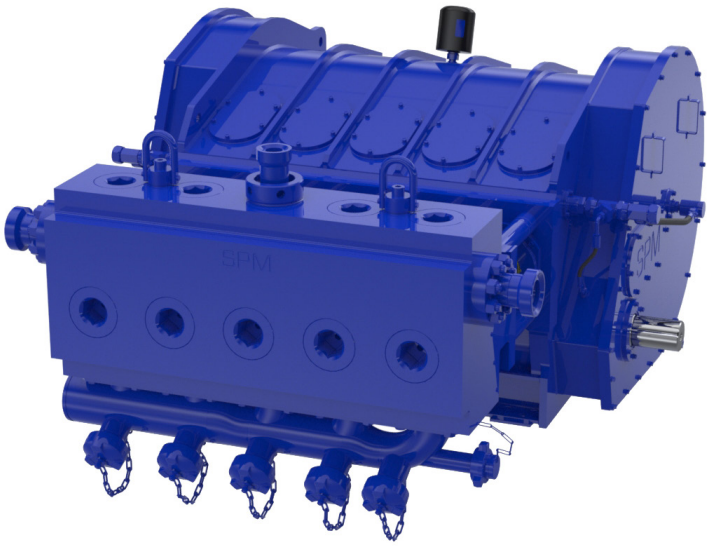
SPM® EXL Frac Pump

Addressing traditional pain points, the pump is engineered for maximum reliability and minimal maintenance

SPM™ Oil & Gas
A Caterpillar Company



Boasting the highest rod-load rating in its class—238,000 lbs.—the SPM® EXL Frac Pump from SPM Oil & Gas, is built to directly address the weaknesses and issues associated with traditional frac pumps. Innovations include a solid-steel unibody-nose plate construction with an integrated skid. This provides greater rigidity, reducing wear on critical components with minimized vibration. With fewer internal welds, frame life is maximized. SPM® Everbore™, SPM Oil & Gas' hardened steel packing bore eliminates wash boarding and protects against packing bore wash so there is no need to resleeve as often. A redesigned gear set features state-of-the-art design and manufacturing capabilities to further extend service intervals.

Applications

Hydraulic fracturing, 2,500 bhp quintuplex pump, allows for 15,000 psi at a 4.5" plunger

Specifications

Maximum Rod Load Capacity	238,000 lbs.
Stroke Length	8"
Gear Ratio	6.353:1
Approximate Length	86.5"
Approximate Width	79.5"
Approximate Height	45"
Approximate Weight (dry)	17,385 lbs.
Power End	12,075 lbs.
Fluid End	5,085 lbs.
Zoomie Suction Manifold	225 lbs.

Note: Pump dimensions and weights are approximate. For full detailed drawings, please contact SPM Oil & Gas.

Features and Benefits

- Solid-steel unibody-nose plate construction for greater rigidity and better load distribution
- Integrated skid for greater rigidity, reduced wear on critical components and minimized vibrations
- Completely redesigned gear system and manufacturing processes provides greater surface contact between gear teeth, reducing damage and maximizing service life
- Fewer internal welds
- Fewer potential leak points
- Robotic weld processes for consistent manufacture
- Patent-pending SPM® Everbore™ hardened steel packing bore to eliminate threat of washboarding and added downtime associated with re-sleeving
- Designed for minimal interaction, supported by SPM® Edge and quality SPM® Everbore™ replacement parts and engineered repairs

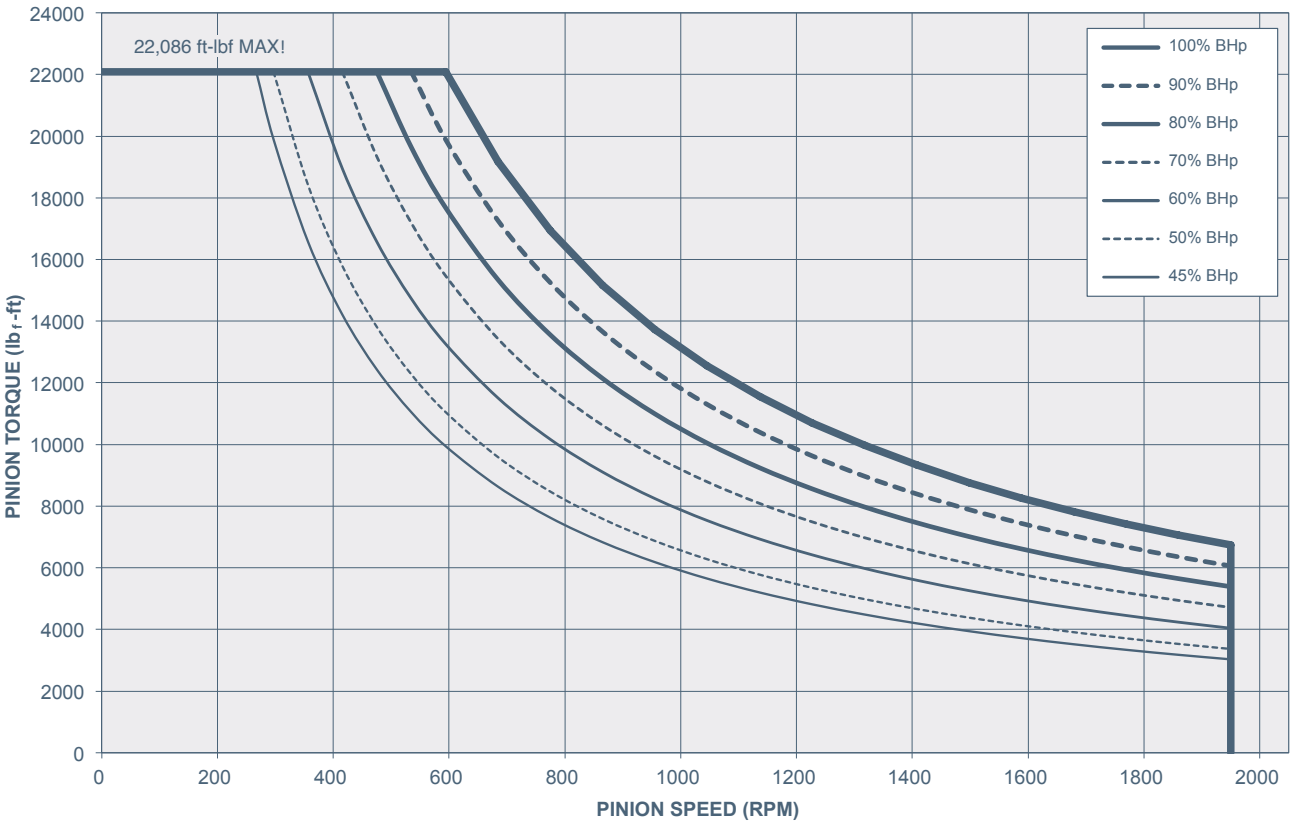
SPM® EXL Frac Pump Performance Chart[1,2]

Plunger Diameter in (mm)	Displace Per Rev gal/rev (liter/rev)	Displacement at Pump Strokes per Minute/Pinion RPM											
		50 gpm (lpm)	318 psi (MPa)	93 gpm (lpm)	593 psi (MPa)	147 gpm (lpm)	932 psi (MPa)	200 gpm (lpm)	1272 psi (MPa)	254 gpm (lpm)	1611 psi (MPa)	307 gpm (lpm)	1950 psi (MPa))
4 (101.6)	2.18 (8.2)	109 (412)	18984 (131)	203 (769)	18984 (131)	319 (1209)	12077 (83)	436 (1648)	8855 (61)	552 (2088)	6990 (48)	668 (2528)	5774 (40)
4 ½ (114.3)	2.75 (10.4)	138 (521)	15000 (103)	257 (973)	15000 (103)	404 (1530)	9542 (66)	551 (2086)	6996 (48)	698 (2643)	5523 (38)	845 (3200)	4562 (31)
5 (127)	3.40 (12.9)	170 (643)	12150 (84)	317 (1201)	12150 (84)	499 (1889)	7729 (53)	681 (2576)	5667 (39)	862 (3263)	4474 (31)	1044 (3950)	3695 (25)
5 ½ (139.7)	4.11 (15.6)	206 (779)	10041 (69)	384 (1454)	10041 (69)	604 (2285)	6388 (44)	823 (3117)	4684 (32)	1043 (3948)	3697 (25)	1263 (4780)	3054 (21)
Input Power: BHP (kW)		1339 (998)		2500 (1864)		2500 (1864)		2500 (1864)		2500 (1864)		2500 (1864)	

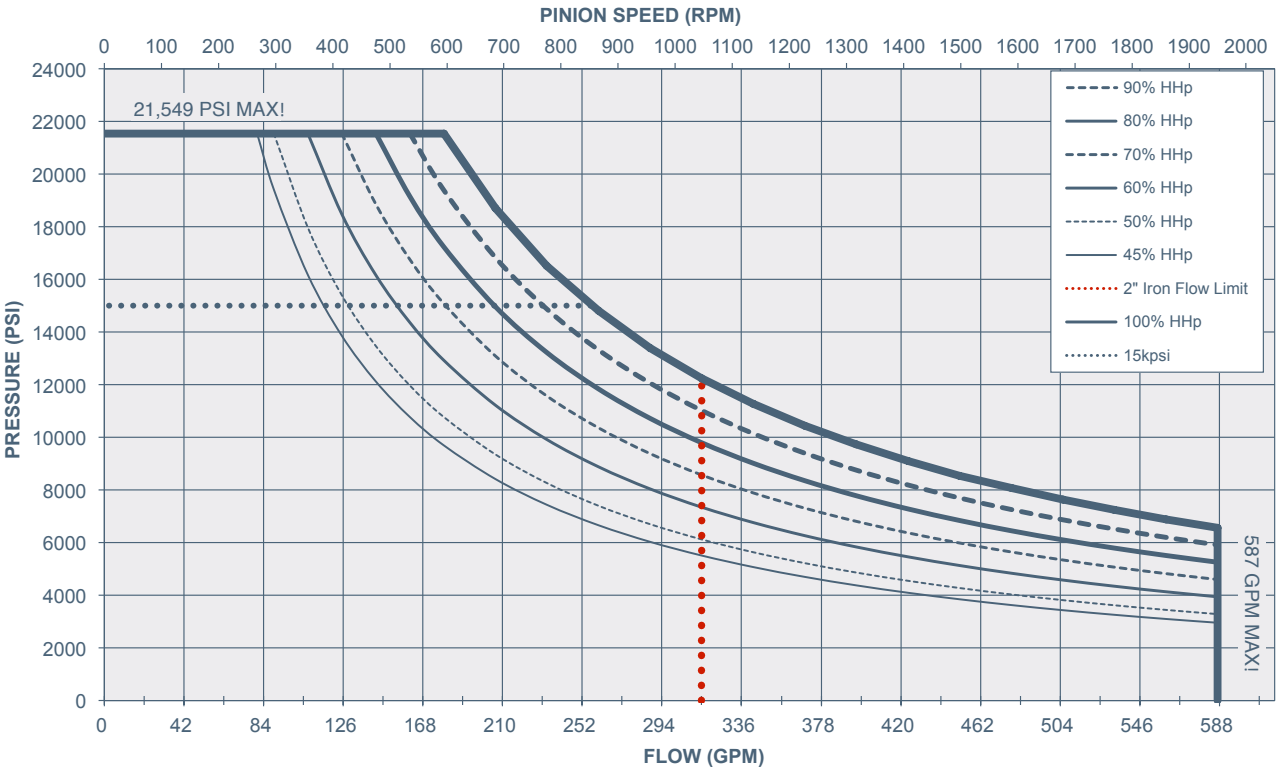
[1] Based on 90% ME and 100% VE — Intermittent Service Only.
[2] Pumps with pressures in excess of 15000 psi require special gauge and discharge flanges. Contact SPM Engineering for information.

Cells highlighted in blue are are intermediate zones where erosion is more prevalent when 3" iron is used (MAX 778 GPM/2945LPM)

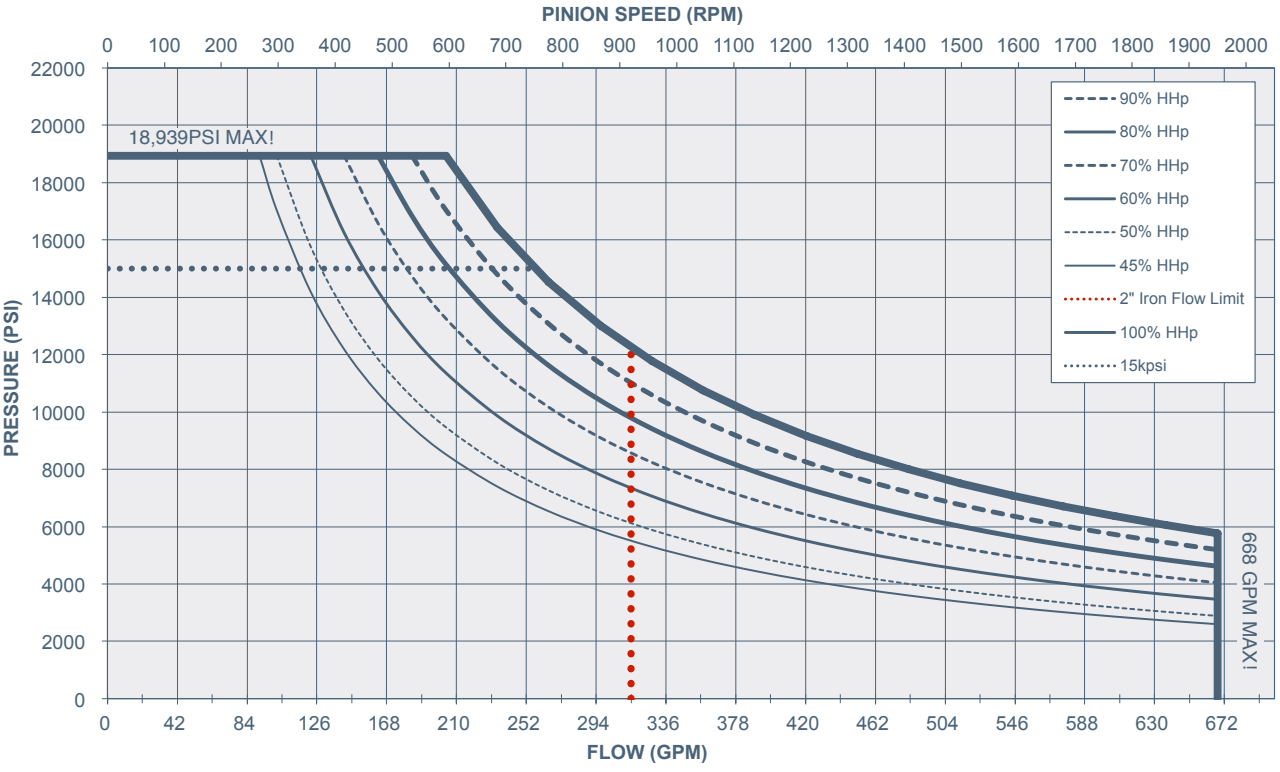
Pinion Torque Curve



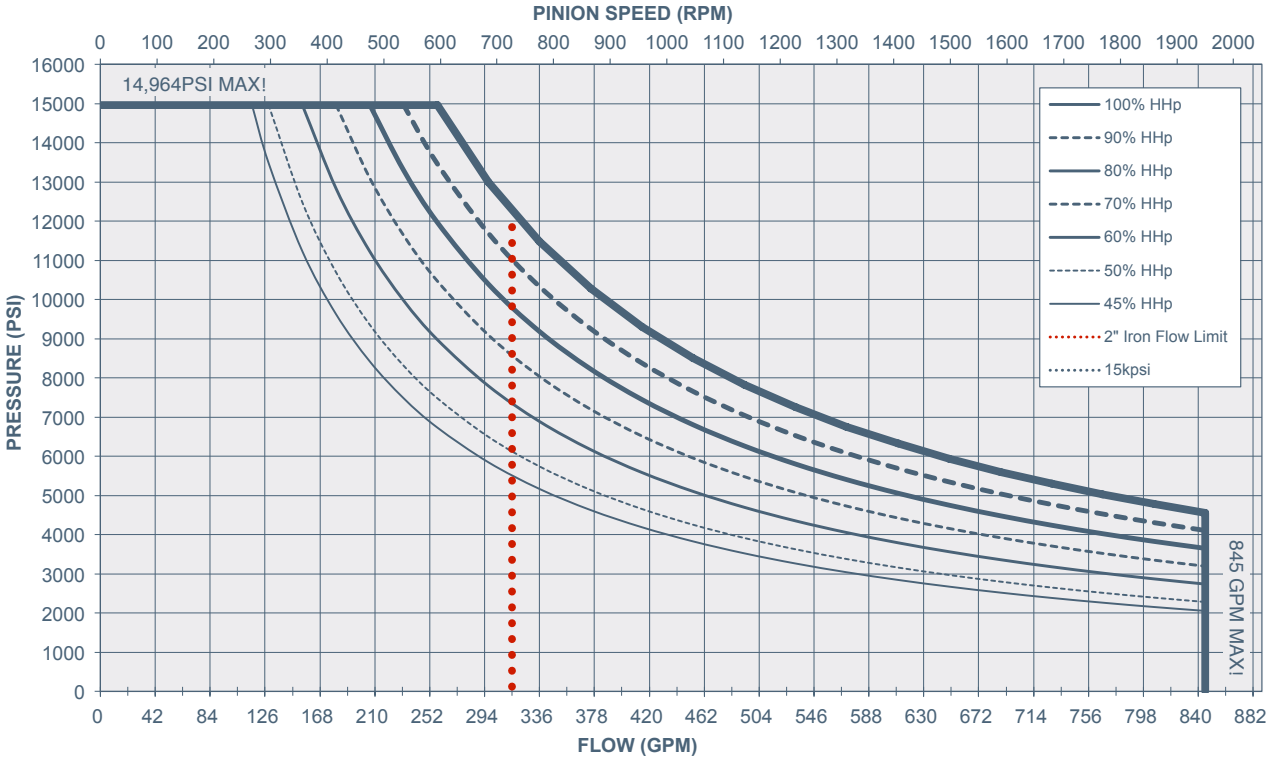
3.75" Plunger Horsepower Curve



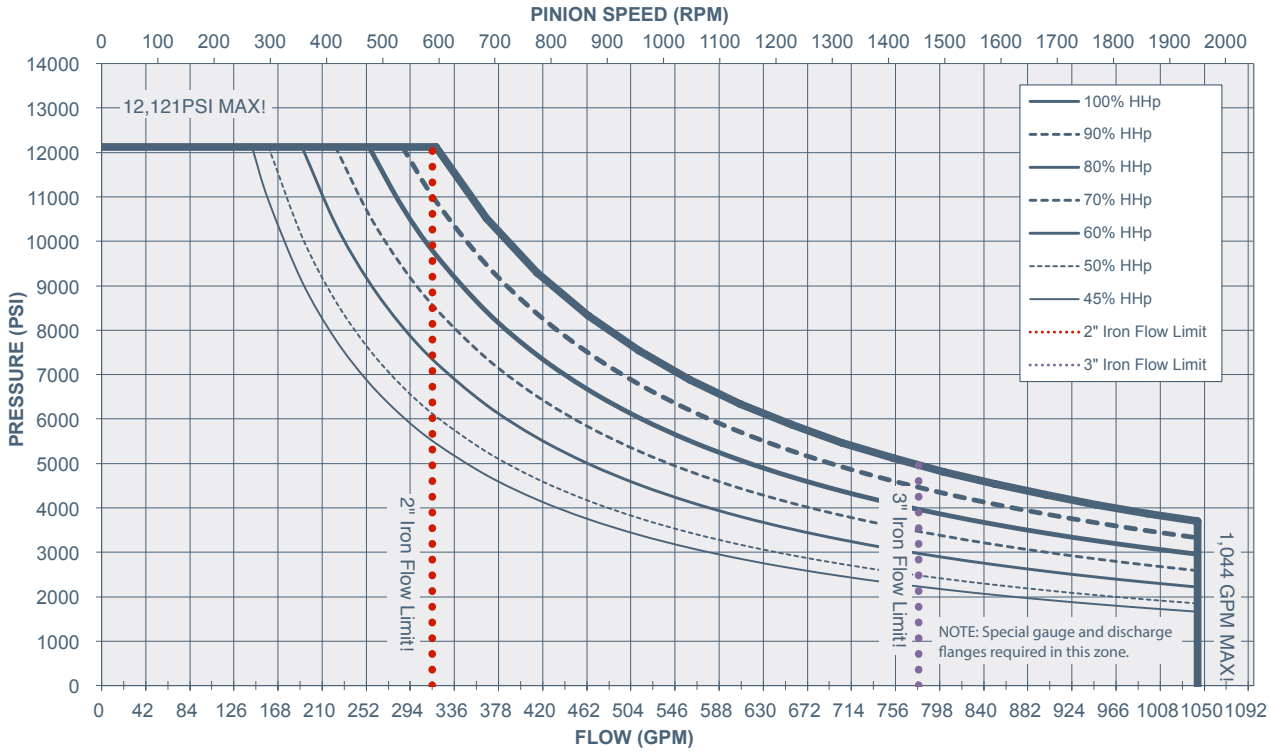
4.0" Plunger Horsepower Curve



4.5" Plunger Horsepower Curve



5.0" Plunger Horsepower Curve



SPM Oil & Gas
601 Weir Way
Fort Worth, TX 76108
USA

T +1 800 342 7458
F +1 817 977 2508

www.spmoilandgas.com