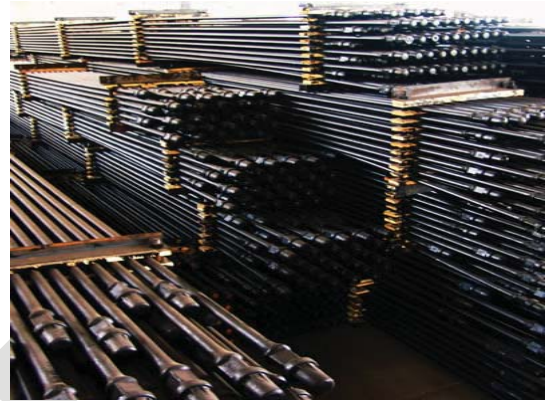


SUCKER ROD

Sucker Rod

Sucker rod is a steel rod that is used to make up the mechanical assembly between the surface and downhole components of a rod pumping system. Sucker rods are 25 to 30 ft long and threaded at each end to enable the downhole components to be run and retrieved easily. All of sucker rod that PPGL supply are conform to API SPEC 11B Gr. C, K D, KD, HY and ultra-strength with high and ultrahigh load ratings plus corrosion-resistant properties. Each rod is heat treated and has pin ends machined with API roller threads.



Sucker Rod

Regular Sucker Rod Specifications

| Name | Size | Grade | Mechanical Properties | | | | Length (m) |
|-------------------------------|------|---------|-----------------------|-----------|-------------|-------|----------------------|
| | | | Rm (MPa) | Rel (MPa) | A (%) 200mm | Z((%) | |
| Sucker Rod and Pony Rod | Φ 16 | K | 620~795 | 415 | ≥13 | ≥60 | 7.62 8.00 9.14 |
| | Φ 19 | | | | | | |
| | Φ 22 | | | | | | |
| | Φ 25 | C | 620~795 | 415 | ≥13 | ≥50 | |
| | Φ 29 | | | | | | |
| | Φ 32 | | | | | | |
| Φ 38 | D | 795~965 | 590 | ≥10 | ≥50 | | |

High Strength Anti-Corrosion Rod Specifications

| Name | Size | Grade | Mechanical Properties (MPa) | Length (m) |
|---|------|-----------------|-----------------------------|----------------------|
| High strength anti-corrosive sucker rod | Φ 16 | KD Norris 75 | 795~965 | 7.62 8.00 9.14 |
| | Φ 19 | | | |
| | Φ 22 | | | |
| | Φ 25 | | | |
| | Φ 29 | | | |
| | Φ 32 | | | |

Ultra-strength Sucker Rod Specifications

| Name | Size | Grade | Mechanical Properties (MPa) | Length (m) |
|-------------------------------|------|-----------------------|-----------------------------|----------------------|
| Ultra- strength sucker rod | Φ 16 | HL HY Norris 75 | 965~1195 | 7.62 8.00 9.14 |
| | Φ 19 | | | |
| | Φ 22 | | | |
| | Φ 25 | | | |
| | Φ 29 | | | |
| | Φ 32 | | | |

Polished Rod Specifications

| Name | Size | Grade | Mechanical Properties | | | | Length (m) |
|-------------------------------|------|-------|-----------------------|----------|-------|-------|-------------------------------|
| | | | Rel (MPa) | Rm (MPa) | A (%) | Z (%) | |
| Polished rod upset on one end | Φ25 | H | ≥795 | 965~1195 | ≥10 | ≥45 | 6.00 8.00 9.50 10.00 |
| | Φ29 | D | ≥590 | 795~965 | ≥10 | ≥50 | |
| Φ32 | | | | | | | |
| Φ38 | | | | | | | |
| Polished rod normal type | Φ25 | H | ≥795 | 965~1195 | ≥10 | ≥45 | 6.00 8.00 9.50 10.00 |
| | Φ29 | D | ≥590 | 795~965 | ≥10 | ≥50 | |
| Φ32 | | | | | | | |
| Φ38 | | | | | | | |
| Polished rod metal spray | Φ32 | H | ≥795 | 965~1195 | ≥10 | ≥45 | 6.00 |
| | Φ38 | D | ≥590 | 795~965 | ≥10 | ≥50 | 8.00 9.14 |

Sucker Rod coupling Technical Specifications

| Name | Size | Grade | Characters |
|-------------------------|--|---------|------------------------------------|
| Sucker rod coupling | 5/8" 3/4" 7/8" 1" 1-1/8" | T SM | Couplings and slimhole couplings |
| Sub Coupling | 5/8" -3/4" 3/4"-7/8" 7/8"-1" 1"- 1-1/8" | T SM | Connecting two sizes of sucker rod |
| Polished rod coupling | 5/8" 3/4" 7/8" 1" 1-1/8" | T SM | 9° cone |
| Coupling of spray metal | 5/8" 3/4" 7/8" 1" 1-1/8" | SM | Couplings and slimhole couplings |