



HEAVY WALL DRILL PIPE

CONSTRUCTION FEATURES (MATERIAL)

It consists of two tool joints and one central part. The steel used in the manufacture of the tool joints is a AISI-4145H mod. high purity steel, fully heat treated to 285-310 Brinell hardness and 40 ft x lb minimum IZOD impact strength. All other physical properties conform with API standard 7 latest revised edition. The central part is made from a solid bar of modified AISI - 1340 steel, fully heat treated. The tool joints are attached by welding.

STRESS RELIEF GROOVES & CONNECTIONS FEATURES

- PARVEEN long stress relief grooves on box ends are standard on 4.1/2" IF, 4" IF & 3.1/2" IF Connections.
- API stress relief grooves on pin ends are standard on 4.1/2" IF, 4" IF & 3.1/2" IF Connections.
- Thread roots are cold worked on all sizes.
- All connections are phosphatized, coated with lubricant and provided with steel protectors.

HARDBANDING

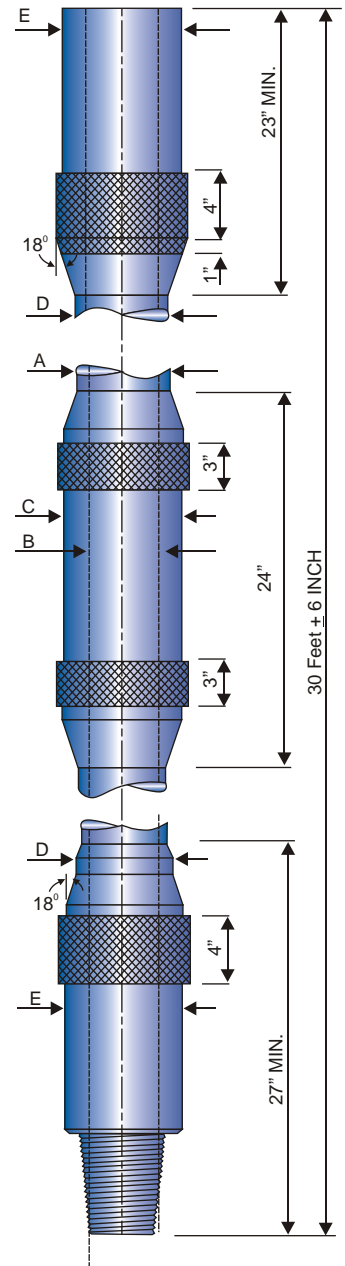
To optimize wear resistance hard banding is standard on pin and box connections and central upset. The heavy duty hard metal is sintered granular tungsten carbide 10/20 mesh or 20/45 mesh (fine particles). The hard banding is deposited by an automatic machine after pre-heating the pipe and is followed by stress relieving. Standard pads

- One 4" wear pad on both pin and box end. Plus one 1" pad on taper section of box;
- Two 3" wear pads on central upsets;

The hardbanding is completely flush on both tool joints and 4/32" oversize on the central upset (fully flush on request).

On inquires and orders please specify:

- Nominal size
- Range
- API stress relief grooves, if needed
- Internal Coating, if needed.



DIMENSIONAL DATA (RANGE II)

NOM. SIZE (A)	TUBE						TOOL JOINT			MECH. PROPERTIES		WEIGHT		MAKE UP TORQUE (ft-lb)	
	NOM. TUBE DIMENSION			CENTER UPSET (C)	ELEVATOR UPSET (D)	MECH. PROPERTIES TUBE SECTION		CONN. SIZE & TYPE	O.D. (E)	I.D.	TENSILE	TORSIONAL	APPROX. WT. INCL. TUBE & JOINTS (LB)		
	I.D. (B)	WALL THICKNESS (IN)	AREA (SQ IN)			YIELD (ft-lb)	TORSIONAL YIELD (ft-lb)				TENSILE YIELD (lb)	TORSIONAL YIELD (ft-lb)	WT. PER (ft)		WT. PER Jt. (30-ft)
3.1/2	2.1/16	0.719	6.280	4	3.5/8	345,000	19,500	NC-38 (3.1/2 I. F.)	4. 3/4	2.3/16	748,750	17,500	25.3	760	9,900
4	2.9/16	0.719	7.410	4.1/2	4.1/8	407,500	27,600	NC-40 (4 F.H.)	5. 1/4	2.11/16	711,470	23,520	29.7	890	13,250
4.1/2	2.3/4	0.875	9.965	5	4.5/8	548,000	40,700	NC-46 (4 I.F.)	6. 1/4	2.7/8	1,024,500	38,700	41.0	1230	21,800
5	3	1,000	12.566	5.1/2	5/8	691,100	56,490	NC-50 (4.1/2 I.F.)	6.1/2	3.1/8	1,286,100	51,370	49.3	1,480	29,400