

# IMPELLER

The impeller is of the reverse vane, end suction type, casted in one piece of cast steel or other specified material. Running clearances need to only be adjusted between the back of the impeller and the cover. This design allows for repeatable factory tolerances, all of which can be adjusted on the bench, not just in the field. All impellers are statically balanced prior to assembly. Front semi-open impellers can be supplied upon request. Running clearances for the front semi-open impeller need to be adjusted between the front of the impeller and the casing. All model meets the stringent performance requirements of ASME B73.1. Our industrial group also manufactures 3 Low-Flow models, 3 Self-priming models and 2 Vortex type models on DPUMPS SERIES to meet different process applications.

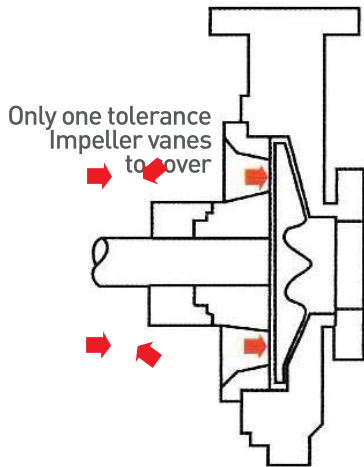


Reverse vane impeller with balance holes offers important performance enhancing maintenance reducing advantages.

Front vane, semi-open impeller is fully interchangeable with the reverse vane impeller. Excellent choice for stringy and certain applications requiring high shear against the casing.



Front vane, low flow semi-open impeller for operation at low flow with minimal thrust loads and vibration.

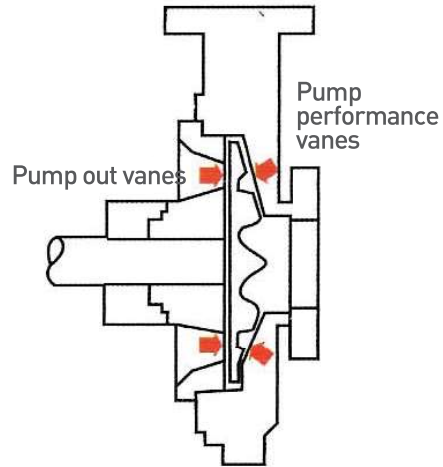


#### REVERSE VANE IMPELLER ADJUSTMENT

The reverse vane impeller has only one set of pumping vanes and one critical tolerance location –between the impeller and rear cover- to establish:

- Performance
- Efficiencies
- Seal chamber pressures (i.e., mechanical seal MTBPM)
- Thrust/axial loads (i.e., bearing life)

Since an impeller can only be set in one direction, the reverse vane impeller has inherent advantages.



#### FRONT VANE IMPELLER ADJUSTMENT

The front vane open style impeller has two sets of pumping vanes and two critical tolerance locations:

- The front vane of the impeller clearance to the casing establishes: performance, efficiencies.
- The impeller pump out vanes clearance to the rear cover establishes:
  - Seal chamber pressures and seal life.
  - Thrust loads and bearing life