Pipeline and Process Services Capabilities

PRECOMMISSIONING, COMMISSIONING, MAINTENANCE AND DECOMMISSIONING SERVICES

Halliburton’s capabilities have been trusted by the worldwide pipeline and process industry for over 40 years to clean, test and help ensure the integrity of systems to maximize oil and gas production.

WORLD CLASS EXPERIENCE
Halliburton has worked with clients around the world to complete significant projects:

» Carried out the world’s first unmanned deep water pipeline hydrotest operation.

» Precommissioned some of the deepest pipelines in the world at depths exceeding 2,400 m (7,800 ft.).

» Dried a number of the largest gas export pipelines in the world.

» Pre-operationally cleaned a number of the largest and most complex systems across the globe.

» Precommissioned some of the longest subsea umbilicals in the world to date – over 125 km (75 mi.).

» Laid the longest thermoplastic umbilical in the world to date – 54 km (34 mi.).

» Leak tested a number of the largest process systems and plants.

» Performed flange management on the worlds largest Floating Liquefied Natural Gas (FLNG) vessel.

GLOBAL PRESENCE AND RESOURCES
Whatever the challenge, Halliburton Pipeline and Process Services has the skills, experience and technology to provide an effective solution, worldwide. Halliburton operates one of the largest mobile pumping fleets in the world, can provide an extensive range of specialized pipeline and process services equipment, maintains a strong global engineering base, and has provided service in over 40 countries.

HEALTH, SAFETY AND ENVIRONMENTAL PERFORMANCE
Halliburton is committed to developing a process-driven culture that leverages quality, health, safety, environment, risk management and operational excellence to deliver superior performance.

OPERATIONAL EXCELLENCE
Halliburton Pipeline and Process Services’ policies, procedures and standards comply with industry standards such as ISO 9001-2008, ISO 14001-2004 and OHSAS 18001-2007. Halliburton’s success is measured by our clients’ performance in terms of reduced downtime, increased production and added value.

GLOBAL COMMON PRACTICES
Practices common across all aspects of Halliburton Pipeline and Process Services include:

» Formalized project management system.

» Knowledge management system that helps get the right information to the right people at the right time.

» Online web-based system that provides a centralized storage and collaboration space for documents, information, ideas and projects.

RESEARCH AND TECHNOLOGY DEVELOPMENT
Halliburton continuously strives to enhance and extend our leadership in innovation, integration and application of technology. Four in-house technology centers provide research, development and operational support to help achieve cost-effective solutions.
GLOBAL CAPABILITIES

Pipeline Precommissioning and Commissioning
» Pipeline flooding, gauging and cleaning
» Hydrostatic testing
» Umbilical flushing and testing
» Fiber optic testing
» Leak testing
» Dewatering
» Air, nitrogen and vacuum drying
» Methanol and glycol swabbing
» Nitrogen packing

Process Precommissioning and Commissioning
» Drop and high speed flushing
» Air and steam blowing
» Retrojetting
» Hydrostatic testing
» Chemical cleaning
» Internal camera inspection
» Oil flushing
» Flange management
» Bolt torque and tensioning
» Oxygen reduction purging
» Nitrogen drying
» Gross air testing
» Ultrasonic testing
» Nitrogen and helium leak testing

Pipeline Cleaning and Flow Assurance
» Routine and progressive pigging
» Mechanical pigging
» SureTherm™ thermal cleaning services
» Hot oiling
» Debris transport with advanced gel systems
» Scale, wax, hydrate and black powder removal
» Pre-inspection cleaning for inline inspection
» Hydrocarbon decontamination
» Change of service cleaning
» Pipeline decommissioning cleaning

Decommissioning
» Abandonment
» Onsite management
» Recertification

Process Plant Shutdown and Maintenance
» Nitrogen purging
» Flange management
» Retrojetting
» Pressure washing
» Chemical cleaning
» Oil flushing
» Bolt torque and tensioning
» Internal camera inspection
» Nitrogen and helium leak testing
» Nitrogen foam inerting
» Pipe freezing

Subsea Excavation
» Trenching for pipelines
» Lowering of pipelines
» Excavation of seabed equipment
» Free span removal
» Drill cuttings removal
» Dispersing of rock-dump
» Seabed leveling
» Dredging
» Dropped object location

Umbilical
» Hydraulic flushing
» Hydraulic decay and proof pressure testing
» Fluid particle analysis
» Fluid change-out
» Valve operations
» Direct current conductor resistance testing
» Insulation resistance testing
» High voltage, very low frequency alternating current testing
» Electrical time domain reflectometry testing
» Fiber splicing
» Optical time domain reflectometry
» Light sources and power meter attenuation testing

Water Injection
» Well pressure maintenance
» Secondary recovery
» Produced water disposal

For more information, contact your local Halliburton representative, visit us on the web at www.halliburton.com or email pps@halliburton.com