

INTEGRATED SAND MANAGEMENT SYSTEM



ACOUSTIC SAND MONITORING

Non-intrusive acoustic noise generated by the inertia of sand particles impacting the inner surface of production pipe walls
Output: Sand rate (g/s) to calculate Maximum Sand Free Rates (MSFR) or Acceptable Sand Rates (ASR).

PORTABLE SAND SAMPLING

Portable sand sampling system to collect sand samples from multiphase flow ie. Oil, gas and water
Output: Collects physical sand samples for analysis

UT WALL THICKNESS

Non-intrusive ultrasonic transducer wall thickness monitoring via transducer array. Allows for high temperature applications
Output: Absolute wall thickness without averaging and extrapolation, m, mm, mils

INTRUSIVE SAND MONITORING

Monitor erosion in flowlines, impingement effects of sand and metal loss. Monitored at pipe bends and reduced diameter sections
Output: Metal loss (m, mm, mils) and erosion rate (m/yr, mm/yr, mils/yr)

LASER PARTICLE SAND ANALYSIS

Sand screen selection relies on accurate particle size analysis
Quick and covers the entire size range in a single measurement
Output: Grain size (micron)

LP/HP PROBES, COUPONS & RETRIEVAL

Linear Resistance Probes (LPR), Electric Resistance Probes (ER), Coupons, Coupon Holders (HP/LP)
Safe retrieval units for high pressure and low pressure systems



FAST



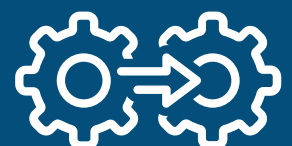
ACCURATE



RELIABLE



PORTABLE



INTEGRATED