

TECHNICAL DATA SHEET

CUP-BB3

HEAVY DUTY, AXIALLY SPLIT, MULTI-STAGE PUMPS

PUMP OVERVIEW

The ClydeUnion Pumps CUP-BB3 pump is a heavy duty axially split, multi-stage, double volute horizontal pump with opposed impellers and either single or double suction first stage impeller options. They comply with the latest edition of API 610 and API 682 standards and are specifically designed for heavy duty, medium and high pressure applications.

The ClydeUnion Pumps CUP-BB3 flexibility of design allows the pump to be equally acceptable over a wide range of duties varying from standard water, oil and chemical applications to advanced water flood and boiler feed applications. ClydeUnion Pumps legacy brands including DB34, DVMX, H-FH and class "M" provide the industry with a comprehensive hydraulic coverage.



TYPICAL APPLICATIONS

- Crude oil + product pipeline
- Seawater injection
- Refining charge
- Desalination high pressure reverse osmosis (HPRO)
- Boiler feed
- Produced water injection
- Metals high pressure descale

TECHNICAL DATA

Capacity:	up to 12,000 USgpm / 3,000 m³/hr
Delivery head:	up to 11,000 ft / 3,350 m
Temperature:	up to 450 °F / 230 °C
Speeds:	up to 6,500 rpm
Flange drilling:	ANSI or BS



FEATURES + BENEFITS

1 Bearing assembly

360° mounting gives class leading vibration levels. High capacity fan as standard. Pure or purge mist options

2 Seal chamber

API 682 compliant. Space for dual seals, easy access for maintenance and locking collar arrangement as standard

3 Integral wear rings

Reduced risk of failure due to wear part displacement. Retro-fit with conventional rings when necessary, conventional options available

4 Double volute design

Minimizes radial thrust loads for optimized bearing and seal life

5 Case wear rings

Renewable case rings

6 Impellers

Back-to-back design to minimize axial thrust. Individually secured, precision cast

7 Axially split casing

Hydraulic re-rates available within existing casing. Minimizes rotor change-out time. Complete balancing and inspection without rotor disassembly. Near centerline mount

(8) Split center bushing

Facilitates inspection, removal and replacement. Maximizes rotor support and dampening

- (9) Material options All API 610 material options. Other material options available. NACE compatible. Non-metallic wear parts
- (10) API shaft taper For easy coupling removal

RANGE COVERAGE CHARTS

60HZ RANGE CHART



50HZ RANGE CHART



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



