

## RC1000 REDA Continuum extended-life ESP pump

Improve lift, efficiency, and reliability in all oil wells

**Target production rate:**  
200 to 1,350 bbl/d at 60 Hz  
[32 to 216 m<sup>3</sup>/d at 50 Hz]

**Casing diameter:**  
5½ in or larger

### Where it is used

- Wells with casings 5½ in or larger
- Gassy production environments, including slug flow
- Abrasive production environments
- Reservoirs with uncertain productivity
- Wells with frequent stops and starts
- Wells with steep production decline
- Unconventional and tight reservoirs
- Conventional oil wells

### How it improves wells

- Improves ESP system reliability
- Increases uptime and extends system run life
- Improves cash flow through accelerated production and continuous operation
- Reduces operating cost through superior hydraulic efficiency
- Enhances performance in gassy and abrasive applications
- Lowers total cost of ownership

### How it works

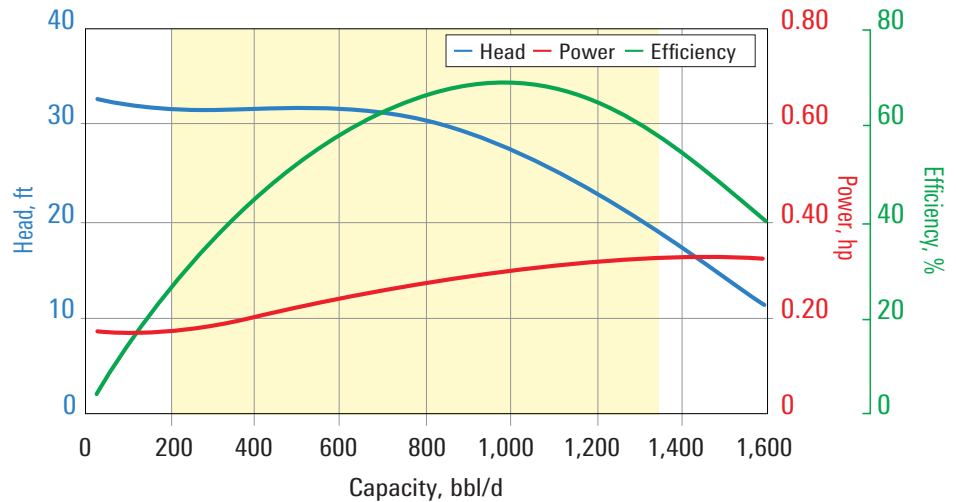
REDA Continuum\* extended-life ESP pumps significantly improve lift, efficiency, lifetime, and power consumption in unconventional and conventional oil wells with very low flow rates, transient and slug flow, solids and abrasives, frequent stops and starts, and production uncertainty.

### What it replaces

Conventional ESP pumps and early conversion to rod lift.

### What else I should know

The latest generation of Continuum pumps has been fully redesigned, the culmination of four



RC1000 pump curve for 60 Hz with  $sg = 1$ .

| RC1000 Pump Specifications   |  |
|--|--|
| <b>Best efficiency point (BEP)</b>                                       |  |
| Flow rate, bbl/d at 60 Hz [m <sup>3</sup> /d at 50 Hz]                   | 980 [133]  |
| Head per stage, ft at 60 Hz [m at 50 Hz]                                 | 27.73 [5.86]   |
| Required power, hp [W]   | 0.29 [130]   |
| Efficiency, %  | 68.41  |
| <b>General</b>   |  |
| OD, in [mm]  | 4.00 [101.6]   |
| Stage geometry   | Mixed flow   |
| Recommended operating range, bbl/d at 60 Hz [m <sup>3</sup> /d at 50 Hz] | 200 to 1,350 [32 to 216]                                     |
| Burst pressure, psi [kPa]  | 6,000 [41,368]   |
| Stage metallurgy   | Ni-Resist <sup>®</sup> , 5530 alloy                          |
| Housing metallurgy   | Carbon steel, Redalloy <sup>®</sup> premium alloy            |
| Shaft diameter, in [mm]  | 0.68 [17.27]   |
| Shaft material; rating at 60 Hz, hp                                      | INCONEL <sup>®</sup> 718; 240                                |
| Shaft radial support options   | ES-TT, <sup>†</sup> ARZ-TT, <sup>†</sup> FBH-TT <sup>§</sup> |
| Radial bearing material  | Tungsten carbide   |
| Pump construction  | Enhanced compression design, factory-shimmed                 |

<sup>†</sup> Enhanced stability option with tungsten carbide bushing.  
<sup>‡</sup> ARZ abrasion-resistant zirconia bearing, tungsten carbide bushing, and sleeve.  
<sup>§</sup> Full bearing housing and tungsten carbide bushing.

years of sustained improvement efforts involving analysis of thousands of pumps. For example, the newest pumps feature advanced tungsten carbide radial bearing design that prevents sand jams and bearing spinning, which reduces vibrations and significantly improves sand and gas handling.

Continuum pumps perform across a wider operating range as compared with conventional ESP pumps. The result is extended lifetime as production declines, which reduces opex and capex for replacement and alternative artificial lift solutions.