

CPC Pumps

Model HM/HMD

API 610/ISO 13709, TYPE BB3 Axially Split
Multistage Pump

www.cpcpumps.com

HM/HMD (BB3) Pump

Fully compliant with API 610 requirements

Operating Parameters

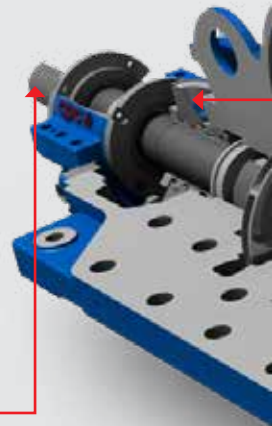
- Flow rate in excess of 4,400 USGPM (1,000 m³/h).
- 7,600 ft and 2,300 m respectively (for heads).
- Temperatures up to 400 °F (200 °C).
- Standard Design Working Pressure of 2,250 PSIG (15,000 kpag).

Standard Features

- Wide hydraulic coverage.
- Application tailored hydraulic selections.
- 600/900/1500# flange ratings.
- Available in all API 610 Table H.1 materials.
- Hydraulically opposed impeller arrangement for thrust balancing.
- Single-suction first stage (HM) or double-suction first stage (HMD).
- Axially split, precision milled parting flanges.
- Split case wear rings and center bushings for ease of maintenance.
- Integral balance line.
- Rigid design shaft for minimal deflection to meet and exceed API 610 requirements.
- Inpro/Seal bearing housing closures.
- Heavy Duty baseplate, drip rim or drip pan designs.

Optional Features

- High pressure special casing design.
- Positive retention of impellers in both directions.
- Fan/Heat-sink bearing housing cooling arrangement for operation at elevated temperatures, to eliminate the need for cooling water.
- Magnetic bearing housing isolators.
- All bearing combination arrangements are available where suitable: Ball/Ball, Sleeve/Ball, Tilt Pad/Sleeve.



Cylindrical or Tapered Shaft Ends

- To meet customer preference.

Split Center Bushing

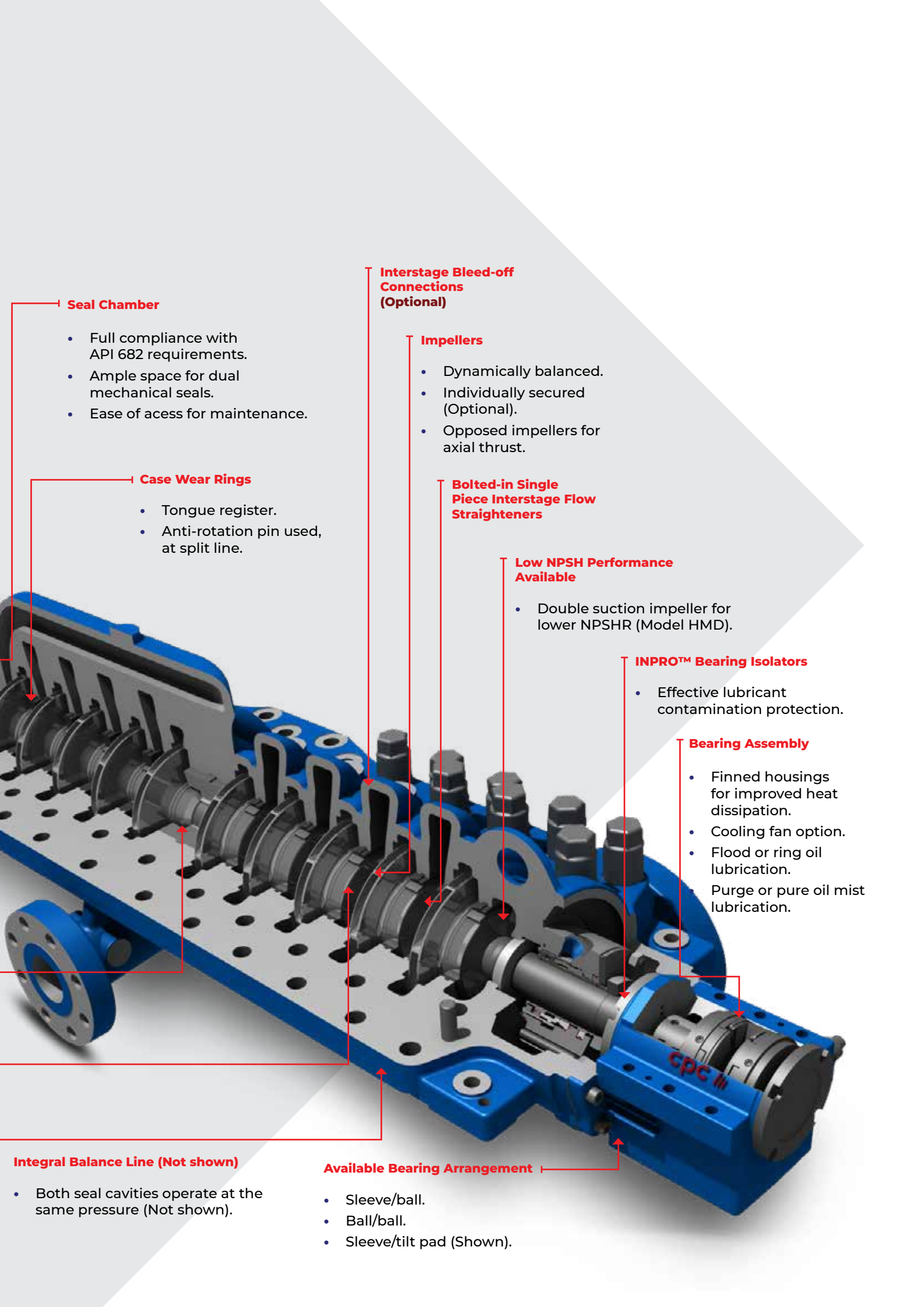
- For ease of inspection, removal and re-installation.

Replaceable Impeller Wear Rings

- Optional integral impeller ring.

Axially Split Casing

- Near centerline mount.
- Full range of design pressures.



Seal Chamber

- Full compliance with API 682 requirements.
- Ample space for dual mechanical seals.
- Ease of access for maintenance.

Case Wear Rings

- Tongue register.
- Anti-rotation pin used, at split line.

Interstage Bleed-off Connections (Optional)

Impellers

- Dynamically balanced.
- Individually secured (Optional).
- Opposed impellers for axial thrust.

Bolted-in Single Piece Interstage Flow Straighteners

Low NPSH Performance Available

- Double suction impeller for lower NPSHR (Model HMD).

INPRO™ Bearing Isolators

- Effective lubricant contamination protection.

Bearing Assembly

- Finned housings for improved heat dissipation.
- Cooling fan option.
- Flood or ring oil lubrication.
Purge or pure oil mist lubrication.

Integral Balance Line (Not shown)

- Both seal cavities operate at the same pressure (Not shown).

Available Bearing Arrangement

- Sleeve/ball.
- Ball/ball.
- Sleeve/tilt pad (Shown).

Precision Cast Impellers

FEA Studies

- Thermal analysis
- Stress analysis
- Effects of nozzle loading
- Natural frequency



About CPC Pumps International Inc.

Building on more than 60+ years of industry experience and unique design and production capabilities, CPC Pumps International Inc. provides pump solutions for the hydrocarbon industry.

With our broad range of solutions and best-in-class hydraulic performance coverage, CPC Pumps provides our customers with tailor-made pump solutions for process-critical applications. Our focus on serving the market for fully compliant API 610 centrifugal pumps has made us a leading innovator in the hydrocarbon processing industry.





Part of the Atlas Copco Gas and Process Division

CPC Pumps International Inc. is part of Atlas Copco Gas and Process. It is operated as a standalone company within Atlas Copco Gas and Process, and serves as competence center of excellence for centrifugal pumps in Atlas Copco.

**Driving the world of
hydrocarbon fluids**
www.cpcpumps.com

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