

# SPLIT CASE PUMPS

PUMPSENSE is a specialist manufacturer of centrifugal pumps. The standard split case range, HS/HST, includes over sixty frames and is one of the most comprehensive ranges of split case pumps in the industry.

These pumps have been designed with a sophisticated understanding of the needs of the various user segments. Pumps have extended best efficiency zones & low noise and vibration characteristics for energy efficient and environment friendly operation. Further, their ruggedness ensures long years of trouble-free operation.

## Range

A comprehensive range spanning over 60 models, designed around seven shaft groups, with nominal impeller diameters of 300mm, 360mm, 400mm, 440mm, 540mm & 660mm, meet the standard requirements of all segments. Discharge range extends to 800 l/s with Heads up to 230m at 1450 rpm. Large custom engineered units are also available on request.

## Applications

Building Services	Condenser and chilled water circulation, fire protection, water transfer.
Utilities	Raw water, clear water, waste water and auxiliary services.
Steel Mills	Service water, roll cooling, blast furnace cooling, cooling tower.
Pulp & paper	Fan pumps, white water, raw water and primary cleaner.
Irrigation	Lift and sprinkler irrigation.
General industry	Sugar mills - water supply and spray pond pumps, raw water and cooling water pumps for chemical, petrochemical and fertilizer industry; mine dewatering pumps.

## Superior Hydraulic Performance

**Stable Head-Capacity Characteristics:** Facilitates capacity regulation and smooth operation when two or more pumps are operating in parallel.

**Low NPSHR:** Ensures high suction lift capability and protects the pump from cavitation erosion without compromising efficiency or smooth operation at part flows.

**Non-overloading power characteristics:** Keeps the motor rating low.

## Superior Mechanical Features

**Easy access:** With the top half casing removed, the complete rotating assembly can be withdrawn by the simple removal of four bearing housing 'top clamp' bolts; no need to dismantle bearings.

**Straightforward Piping:** Pipe layout made easy with suction and discharge flanges on the same centreline for single stage pumps.

**Impellers:** Are designed for optimum efficiency. They are double suction for single stage pumps and are dynamically balanced.

**Casing Wear rings:** Fitted as standard, simple heavy rectangular cross-section with "tongue & groove" arrangement to prevent rotation. Impeller wear rings are optional on all models.

**High Strength shaft:** The shaft is generously sized to cover maximum loading and supported by two grease lubricated deep groove ball bearings. Shaft design ensures minimum deflection and improved life for bearings, wear rings and shaft seals. Shafts are protected by shaft sleeves in packed gland pumps.

**Stuffing Box:** Easily converted for use with soft-packing or mechanical seals. All pump casings are pre-drilled and tapped to easily facilitate either option.

**Double Volute Casings:** All high head pumps have double volute casings to minimize radial loading during part flow operation.

## Optional Arrangements

One of our major strengths is our ability to provide customized designs and product variants quickly and economically. Bottom suction, vertical dry pit and side suction/top discharge arrangements can all be provided against specific customer requirements.