538 series LIFTPrime high-efficiency E13000 pump

Improve well economics

Applications

- Greater than 11,000 BPD in 7-in. casing
- Wells with power supply constrain
- Wells with extended flow-rate range
- Abrasive applications
- Viscous and heavy oil applications
- SAGD applications

Features and Benefits

- Higher efficiency range
  - Increase ESP system efficiency
  - Minimize power consumption across the operation range
- Highest lifting/ft
  - Shortened ESP string
  - Greater well accessibility
- Unmatched operating range
  - Great flexibility to well production dynamic
- Improved reliability
  - The highest shaft torque rating
  - Modular design reduces the stress on the shaft
  - Reduce well downtime and deferred oil production
  - Reduce intervention cost
  - Reduce reservoir prolusion during intervention
  - Reduction in stage thrust

The 538 series LIFTPrime™ high-efficiency E13000 pump uses advanced hydraulic design and manufacturing technology to achieve the highest efficiency across the widest flow range (7,000 to 1700 bpd) in both conventional and unconventional fields.

The superior hydraulic design ensures the pump has a constant steep rising head curve across the recommended operation range. This allows the pump to respond to large pressures and flow rates which is essential to unstable downhole inflow patterns.

The E13000 pump is designed to operate in the most challenging applications. An enhanced shaft torque rating allows operators to maximize production when dealing with viscous and heavy oil.

Hydraulic thrust is absorbed inside of the pump instead of transferring thrust to the seal section through the shaft. This improves the reliability of the seal section and reduces the radial component stress on the shaft which reduces risk of shaft failure.

400 series LIFTPrime E6000 pump specifications	
OD, in. (mm)	4.00 (101.6)
Standard stage alloy	Ni-Resist™
Stage geometry	Mixed-flow
Flow range, bbl/d at 60 Hz m^3d at (50Hz)	1000 -800 (130 -1050)
Head per stage at BEP, hp at 60 Hz (KW at 50 HZ)	23 (3.5)
Power per stage at BEP, hp at 60 Hz (KW at 50 HZ)	1.53 (0.9)
Efficiency at best efficiency point (BEP)	76%
Burst pressure, psi (kPa)	5,627 (38,797)
Standard housing alloys	Carbon steel
Standard shaft alloys	Inconel®
Shaft diameter, in. (mm)	7/8 (22.22)
Abrasion resistant options	SSD, SXD, CSHD, CG1
Radial and axial bearing material	Tungsten carbide
Shaft break-power limit (hp) at 60 Hz	550
Minimum casing size (in.)	5.5

BEP @ 3500 rpm (bpd)	13,000	Power @ BEP (hp)	5.39
Lift @ BEP (ft)	42	Efficiency @ BEP	7
Extended range (bpd)	4,000 – 16,000	Shaft diameter (in.)	1.88
Head/stage BEP (ft)	42		
Minimum casing size (in.)	7	Shaft break – power limit (hp)	1,250
Housing diameter (in.)	5.38		

Performance curve