PUMP OVERVIEW

The CUP-BB5HP range encompasses radially split, diffuser type multi-stage pumps specifically designed for the high pressure and high speed service needs of the market.

With two main variants of in-line impellers (CUP-BB5HPi) or back-to-back impeller arrangement (CUP-BB5HPb) the units are bespoke, engineered-to-order solutions, fully compliant with the latest edition of API 610 & API 682 requirements and customer specifications. These highly successful machines are used extensively throughout the oil and gas, exploration, production, transportation and refining sectors.

We pride ourselves on our collaborative approach with our customers and suppliers to ensure the optimum engineered solution is achieved.

The ClydeUnion Pumps CUP-BB5HP encompasses proven design history, evolving from our legacy Weir Pumps ‘OK’ and Union Pumps ‘HMBS’ machines. Both contribute to an enviable heritage of sound engineering, with hundreds of CUP-BB5HP pumps operating worldwide, both onshore and offshore.

TECHNICAL DATA

Capacity: up to 2,800 m³/hr / 12,330 USgpm
Delivery head: up to 4,100 m / 13,450 ft
Temperature: up to 180 °C / 350 °F
Speeds: up to 6,600 rpm
Flange drilling: ANSI or BS

TYPICAL APPLICATIONS

- Produced water injection
- Seawater injection
- Flowline displacement
- Main oil lines
FEATURES + BENEFITS

1. Comprehensive range coverage
   Successful and extensive, proven range

2. Heavy duty pump casing
   Designed for full maximum allowable working pressure (MAWP) and 2xAPI 610 nozzle loads. Foot or centre line mounted

3. Impellers
   Staggered to optimise vibration performance. Available in in-line or back to back arrangements. Precision cast for repeatable performance

4. Ease of maintenance
   ClydeUnion Pumps shear ring locking system ensures quick cartridge change out and minimal downtime during overhauls

5. Thrust + journal bearings
   Various options available to suit customer requirements

6. Bearing housings
   Lift off design to facilitate ease of access to mechanical seals and bearings. 360° mounting for optimum rotor support and minimum vibration

7. Advanced metallurgy
   Material options according to API 610. NACE and NORSOK certified when required

8. Advanced mechanical sealing (to API 682)
   Cartridge style (single or dual) mechanical seals, with no external seal setting

9. Pump healthcare monitoring
   Temperature and vibration monitoring of critical components. Wired to skid edge junction box or control panel

10. Hydraulic balancing device
    Balance drum and bush arrangement to balance hydraulically generated thrust loads

RANGE COVERAGE CHARTS

50Hz RANGE CHART

60Hz RANGE CHART

These charts cover the standard pump range. Other engineering designs exist for extreme applications.