Polished Rod

Polished Rod, it is designed and manufactured in accordance with the latest edition of the API specification 11B. Our polished rods and couplings are furnished with cold formed fully rolled threads. And they are made from fine quality alloy steel, featured by high strength, smooth surface and long service life. The tensile strength of polished rods are a range of 655 to 1102 Mpa. Regular polished rods are connected to polished rods coupling, and end upsetting polished rods are connected to sucker rod coupling in use. This technique ensures a perfect thread on each and every pin. The burnished thread surface that results from rolled threads improves resistance to corrosion and reduces abrasion within the thread. The work hardened flank provides increased surface tensile, yield and shear strength. Due to pressure deformation, a residual compressive stress system builds up at the thread root, which counteracts tensile loading. When compared to cut threads, the load capacity of rolled thread is increased by 6 – 12%.

Usual Size Parameters:

1.Commom Polished Rod (API Spec 11B)

Size (inch)	Diameter of rod body OD（mm）	Thread nominal diameter (in)	With of sucker rod size (in)	Polished rod thread vanish cone BP4	Standard length L ±50(mm)
1-1/8	28.58 (+0.13,-0.25)	15/16 or 1 1/16	5/8 or 3/4	9°	2400/3400/4900/6700/7900/9100/11000/12200
1-1/4	31.75 (+0.13,-0.25)	1 3/16	7/8	9°	2400/3400/4900/6700/7900/9100/11000/12200
1-1/2	38.10 (+0.13,-0.25)	1 3/8	1	9°	2400/3400/4900/6700/7900/9100/11000/12200

2.End upsetting polished rod (SY/T5029-2006):

Size (inch)	Diameter of rod body OD（mm）	Upsetting end thread nominal diameter (in)	Not upsetting end thread nominal diameter (in)	With of sucker rod specifications (in)	Length of polished rods LK ±50 （mm）
1	25.40 (+0.13,-0.25)	1 3/16	15/16	1 3/16	4500/6000/8000/10000/11000/12000
1-1/8	28.58 (+0.13,-0.25)	1 3/8	1 1/16	1 3/8	4500/6000/8000/10000/11000/12000
1-1/4	31.75 (+0.13,-0.25)	1 9/16	1 3/16	1 9/16	4500/6000/8000/10000/11000/12000

Types:

PISTON STEEL: Piston Steel is manufactured from a special quality medium carbon steel (1045) and designed for light to heavy loads where well fluids are non-corrosive. This polished rod has a

minimum tensile strength of 100,000 PSI and is the best choice for heavy pumping applications where corrosion is not a problem.

2.ALLOY STEEL: Alloy Steel is manufactured from a chromium-molybdenum alloy steel (4140) and designed for light to heavy loads at any depth in mild to medium corrosive well fluids that are effectively inhibited against corrosion. This polished rod has a minimum tensile strength of 125,000 PSI and has been alloyed to improve its hardenability and increase its resistance to corrosion and abrasion.

3. STAINLESS STEEL: Stainless Steel is manufactured from Type 431 High Strength stainless steel. This polished rod has a minimum tensile strength of 115,000 PSI and has the best corrosion resistance properties when compared to 1045 or 4140 alloy rods. It has excellent tensile and torque strength and good toughness, making it ideally suited for progressing cavity pump application. This grade exhibits excellent resistance to a wide variety of corrosive media including salt water. It is designed for any loads at any depth where corrosion is a problem.

4. HASCO-LOY HARD FACED: The Hard surfaced polished rod is made from cold finished 1045 carbon steel with a hard faced surface applied to the O.D. It is recommended for abrasive and corrosive conditions under moderate to heavy loads. This polished rod has the best corrosion and abrasion resistance of ANY in the industry.

5. HIGH-POWER N50: High-Power N50 stainless steel polished rod is designed to solve your most serious corrosion problems. This rod conforms to NACE MRO175-90 standards for the high-strength unannealed bar. This polished rod has a minimum tensile strength of 135,000 PSI, excellent corrosion resistance and mechanical properties superior to anything on the market.

6.MEGA-BAR: Mega-Bar is a high molybdenum special stainless steel with twice the nickel content of our N50 Polished Rod. This Polished Rod provides excellent resistance to pitting, crevice corrosion and stress cracking. Mega-Bar has a minimum tensile strength of 121,000 PSI, elongation of 36% and a proven record of outstanding performance.