DP-Master manufactures the complete range of API drill pipe products from 2-3/8” OD up to 6-5/8” OD.

In addition to standard API 5DP specifications, DP-Master also manufactures drill pipe in accordance with NS-1 and TH HILL Critical specifications as well as to many customer specifications.

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Quality and Manufacturing

All drill pipe and tool joints are manufactured in our modern and technologically advanced manufacturing facility at DP-Master. Each tool joint is forged, machined, processed, inspected and tested by qualified operators to ensure the quality meets or exceed API specifications and customer’s requirements.

The Pipe Body and Tool Joint are joined together by friction welding. Each heat affected zone is quenched and tempered using our post weld heat treatment system to ensure a strong, tough and uniform weld zone.

100% of all friction welds are inspected by UT & MPI and hardness readings are taken across the heat affected zone. The friction weld area both internal and external are ground and sanded to a smooth finish to ensure these critical areas are free of stress risers.
DP-Master Drill Pipe Manufacturing Flow

Drill Pipe Body
- Green Tube
- Laboratory Inspection
- Induction Heating
- Upsetting Pipe Ends
- Austenitizing Pipe
- Quenching Pipe
- Tempering Pipe
- Straightening Pipe

Tool Joint
- Billet Saw Cut
- Forging Into Tool Joint Blank
- Blanking & Boring
- Phosphate Coating
- Threading & Finishing
- Tool Joint Ready for Welding

Assembly
- Drill Pipe Body Ready for Welding

Quality Inspection
- Inspection Point
- Inspection Point
- Inspection Point
- Inspection Point
- Inspection Point
- Inspection Point

TRUSCOPE Inspection System
- Full Length Pipe Inspection
- Special End Area Inspection (SEA), UT Shear Inspection & UT Wall Inspection
- Turning & Boring
Drill pipe is manufactured to applicable industry specifications and to customer requirements. Each drill pipe is inspected 100% at completion.
Quality control is paramount at DP Master, which is why we have a strategic partnership with Tuboscope allowing us to have the TRUSCOPE Inspection System onsite. Our drill pipe undergo Special End Area inspection (SEA) following the TRUSCOPE inspection and all new drill pipe come with a Tuboscope Inspection Certificate, meaning they are ready for service even in the most extreme conditions. The Tuboscope certificate details clearly the specification to which the pipe was inspected and this is a true Third Party Guarantee that adds significant value to DP-Master’s products.

Features and Options

In addition to the standard manufacturing processes where customer required, DP-Master is able to perform hardbanding, internal coating, thread cold roll and make & break to the highest quality standard.

Tool Joint Make & Break

- Factory make & break performed in controlled procedure ensure product consistency. This help to save valuable rig time and cost while reducing risk of mishandling incident and rig downtime.

Surface Protection

- Phosphate coating are applied to all threads and seal shoulders of connections to improve anti galling and corrosion.
- DP-Master can supply internal plastic coating according to customer requirements. The coating forms a protective layer in the pipe ID to prevent corrosion and thus extend the life span of the pipe in the drilling environment.

Enhanced Fatigue Resistance

- Cold rolling of thread roots has demonstrated the beneficial effects to improve fatigue resistance of the connections by minimizing crack initiation.

High Performance Rotary Shoulder Connection

- DP-Master offers its DPM-DS and DPM-MT series double shoulder connections which outperform conventional API connections to meet the needs of deep, extended and challenging wells with greater torsional capacities.
Increase Drill Pipe Life

- Hardbanding on the tool joint or wear pad extends the service life of drill pipe. It can be applied in several configurations to suit clients’ requirements. Hardbanding is applied under closely controlled conditions resulting in a uniform, low porosity, wear resistant surface. DP-Master is authorised to apply market proven hardbanding products including ARNCO 100XT / 300XT, Tuboscope TCS8000 / TCSTI, Duraband NC, Tuffband NC and Castolin OTW 12.

- Extra length tool joints can be incorporated into DP-Master drill pipe to increase tong space to provide several recut to the connections.

Mechanical Properties

DP-Master has selected specially engineered metallurgy for its tool joints and tubes. Tool Joints are manufactured from AISI 4137H steel with increased hardenability giving a very uniform microstructure and excellent mechanical properties through the cross section of the tool joint.

All DP-Master Tubes are supplied by Tianjin Pipe Corporation (TPCO) which is a leading global producer of seamless tubes with modern state-of-the-art facilities. TPCO produces the Green Tubes according to DP-Master’s chemistry and the tubes are then Austenitized, Quenched and Tempered in DP-Master’s own Heat Treatment plant. All mechanical testing is carried out in our own laboratory on site.
DP-Master Drill Pipe Grades Table

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<tr>
<th>SPECs.</th>
<th>GRADE</th>
<th>BODY GRADE</th>
<th>TOOL JOINT GRADE</th>
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**Charpy impact test at full size specimen**

% SYMS as per NACE TM-0177 test method A