

GOST 8467-83 STEEL TUBES WITH PIN CONNECTIONS FOR GEOLOGICAL SURVEYING

Tube sizes are shown in Fig. 1 and Table 1.

Table 1 Sizes, mm

Tube					Upset end				
Outside diameter, D	Wall thickness, S	Specified length	Theoretical mass, kg		d	11	12	D1	G
			tube body	with upset end					
33.5 ±0.3	4.75 +0.57	1500	3.37	-	без высадки non-upset	28.5 +0.5	40		
	-0.48	3000							
42 ±0.45	5.00 +0.6	1500	4.56	0.65	20-27	100	20	33.5 +0.5	50
	-0.5	3000							
		4500							
50 ±0.45	5.50 +0.66	1500	6.04	0.96	26-35	110	25	42.0 +0.5	55
	-0.55	3000							
		4500							

Thread profile end size (left-hand thread included) are shown in Fig. 2 and Table 2 and 3.

Fig. 1. Drill pipe with nipple connection.

Fig. 2. Profile of thread for drill pipe with nipple connections.

Table 2

Параметры резьбы Thread parameters	Номинальные размеры для труб диаметрами Specified dimensions for pipe diameter	
	33.5; 42 мм	50 мм
Шаг (Thread pitch), S, мм	6.35	6.35
Угол наклона боковых сторон профиля /2, град	5	5
Angle /2, degrees		
Рабочая высота витка, t, мм	1.5	1.75
Thread turn height, t, мм		
Ширина витка у вершины: Turn width at the apex:		
наружной резьбы, m, мм	3.029	3.007
outside thread, m, мм		
внутренней резьбы, m1, мм	3.044	3.022
inside thread, m1, мм		
Наименьший зазор по ширине витка (Minimum gap), a, мм	0.015	0.015

Table 3 Sizes, mm

Диаметр наружн. трубы	Номин. диаметр резьбы	Наружная резьба		Внутренняя резьба	
		наружн. диаметр d0	внутр. диаметр d1	наружн. диаметр d0	внутр. диаметр d1
Outside diameter of tube	Specified diameter of thread	Outside thread		Inside thread	
		outside diameter d0	inside diameter d1	outside diameter d0	inside diameter d1
33.5	28	28	25	28.025	25
42	33	33	30	33.032	30
50	41.5	41.5	38	41.532	38

Technical requirements.

Tubes shall be manufactured of steel grades 36G2S, 40H and 30HGS according to GOST 4543-71 and steel grade D with sulphur and phosphorus contents not over 0.015 percent each.

Tubes of steel grade D shall be normalized; tubes of steel grade 36G2S shall be normalized or quenched and tempered; tubes of steel grades 40H or 30HGS shall be quenched and tempered. Heat treatment of tubes shall be carried out after upsetting.

Mechanical properties of normalized tubes are given in table 4.

Table 4

Механические свойства Mechanical properties	Марка стали (Steel grade)	
	36Г2С	Д
Предел прочности при растяжении, кгс/мм ² , не менее Tensile strength, kg/mm ² , not lower	70	65
Предел текучести, кгс/мм ² , не менее Yield limit, kg/mm ² , not lower	50	38
Относительное удлинение, %, не менее Elongation, %, not lower	12	16

Mechanical properties of heat treated tubes are subject to agreement. Tube surface shall be smooth, without cracks, laps and deep scratches. Minor surface defects are permissible if they leave the dimensions within the specified limits.

The runout between the upset and non-upset parts shall be smooth.

Wall thickness variation and ovality shall leave tube dimensions within the specified tolerances. Tube curvature shall be under 1 mm per meter length.

Thread surface roughness shall not exceed 3.2 micrometers.

The remaining wall thickness in the thread recess is given below:

for OD 33.5 mm: not lower than 2.2 mm;

for OD 42 mm: not lower than 3.9 mm;

for OD 50 mm: not lower than 3.6 mm.

One tensile test specimen is taken from a tube lot according to GOST 1497-73.