

REDA Continuum extended-life ESP pump

Improve lift, efficiency, and reliability in unconventional and conventional oil wells



Target production rate:
200 to 7,000 bbl/d



Casing diameter:
5½ in or larger

Where it is used

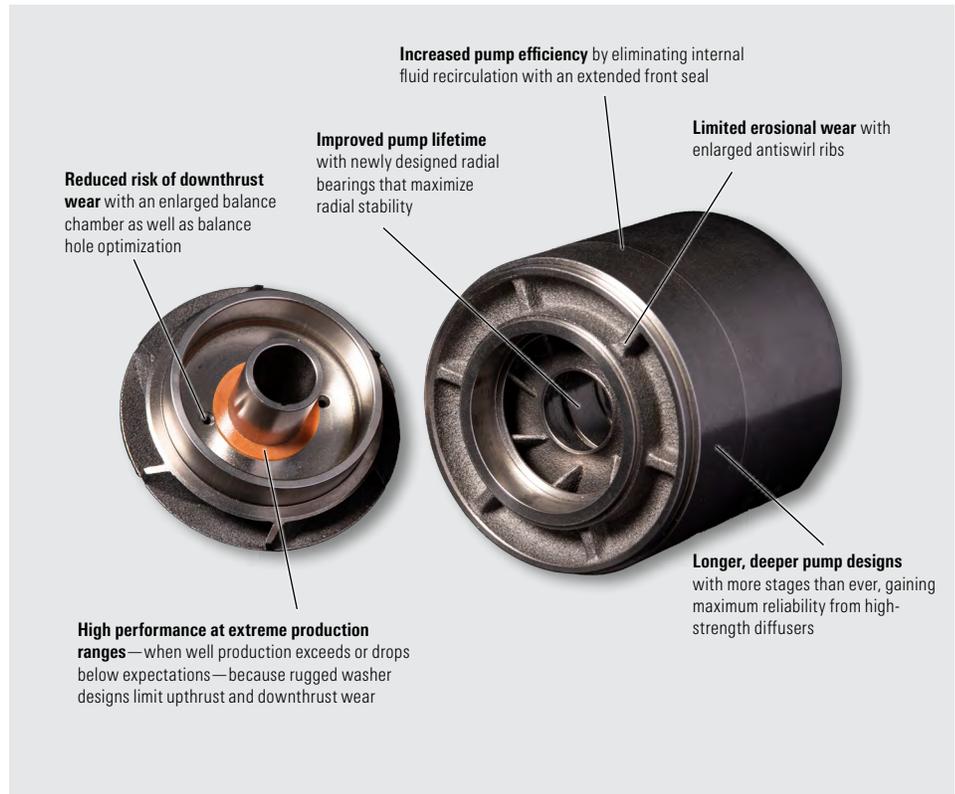
- Wells with casings 5½ in or larger
- Gassy production environments, including slug flow
- Abrasive production environments
- Reservoirs with uncertain productivity
- Wells with frequent stops and starts
- Wells with steep production decline
- Unconventional and tight reservoirs
- Conventional oil wells

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

The REDA Continuum* extended-life ESP pump improves lift, efficiency, lifetime, and power consumption in unconventional and conventional oil wells with low and slug flow, solids, frequent stops and starts, and production uncertainty.



Continuum pumps increase ESP reliability and lifetime with a design optimized for challenging well conditions.

The Continuum pump performs across a wider operating range as compared with conventional ESP pumps, significantly improving performance at low flow rates, in transient and slug flow, and in abrasive environments.

The result is extended lifetime as production declines, which reduces opex and capex for replacement and alternative artificial lift solutions.

What it replaces

Conventional ESP pumps and early conversion to rod lift.

What else I should know

The latest generation of Continuum pumps are fully redesigned, the culmination of four years of sustained improvement efforts involving analysis of thousands of pumps. In addition to other major improvements, the newest pumps feature an advanced tungsten carbide radial bearing design that prevents sand jams and bearing spinning, which reduces vibrations and significantly improves sand and gas handling.

REDA Continuum

Continuum Pump Specifications

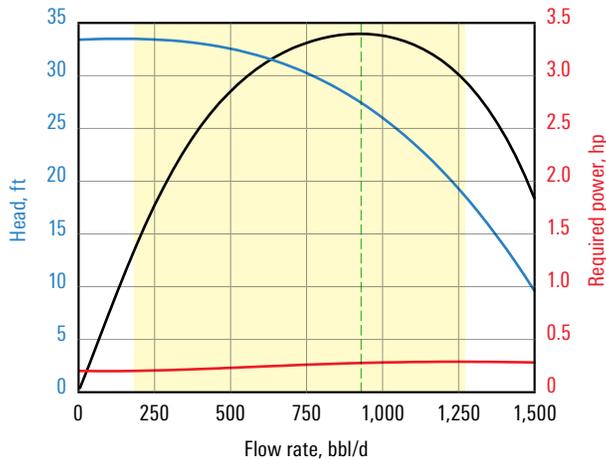
Pump model	1000	2500	4000
OD, in [mm]	4.00 [101.6]	4.00 [101.6]	4.00 [101.6]
Stage geometry	Mixed flow	Mixed flow	Mixed flow
Recommended operating range, bbl/d at 60 Hz (m ³ /d at 50 Hz)	200–1,350 [31.8–215]	1,000–3,200 [159–509]	3,500–7,000 [556–1,113]
Efficiency at best efficiency point (BEP), %	68.41	68.06	75.17
Head per stage at BEP, ft at 60 Hz (m at 50 Hz)	26.66 [5.86]	23.92 [5.06]	32.82 [6.95]
Burst pressure, psi [kPa]	6,000 [41,368]	6,000 [41,368]	6,000 [41,368]
Stage metallurgy	Ni-Resist [®] , 5530 alloy	Ni-Resist, 5530 alloy	Ni-Resist, 5530 alloy
Housing metallurgy	Carbon steel, Redalloy* high-nickel alloy	Carbon steel, Redalloy alloy	Carbon steel, Redalloy alloy
Shaft diameter, in [mm]	0.68 [17.27]	0.68 [17.27]	0.87 [22.23]
Shaft material and rating at 60 Hz, hp	240 (INCONEL [®] 718)	240 (INCONEL 718)	492 (INCONEL 718)
Shaft radial support options	ES-TT, ¹ ARZ-TT, ² FBH-TT, ³ FBH-TT-KS ^{1†}	ARZ-TT, FBH-TT, FBH-TT-KS	ARZ-TT, FBH-TT, FBH-TT-KS
Radial bearing material	Tungsten carbide	Tungsten carbide	Tungsten carbide
Pump construction	Enhanced compression design, factory-shimmed	Enhanced compression design, factory-shimmed	Enhanced compression design, factory-shimmed

¹ Enhanced stability option with tungsten carbide bushing.

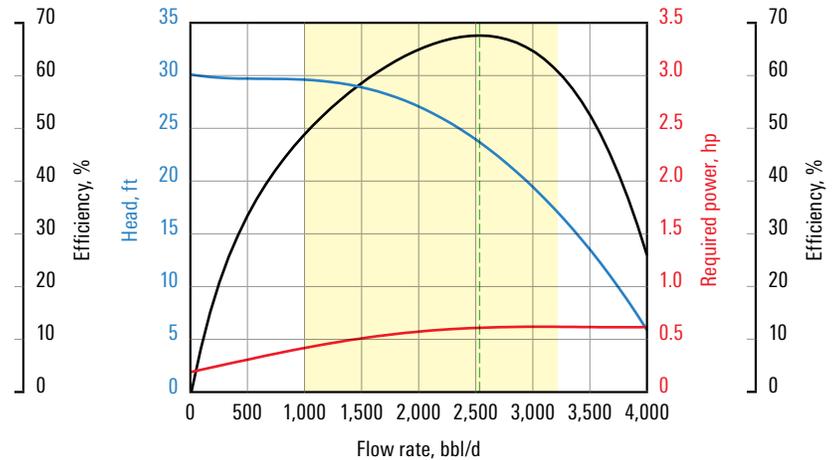
² ARZ abrasion-resistant zirconia bearing, tungsten carbide bushing, and sleeve.

³ Full bearing housing and tungsten carbide bushing.

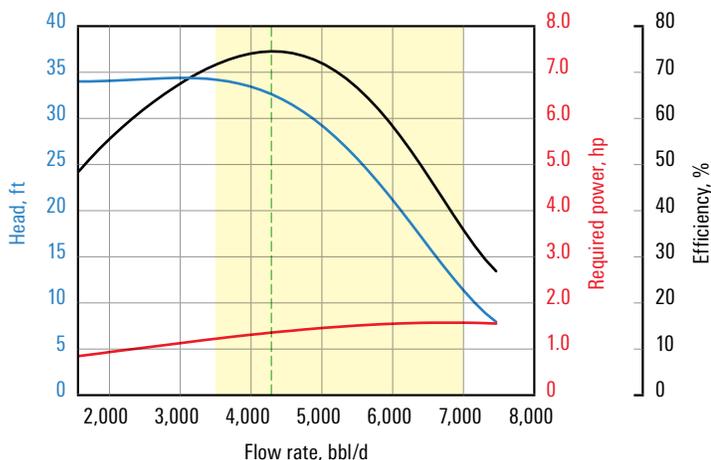
[†] Full bearing housing, tungsten carbide bushing, and keyless sleeve.



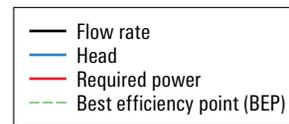
Model 1000 Continuum pump curves.†



Model 2500 Continuum pump curves.†



Model 4000 Continuum pump curves.†



[†] Pump curves are for 60 Hz with sg=1.

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