

CUP-OH2

SINGLE STAGE, API, END SUCTION PUMP

PUMP OVERVIEW

The ClydeUnion Pumps CUP-OH2 pump is a heavy duty, single stage, radially split, overhung, end suction machine, designed and manufactured to the latest edition of API 610.

The CUP-OH2 pumps have stringent API noise and vibration limits which are met, due to a rigid pump body with 360° bearing support and heavy centreline mounting. Reliable operation at elevated temperatures is ensured due to a number of cooling methodologies complementing inherently cool running bearing modules. A back pull-out design allows the complete rotating assembly to be removed without disturbing the suction or discharge pipework. ClydeUnion Pumps legacy brands including HHS, DB10, SMK and H-OP provide the industry with a very comprehensive hydraulic coverage.

- Rigid shaft design with minimised deflection at the seal faces to below API 610 criteria, provides a longer mechanical seal life
- High rigidity baseplate designs are among the stiffest in the industry
- Bearing housing cooling fins provide optimum heat transfer

TYPICAL APPLICATIONS

- Petroleum / refinery
- Gas processing
- Offshore installation
- Desalination
- Petrochemical
- Nuclear / conventional power
- Jet fuelling systems



TECHNICAL DATA

Capacity: up to 1,700 m³/hr / 7,500 USgpm

Delivery head: up to 350 m / 1,148 ft

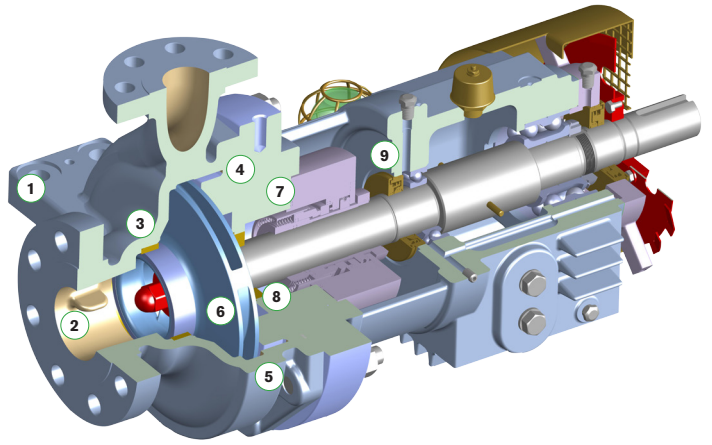
Temperature: up to 426 °C / 800 °F

Speeds: up to 4,000 rpm

Flange drilling: ANSI or BS

FEATURES & BENEFITS

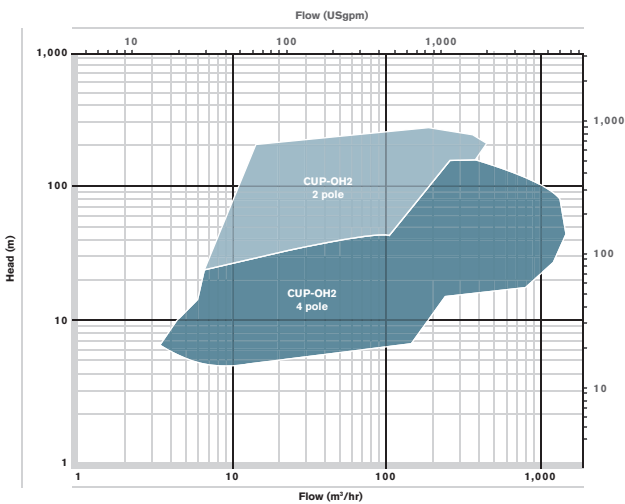
- 1 **Casing**
Centreline mounted casings, API 610 nozzle loads
- 2 **Suction nozzle**
Flow straightening vane reduces inlet swirl to ensure uniform flow into the impeller eye. Top suction nozzles available on selected sizes
- 3 **Wear rings**
Renewable case and impeller wear rings. Rings are secured by tack welds as standard
- 4 **Casing to cover**
Metal to metal fit with controlled compression gasket. Series 300 stainless steel flexible graphite gasket used as standard
- 5 **Casing drain**
Casing can be fully drained, socket weld flange drains as standard
- 6 **Impeller**
Designed to provide low suction specific speeds. Streamlined impeller locknut used for improved suction performance. Balance holes are optimised to ensure long bearing and seal life
- 7 **Seal chamber**
API 610 and API 682 compliant. Space for dual seals, easy access for maintenance



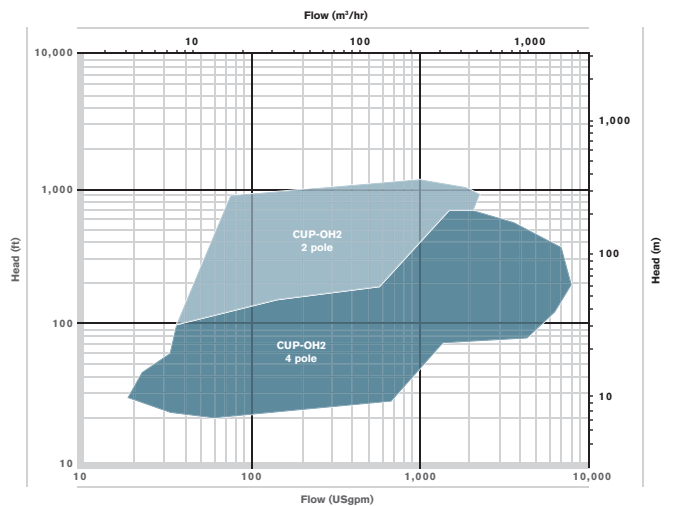
- 8 **Throat bushing**
Close clearance design helps provide optimum seal chamber environment. Pressured in from high pressure side
- 9 **Radial bearings**
Single row, deep groove bearings. Machined brass cages as standard

RANGE COVERAGE CHARTS

50HZ RANGE CHART



60HZ RANGE CHART



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

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