



优钻地质材料供应有限公司 PRE-MAT DRILLING SUPPLIES PTE LTD

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API DRILL ROD (WITH FRICTION WELDED TOOL JOINT)

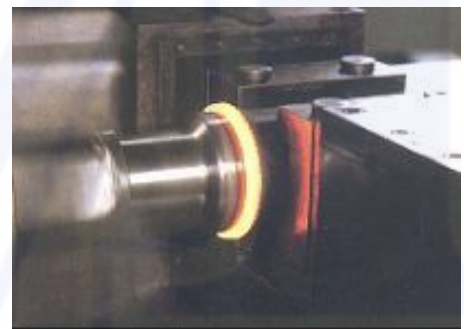
Product Origin: Korea

| Drill Rod Body | | Tool Joint | Wall Thickness | Available Length | Weight |
|-------------------|----------|--------------------------|----------------|------------------|--------|
| OD | ID | | | | |
| 3 1/2" (88.9 mm) | 76.1 mm | 2 3/8" API Reg Pin x Box | 6.4 | 3.0 | 45.0 |
| | | 2 3/8" API Reg Pin x Box | 6.4 | 1.5 | 25.5 |
| | | 2 3/8" API Reg Pin x Box | 6.4 | 1.0 | 19.0 |
| 4 1/2" (114.3 mm) | 100.1 mm | 3 1/2" API Reg Pin x Box | 7.1 | 3.0 | 65.0 |
| | | 3 1/2" API Reg Pin x Box | 7.1 | 1.5 | 39.0 |
| | | 3 1/2" API Reg Pin x Box | 7.1 | 1.0 | 32.0 |
| 5 1/2" (139.7 mm) | 123.5 mm | 4 1/2" API Reg Pin x Box | 8.1 | 3.0 | 99.7 |
| | | 4 1/2" API Reg Pin x Box | 8.1 | 1.5 | 60.7 |
| | | 4 1/2" API Reg Pin x Box | 8.1 | 1.0 | 47.7 |
| 5 1/2" (139.7 mm) | 120.7 mm | 4 1/2" API Reg Pin x Box | 9.5 | 3.0 | 111.6 |
| | | 4 1/2" API Reg Pin x Box | 9.5 | 1.5 | 65.7 |
| | | 4 1/2" API Reg Pin x Box | 9.5 | 1.0 | - |

Raw Material Specifications

Drill Rod : API 5CT N-80 or API 5CT P-110
 Yield Strength : 80,000-110,000 psi
 Tensile Strength : Minimum 100,000 psi
 Tool Joint : JIS SCM415 with heat treatment c/w protection cap both ends

After friction welding process, heat affected zone to be normalized.



Friction Welding Process



SAVER/CROSSOVER SUBS

API Reg Pin x API Reg Box

- 3½" Pin x 2¾" Box (260 mm Overall Length)
- 3½" Pin x 2⅞" Box (305mm Overall Length)
- 3½" Pin x 3½" Box (280mm Overall Length)
- 3½" Pin x 3½" Box (450mm Overall Length)
- 3½" Pin x 3½" Box (190mm Overall Length)
- 3½" Pin x 4½" Box (300mm Overall Length)
- 4½" Pin x 3½" Box (300mm Overall Length)
- 4½" Pin x 4½" Box (300mm Overall Length)
- 6⅝" Pin x 4½" Box (300mm Overall Length)
- 2⅞" Pin x 2¾" Box (230mm Overall Length)
- 2⅞" Pin x Short Thread 2¾" Box (230mm Overall Length)

API Reg Pin x API Reg Pin

- 3½" Pin x 3½" Pin (280mm Overall Length)
- 3½" Pin x 3½" Pin (430mm Overall Length)
- 3½" Pin x 4½" Pin (300mm Overall Length)
- 2⅞" Pin x 2¾" Pin (280mm Overall Length)
- 2⅞" Pin x 2¾" Pin (430mm Overall Length)
- 2⅞" Pin x 3½" Pin (280mm Overall Length)
- 2⅞" Pin x 3½" Pin (430mm Overall Length)
- 4½" Pin x 4½" Pin (280mm Overall Length)

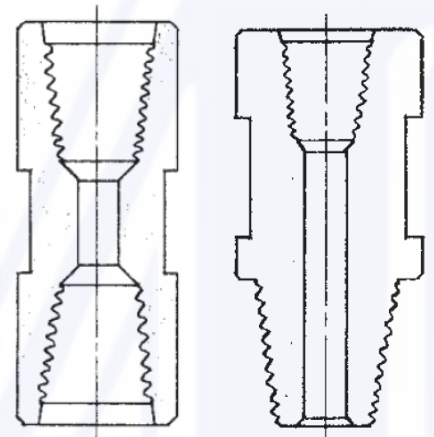
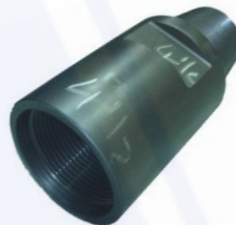
API Reg Box x API Reg Box

- 2⅞" Box x 2⅞" Box (240mm Overall Length)
- 2⅞" Box x 3½" Box (240mm Overall Length)
- 3½" Box x 2¾" Box (260mm Overall Length)
- 3½" Box x 3½" Box (280mm Overall Length)
- 3½" Box x 4½" Box (300mm Overall Length)
- 4½" Box x 4½" Box (300mm Overall Length)
- 6⅝" Box x 3½" Box (300mm Overall Length)
- 6⅝" Box x 4½" Box (300mm Overall Length)
- 2⅞" Box x 2¾" Box (230mm Overall Length)
- 6⅝" Box x 6⅝" Box (300mm Overall Length)

Imported API Crossover/Subs

Origin: KOREA

JSI SCM415 Carbursed and Hardened to HRc 46~50



API Tool Female Joint

- 3½" Box x 4Flat Wrench Slot (218 mm Overall Length)
- 4½" Box x 4Flat Wrench Slot (238 mm Overall Length)
- 6⅝" Box x 4 Flat Wrench Slot

API Tool Male Joint

- 3½" JointPin x 5½" ODBody x (70mm Overall Length)
- 4½" JointPin x 5½" ODBody x (230mm Overall Length)
- 6⅝" JointPin x One end with NO flat Wrench Slot

PHYSICAL PROPERTIES

(CASING & TUBING)

| SPECIFICATION | APPLICATION | GRADE | MECHANICAL | |
|--------------------------------------|--|-------------------|----------------------|------------------------|
| | | | YIELD STRENGTH (psi) | TENSILE STRENGTH (psi) |
| API 5CT | GROUP 1 | H-40 | 40,000 ~ 80,000 | ≥ 60,000 |
| | | J-55 | 55,000 ~ 80,000 | ≥ 75,000 |
| | | K-55 | 55,000 ~ 80,000 | ≥ 95,000 |
| | | N-80 | 80,000 ~ 110,000 | ≥ 100,000 |
| API 5CT | GROUP 2 | L-80 | 80,000 ~ 95,000 | ≥ 95,000 |
| | | L-80 9CR | 80,000 ~ 95,000 | ≥ 95,000 |
| | | L-80 13CR | 80,000 ~ 95,000 | ≥ 95,000 |
| | | C-90 | 90,000 ~ 105,000 | ≥ 100,000 |
| | | C-95 | 95,000 ~ 110,000 | ≥ 105,000 |
| | | T-95 | 95,000 ~ 110,000 | ≥ 105,000 |
| API 5CT | GROUP 3 | P-110 | 110,000 ~ 140,000 | ≥ 125,000 |
| API 5CT | GROUP 4 | Q-125 | 125,000 ~ 150,000 | ≥ 135,000 |
| SM SERIES | G GENERAL & DEEP WELL SERVICE | SM-95G | 95,000 ~ 125,000 | ≥ 110,000 |
| | | SM-125G | 125,000 ~ 155,000 | ≥ 140,000 |
| | | SM-140G | 140,000 ~ 170,000 | ≥ 150,000 |
| | | SM-150G | 150,000 ~ 180,000 | ≥ 160,000 |
| | | SM-155G | 155,000 ~ 185,000 | ≥ 163,000 |
| | T,TT HIGH COLLAPSE STRENGTH | SM-80T | 80,000 ~ 110,000 | ≥ 100,000 |
| | | SM-95T | 95,000 ~ 125,000 | ≥ 110,000 |
| | | SM-95TT | 95,000 ~ 125,000 | ≥ 110,000 |
| | | SM-110T | 110,000 ~ 140,000 | ≥ 125,000 |
| | | SM-110TT | 110,000 ~ 140,000 | ≥ 125,000 |
| SM-95TS | | 95,000 ~ 110,000 | ≥ 105,000 | |
| TS HIGH COLLAPSE & SOUR WELL SERVICE | SM-80TS | 80,000 ~ 95,000 | ≥ 100,000 | |
| | SM-90TS | 90,000 ~ 105,000 | ≥ 103,000 | |
| | SM-95TS | 95,000 ~ 110,000 | ≥ 105,000 | |
| | SM-C100T | 100,000 ~ 115,000 | ≥ 105,000 | |
| | SM-C110T | 110,000 ~ 125,000 | ≥ 115,000 | |
| S SOUR WELL SERVICE | SM-80S | 80,000 ~ 95,000 | ≥ 100,000 | |
| | SM-90S | 90,000 ~ 105,000 | ≥ 103,000 | |
| | SM-95S | 95,000 ~ 110,000 | ≥ 105,000 | |
| | SM-C100 | 100,000 ~ 115,000 | ≥ 105,000 | |
| | SM-C110 | 110,000 ~ 125,000 | ≥ 115,000 | |
| SS SEVERE SOUR WELL SERVICE | SM-85SS | 85,000 ~ 100,000 | ≥ 100,000 | |
| | SM-90SS | 90,000 ~ 105,000 | ≥ 100,000 | |
| | SM-100SS | 100,000 ~ 115,000 | ≥ 105,000 | |
| L LOW TEMPERATURE SERVICE | SM-80L | 80,000 ~ 110,000 | ≥ 100,000 | |
| | SM-80LL | 80,000 ~ 110,000 | ≥ 100,000 | |
| | SM-95L | 95,000 ~ 125,000 | ≥ 105,000 | |
| | SM-95LL | 95,000 ~ 125,000 | ≥ 105,000 | |
| | SM-110L | 110,000 ~ 140,000 | ≥ 125,000 | |
| | SM-110LL | 110,000 ~ 140,000 | ≥ 125,000 | |
| NEW SM SERIES | CO ₂ CORROSIVE WELL SERVICE | SM9CR-75 | 75,000 ~ 90,000 | ≥ 95,000 |
| | | SM9CR-80 | 80,000 ~ 95,000 | ≥ 95,000 |
| | | SM9CR-95 | 95,000 ~ 110,000 | ≥ 105,000 |
| | | SM13CR-75 | 75,000 ~ 90,000 | ≥ 95,000 |
| | | SM13CR-80 | 80,000 ~ 95,000 | ≥ 95,000 |
| | | SM13CR-85 | 95,000 ~ 100,000 | ≥ 100,000 |
| | | SM13CR-95 | 95,000 ~ 110,000 | ≥ 105,000 |
| | CO ₂ -LOW H ₂ S CORROSIVE WELL SERVICE | SM13CR-80 | 80,000 ~ 95,000 | ≥ 90,000 |
| | | SM13CR-95 | 95,000 ~ 110,000 | ≥ 105,000 |
| | | SM13CR-110 | 110,000 ~ 125,000 | ≥ 115,000 |
| | | SM22CR-65 | 65,000 ~ 100,000 | ≥ 93,000 |
| | | SM22CR-110 | 110,000 ~ 140,000 | ≥ 125,000 |
| | | SM22CR-125 | 125,000 ~ 145,000 | ≥ 130,000 |
| | | SM22CR-140 | 140,000 ~ 160,000 | ≥ 145,000 |
| NEW SM SERIES | SM25CR-75 | 75,000 ~ 100,000 | ≥ 95,000 | |
| | SM25CR-110 | 110,000 ~ 140,000 | ≥ 125,000 | |
| | SM25CR-125 | 125,000 ~ 145,000 | ≥ 130,000 | |
| | SM25CR-140 | 140,000 ~ 160,000 | ≥ 145,000 | |
| | SM25CRW-80 | ≥ 80,000 | ≥ 116,000 | |
| | SM25CRW-110 | 110,000 ~ 140,000 | ≥ 125,000 | |
| | SM25CRW-125 | 125,000 ~ 145,000 | ≥ 130,000 | |
| SM25CRW-140 | 140,000 ~ 160,000 | ≥ 145,000 | | |