Weatherford couplings

High-Stress Endurance

Weatherford Grade T and Grade SM sucker-rod couplings are manufactured to strict quality-control standards from high-strength alloy steel. They conform to API Specification 11B.

Weatherford Hi-T™ couplings are designed to carry the high-torque requirements of progressing cavity-pumping applications and the high loads of deep wells.

The threads of these couplings are cold formed and produced by displacement of material rather than by removal of material, as in the cut thread. Cold forming the thread results in a compressive stress at the root of the thread, giving maximum strength to the traditional weak point of cut-thread couplings.

Weatherford sprayed-metal couplings have a corrosion-resistant surface with a low coefficient of friction to reduce wear on the tubing and the coupling. These couplings are recommended for deviated wells.

Weatherford couplings are available in slimhole, fullsize, and oversized configurations in sizes of 5/8 through 1-1/8 in.

Coupling Selection

Coupling*	Application	Tensile Minimum (ksi, MPa)
API Grade T	General noncorrosive wells	95 655
API Grade SM Coated	Abrasive/properly inhibited wells	
Hi-T T	High-torque, noncorrosive wells	130 896
Hi-T SM	High-torque, abrasive/properly inhibited wells	

*Weatherford Hi-T couplings have enhanced characteristics to help carry the ultrahigh torque ratings of the EL and T-Rods.

Coupling Sizes and Weights

API Size (in.)	OD (in.)		Weight (lb, kg)	
	Standard	Slimhole	Standard	Slimhole
5/8	1-1/2	1-1/4	1.30 0.59	1.00 0.45
3/4	1-5/8	1-1/2	1.50 0.68	1.26 0.57
7/8	1-13/16	1-5/8	1.80 0.82	1.50 0.68
1	2-3/16	2	2.58 1.17	2.01 0.91
1-1/8	2-3/8	2-1/4	3.13 1.42	2.50 1.34

Approximate Weight of 25-ft Sucker Rod

API Size (in.)	Without Coupling (lb, kg)	With Standard Coupling (lb, kg)	With Slimhole Coupling (lb, kg)
5/8	27.2 12.3	28.5 12.9	28.2 12.8
3/4	38.5 17.5	40.0 18.1	39.8 18.1
7/8	52.0 23.6	53.8 24.4	53.5 24.3
1	69.9 31.7	72.5 32.9	71.9 32.6
1-1/8	88.7 40.2	91.8 41.6	91.17 41.35

API Grade T coupling

Grade SM coupling

Hi-T coupling

