaced, so a negative pressure will be induced at the eye. Such a low pressure helps to suck fresh water stream into the system again, and this process continues.
- From foregoing discussions it is clear that, the negative pressure at the eye of the impeller helps to maintain the flow in the system. If no water is present initially, the negative pressure developed by the rotating air, at the eye will be negligibly small to suck fresh stream of water. As a result the impeller will rotate without sucking and discharging any water content. So the pump should be initially filled with water before starting it. This process is known as priming.





# Industrial Uses

- ACI centrifugal fan wheels / impellers are used in numerous applications including the mechanical, woodworking, textile and industrial ventilation industries.
- They can be installed in spray paint booths, used to intake fumes and dust, in steel working industries, cement factories and tanneries.
- They can also be used on a wide array of equipment, mainly for industrial fans, aspirators, burners, conditioners, fan coils, water cleaners, ironing machines, fume extractor kits for wall-mounted boilers and industrial ovens.



# Applications

- Chemical
- Compressor Refrigeration
- Heat Exchangers
- Emergency Fume
- Smoke Extraction
- Clean Air (optional feature)
- Fume Hoods
- Cooling Towers



# Advantages

- Dimensionally accurate
- Anti-corrosive
- Easy installation
- Durable finish standards
- Sturdiness
- Non corrosive
- Corrosion-resistance
- High strength



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