

538 series LIFTPrime high-efficiency E5500 pump

Improve well economics

Applications

- Wells producing 3,500–7,200 BPD in 7-in. or 7 5/8 -in. casing
- High-viscosity or high-torque environments
- Abrasive or fines-laden wells (SSD/SXD options)
- Unstable inflow or variable reservoir pressure
- Brownfield performance improvement where others underperformed

Features and Benefits

- Highest efficiency (72% BEP) to reduce power consumption
- Maintains >60% efficiency from 3,500 to 7,200 BPD, maximizing production while reducing energy consumption
- Strongest shaft in class (1 3/16 -in., +67% stronger than 1-in. competitors) for robust torque handling
- Available SSD/SXD configurations for moderate to extreme abrasion
- Wide extended operating range (1,400–7,200 BPD) for maximum flexibility
- Improved reliability with newly balanced hydraulics and optimized thrust load
- High lift per stage (47.8 ft) enabling shorter ESP strings

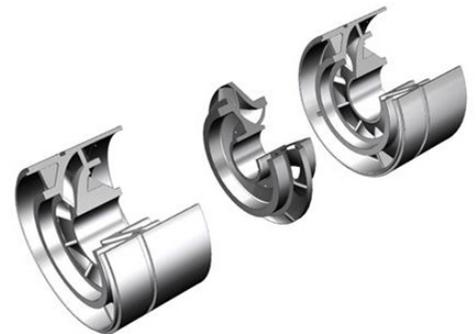
The 538 series **LIFTPrime™ high-efficiency E5500 pump** builds on the proven hydraulic architecture of the 538 LIFTPrime pumps, including the E8000 and E13000, while being purpose-engineered for mid-range flow applications where efficiency, reliability, and operating flexibility drives well economics. Designed to outperform existing 5.38-in. technology, the E5500 delivers class-leading hydraulic performance, a wide usable flow range, and significantly improved mechanical robustness.

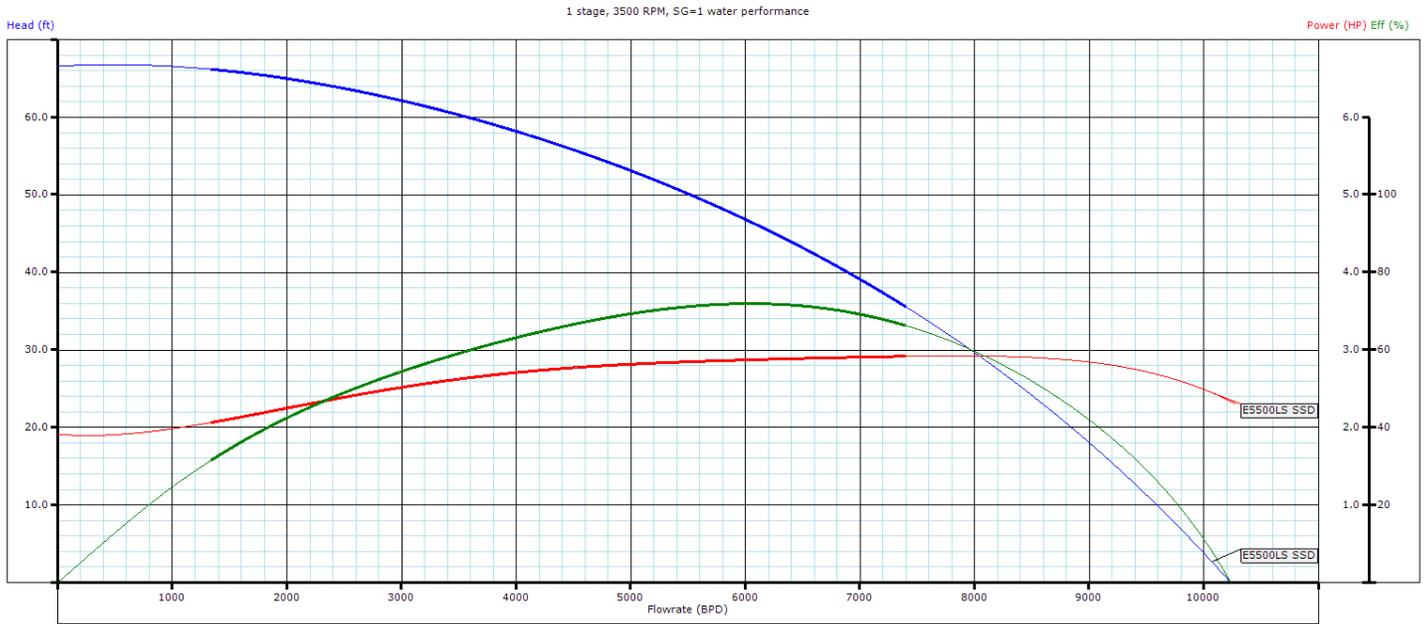
Its advanced mixed-flow stage geometry produces a constant rising head curve, allowing the pump to maintain stable lift performance even in wells with fluctuating inflow, high-viscosity fluids, or pressure variability common in unconventional assets. This stability helps operators reduce production interruptions, maintain reservoir drawdown, and extend ESP system uptime.

A key strength of the E5500 is its high-strength 1 3/16-in. shaft, which provides up to 67% higher torque capacity than competitor 1-in. shafts and 145% more strength than previous-generation designs. This mechanical advantage enables the pump to operate reliably in demanding high-viscosity, high-load environments where high torque starts and loads fluctuation have historically caused failures. The pump absorbs hydraulic thrust, reducing stress on the seal section and improving long-term component reliability.

The E5500's combination of >60% efficiency across 3,500–7,200 BPD, strong gas-handling stability, and availability in SSD and SXD abrasion-resistant configurations makes it suitable for a wide range of applications, from high viscosity robustness to brownfield optimization. Its modular build and compatibility with the 538-series infrastructure streamline deployment, serviceability, and inventory management.

Overall, the E5500 delivers a modernized, high-performance solution that reduces lifting cost per barrel, strengthens system reliability, and gives operators the flexibility needed to meet today's production challenges.





538 series LIFTPrime E5500 pump specification

OD, in (mm)	5.38 (136.7)
Standard stage alloy	Ni-Resist
Stage geometry	Mixed-flow
Best Efficiency Point, bbl/d at 60 Hz (m ³ /d at 50Hz)	6,000 (795)
Efficiency at best efficiency point (BEP)	72%
API flow range, bbl/d at 60 Hz (m ³ /d at 50Hz)	4,800 – 7,200 (636 to 954)
Extended Flow range, bbl/d at 60 Hz (m ³ /d at 50Hz)	1,400 – 7,200 (185 to 954)
Head per stage at BEP, ft at 60 Hz (m at 50 Hz)	47.8 (10.1)
Power per stage at BEP, hp at 60 Hz (kW at 50 Hz)	2.91 (1.26)
Burst pressure, psi (kPa)	5,627 (38,797)
Housing alloys	Carbon Steel – Std 9CR – Option
Shaft diameter, in (mm)	1-3/16 (30.16)
Standard shaft alloys	Inconel
Allowable BHP, hp at 60 Hz (kW at 50 Hz)	1250 (539.4)
Abrasion resistant options	SSD, SXD