



# DRILLING EQUIPMENT INSPECTION

## DRILL PIPE INSPECTION

Drill pipe inspection is set at regular intervals depending on drilling conditions and past failures experienced. For drill pipe inspection SGS uses New Tech Systems EZ electro magnetic inspection Units (EMI) with wall loss monitor. These units are capable of inspecting 2.3/8" up to 6.5/8" drill pipe.

This unit is used for full-length electromagnetic inspection of drill pipe tubes, to locate internal and external pitting, cuts, gouges, localised wall loss and fatigue cracks which would be detrimental to the integrity of pipe to be

used in drilling operations. Incorporated with EMI, pipe tube is gauged to measure wear of tube and to locate dents and mashed areas.

Wall thickness readings are required to be taken, with the use of compression wave ultrasonic thickness gauge. Values for down grading pipe due to wall thickness loss are set by customer or inspected to comply with set standards. The set standards will conform to API RP7, T.H.Hill DS1, NS2 or any other standards nominated by customer. In addition to tubular body inspection,

thread inspection are carried out both visually and dimensionally for API and Premium Connection.

We also offer a service which includes magnetic particle inspection (MPI) of drilling rig mast, sub base, pipe elevators, slips, tongs, sheaves, welded areas of high pressure lines and various other hoisting & drilling equipment. Most of the above items are inspected utilising A.C. Yoke magnetic flow technique. To assist in inspection we have one sandblasting unit capable of preparing most rig parts and tools for inspection.

# OIL COUNTRY TUBULAR GOODS (OCTG) INSPECTION



## BOTTOM HOLE ASSEMBLY INSPECTION

Bottom hole assembly (BHA) inspection consists of inspection of drill collars, heavy weight drill pipe, cross over subs, stabilisers, reamers and bit subs. Equipment required for BHA inspection includes, magnetising coil, black light, various thread gauges.

The inspection of bottom hole assemblies include, wet fluorescent magnetic particle inspection of threads and upset areas, visual inspection of threads for mechanical damage, over torque. Dimensional check of thread components, as well as thread profile and lead check of threads. BHA inspections will conform to API RP7,

T.H.Hill DS1, NS2, or any other standards nominated by customer. Inspection equipment is mobile and inspection can be done at well site or customer's yard. In conjunction with drill pipe and BHA inspection SGS can field reface rotary shouldered connections if required. Minor damaged to seal area can be removed with re-facing to set limits. Damage beyond set limits require shop repair.

## OCTG INSPECTION

Used tubing inspection consists of electromagnetic inspection of tube to locate internal and external pitting, cuts, gouges, localised wall loss which would be detrimental to the integrity of pipe. Incorporated with EMI, wall thickness readings are required to be taken, with the use of compression wave ultrasonic thickness gauge.

Values for down grading pipe due to wall thickness loss are set by customer or inspected to comply with set standards. The electromagnetic inspection utilises the same unit as used for drill pipe inspection. In addition to tube inspection, thread inspection is made to establish useability of threads for further use.

Tubing is also drifted to locate any restrictions inside of tube, which will not allow passage of tools which may be run inside tubing during production. Tubing sizes that we capable of inspection are 1.660" up to 6.5/8" casing sizes that we are capable of inspection 4.1/2" up to 36"

## SPECIALTY TOOL AND FISHING TOOL INSPECTION

Specialty tools and fishing tools are inspected to different requirements to standard bottom hole assembly tools as they are specially designed by the manufacturer. The design criteria meets the demands to complete required tasks and to exceed to stress and loads applied to tools. Connections may be non standard API connections but will still be inspected with traditional Non-Destructive Testing (NDT) techniques or as per manufacturer inspection standards.

**SGS IS THE WORLD'S LEADING INSPECTION, VERIFICATION, TESTING AND CERTIFICATION COMPANY.**

## CONTACT US

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