CONSERVATION OF RESOURCES

QF5i More Than Doubles Dirt Holding Capacity and Element Cost Savings

Technical Application Bulletin

CHALLENGE

A Frac Drilling OEM in West Texas was working with Competitor P for four (4) filter housing assemblies per trailer and had ten (10) trailers in a fleet. Competitor P's filters were causing contamination issues and higher ISO counts. Competitor P also had delivery and pricing issues.

APPROACH

SI upgraded the OEM's system with the QF5i, which has a similar size & flow rate to the competitor's product. However, the QF5i provided a new, innovative solution with extra protection and increased performance. A magnetic filter rod is suspended through the coresless element to catch extra ferrous materials during bypass so the OEM could have continous function whether on cold start or after max Dirt Holding Capacity (DHC) is reached when the filter enters the bypass. The rod can be removed and the ferrous material can be wiped away with ease. The QF5i's Magnetic Rod also extends the element life further by excluding ferrous contaminates from ever reaching the element.

RESULTS

- Dirt Holding Capacity was increased 73% from Competitor P in comparison to a similar 40 micron rating
- Equivalent to using 3 of the SI elements for every 5 of Competitor P's, resulting in 40% savings in element costs
- No change to differential pressure across the system
- SI's added advantage of the ferrous material being captured on the magnetic rod will increase the life expectancy of the filter being used.

73%
INCREASED DIRT HOLDING CAPACITY
(40 micron rating)

254%
INCREASED DIRT HOLDING CAPACITY
(25 micron rating)

LONGER
LIFE EXPECTANCY

40%-60%
SAVINGS IN ELEMENT COSTS

The QF5i has efficient means to remove both ferromagnetic and non-ferronmagnetic parts from the fluid