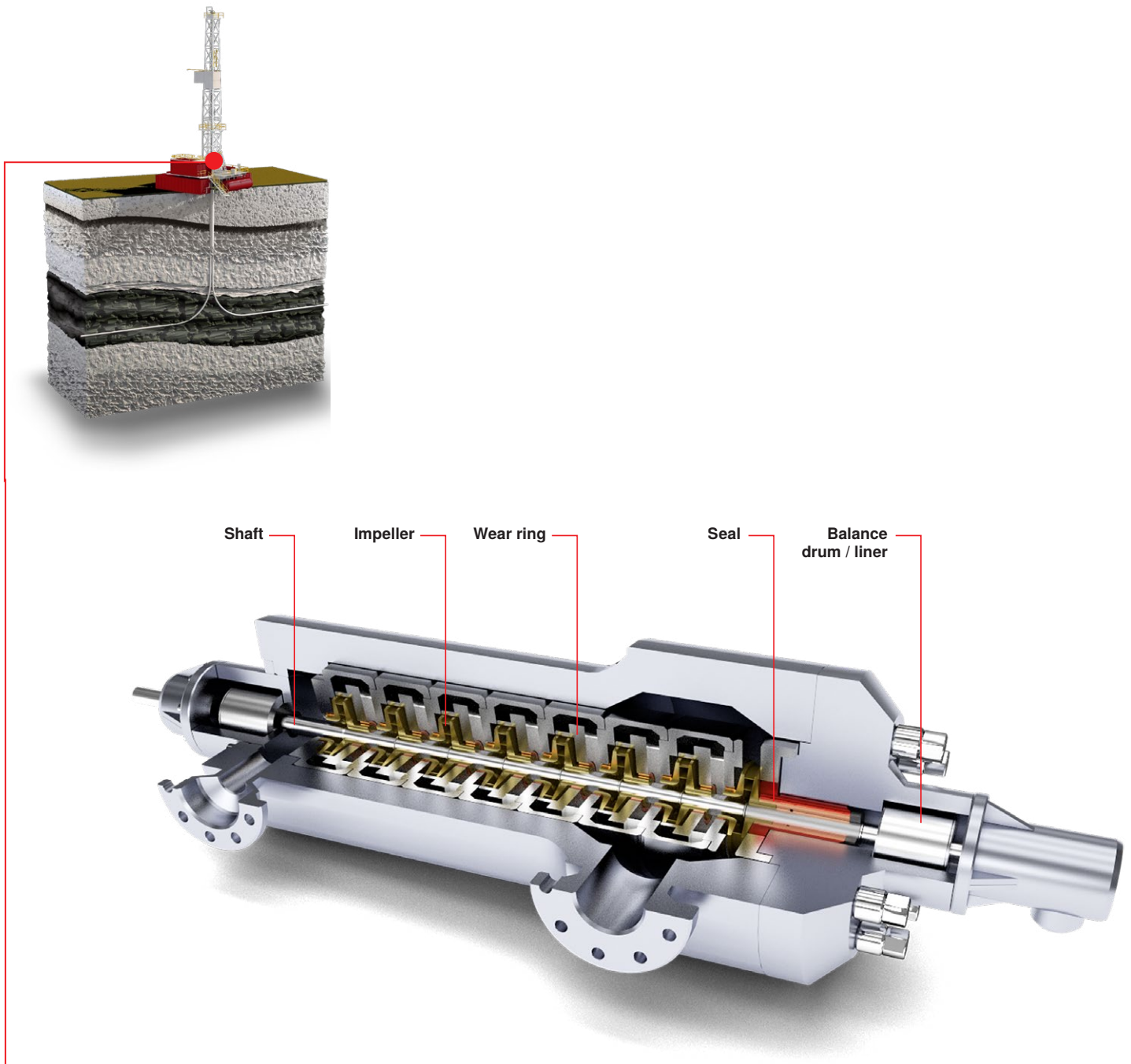


Reduce Hydraulic Fracturing Downtime

Metco™ PUMP coatings increase the lifespan and efficiency of centrifugal injection pumps used for hydraulic fracturing, lowering the total cost of ownership.



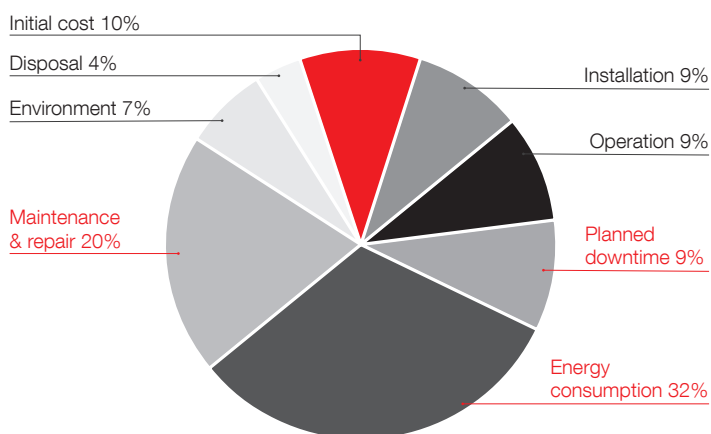
Metco PUMP is a better coating solution to combat abrasion and erosion on pumps used in oil and gas hydraulic fracturing operations.

Oil and gas injection pumps must operate reliably in harsh, demanding environments. They inject water at high-pressure with entrained sand, resulting in severe erosive and abrasive wear throughout the pump. While the pump wear rings, impeller, balance drum and drum liner are often manufactured from 25-5-3 duplex stainless steel with a Stellite 6 weld overlay, failure within 3 to 6 months of operation is all too common. A frequent failure mechanism is caused by over pressurization due to excessive wear of the mechanical seals. Oerlikon's **Metco PUMP** coatings extend the mean time between failures 300 to 700 percent and reduce the overall cost of ownership.

Your advantages with Metco PUMP coated injection pumps.

- Operate longer between maintenance outages
- Operate more efficiently, increasing production
- Reduce running costs
- Reduce unplanned downtime
- Reduce the total cost of ownership

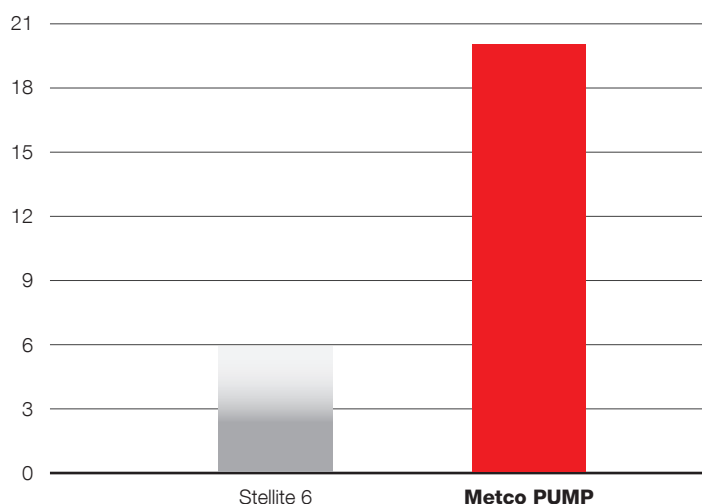
Injection Pump Cost of Ownership



Capital costs (initial cost and installation) are less than 20% of the total cost of ownership. A **Metco PUMP** coating solution significantly reduces the most intensive pump ownership costs (items in red text).

Injection Pump Time to Failure

in months



A reliable partner with reliable solutions.

Oerlikon Metco brings decades of experience solving the toughest application challenges in close partnership with leading pump manufacturers. Our OEM relationships are built on our unique combination of expertise and services other coating companies cannot match:

- Design and development of high-performance coatings using our own proprietary materials and processes
- In-house test facilities (metallography, tribology, corrosion)

- Access to materials R&D capabilities and a broad range of material manufacturing processes
- Surfacing services that include thermal spray and thin film processes
- Complete inspection and machining capabilities
- Global footprint
- ISO certified facilities

Contact us for more information about our coating services and Metco PUMP solutions.

oerlikon
metco