

# PROGRESSING CAVITY PUMPS

LOWER YOUR  
LIFTING COSTS

## ISO 9001:2015 REGISTERED - QUALITY MANUFACTURED

You don't have the time, operating expense, or capital to take risks on your wells. You have people to manage, land owners to appease, production targets to make, and costs to reduce. You need reliable downhole tools that just work – especially your Progressing Cavity Pump (PCP).

Lifting Solutions manufactures a reputable line high-quality, low-cost progressing cavity pumps (PCP) designed, engineered, serviced, and manufactured under strict ISO 9001:2015 control in Canada by experienced professionals. We have assembled the most reputable and pioneering minds in PC pumps and let them innovate. We kept the good and enhanced the rest: no more legacy, no more outdated manufacturing, and no more unnecessary costs. To mitigate the risk typically associated with working over your critical producing well, we have completed extensive material testing in our modern materials laboratory and have proven our elastomer and cavity pressure ratings on full-scale pump durability benches.

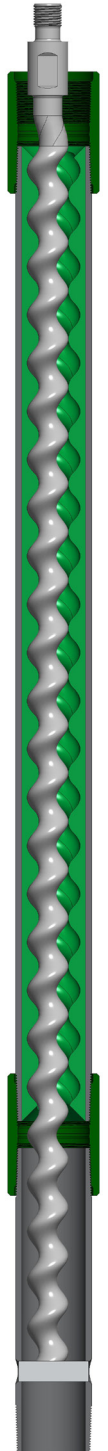
With fit-for-purpose geometries, optimized tubing sizes, and balanced compression fit, your Lifting Solutions PCP will exceed industry quality standards and lower lifting costs in your well.

## LIFTING SOLUTIONS PCP'S OUTPERFORM

- Legacy-free, optimized product line developed from scratch that is easy to configure, operate, and service
- Direct threaded stators to reduce costs and to avoid welds that are potential failure locations
- Fit-for-purpose geometries accommodate casing and tubing sizes reducing the requirement for special accessories
- Manufactured using new, modern technology and efficient practices in a dedicated manufacturing facility for a low-cost, high-quality product
- Quality ensured using rigorous process controls and targeted inspections at specific stage gates during the manufacturing process

## PRODUCT LINE FEATURES AND BENEFITS

- Over forty (40) conventional pump models in seven (7) focused series cover heavy crude oil, medium and light oil, in both slimhole and large OD configurations. Specialized elastomer formulations developed by in-house materials engineers with collaboration on bonding system development. Capacities ranging from 2 to 280 m<sup>3</sup>/day/100rpm (12 to 1760 bbl/day/100rpm) in oilfield compatible tubulars
- Innovative specialty products including iPCP (Insertable PCP), PivotAL™ and TorsionAL™ pump configurations
- Rotor and stator dimensional control and consistency - machined and monitored using state of the art equipment
- Pump fits, rotor sizing and pump testing to maximize efficiency, minimize friction and provide enhanced longevity
- Full scale product validation testing with advanced inspection and failure analysis capabilities feeding into continuous product improvement and design review/application recommendation practices.





## CONVENTIONAL PRODUCT LINE OVERVIEW

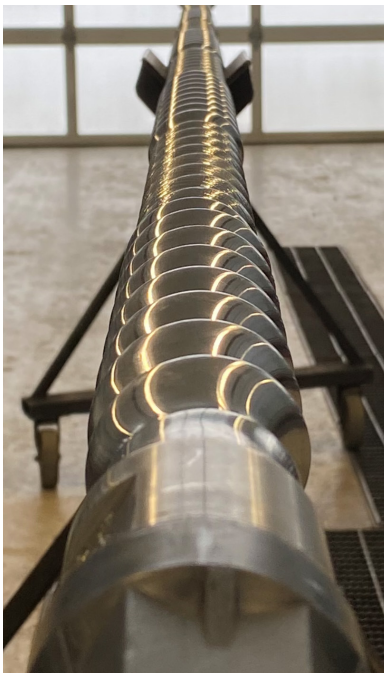
| Series        | Model Range<br>m3/day/100rpm | Model Range<br>bbls/day/100rpm | Standard Stator Connection <sup>1</sup> |              | Rotor Connection<br>Size in (mm) |
|---------------|------------------------------|--------------------------------|---|--------------|----------------------------------|
|               |                              |                                | Size in (mm)                            | OD in (mm)   |                                  |
| 2-3/8" Series | 2 to 5                       | 13 B to 44 B                   | 2-3/8 (60.3) NUE Pin                    | 2.88 (73.0)  | 3/4 (19.1) API Pin               |
| 3-1/8" Series | 4 to 7                       | 25 B to 44 B                   | 2-7/8 (73.0) EUE Pin                    | 3.46 (87.9)  | 7/8 (22.2) API Pin               |
| 3-1/2" Series | 10 to 15                     | 63 B to 440 B                  | 2-7/8 (73.0) EUE Box                    | 3.50 (88.9)  | 7/8 (22.2) API Pin               |
| 3-3/4" Series | 8 to 120                     | 50 B to 755 B                  | 3-1/2 (88.9) EUE Pin                    | 4.18 (106.2) | 1 (25.4) API Pin                 |
| 4-1/8" Series | 23 to 190                    | 145 B to 195 B                 | 3-1/2 (88.9) EUE Box                    | 4.13 (104.8) | 1 (25.4) API Pin <sup>1</sup>    |
| 4-3/4" Series | 35 to 280                    | 220 B to 1761 B                | 4-1/2 (114.3) EUE Pin                   | 5.56 (141.2) | 1-1/8 (28.6) API Pin             |
| 5" Series     | 64 to 215                    | 403 B to 1352 B                | 5 (127.0) STC Pin                       | 5.56 (141.2) | 1-1/8 (28.6) API Pin             |

## SPECIALTY PRODUCT LINE DETAILS

### The PivotAL™ PCP

has alternating sections of active (interference) and inactive (clearance) sections that give your pumping system a second life with a simple rotor lift. Why not extend run life between costly replacements.

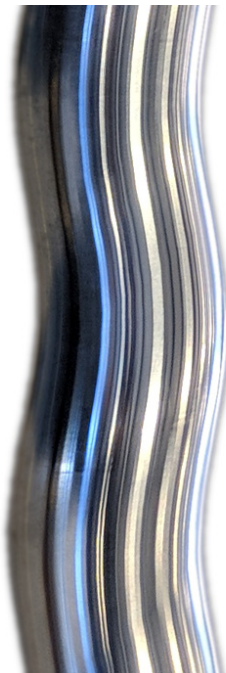
*Ideal Application? Proven performance in low inflow, gassy, sandy and abrasive applications with tough economics.*



### The TorsionAL™ PCP

has a low eccentricity, wide seal lines with a torsionally stiff rotor that powers through problem situations to keep oil moving. Together lets keep unnecessary services off the well.

*Ideal Application? Wells that require frequent coiling, flushing and frequent rod, tubing and shear failures.*



### The Insertable iPCP

helps reduce servicing costs and associated downtime by eliminating the requirement to pull tubing on pump related workovers. This innovative product reduces lifecycle costs and increases uptime.

*Ideal Application? Wells with expensive workover costs related to tubing pulls in situations where the tubing is not the problem.*

