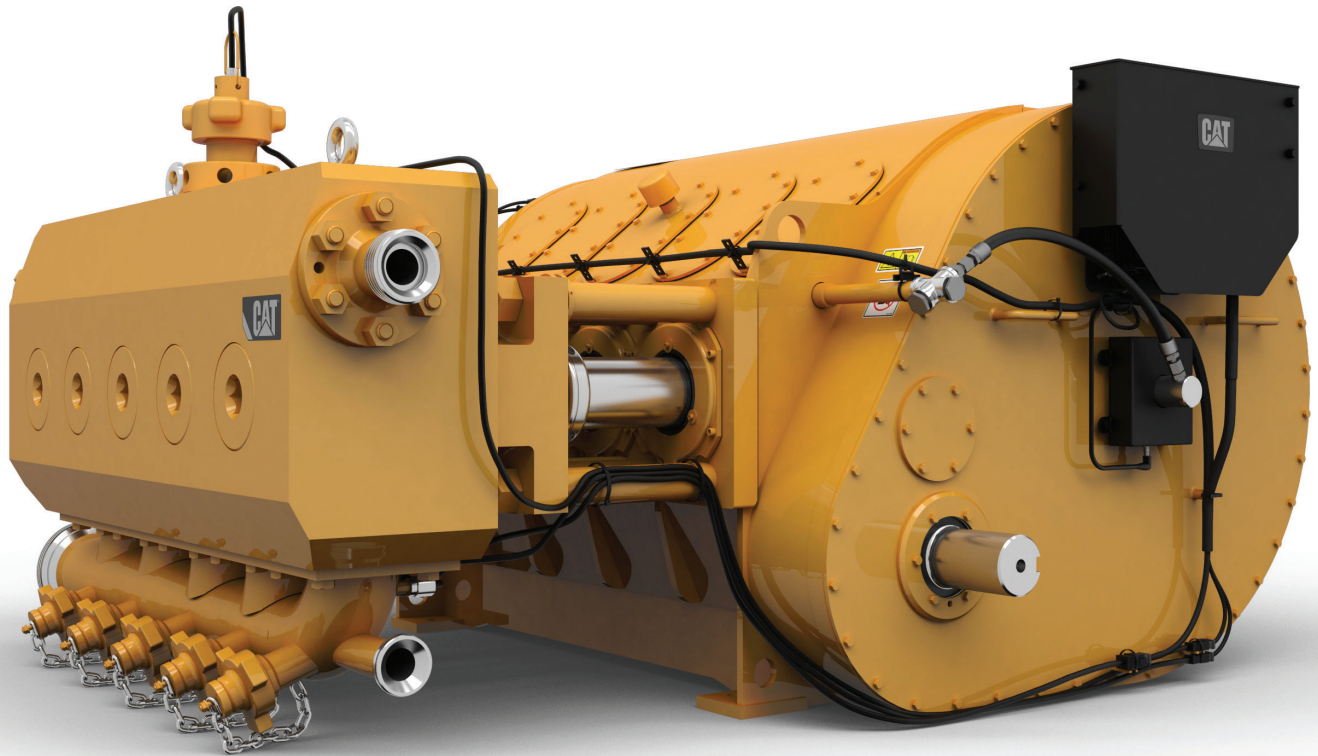


# CAT<sup>®</sup> WELL SERVICE PUMPS

For the Oil & Gas Industry



# WELL CONSTRUCTED

## So You Can Put Us To Work

### Standard Features

#### FLUID ENDS

- Increased durability of fluid ends to decrease downtime
- Full line of 1502 and 2002 discharge configurations
- Dimensionally compatible with legacy 8" and 10" stroke flange-mounted power ends
- Valve-over-valve design to simplify valve, seat, and plunger installation
- Polypak seals for more reliable sealing at suction cover and discharge flanges (D-rings optional)
- Flow end components designed to maximize interchangeability across our fluid end line and industry standard fluid ends

#### POWER ENDS

- Industry standard footprint
- Reverse helical pinion and bull gear design
- Two-piece stay rod design – pre-tensioned stay rod lowers cyclic loading and fatigue stress
- Nose plate of frame uses an interlocking dovetail design, which strengthens frame stability at higher rod loads
- Forged bull gears and crankshaft
- Gear inspection ports
- Premium power end filtration system

#### CAT® VALVES AND SEATS

- One-piece valve with injected inserts
- Optimized geometry
  - Reduced impact forces
  - Longer valve and seat life
- Increased flow area
  - Reduces potential for cavitation
- Reduces cause for fluid end washouts
  - Fluid is directed toward discharge valve
- Field proven, at least 2 times the life of competitor valves
- Fit nearly any well stimulation pump
- Seats can be used with multiple valve changes
- Reduced maintenance time and intervals

### Optional Features

#### PUMP ELECTRONIC MONITORING SYSTEM (PEMS®)

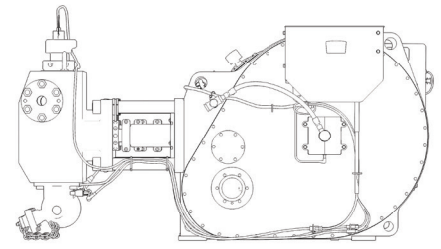
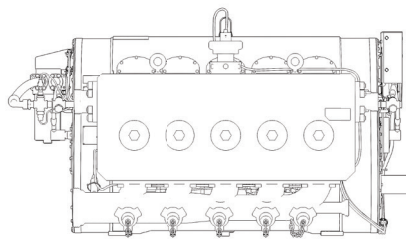
- J1939 parameters
- Leak and cavitation diagnostics
- Histograms
- Reduced unplanned downtime
- Available on any complete pump or power end

#### STAINLESS STEEL FLUID ENDS

- Available Cat® Cube Bore premium geometry
- All XD geometric benefits
- Improved corrosion resistance, particularly in recycled water applications
- Improved resistance to stress corrosion cracking
- Optimized autofrettage parameters specifically for stainless steel material
- Fully interchangeable with existing Caterpillar carbon steel product line
- Reduced total cost of ownership

## Well Service Pumps

YOU NEED THE RIGHT PUMP FOR THE JOB. OUR FULL LINE HAS YOU COVERED.



	Max Input	Max rpm	Number of Plungers	Stroke Length	Plunger Load	Pump Weight	Gear Ratio	Bore Centers	
<b>WS255 Quintuplex Well Stimulation Pump</b>	2500 bhp (1864 bkW)	330	5	8 in (203.2 mm)	238,000 lb (108 955 kg)	16,600 lb (7530 kg)	6.353:1	10"	
<b>WS273 XD Triplex Well Stimulation Pump</b>	2700 bhp (2014 bkW)	275	3	10 in (254 mm)	275,000 lb (124 738 kg)	18,000 lb (8165 kg)	5.55:1	13"	
<b>WS305 XD Quintuplex Well Stimulation Pump</b>	3000 bhp (2237 bkW)	275	5	10 in (254 mm)	250,000 lb (113 398 kg)	25,500 lb (11 567 kg)	5.55:1	13"	



## Single-source Confidence

Cat well service pumps are designed and manufactured to integrate across our product line and industry standards. Get exceptional product life and performance, supported by the global Cat dealer network. We're built to exceed your expectations.

**To learn more, talk to your local Cat dealer or visit**  
**[www.cat.com/oilandgas](http://www.cat.com/oilandgas)**

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