

# HIGH VERTICIENT and easily maintained

SPP's Lowest Life-cycle Cost Series of single and multi-stage Vertical Turbine pumps have been designed for longevity and incorporate many standard features, which facilitate ease of maintenance.

A spacer coupling between the thrust bearing assembly and seal chamber allows a cartridge mechanical seal to be removed without dismantling the headpiece and removing the driver.

Easily removable keyed muff type couplings connect all shafts, facilitating disassembly of the whole pump unit with minimal risk of damaging expensive component parts.

High-grade standard materials of construction and a rugged stiff shaft mechanical design coupled to state of the art hydraulics, offer unrivalled longevity and the lowest cost of ownership.

# SPP's LLC Series pumps set the standard for low life cycle cost pumping equipment.



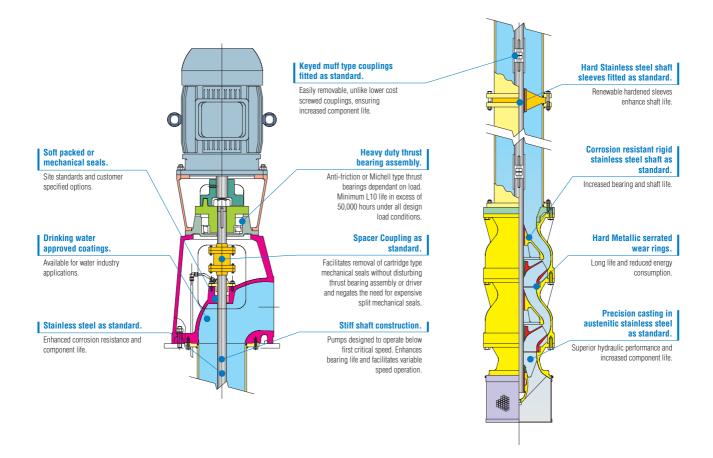
### **TYPICAL APPLICATIONS**

- Water Treatment & Supply
- River Water Extraction
- Borehole Deep Well Extraction
- Drainage & Irrigation
- Cooling Tower Circulation
- Process & Industrial utility duties
- · Petrochemical utility duties
- Condensate Extraction
- Sea Water lift
- Power Plant utility duties



LOWEST LIFE-CYCLE COST SERIES

Total Pumping Solutions



PERFORMANCE & CAPACITY 50 Hz up to 1500 rpm	
Flow rates:	up to 4000 m³/hr
Heads:	up to 200 m
Liquid temperature:	-10°C - 80°C
Ambient temperature range:	-10°C to 45°C
Maximum Solids content:	2,000 ppm (fines) standard build*

\*Consult SPP for higher solid contents

STANDARD MATERIALS OF CONSTRUCTION	
Bellmouth Inlet	Cast Iron
Bowls	Cast Iron
Impellers	Stainless Steel
Wear Rings	Cast Iron
Shaft	Stainless Steel
Shaft Sleeves	Hardened Stainless Steel
Column Shaft Bearings	Drinking water approved non-metallic bushes
Column Pipes	Carbon Steel
Headpieces	Cast Iron/Carbon Steel
Thrust Bearing Assembly	Anti-friction or Michell type thrust bearings
Strainer	Stainless Steel

\*Non-standard material options available, consult SPP for alloy irons, bronzes or stainless & duplex steels

### **CONFIGURATIONS**

- Above or below floor discharge options.
- Solid shaft electric motor drive utilising pump thrust bearing assembly.
- Hollow shaft electric motor drive utilising motor thrust bearing arrangement.
- Right Angle Gearbox drive utilising gearbox thrust bearing assembly for engine or turbine driven pumps.

## PERFORMANCE & CAPACITY 50 Hz up to 1500 rpm

### Single Stage Range Curve

