

# **Vertical Turbine Pumps**

Sumo vertical turbine pumps are designed to deliver water from depths ranging from 20m to 150m. The rugged, heavy-duty construction enables the pumps to withstand heavy usage and stress. The non-reactive, non-corrosive and resistant-to-rust and abrasion features make them ideal for a number of purposes. Through precise dimensions and strict quality control, our bowl and impeller combinations achieve the highest possible efficiency. With multi staging, any desired pressure and head can be achieved with optimum performance.

#### **Applications**

- 1. Water supply
- 2. Irrigation
- 3. Dewatering
- 4. Recirculation
- 5. Fire Safety

## Parameters to consider when selecting a Vertical Turbine Pump

- 1. Capacity
- 2. Total head
- 3. Speed of operation (full load driver rpm)
- 4. Surface or underground discharge
- 5. Water analysis, if other than clear water
- 6. Diesel engine / gear drive details

## Key components designed into the Vertical Turbine Pumps

- 1. Pump drive available with vertical solid shaft, diesel engine / electric motor driven.
- 2. Lubrication water lubricated line shaft.
- 3. Discharge heads high quality C.I. cast, CNC machined.
- 4. Pump bowls high quality C.I. cast, CNC machined.
- 5. Impellers precision-designed, engineered and finished to provide the highest efficiency. Impellers are made of cast iron and accurately machined and balanced for long life and top performance.

#### **Benefits**

- 1. Superior performance and reduced rotor vibration.
- 2. Superior mechanical design and high natural frequencies.
- 3. Quick stocking and easy replacement of the bearing housing assembly in the field avoiding costly and time consuming tear-down of the entire pumping unit.
- 4. Axial adjustment of impeller by an easily accessible nut.
- 5. Fast and easy removal.
- 6. Minimum floor space required.
- 7. Faster start up.
- 8. Maintenance done in a clean, above grade environment.

Specifications	
Sizes	3", 3.5", 4.5"
Drive	Belt driven
Operating data	Available in various head and discharge ranges
Bearing	Anti-friction high quality bearings
Lubrication	Water lubricated
Sealing	Packed gland