

At RDT we understand our customer's need for durability and performance when choosing the drill pipe that they will use. Each joint of pipe we produce goes through our intense quality assurance procedures which start from the time we begin material selection for producing the pipe, to the final inspection at the end of the manufacturing process. Only the best tubes are selected to make the best drill pipe. Each piece of pipe is manufactured from an alloy that produces tight dimensional tolerances.

The product that we produce provides a 95% minimum wall in every tube. This means that you receive pipe that has as much as 100% more wall wear than API premium class drill pipe.

Following the industry standards set for API requirements is not enough for us. RDT only provides a product that exceeds those requirements. We always insure that the threading on our drill pipe is performed in accordance with the new API Spec 5DP.

Hardbanding is designed to increase the life of your tool joint. All hardbanding is applied to our customer's specification. At RDT, our customers can select different types of hardbanding which include tungsten carbide and casing-friendly. We also provide grade identification grooves which are applied to API RP7G specifications or to the specific requirements that our customers may have.

Size OD in.	Nominal Weight lb/ft	Wall Thickness in.	Nominal ID in.	Pipe Body Section Area sq in.	Drift Diameter in.	Min Capacity US gal/ft	Min Displacement US gal/ft
2 3/8	6.65	0.280	1.815	1.843	1 5/8	0.134	0.110
2 7/8	6.85	0.217	2.441	1.812	1 5/8	0.236	0.110
	10.40	0.362	2.151	2.858	2	0.188	0.170
3 1/2	9.50	0.254	2.992	2.59	2 9/16	0.360	0.169
	13.30	0.368	2.764	3.621	2 9/16	0.310	0.218
	15.50	0.449	2.602	4.304	2 7/16	0.276	0.259
4	11.85	0.262	3.476	3.077	2 11/16	0.481	0.205
	14.00	0.330	3.34	3.805	2 11/16	0.445	0.239
	15.70	0.380	3.24	4.322	2 11/16	0.421	0.263
4 1/2	16.60	0.337	3.826	4.407	3 1/8	0.585	0.293
	20.00	0.430	3.64	5.498	2 7/8	0.527	0.350
5	19.50	0.362	4.276	5.275	3 5/8	0.733	0.338
	25.60	0.500	4	7.069	3 3/8	0.641	0.430
5 1/2	21.90	0.361	4.778	5.828	3 7/8	0.910	0.380
	24.70	0.415	4.67	6.63	3 7/8	0.872	0.419
6 5/8	25.20	0.330	5.965	6.526	4 7/8	1.418	0.440
	27.70	0.362	5.901	7.123	4 7/8	1.389	0.468



Optional Drill Pipe Products

Beyond our capability to manufacture NEW drill pipe, RDT also offers our customers an economical option to purchase Premium Plus NEW or Premium Plus USED pipe. At various times, steel mills have sporadic flat spots on green tubes that have been previously ordered. RDT has implemented a process where we can smooth out those flat spots. Although the pipe is still NEW pipe, we are not able to sell it as such, so we classify it as our Premium Plus NEW. Premium Plus NEW is a classification for drill pipe where the remaining body wall is above 92.5%. RDT provides a full certification package containing all the mechanical tests performed as if the drill pipe still maintains a NEW classification.

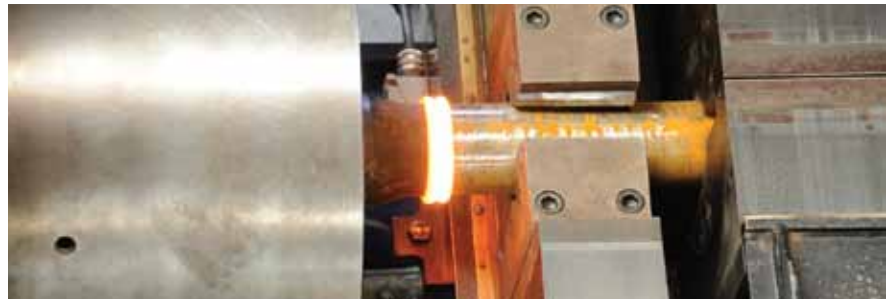
Our Premium Plus USED drill pipe classification covers pipe produced through our re-tool jointing process. At RDT, we take USED drill pipe bodies that have over 85% remaining body wall and weld new tools joints. Please review our re-tool jointing

process technical brochure for more detail on this product. Like our Premium Plus NEW drill pipe, when you order our Premium Plus USED pipe you will also be provided a certification package that includes all mechanical testing of the new tool joints and weld line.

Due to the advances in rig technology over recent years, handling longer tubulars has become increasingly easier than it was in the past. Longer lengths of tubular products fall under the classification of Range III, which average one-half in length more than the traditional Range II tubulars. As a result of the improvements and efficiencies that this rig

technology has produced, RDT has designed and built our manufacturing facilities to handle both Range III, as well as the popular Range II tubular products.

For all rotary shouldered connections, we recommend that you have a connection break-in period prior to placing new drill pipe in service. We can provide this optional service at our manufacturing facility under highly supervised, controlled conditions. By taking the time to utilize this optional procedure at our factory, you can realize substantial cost savings compared to having the new connection break-in performed on the rig.



Quality Products



At RDT our focus is also on providing quality products. Our quality process begins with the selection of the best materials. We pride ourselves on selecting and working with mills that have a high track record for manufacturing the highest quality pipe. Only the best tubes are selected to make the best drill pipe. Our product provides a 95% minimum wall in every tube by using the specifications requiring a rich alloyed chemistry that tightens the pipe's dimensional tolerances. With this in mind, it can mean up to 100% more wall wear for API premium class drill pipe. Our drill pipe is available in standard sizes from 2-3/8" to 6-5/8" and comes in grades E, X, G and S.

Focused on Customer Requirements

Focusing on your needs is paramount to our company. During our manufacturing process all tool joints are made to your requirements. Our threading is done to meet API Specification 7 and all our tool joints are heat-treated and manufactured from materials selected to exceed API requirements. Available upon request, RDT offers hardbanding in both tungsten carbide and casing-friendly types. All hardbanding is done specifically to meet our customer's request and specifications. All grooves are applied to meet API RP7G specification or to the specific requirements directed by our customers.

The first step in drill pipe manufacturing is the upsetting process. At RDT we maintain tight control over our manufacturing process which results in superior quality in our tool joints. Increasing the runout length produces drill pipe with superior fatigue resistance. After the upsetting process, the tube then goes through a strictly controlled heat-treat process where we make sure that each tube is quenched and tempered to bring it into compliance with API specifications.

Maintaining our vigilance on producing a quality product requires careful attention to ensure the correct mechanical properties are achieved during laboratory testing of the heat-treated tubes.



Once the tubes are heat-treated they are joined by using an inertia welding process to the tool joints. Weld conditions are recorded and compared against proprietary parameters using an electronically controlled welding cycle. Upon removal of the weld flash, the weld zone is heated to achieve a temperature within the austenitizing range, then quenched and tempered to achieve the required mechanical properties. During this process all heat-treat cycles are recorded and measured to ensure that we meet the specified parameters. The pipe goes through the polishing cycle of

both the internal and external weld areas to remove all the steps and machining marks before inspection. To verify the integrity of each weld zone, we conduct both sample destructive testing and 100% non-destructive testing on every joint. This is just one small step in the major QA/QC process that we use on each joint of drill pipe before it is ready for shipment.

Once the inspection process is complete, we can apply hardbanding and the internal plastic coating as per our customer's request.

Customer Focused - Service Driven

At RDT, our commitment to focusing on our customer's needs, providing a superior product and maintaining exemplary service is what sets us apart from our competitors. Striving to meet your needs on a quality product, delivered in a timely manner, to the specifications that you require, will always be paramount to how we conduct our business. Please contact your RDT sales representation to discuss all your drill pipe requirements.

