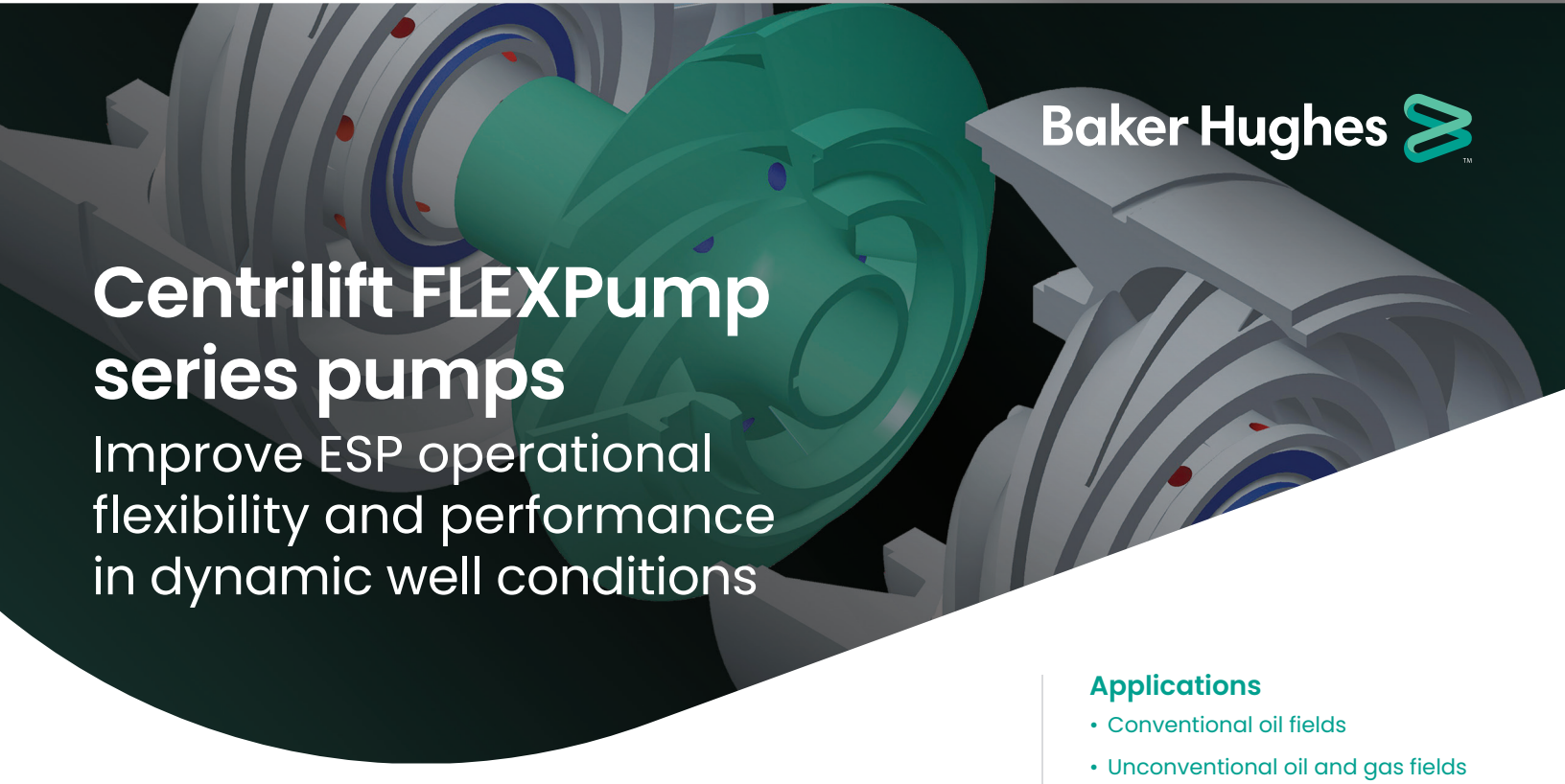


Centrilift FLEXPump series pumps

Improve ESP operational flexibility and performance in dynamic well conditions

The **CENtrilift™ FLEXPump™ series pumps**, from Baker Hughes, incorporate innovative hydraulic design concepts to expand the application range of electrical submersible pumping (ESP) systems. These efficient, reliable pumps have the industry's widest operating range, providing operators with the flexibility required in dynamic well conditions to minimize ESP system changeouts and nonproductive time (NPT), while reducing operating expenses. The high-performance FLEXPump series pumps are designed to maximize production and ultimate reserve recovery from conventional oil fields, low-flow rate mature oil fields, and unconventional resource plays in experiencing rapid declines in production index.

Expand the operational flexibility of ESP systems

The design of the FLEXPump series reduces the total hydraulic thrust in both upthrust and downthrust conditions, allowing for a wider operating range.

The extended operating ranges of these pumps mean the ESP system is adaptable to changing well conditions as production rates change. These pumps provide operational flexibility over radial compression stages, and deliver extensive flow ranges from a minimal number of pump models in the FLEXPump series. Flow rates range from 50 to 10,500 B/D (7.95 to 1,699.37 m^3/d).

Baker Hughes engineers can help choose the right FLEXPump series pump for each well's specific requirements, focusing on helping maximize return on investment (ROI) for each well.

Enhance the efficiency of ESP systems

Engineers designed the FLEXPump series pumps to deliver superior efficiency across the wider operating range, lowering OPEX—including power consumption—over the life of the well.

These pumps deliver continuously-rising lift per stage, allowing for better well drawdown, higher efficiency, and improved uptime by reducing cyclic shutdowns. This also lowers the motor operating temperature for increased run life and superior overall system efficiency. Greater efficiency gives you an OPEX advantage over the life of the reservoir.

Applications

- Conventional oil fields
- Unconventional oil and gas fields
- Horizontal or deviated wells
- Mature oil fields

Benefits

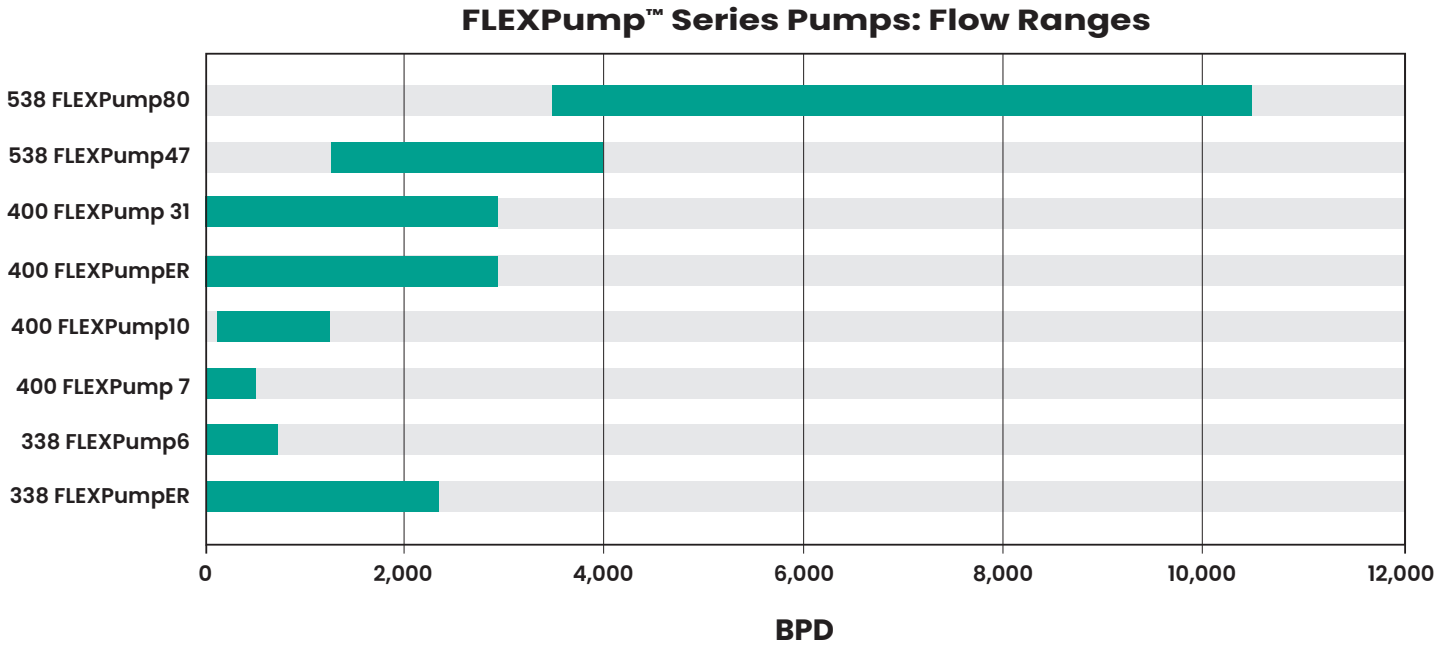
- Adapts to changing well production
- Improves gas handling
- Increases well drawdown
- Extends operating range and pump run life
- Lowers OPEX
- Reduces power costs

Improve the reliability of ESP systems

From existing assets and new production zones—like shale resource plays, tight reservoirs, and deeper zones, where flow conditions can change dramatically over short periods of time—FLEXPump series pumps deliver stable operations in varying conditions. In addition, the series pumps can handle thrust conditions more effectively, which increases run life, reduces workovers, and decreases downtime.

Wider stage vane openings reduce pump plugging and enhance solids and gas-handling capabilities. Lower hydraulic thrust extends operation in lower flow conditions and heavier construction of pump components increases uptime and reliability.

Contact Baker Hughes to learn more about how the FLEXPump series pumps can deliver operational flexibility in dynamic well conditions while increasing reliability and efficiency.



SPECIFICATIONS								
	338 FLEXPumpER	338 FLEXPump6	400 FLEXPump 7	400 FLEXPump10	400 FLEXPump 31	400 FLEXPumpER	538 FLEXPump47	538 FLEXPump80
Stage material	Ni-resist	Ni-resist	Ni-resist	Ni-resist	Ni-resist	Ni-resist	Ni-resist	Ni-resist
Stage geometry	Mixed flow	Mixed flow	Volute	Mixed flow	Mixed flow	Mixed flow	Mixed flow	Mixed flow
Abrasion resistance	SSD 1:4	SSD 1:4	SSD 1:4, ER	SSD hybrid 1:3 / 1:9, SXD	SND, SSD 1:4, SXD	SSD 1:4, SXD	SND, SHD 1:4, SSD 1:3, SXD	SSD 1:3, SXD
Shaft diameter	11/16-in.	5/8-in.	11/16-in.	11/16-in.	11/16-in.	11/16-in.	7/8-in.	7/8-in. (no large shaft option)
Housing pressure	5,850 psi	5,850 psi	5,627 psi	5,627 psi	5,480 psi	5,627 psi	5,627 psi	5,627 psi
Minimum flow	50 B/D	20 B/D	50 B/D	275 B/D	1,200 B/D	50 B/D	2,400 B/D	3,500 B/D
Maximum flow	2,500 B/D	800 B/D	1,200 B/D	1,625 B/D	4,000 B/D	2,900 B/D	6,000 B/D	10,500 B/D
BEP head	20.5 ft	15 ft	31.4 ft	36 ft	23.3 ft	19.5 ft	50 ft	50 ft
BEP efficiency	61.4%	49%	54.8%	65%	70%	74%	71%	77%
BEP horsepower	0.38 BHP	0.132 BHP	0.31 BHP	0.33 BHP	0.76 BHP	0.38 BHP	2.64 BHP	3.85 BHP

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