20+ 2500Q HDF PUMPS SURPASS 10,000 HOURS WITHOUT MAJOR REPAIRS

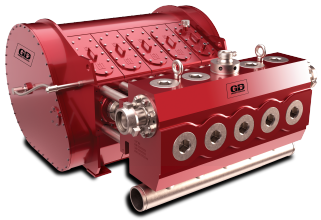
GD ENERGY PRODUCTS

WE BUILD CONFIDENCE.

FIELD TEST CONDITIONS

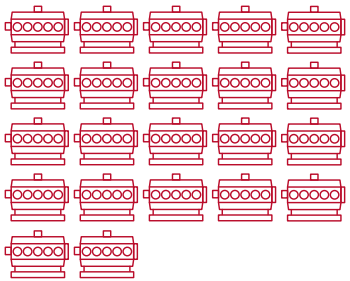
PUMP

2500Q HDF



NUMBER OF PUMPS

22



LOCATION

PERMIAN, HAYNESVILLE & MARCELLUS BASINS



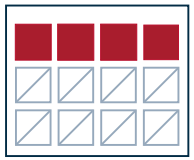
OPERATING PRESSURES

8,000-12,500 PSI



TIMELINE

4 YEARS



AVERAGE FLOW RATE

5-9 BPM

PLUNGER SIZE

4 AND 4.5

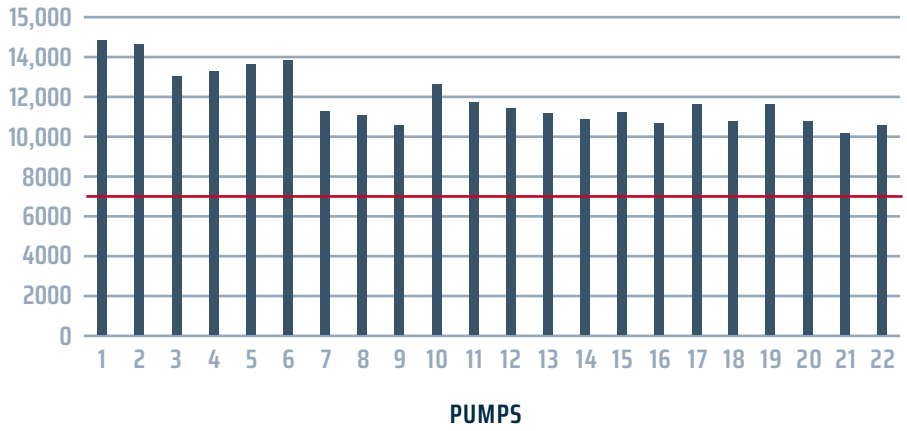
PERFORMANCE

INCREASED PERFORMANCE LIFE

INCREASED PERFORMANCE LIFE BY 43%

0 FRAME CRACKS/OVERHAULS

HOURS



GD ENERGY PRODUCTS' 2500Q HDF PUMPS SURPASS 10,000 SERVICE HOURS AND COUNTING

WE BUILD CONFIDENCE.

CHALLENGE

Hydraulic fracturing operations demand equipment that can withstand extreme conditions while maintaining reliability. Pumps are often pushed to their limits which can lead to premature power end frame cracks, resulting in unplanned downtime, increased maintenance costs, and higher total cost of ownership. Industry-standard 2500 horsepower pumps typically last about 7,000 hours before requiring significant repairs, limiting operational efficiency. Service companies operating in high-pressure shale plays needed a more robust solution that could extend service life and reduce downtime.

SOLUTION

GD Energy Products (GDEP) tackled this challenge by redesigning their power end frame on the 2500Q HDF pump to enhance its durability and longevity. Collaborating closely with a customer, GDEP's engineering team addressed the issue of premature power end frame cracking with several key upgrades:

- **Thicker Steel Frame Construction:** To minimize operational stresses on critical joints.
- **Improved Bearing Retention System:** Redesigned to prevent snap ring bearing retainer failure.
- **Optimized Gear and Pump Timing:** To further reduce operational wear and tear.

GDEP also implemented a **Power End Reframe Program**, enabling customers to repurpose existing subcomponents into the more durable HDF frame, **saving up to 30% on new equipment** and reducing downtime.

RESULTS

GDEP's 2500Q HDF pumps have redefined durability, with 22 units surpassing 10,000 hours of continuous field operation over four years—without major repairs. This achievement **exceeds the industry standard by 43%.**

- **Enhanced Pump Reliability:** The upgraded design led to fewer power end replacements and extended service intervals, contributing to reduced downtime and lower overall maintenance costs, thus improving total cost of ownership.
- **Significant Cost Reductions:** By minimizing unplanned downtime and maintenance expenses, customers achieved substantial savings. Additionally, those opting for GDEP's Power End Reframe Program realized up to 30% savings on new equipment investments.
- **Boosted Operational Efficiency:** The extended service life of the pumps enabled customers to maintain higher productivity with fewer interruptions, leading to increased monthly pumping hours and reduced dependency on standby pumps.

GDEP's dedication to innovation and customer collaboration has resulted in groundbreaking success. Their 2500Q HDF pumps continue to perform reliably in the most demanding conditions, empowering customers to achieve higher operational efficiency and drive the industry forward.