

# IRON RE-CERTIFICATION

## INSPECTION LEVELS

1

- Prepare and clean all surface areas
- Visual inspection
- Document serial numbers, piece names, and manufacturers
- Ultrasonic testing (UT) of stress areas
- Hydrostatic pressure (HP) testing to required pressure
- New banding information with documentation

2

- All Level 1 requirements
- Prime and paint all pieces

3

- All Level 2 requirements
- Magnetic particle (MP) testing of all pieces



## ULTRASONIC THICKNESS INSPECTION

- UT inspection of each piece of high-pressure iron
- Process to verify that wall thickness meets acceptable specifications
- Readings taken at multiple locations

## VISUAL INSPECTION

- Thorough inspection of each piece of high-pressure iron
- Visual inspection of all visible surfaces (internal and external), as well as assembly components (connections, iron bodies, and wing nuts)
- Identification and documentation of flaws, excessive wear, pitting, cracks, defects, damages, galling, and thread damage



## IRON RESTRAINT TESTING AND SALES

- Full line of restraints available, including all varieties and classifications
- Testing performed under any requested conditions or pressures
- Latest technologies and periodic testing help ensure safety

# INSPECTION SERVICES



## INSPECTION OF PIPE, TOOLS, AND TUBING

- Wet/dry magnetic particle (MP), liquid penetrant (LP), visual, and EMI inspections
- Detailed documentation and inspection report
- Proper stenciling and paint applied to each piece, along with anti-galling agent (dry moly, pipe dope, etc.)
- Identify damaged connections
- Containment equipment is used to prevent environmental contamination
- Additional services are available by customer request

## DRILL PIPE SERVICES

Category

**3**

- Prepare and clean all surface areas
- Visual inspection of connections
- Electromagnetic inspection of tubes
- Document joint number, OD, ID, tong space, and wall thickness
- Segregate non-acceptable joints
- Identify joints with proper markings

Category

**4**

- All Category 3 requirements
- Grind and dry magnetic upsets (four feet on the box side, three feet on the pin side)

Category

**5**

- All Category 4 requirements
- Blacklight connection inspection
- Document bevel diameter, counter bore depth, counter bore diameter, pin length, and seal width

## STEEL TOOL SERVICES

Cleaning, visual inspection, blacklight inspection of connections (with demagnetization as needed), recording measurements and serial numbers, grind and dry magnetic tool bodies

## NON-MAG TOOL SERVICES

Cleaning, visual inspection, liquid penetrant inspection of non-magnetic connections, recording measurements and serial numbers, grind and liquid penetrant tool bodies