

## CURVE<sup>®</sup> C Range C75 - C800

### + Ultra Heavy Duty Applications

“During an extensive trial conducted on our mill circuit pumps the Curve<sup>®</sup> C Range has come out on top. It’s proven to be safer to maintain, longer lasting, more efficient & more reliable than anything we have found on the market.”

- Curve<sup>®</sup> Client



### ↓ Drive Down Operating Costs

- The combination of design & materials ensures that Curve<sup>®</sup> pumps have the lowest operating costs in the world.

### ↑ Increase Availability

- Lower speeds achieved to do the same duty result in longer wear life & intervals between routine maintenance.
- Hydraulic design ensures even wear distribution, eliminating “holing” effects.

### ↓ Reduce Power Consumption

- Optimal hydraulic design & machined tolerances achieve higher efficiencies.
- The Curve<sup>®</sup> adjustable suction liner ensures that these efficiencies are maintained throughout the complete life cycle of the pump.

### ↓ Reduce Water Consumption

- A completely redesigned sealing arrangement allows the client to use a dry seal instead of costly gland service water.
- Significantly reduced sealing maintenance due to high-chrome shaft sleeve and lantern ring.

### ↑ Improve Safety

- Careful consideration of the on-site use and maintenance of Curve<sup>®</sup> pumps led us to develop dedicated lifting equipment that provides ease of maintenance & minimal downtime.

#### REPLACE YOUR OUTDATED SLURRY PUMP TECHNOLOGY

## Reduce Impact & Improve Productivity

Slurry pumps account for a large portion of an engineer’s budget. At Pump & Abrasion Technologies we’re constantly striving to find ways to help customers to reduce costs and optimise availability.

Designed from a clean sheet, free from prior constraints and employing the latest know-how, the Curve<sup>®</sup> range of pumps were developed to answer all the current slurry pumping challenges experienced by our clients. The innovative combination of cutting-edge designs and proprietary material options, means the Curve<sup>®</sup> range not only exceeds expectations, but has revolutionized the industry.

Curve<sup>®</sup> technology was designed in such a manner that it can be retrofitted to legacy pumping systems with minimal changes. Existing equipment with outdated technologies can thus be upgraded without the need to change the base, mechanical-end, or piping.

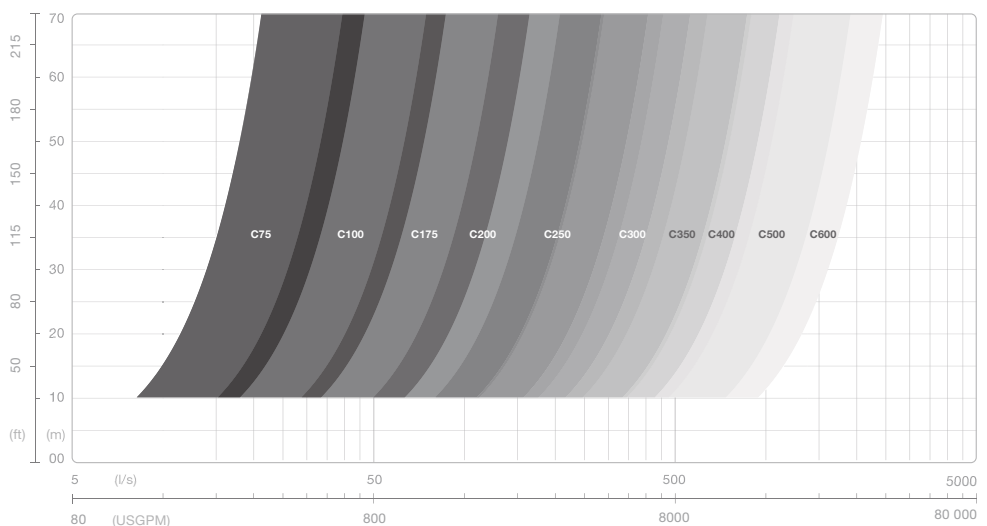
The Curve<sup>®</sup> range has proven to reduce Total Ownership Cost (TOC), electricity- and water consumption, and improve safety conditions, in some of the harshest environments on the planet.

### Case Study | CURVE<sup>®</sup> Exceeding Expectations

Use your phone’s camera & scan the QR code to watch our field report video.



### Flow Coverage Map



# Exploded View & Features



Designed & developed with safety in mind.

## 01 Balanced suction cover

- Ductile iron suction cover adds strength and withstands pipe loads.
- Balanced lifting point for easy maintenance.

## 02 Adjustable suction liner assembly

- A fully adjustable suction liner assembly delivers & maintains class-leading inlet sealing.
- Simple and robust design without complicated, costly mechanisms.

## 03 Improved volute & cut-water profile

- Improved volute cut-water profile reduces wear.
- Volute design follows natural flow lines, with optimum hydraulic balance, promoting even wear.
- Lightweight casing fasteners for quick-and-easy maintenance.
- Shoulder for loose flange enables superior pipe connection.

## 04 Best in-class impeller

- Best-in-class integral front sealing arrangement virtually eliminates recirculation.
- First-ever fully profiled primary vanes in all material options leading to reduced TOC.
- Optimized wear material to structural-material ratios.
- Constant vane thickness allows for linear wear and enduring efficiency.

## 05 Matching impeller & inlet flow lines

- Matching impeller and inlet flow lines, reduce inlet losses and wear, with increased efficiency.

## 06 Large-diameter heavy expeller

\*only on dry gland assembly

- Large-diameter heavy expellers offer best-in-class dry seal, eliminate costly downtime, reduce TOC and protect mechanical ends.

## 07 Class-leading dry gland cover

\*only on dry gland assembly

- Substantial dry gland cover augments superior expeller.

## 08 Adapter ring

- Adapter ring allows for interchangeable mechanical ends with existing installed base.

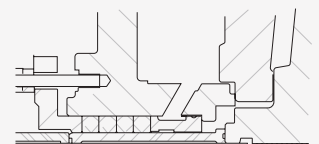
## 09 High-chrome, lantern ring & shaft sleeve

- Proprietary high-chrome, wide lantern ring & shaft sleeve, with unmatched wet & dry gland shaft sealing – meaning no stoppages due to sealing problems or premature failures.

## Wear material options

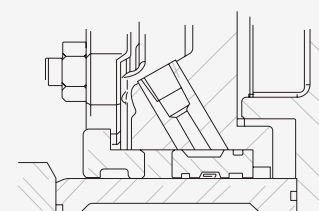
- M3 to M10 high-chrome.

## Shaft sealing wet gland



- Large feed cavity eliminates possibility of blockage.
- Large inlet port (6-8 depending on pump size) distributes flow evenly around entire lantern ring.
- High-chrome iron > 600 BHN lantern ring.
- Accurately machined lantern ring and shaft seal gap allows accurate expulsion velocity through entire operational cycle.
- High-chrome iron > 600 BHN shaft sleeve.

## Shaft sealing dry gland



- High-chrome iron 600 BHN lantern ring.
- Close tolerance O-Ring seals isolate media ingress.
- High-chrome iron 600 BHN shaft sleeve for maximum resistance to operation wear.

## Speak To A Pump System Specialist

You don't need another supplier, you need an invested partner. Our business is built on the foundation of decades of earning our valued clients' and partners' trust, only made possible by consistently delivering unparalleled service excellence.

For more information visit [pabtglob.com](http://pabtglob.com)

