

“세상에서 가장 아름답고 완벽한 원을 만드는 기술 - 아주베스틸”

아주베스틸의 도전은 멈추지 않습니다.

정상을 향한 질주를 시작합니다.

산업의 기초 소재인 철강재를 생산하여 에너지, 건축, 자동차, 선박 등 대한민국 주요산업의 세계적인 경쟁력을 확보하는데 큰 기여를 해왔습니다. 끊임없는 품질혁신과 기술개발로 강관제품의 고급화와 고부가가치 창출에 앞장서고 있습니다.





AJU Besteel

The Best Challenge
The Best Passion
The Best Value

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CEO 인사말



“도전하는 경영인으로 남겠습니다”

안녕하십니까? 아주베스틸 대표이사 박유덕입니다.

당사는 1996년 창업 이래 철강산업이 국가발전의 밑거름이며 모든 산업의 근간이 되는 핵심적 분야임을 새삼 되새기며 철강산업의 선두주자가 되고자 부단히 노력해 오고 있습니다.

최신 설비를 갖추고, 최상의 품질과 서비스로 고객의 다양한 욕구와 기대에 적극 부응하며, 고객만족과 행복이 궁극적으로 이루어질때까지 끊임없이 정진할 것입니다.

우리 앞에 펼쳐진 21세기는 저희에게는 무한한 도전과 기회의 장으로 다가오고 있습니다.

사회적 책임과 회합 그리고 글로벌 기업시민으로서 책임을 다하는 모습으로 성장해 나갈 것입니다.

아낌없는 관심과 격려를 부탁드립니다, 아주베스틸(주)를 믿고 사랑해주신 고객여러분께 깊이 감사드립니다.

아주베스틸 대표이사 **박 유 덕**

The History of Business



아주베스틸(주)는 1996년 창립 이래 근간산업인 철강을 기반으로 최신 설비를 갖추고 산업 전반에 널리 사용되는 강관제품을 공급해오고 있습니다.

1997년 강관회사로의 첫발을 내딛은 아주베스틸은 2005년 종합강관회사로서의 초석을 다졌으며, 2009년 API인증을 획득하면서 업계에서 탁월한 기술력을 인정받았습니다. 2010년에는 일반 배관용, 압력 배관용, 구조용 강관과 에너지용 3대 강관인 TUBING, CASING, LINE PIPE를 모두 공급하는 명실상부한 종합강관회사로 입지를 구축하였습니다.

1996-2004
창업기
**THE CHALLENGE
BIZ**

- 1996년 02월 설립
- 1998년 02월 공장이전(경주시 외동읍)
- 2001년 12월 Slitter Line 설비완공
- 2003년 01월 서울사무소 설립
- 10월 QS-9000:1998, ISO-9002:1994 인증획득
- 12월 정보화 경영체제 인증획득(5급)

2005-2009
성장기
**THE PASSION
BIZ**

- 2005년 09월 포항공장 설립
- 11월 제42회 무역의 날 1천만불 수출탑 수상
- 12월 소경 설비라인 완공
- 2006년 03월 KSD 3566, KSD 3760, KSD 3507 인증획득
- 10월 PPL 라인 설비완공
- 2007년 04월 본점이전(경주 □ 포항 남구 대송면)
- 06월 KSD 3566, KSD 3760, KSD 3507 각각 종류 추가
- 08월 KSD 3631, KSD 3562 인증획득
- 12월 중경 설비라인 완공
- 12월 아연도금 설비라인 완공
- 2008년 10월 KSC 8401 인증획득
- 12월 매출액 1,000억원 달성, 액면분할 실시(5,000원)

2009-Present
도약기
**THE VALUE
BIZ**

- 2009년 05월 API 5CT, API 5L 인증획득
- 2010년 04월 GL(독일선급), KR(한국선급), ABS(미국선급) 인증획득
- 06월 대경라인 설비완공
- 08월 KSD 3568, KSD 3589, KS F 4602 인증획득
- 10월 OCTG라인 설비완공
- 11월 열처리 라인 설비완공
- 11월 제47회 무역의 날 3천만불 수출탑 수상
- 2011년 01월 KSD 3565 상수도용 도복장 강관 인증 획득
- 03월 Lloyd(영국선급) 인증 획득
- 04월 DNV(노르웨이선급) 인증 획득



주요생산제품
MAIN PRODUCTS & USAGE

| 관의종류 | | 국가별 유사 규격명 | | | | 용도 |
|------------|------|---------------------------------|--------------------------------|-----------------------|--------------------------|---|
| 종류 | 제조방법 | 한국 | 일본 | 미국 | 영국 | |
| 배관용강관 | ERW | 배관용탄소강관 (KS D 3507/SPP) | 배관용탄소강관 (JIS G 3452 / SGP) | ASTM A53 ASTM A153 | BS 1387 | 사용압력이 비교적 낮은 증기, 공기, 물, 기름, 가스 등의 배관용강관 |
| | ERW | 연료가스배관용탄소강관 (KS D 3631/SPPG) | - | - | - | 사용압력이 중압이하인 연료용 가스(도시가스 및 액화석유가스) 공급배관 |
| 압력배관용 강관 | ERW | 압력배관용탄소강관 (KS D 3562 / SPPS) | 압력배관용탄소강관 (JIS G 3454/STPG) | ASTM A53 | BS 3601 | 350c 이하에서 사용하는 배관용 강관 |
| 구조용강관 | ERW | 기계구조용탄소강관 (KS D 3517/STKM) | 기계구조용탄소강관 (JIS G 3445/STKM) | ASTM A513 | BS 980 /BS 1717, BS 1775 | 기계, 자동차, 자전거, 가구, 기구 등의 기계부품에 사용하는 강관 |
| | ERW | 일반구조용탄소강관 (KS D 3566/STK) | 일반구조용탄소강관 (JIS G 3444/STK) | ASTM A500 ASTMA252 | BS 980 /BS 1139 BS 4848 | 토목, 건축, 철탑, 비계, 말뚝, 난간 및 울타리 지주 등의 구조물에 사용하는 강관 |
| | ERW | 일반구조용각형강관 (KS D 3568 / SPSR) | 일반구조용각형강관 (JIS A 3466/STKR) | ASTM A500 | BS 4848 | 토목, 건축 및 기타구조물에 사용하는 강관 |
| 송유관 | ERW | | | API 5L | | 석유 및 천연가스 수송용 |
| 유정관 | ERW | | | API 5CT | | 유정용관 |
| 강제전선관 | ERW | 강제전선관 (KS C 8401) | 강제전선관 (JIS C 8305) | UL6 ANSI C80.1 | BS 31 | 전기배선에서 전선을 보호하기 위한 강관 |
| 비닐하우스 강관 | ERW | 비닐하우스용강관 (KS D 3760) | | | | 내식성 우수, 가공성 우수, 야채, 화훼용 등의 비닐하우스 |
| 단관비계 | ERW | 건설자재용 | | | | 건설 자재용 |
| PE COATING | ERW | 상수도용 도복장 강관 (KS D 3565) | | | | 상수도용 |
| | ERW | 폴리에틸렌 피복 강관 (KS D 3589) | | | | 쓰레기 수송관 |
| 강관 말뚝 | ERW | 강관말뚝 (KS F 4602) | | | | 말뚝용 |



품질인증 현황

| 구분 | 표준명 | 인증기관 | 취득년도 |
|-------------------------|--|-----------------------------------|------|
| KS | 일반 구조용 탄소강관 (KS D 3566) | 한국표준협회 | 2006 |
| | 비닐하우스용 아연도 강관 (KS D 3760) | 한국표준협회 | 2006 |
| | 배관용 탄소강관(KS D 3507) | 한국표준협회 | 2006 |
| | 압력 배관용 탄소강관 (KS D 3562) | 한국표준협회 | 2007 |
| | 연료 가스 배관용 탄소강관 (KS D 3631) | 한국표준협회 | 2007 |
| | 강제 전선관 (KS C 8401) | 한국표준협회 | 2008 |
| | 일반 구조용 각형 강관 (KS D 3568) | 한국표준협회 | 2010 |
| | 압출식 폴리에틸렌 피복 강관 (KS D 3589) | 한국표준협회 | 2010 |
| | 강관 말뚝 (KS F 4602) | 한국표준협회 | 2010 |
| 상수도용 도복장 강관 (KS D 3565) | 한국표준협회 | 2011 | |
| API | API Monogram (5CT) | American Petroleum Institute | 2009 |
| | API Monogram (5L) | American Petroleum Institute | 2009 |
| ISO | 품질경영시스템 (KS Q ISO 9001:2009 / ISO 9001:2008) | 한국표준협회 | 2007 |
| 선급 | Welding Procedure Survey | ABS (American Bureau Of Shipping) | 2010 |
| | Approval Of Manufacturers | GL (Germanischer Lloyd) | 2010 |
| | Approval Certificate For Manufacturing Process | KR (Korean Register) | 2010 |
| | Approval Of Manufacturers | DNV (Det Norske Veritas) | 2011 |
| | Approval Of Manufacturers | LR (Lloyd's Register) | 2011 |

품질 인증서

KS



KD D 3566

KS D 3760

KS D 3507

KS D 3562

KS D 3631

KS C 8401

KS D 3568

KS D 3589

KS F 4602

API



API 5L

API 5CT

ISO



QMS2657

QMS2657

선급



QMS2657

GL

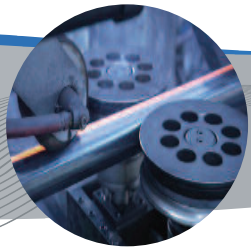
ABS인증서-6



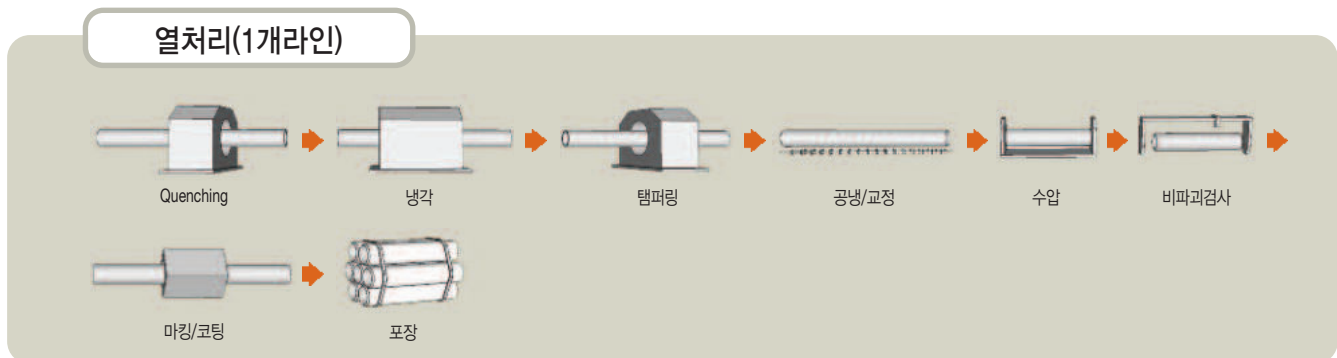
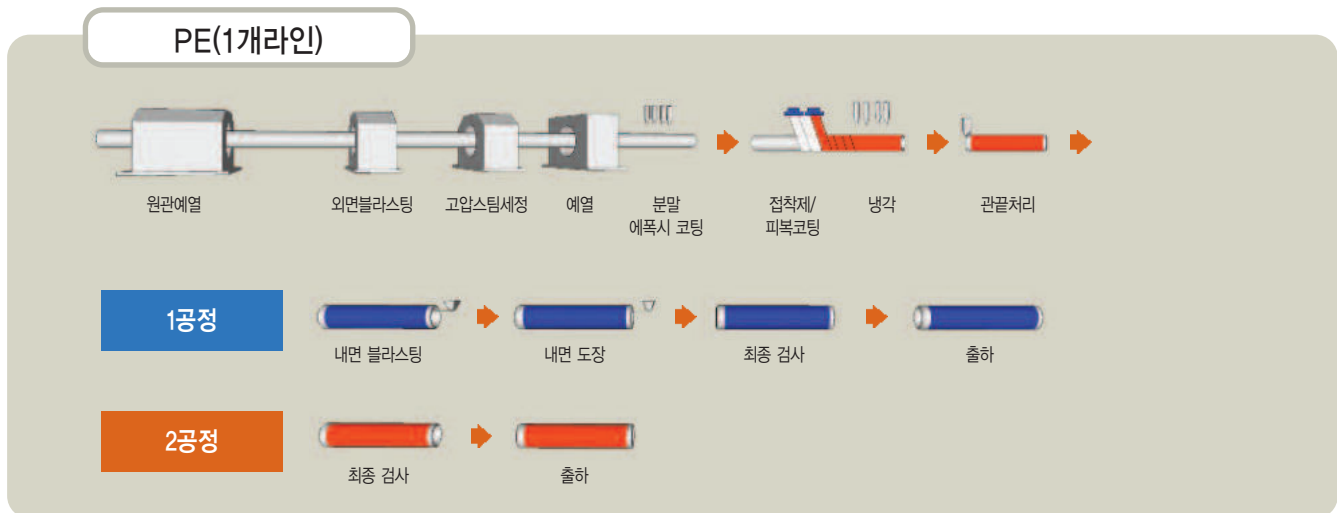
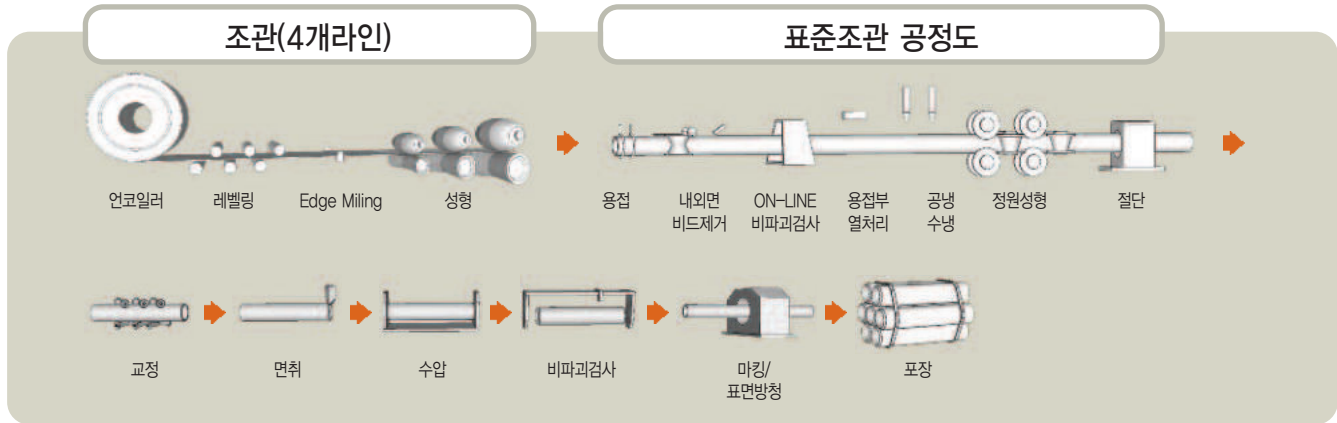
주요 생산설비

| 구 분 | 설비명 | 두께(mm) | 외경(mm) | 생산능력 | 비 고 |
|------------|---------------------|----------|-------------|-----------|-----------|
| 조관 | #1(소경) | 1.2~4.5 | 19.1~76.3 | 60,000MT | |
| | #2(중경) | 4.0~15.0 | 89.1~318 | 180,000MT | |
| | #3(대경) | 4.0~15.0 | 318.1~508 | 260,000MT | |
| | #4(후육유정관) | 3.0~12.0 | 26.67~139.8 | 100,000MT | |
| | 총 생산능력 | | | | 600,000MT |
| 열처리 | Quenching&Tempering | 3.0~14T | 60.3~177.8 | 70,000MT | |
| 도금(아연용용도금) | | 15~500A | | 160,000MT | |
| PE | 외면코팅 | MAX 25.4 | 100~1800A | 60,000MT | |
| | 내면쇼트도장 | MAX 25.4 | 100~1800A | 60,000MT | |
| 표면처리 | 산세강판 | 1.4~6.4 | 500~1500(W) | 160,000MT | |





제조공정



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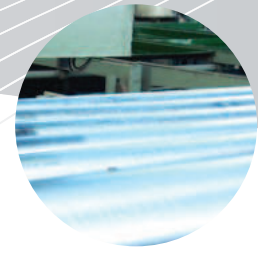




기계구조용 탄소강관

PO STEEL TUBES FOR MACHINE STRUCTURAL PURPOSES KS D 3517 (JIS G 3445)

| Productive standard | | Application & Chemical composition | | | | | | | | | | | |
|---------------------|----------------|------------------------------------|----------------|--------------------------|-------------------|-----------------|-------------------|-------------|-------------------|--|---|--|-----------------|
| Outside diameter | Thickness (mm) | Type | Classification | Chemical composition (%) | | | | | Application | Mechanical properties | | | |
| | | | | C | Si | Mn | P | S | | Tensile strength kg f/mm ² {N/mm ² } | Yield point kg f/mm ² {N/mm ² } | Elongation (%) No. 11, No. 12 specimen | |
| 13.8 | 1.20 | 11 | A | STKM11A | 0.12 Max | 0.35 Max | 0.25 ~ 0.60 | 0.04 Max | 0.04 Max | Steel pipes for application for mechanical Parts such as machinery, automobiles, bicycles, furniture and fixtures etc. | 30 Min {294} | - | 35 Min |
| 15.9 | ~ | 12 | A | STKM12A | 0.20 Max | 0.35 Max | 0.25 ~ 0.60 | 0.04 Max | 0.04 Max | | 35 Min {243} | 18 Min {177} | 35 Min |
| 19.1 | 2.30 | | B | STKM12B | | | | | | | 40 Min {392} | 28 Min {275} | 25 Min |
| | | | C | STKM12C | | | | | | | 48 Min {471} | 36 Min {353} | 20 Min |
| 22.2 | 1.20 | 13 | A | STKM13A | 0.25 Max | 0.35 Max | 0.30 ~ 0.90 | 0.04 Max | 0.04 Max | | 38 Min {373} | 22 Min {216} | 30 Min |
| 25.4 | | | B | STKM13B | | | | | | | 45 Min {441} | 31 Min {304} | 20 Min |
| | | | C | STKM13C | | | | | | | 52 Min {510} | 39 Min {382} | 15 Min |
| 31.8 | ~ | 14 | A | STKM14A | 0.30 Max | 0.35 Max | 0.30 ~ 1.00 | 0.04 Max | 0.04 Max | | 42 Min {412} | 25 Min {245} | 25 Min |
| 38.1 | | | B | STKM14B | | | | | | | 51 Min {500} | 36 Min {353} | 15 Min |
| | | | C | STKM14C | | | | | | | 56 Min {549} | 42 Min {412} | 15 Min |
| 48.6 | 1.70 | 15 | A | STKM15A | 0.25 ~ 0.35 | 0.35 Max | 0.30 ~ 1.00 | 0.04 Max | 0.04 Max | | 48 Min {471} | 28 Min {275} | 22 Min |
| 60.5 | | | C | STKM15C | | | | | | | 59 Min {579} | 44 Min {431} | 12 Min |
| | | 76.3 | ~ | 16 | A | STKM16A | 0.35 ~ 0.45 | 0.40 Max | 0.40 ~ 1.00 | | 0.04 Max | 0.04 Max | 52 Min {510} |
| C | STKM16C | | | | 63 Min {618} | 47 Min {461} | | | | | | | 12 Min |
| 89.1 | 4.00 | 17 | A | STKM17A | 0.45 ~ 0.55 | 0.40 Max | 0.40 ~ 1.00 | 0.04 Max | 0.04 Max | | 56 Min {549} | 35 Min {343} | 20 Min |
| | | | C | STKM17C | | | | | | | 66 Min {647} | 49 Min {481} | 10 Min |
| 114.3 | 2.20 | 18 | A | STKM18A | 0.18 ~ Max | 0.55 Max | 1.50 Max | 0.04 Max | 0.04 Max | | 45 Min {441} | 28 Min {275} | 25 Min |
| 139.8 | ~ | | B | STKM18B | | | | | | | 50 Min {490} | 32 Min {314} | 23 Min |
| | | | C | STKM18C | | | | | | 52 Min {510} | 39 Min {382} | 15 Min | |



일반구조용 탄소강관

CARBON STEEL TUBES FOR GENERAL STRUCTURAL PURPOSES KS D 3566 (JIS G 3444)

| Outside diameter | Wall thickness | | Weight | | Cross-sectional area | | Geometrical moment of inertia | | Section modulus | | Radius of gyration of area | |
|------------------|----------------|--------|--------|---------|----------------------|---------|-------------------------------|------------------------|-----------------|----------|----------------------------|---------|
| mm | mm | | kg/m | | cm ² | | cm ⁴ | | cm ³ | | cm | |
| 21.7 | 2.0 | (2.0) | 0.927 | (0.927) | 1.238 | (1.238) | 0.607 | (0.607) | 0.560 | (0.560) | 0.700 | (0.700) |
| 27.7 | 2.0 | (2.0) | 1.24 | (1.24) | 1.583 | (1.583) | 1.26 | (1.26) | 0.930 | (0.930) | 0.890 | (0.890) |
| | 2.3 | (2.3) | 1.41 | (1.41) | 1.799 | (1.799) | 1.41 | (1.41) | 1.03 | (1.03) | 0.880 | (0.880) |
| 34.0 | 2.3 | (2.3) | 1.80 | (1.80) | 2.291 | (2.291) | 2.89 | (2.89) | 1.70 | (1.70) | 1.12 | (1.12) |
| 42.7 | 2.3 | (2.3) | 2.29 | (2.29) | 2.919 | (2.919) | 5.97 | (5.97) | 2.80 | (2.80) | 1.43 | (1.43) |
| | 2.5 | (2.5) | 2.49 | (2.49) | 3.157 | (3.157) | 6.40 | (6.40) | 3.00 | (3.00) | 1.42 | (1.42) |
| | 2.8 | (2.8) | 2.76 | (2.76) | 3.510 | (3.510) | 7.02 | (7.02) | 3.96 | (3.96) | 1.41 | (1.41) |
| 48.6 | 2.3 | (2.3) | 2.63 | (2.63) | 3.345 | (3.345) | 8.99 | (8.99) | 3.70 | (3.70) | 1.64 | (1.64) |
| | 2.5 | (2.5) | 2.84 | (2.84) | 3.621 | (3.621) | 9.65 | (9.65) | 3.97 | (3.97) | 1.63 | (1.63) |
| | 2.8 | (2.8) | 3.16 | (3.16) | 4.029 | (4.029) | 10.6 | (10.6) | 4.36 | (4.36) | 1.62 | (1.62) |
| | 3.2 | (3.2) | 3.56 | (3.56) | 4.564 | (4.564) | 11.8 | (11.8) | 4.86 | (4.86) | 1.61 | (1.61) |
| 60.5 | 2.3 | (2.3) | 3.30 | (3.30) | 4.205 | (4.205) | 17.8 | (17.8) | 5.90 | (5.90) | 2.06 | (2.06) |
| | 3.2 | (3.2) | 4.52 | (4.52) | 5.760 | (5.760) | 23.7 | (23.7) | 7.84 | (7.84) | 2.03 | (2.03) |
| | 4.0 | (4.0) | 5.57 | (5.57) | 7.100 | (7.100) | 28.5 | (28.5) | 9.41 | (9.41) | 2.00 | (2.00) |
| 76.3 | 2.8 | (2.8) | 5.08 | (5.08) | 6.465 | (6.465) | 43.7 | (43.7) | 11.5 | (11.5) | 2.60 | (2.60) |
| | 3.2 | (3.2) | 5.77 | (5.77) | 7.349 | (7.349) | 49.2 | (49.2) | 12.9 | (12.9) | 2.59 | (2.59) |
| | 4.0 | (4.0) | 7.13 | (7.13) | 9.085 | (9.085) | 59.5 | (59.5) | 15.6 | (15.6) | 2.56 | (2.56) |
| 89.1 | 2.8 | (2.8) | 5.96 | (5.96) | 7.591 | (7.591) | 70.7 | (70.7) | 15.9 | (15.9) | 3.05 | (3.05) |
| | 3.2 | (3.2) | 6.78 | (6.78) | 8.636 | (8.636) | 79.8 | (79.8) | 17.9 | (17.9) | 3.04 | (3.04) |
| | 4.0 | (4.0) | 8.39 | (8.39) | 10.69 | (10.69) | 97.0 | (97.0) | 21.8 | (21.8) | 3.01 | (3.01) |
| 101.6 | 3.2 | (3.2) | 7.76 | (7.76) | 9.892 | (9.892) | 120 | (120) | 23.6 | (23.6) | 3.48 | (3.48) |
| | 4.0 | (4.0) | 9.63 | (9.63) | 12.26 | (12.26) | 146 | (146) | 28.8 | (28.8) | 3.45 | (3.45) |
| | 5.0 | (5.0) | 11.9 | (11.9) | 15.17 | (15.17) | 177 | (177) | 34.9 | (34.9) | 3.42 | (3.42) |
| 114.3 | 3.2 | (3.2) | 8.77 | (8.77) | 11.17 | (11.17) | 172 | (172) | 30.2 | (30.2) | 3.93 | (3.93) |
| | 3.6 | (3.6) | 9.83 | (9.83) | 12.52 | (12.52) | 192 | (192) | 33.6 | (33.6) | 3.92 | (3.92) |
| | 4.5 | (4.5) | 12.2 | (12.2) | 15.52 | (15.52) | 234 | (234) | 41.0 | (41.0) | 3.89 | (3.89) |
| | 5.6 | (5.6) | 15.0 | (15.0) | 19.12 | (19.12) | 283 | (283) | 49.6 | (49.6) | 3.85 | (3.85) |
| 139.8 | 3.6 | (3.6) | 12.1 | (12.1) | 15.40 | (15.40) | 357 | (357) | 51.1 | (51.1) | 4.82 | (4.82) |
| | 4.0 | (4.0) | 13.4 | (13.4) | 17.07 | (17.07) | 394 | (394) | 56.3 | (56.3) | 4.80 | (4.80) |
| | 4.5 | (4.5) | 15.0 | (15.0) | 19.13 | (19.13) | 438 | (438) | 62.7 | (62.7) | 4.79 | (4.79) |
| | 6.0 | (6.0) | 19.8 | (19.8) | 25.22 | (25.22) | 566 | (566) | 80.9 | (80.9) | 4.74 | (4.74) |
| 165.2 | 4.5 | (4.5) | 17.8 | (17.8) | 22.72 | (22.72) | 734 | (734) | 88.9 | (88.9) | 5.68 | (5.68) |
| | 5.0 | (5.0) | 19.8 | (19.8) | 25.16 | (25.16) | 808 | (808) | 97.8 | (97.8) | 5.67 | (5.67) |
| | 6.0 | (6.0) | 23.6 | (23.6) | 30.01 | (30.01) | 952 | (952) | 115 | (115) | 5.63 | (5.63) |
| | 7.0 | (7.0) | 27.3 | (27.3) | 34.79 | (34.79) | 109×10 | (109×10) | 132 | (132) | 5.60 | (5.60) |
| 190.7 | 4.5 | (4.5) | 20.7 | (20.7) | 26.32 | (26.32) | 114×10 | (114×10) | 120 | (120) | 6.59 | (6.59) |
| | 5.0 | (5.0) | 22.9 | (22.9) | 29.17 | (29.17) | 126×10 | (126×10) | 132 | (132) | 6.57 | (6.57) |
| | 6.0 | (6.0) | 27.3 | (27.3) | 34.82 | (34.82) | 149×10 | (149×10) | 156 | (156) | 6.53 | (6.53) |
| | 7.0 | (7.0) | 31.7 | (31.7) | 40.40 | (40.40) | 171×10 | (171×10) | 179 | (179) | 6.50 | (6.50) |
| 216.3 | (8.2) | (8.2) | (36.9) | (36.9) | (47.01) | (47.01) | (196×10) | (196×10) | (206) | (206) | (6.46) | (6.46) |
| | 4.5 | (4.5) | 23.5 | (23.5) | 29.94 | (29.94) | 168×10 | (168×10) | 155 | (155) | 7.49 | (7.49) |
| | (5.8) | (5.8) | (30.1) | (30.1) | (38.36) | (38.36) | (213×10) | (213×10) | (197) | (197) | (7.45) | (7.45) |
| | 6.0 | (6.0) | 31.1 | (31.1) | 36.61 | (36.61) | 219×10 | (219×10) | 203 | (203) | 7.44 | (7.44) |
| | 7.0 | (7.0) | 36.1 | (36.1) | 46.03 | (46.03) | 252×10 | (252×10) | 233 | (233) | 7.40 | (7.40) |
| 267.4 | 8.0 | (8.0) | 41.1 | (41.1) | 52.35 | (52.35) | 284×10 | (284×10) | 263 | (263) | 7.37 | (7.37) |
| | (8.2) | (8.2) | (42.1) | (42.1) | (53.61) | (53.61) | (291×10) | (291×10) | (269) | (269) | (7.36) | (7.36) |
| | 6.0 | (6.0) | 38.7 | (38.7) | 49.27 | (49.27) | 421×10 | (421×10) | 315 | (315) | 9.24 | (9.24) |
| 318.5 | (6.6) | (6.6) | (42.4) | (42.4) | (54.08) | (54.08) | (460×10) | (460×10) | (344) | (344) | (9.22) | (9.22) |
| | 7.0 | (7.0) | 45.0 | (45.0) | 57.27 | (57.27) | 486×10 | (486×10) | 363 | (363) | 9.21 | (9.21) |
| | 8.0 | (8.0) | 51.2 | (51.2) | 68.19 | (68.19) | 549×10 | (549×10) | 411 | (411) | 9.18 | (9.18) |
| | 9.0 | (9.0) | 57.4 | (57.4) | 73.06 | (73.06) | 611×10 | (611×10) | 457 | (457) | 9.14 | (9.14) |
| 356.6 | (9.3) | (9.3) | (59.2) | (59.2) | (75.41) | (75.41) | (75.41) | (75.41) | (470) | (470) | (9.13) | (9.13) |
| | 6.0 | (6.0) | 46.2 | (46.2) | 58.91 | (58.91) | 719×10 | (719×10) | 542 | (542) | 11.1 | (11.1) |
| | 7.0 | (7.0) | 53.8 | (53.8) | 65.50 | (65.50) | 813×10 | (813×10) | 552 | (552) | 11.0 | (11.0) |
| | 8.0 | (8.0) | 61.3 | (61.3) | 78.04 | (78.04) | 941×10 | (941×10) | 591 | (591) | 11.0 | (11.0) |
| 406.4 | 9.0 | (9.0) | 68.7 | (68.7) | 87.51 | (87.51) | 105×10 ³ | (105×10 ³) | 659 | (659) | 10.9 | (10.9) |
| | 6.3 | (6.3) | 54.3 | (54.3) | 69.13 | (69.13) | 105×10 ³ | (105×10 ³) | 593 | (593) | 12.4 | (12.4) |
| | 8.0 | (8.0) | 68.6 | (68.6) | 87.36 | (87.36) | 132×10 ³ | (132×10 ³) | 742 | (742) | 12.3 | (12.3) |
| | 9.0 | (9.0) | 76.9 | (76.9) | 98.00 | (98.00) | 147×10 ³ | (147×10 ³) | 828 | (828) | 12.3 | (12.3) |
| | 12.0 | (12.0) | 102 | (102) | 129.5 | (129.5) | 191×10 ³ | (191×10 ³) | 108×10 | (108×10) | 12.2 | (12.2) |
| 457.2 | 9.0 | (9.0) | 88.2 | (88.2) | 112.4 | (112.4) | 222×10 ³ | (222×10 ³) | 109×10 | (109×10) | 14.1 | (14.1) |
| | 12.0 | (12.0) | 117 | (117) | 148.7 | (148.7) | 289×10 ³ | (289×10 ³) | 142×10 | (142×10) | 14.0 | (14.0) |
| | 16.0 | (16.0) | 154 | (154) | 196.2 | (196.2) | 374×10 ³ | (374×10 ³) | 184×10 | (184×10) | 13.8 | (13.8) |
| | 19.0 | (19.0) | 182 | (182) | 231.2 | (231.2) | 435×10 ³ | (435×10 ³) | 214×10 | (214×10) | 13.7 | (13.7) |
| 500.0 | 9.0 | (9.0) | 99.5 | (99.5) | 126.7 | (126.7) | 318×10 ³ | (318×10 ³) | 140×10 | (140×10) | 15.8 | (15.8) |
| | 12.0 | (12.0) | 132 | (132) | 167.8 | (167.8) | 416×10 ³ | (416×10 ³) | 182×10 | (182×10) | 15.7 | (15.7) |
| | 16.0 | (16.0) | 174 | (174) | 221.8 | (221.8) | 540×10 ³ | (540×10 ³) | 236×10 | (236×10) | 15.6 | (15.6) |
| | 19.0 | (19.0) | 205 | (205) | 261.8 | (261.8) | 629×10 ³ | (629×10 ³) | 275×10 | (275×10) | 15.5 | (15.5) |
| 508.0 | 9.0 | (9.0) | 109 | (109) | 138.8 | (138.8) | 418×10 ³ | (418×10 ³) | 167×10 | (167×10) | 17.4 | (17.4) |
| | 12.0 | (12.0) | 144 | (144) | 184.0 | (184.0) | 548×10 ³ | (548×10 ³) | 219×10 | (219×10) | 17.3 | (17.3) |
| | 14.0 | (14.0) | 168 | (168) | 213.8 | (213.8) | 632×10 ³ | (632×10 ³) | 253×10 | (253×10) | 17.2 | (17.2) |
| 508.0 | 9.0 | (9.0) | 111 | (111) | 141.1 | (141.1) | 439×10 ³ | (439×10 ³) | 173×10 | (173×10) | 17.6 | (17.6) |
| | 12.0 | (12.0) | 147 | (147) | 187.0 | (187.0) | 575×10 ³ | (575×10 ³) | 226×10 | (226×10) | 17.5 | (17.5) |
| | 14.0 | (14.0) | 171 | (171) | 217.3 | (217.3) | 663×10 ³ | (663×10 ³) | 261×10 | (261×10) | 17.5 | (17.5) |
| | 16.0 | (16.0) | 194 | (194) | 247.3 | (247.3) | 749×10 ³ | (749×10 ³) | 295×10 | (295×10) | 17.4 | (17.4) |
| | 19.0 | (19.0) | 229 | (229) | 291.9 | (291.9) | 874×10 ³ | (874×10 ³) | 344×10 | (344×10) | 17.3 | (17.3) |
| | 22.0 | (22.0) | 264 | (264) | 335.9 | (335.9) | 994×10 ³ | (994×10 ³) | 391×10 | (391×10) | 17.2 | (17.2) |



각형강관 제작가능 범위
SQUARE RECTANGULAR PIPE

(Unit : mm)

| Thickness | | | | | | | | | | | | | | |
|-----------|-------------|---|---|---|---|---|---|---|---|---|----|----|----|----|
| Square | Rectangular | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 |
| 19×19 | | | | | | | | | | | | | | |
| 25×25 | | | | | | | | | | | | | | |
| 30×20 | | | | | | | | | | | | | | |
| 30×30 | | | | | | | | | | | | | | |
| 40×20 | | | | | | | | | | | | | | |
| 40×40 | | | | | | | | | | | | | | |
| 50×30 | | | | | | | | | | | | | | |
| 50×50 | | | | | | | | | | | | | | |
| 60×40 | | | | | | | | | | | | | | |
| 60×60 | | | | | | | | | | | | | | |
| 75×45 | | | | | | | | | | | | | | |
| 75×75 | | | | | | | | | | | | | | |
| 100×50 | | | | | | | | | | | | | | |
| 100×100 | | | | | | | | | | | | | | |
| 125×75 | | | | | | | | | | | | | | |
| 125×125 | | | | | | | | | | | | | | |
| 150×75 | | | | | | | | | | | | | | |
| 150×150 | | | | | | | | | | | | | | |
| 200×100 | | | | | | | | | | | | | | |
| 160×160 | | | | | | | | | | | | | | |
| 180×180 | | | | | | | | | | | | | | |
| 200×150 | | | | | | | | | | | | | | |
| 200×200 | | | | | | | | | | | | | | |
| 250×150 | | | | | | | | | | | | | | |
| 250×250 | | | | | | | | | | | | | | |
| 300×200 | | | | | | | | | | | | | | |
| 300×300 | | | | | | | | | | | | | | |
| 350×250 | | | | | | | | | | | | | | |
| 400×200 | | | | | | | | | | | | | | |
| 350×350 | | | | | | | | | | | | | | |
| 400×300 | | | | | | | | | | | | | | |
| 400×400 | | | | | | | | | | | | | | |
| 500×300 | | | | | | | | | | | | | | |



원형강관 제작가능 범위

ROUND STEEL PIPE

(Unit : mm)

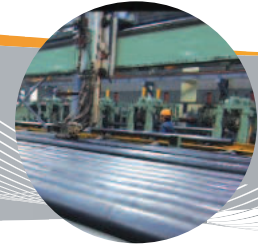
| Thickness | | | | | | | | | | | | | | | |
|------------------|---|---|---|---|---|---|---|---|---|----|----|----|----|----|----|
| Outside diameter | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 |
| 21.7 | | | | | | | | | | | | | | | |
| 22.2 | | | | | | | | | | | | | | | |
| 25.4 | | | | | | | | | | | | | | | |
| 27.2 | | | | | | | | | | | | | | | |
| 34.0 | | | | | | | | | | | | | | | |
| 42.7 | | | | | | | | | | | | | | | |
| 48.6 | | | | | | | | | | | | | | | |
| 60.5 | | | | | | | | | | | | | | | |
| 76.3 | | | | | | | | | | | | | | | |
| 89.1 | | | | | | | | | | | | | | | |
| 114.3 | | | | | | | | | | | | | | | |
| 139.8 | | | | | | | | | | | | | | | |
| 165.2 | | | | | | | | | | | | | | | |
| 216.3 | | | | | | | | | | | | | | | |
| 267.4 | | | | | | | | | | | | | | | |
| 318.5 | | | | | | | | | | | | | | | |
| 355.6 | | | | | | | | | | | | | | | |
| 406.4 | | | | | | | | | | | | | | | |
| 457.2 | | | | | | | | | | | | | | | |
| 508.0 | | | | | | | | | | | | | | | |



압력배관용 탄소강관

CARBON STEEL PIPES FOR PRESSURE SERVICE KS D 3562 (JIS G 3454)

| Nominal diameter | | Nominal wall thickness | | | | | | | | | | | | | | | | | | |
|------------------|-------|------------------------|--------|---------------|---------------------------|--------|---------------|---------------------------|----------|---------------|---------------------------|--------|---------------|---------------------------|--------|---------------|---------------------------|--------|---------------|---------------------------|
| | | Schedule 10 | | | Schedule 20 | | | Schedule 30 | | | Schedule 40 | | | Schedule 60 | | | Schedule 80 | | | |
| | | Wall thickness | Weight | Test pressure | Wall thickness | Weight | Test pressure | Wall thickness | Weight | Test pressure | Wall thickness | Weight | Test pressure | Wall thickness | Weight | Test pressure | Wall thickness | Weight | Test pressure | |
| A | B | mm | mm | kg/m | kgf/cm ² (MPa) | mm | kg/m | kgf/cm ² (MPa) | mm | kg/m | kgf/cm ² (MPa) | mm | kg/m | kgf/cm ² (MPa) | mm | kg/m | kgf/cm ² (MPa) | mm | kg/m | kgf/cm ² (MPa) |
| 10 | 3/8 | 17.3 | - | - | - | - | - | - | - | - | 2.3 | 0.851 | - | 2.8 | 1.00 | - | 3.2 | 1.11 | - | - |
| 15 | 1/2 | 21.7 | - | - | - | - | - | - | - | - | 2.8 | 1.31 | - | 3.2 | 1.46 | - | 3.7 | 1.64 | - | - |
| 20 | 3/4 | 27.2 | - | - | - | - | - | - | - | - | 2.9 | 1.74 | - | 3.4 | 2.00 | - | 3.9 | 2.24 | - | - |
| 25 | 1 | 34.0 | - | - | - | - | - | - | - | - | 3.4 | 2.57 | - | 3.9 | 2.89 | - | 4.5 | 3.27 | - | - |
| 32 | 1 1/4 | 42.7 | - | - | - | - | - | - | - | - | 3.6 | 3.47 | - | 4.5 | 4.24 | - | 4.9 | 4.57 | - | - |
| 40 | 1 1/2 | 48.6 | - | - | - | - | - | - | - | - | 3.7 | 4.10 | - | 4.5 | 4.89 | - | 5.1 | 5.47 | - | - |
| 50 | 2 | 60.5 | - | - | - | 3.2 | 4.52 | - | - | - | 3.9 | 5.44 | - | 4.9 | 6.72 | - | 5.5 | 7.46 | - | - |
| 65 | 2 1/2 | 76.3 | - | - | - | 4.5 | 7.97 | - | - | - | 5.2 | 9.12 | - | 6.0 | 10.4 | - | 7.0 | 12.0 | - | - |
| 80 | 3 | 89.1 | - | - | - | 4.5 | 9.39 | - | - | - | 5.5 | 11.3 | - | 6.6 | 13.4 | - | 7.6 | 15.3 | - | - |
| 90 | 3 1/2 | 101.6 | - | - | - | 4.5 | 10.8 | - | - | - | 5.7 | 13.5 | - | 7.0 | 16.3 | - | 8.1 | 18.7 | - | - |
| 100 | 4 | 114.3 | - | - | 20 | 4.9 | 13.2 | 35 | - | - | 50 | 6.0 | 16.0 | 60 | 7.1 | 18.8 | 90 | 8.6 | 22.4 | 120 |
| 125 | 5 | 139.8 | - | - | (2.0) | 5.1 | 16.9 | (3.5) | - | - | (5.0) | 6.6 | 21.7 | (6.0) | 8.1 | 26.3 | (9.0) | 9.5 | 30.5 | (12) |
| 150 | 6 | 165.2 | - | - | - | 5.5 | 21.7 | - | - | - | 7.1 | 27.7 | - | 9.3 | 35.8 | - | 11.0 | 41.8 | - | - |
| 200 | 8 | 216.3 | - | - | - | 6.4 | 33.1 | 7.0 | 36.1 | - | 8.2 | 42.1 | - | 10.3 | 52.3 | - | 12.7 | 63.8 | - | - |
| 250 | 10 | 267.4 | - | - | - | 6.4 | 41.2 | 7.8 | 49.9 | - | 9.3 | 59.2 | - | 12.7 | 79.8 | - | 15.1 | 93.9 | - | - |
| 300 | 12 | 318.5 | - | - | - | 6.4 | 49.3 | 8.4 | 64.2 | - | 10.3 | 78.3 | - | 14.3 | 107 | - | 17.4 | 129 | - | - |
| 350 | 14 | 355.6 | 6.4 | 55.1 | - | 7.9 | 67.7 | 9.5 | 81.1 | - | 11.1 | 94.3 | - | 15.1 | 127 | - | 19.0 | 158 | - | - |
| 400 | 16 | 406.4 | 6.4 | 63.1 | - | 7.9 | 77.6 | 9.5 | 93.0 | - | 12.7 | 123 | - | 16.7 | 160 | - | 21.4 | 203 | - | - |
| 450 | 18 | 457.2 | 6.4 | 71.1 | - | 7.9 | 87.5 | 11.1 | 122 | - | 14.3 | 156 | - | 19.0 | 205 | - | 23.8 | 254 | - | - |
| 500 | 20 | 508.0 | 6.4 | 79.2 | - | 9.5 | 117 | 12.7 | 155 | - | 15.1 | 184 | - | 20.6 | 248 | - | 26.2 | 311 | - | - |
| 550 | 22 | 558.8 | 6.4 | 87.2 | - | 9.5 | 129 | 12.7 | 171 | - | 15.9 | 213 | - | - | - | - | - | - | - | - |
| 600 | 24 | 609.6 | 6.4 | 95.2 | - | 9.5 | 141 | 14.3 | 228(210) | - | - | - | - | - | - | - | - | - | - | - |



배관용 탄소강관

CARBON STEEL PIPES FOR ORDINARY PIPING KS D 3507 (JIS G 3452) / KS D 3631

| Nominal diameter | | Outside diameter (mm) | Tolerances on outside diameter | | Wall thickness (mm) | Tolerances on wall thickness | Unit weight excluding socket (kg/m) |
|------------------|-------|-----------------------|--------------------------------|-------------|---------------------|------------------------------|-------------------------------------|
| A | B | | Taper threaded pipe | Others | | | |
| 10 | 3/8 | 17.3 | ±0.5mm (±0.5mm) | | 2.35 (2.3) | + Not specified -12.5% | 0.866 (0.851) |
| 15 | 1/2 | 21.7 | ±0.5mm (±0.5mm) | | 2.65 (2.8) | | 1.25 (1.31) |
| 20 | 3/4 | 27.2 | ±0.5mm (±0.5mm) | | 2.65 (2.8) | | 1.60 (1.68) |
| 25 | 1 | 34.0 | ±0.5mm (±0.5mm) | | 3.25 (3.2) | | 2.45 (2.43) |
| 32 | 1 1/4 | 42.7 | ±0.5mm (±0.5mm) | | 3.25 (3.5) | | 3.16 (3.38) |
| 40 | 1 1/2 | 48.6 | ±0.5mm (±0.5mm) | | 3.25 (3.5) | | 3.63 (3.89) |
| 50 | 2 | 60.5 | ±0.5mm (±0.5mm) | ±1% (±1%) | 3.65 (3.8) | | 5.12 (5.31) |
| 65 | 2 1/2 | 76.3 | ±0.7mm (±0.7mm) | ±1% (±1%) | 3.65 (4.2) | | 6.34 (7.47) |
| 80 | 3 | 89.1 | ±0.8mm (±0.8mm) | ±1% (±1%) | 4.05 (4.2) | | 8.49 (8.79) |
| 90 | 3 1/2 | 101.6 | ±0.8mm (±0.8mm) | ±1% (±1%) | 4.05 (4.2) | | 9.74 (10.1) |
| 100 | 4 | 114.3 | ±0.8mm (±0.8mm) | ±1% (±1%) | 4.5 (4.5) | | 12.2 (12.2) |
| 125 | 5 | 139.8 | ±0.8mm (±0.8mm) | ±1% (±1%) | 4.85 (4.5) | | 16.1 (15.0) |
| 150 | 6 | 165.2 | ±0.8mm (±0.8mm) | ±1% (±1.6%) | 4.85 (5.0) | | 19.2 (19.8) |
| 175 | 7 | 190.7 | ±0.9mm (±0.9mm) | ±1% (±1.6%) | 5.3 (5.3) | | 24.2 (24.2) |
| 200 | 8 | 216.3 | ±1.0mm (±1.0mm) | ±1% (±0.8%) | 5.85 (5.8) | | 30.4 (30.1) |
| 225 | 9 | 241.8 | ±1.2mm (±1.2mm) | ±1% (±0.8%) | 6.2 (6.2) | | 36.0 (36.0) |
| 250 | 10 | 267.4 | ±1.3mm (±1.3mm) | ±1% (±0.8%) | 6.4 (6.6) | | 41.2 (42.4) |
| 300 | 12 | 318.6 | ±1.5mm (±1.5mm) | ±1% (±0.8%) | 7.0 (6.9) | | 53.8 (53.0) |
| 350 | 14 | 355.6 | - (-) | ±1% (±0.8%) | 7.6 (7.9) | | 65.2 (67.7) |
| 400 | 16 | 406.4 | - (-) | ±1% (±0.8%) | 7.9 (7.9) | | 77.6 (77.6) |
| 450 | 18 | 457.2 | - (-) | ±1% (±0.8%) | 7.9 (7.9) | 87.5 (87.5) | |
| 500 | 20 | 508.0 | - (-) | ±1% (±0.8%) | 7.9 (7.9) | 97.4 (97.4) | |
| 550 | 22 | 558.8 | - | ±1% | 7.9 | 107 | |
| 600 | 24 | 609.6 | - | ±1% | 7.9 | 117 | |



일반구조용 각형강관

SQUARE AND RECTANGULAR PIPES SQUARE KS D 3568 (JIS G 3466)

| Side length | Wall thickness | Unit weight | Cross-sectional area | Geometrical moment of inertia | Modulus of section | Radius of gyration of area |
|-------------|----------------|-------------|----------------------|---------------------------------|---------------------------------|---------------------------------|
| A × B | t | | | cm ⁴ | cm ³ | cm |
| mm | mm | Kg/m | cm ² | I _x , I _y | Z _x , Z _y | i _x , i _y |
| 20×20 | 1,2 | 0,697 | 0,865 | 0,53 | 0,52 | 0,769 |
| | 1,6 | 0,872 | 1,123 | 0,67 | 0,65 | 0,751 |
| 25×25 | 1,2 | 0,867 | 1,105 | 1,03 | 0,824 | 0,965 |
| | 1,6 | 1,12 | 1,432 | 1,27 | 1,02 | 0,942 |
| 30×30 | 1,2 | 1,06 | 1,345 | 1,83 | 1,22 | 1,17 |
| | 1,6 | 1,38 | 1,752 | 2,31 | 1,54 | 1,15 |
| 40×40 | 1,6 | 1,88 | 2,392 | 5,79 | 2,90 | 1,56 |
| | 2,3 | 2,62 | 3,332 | 7,73 | 3,86 | 1,52 |
| 50×50 | 1,6 | 2,38 | 3,032 | 11,7 | 4,68 | 1,96 |
| | 2,3 | 3,34 | 4,252 | 15,9 | 6,34 | 1,93 |
| | 3,2 | 4,50 | 5,727 | 20,4 | 8,16 | 1,89 |
| 60×60 | 1,6 | 2,88 | 3,672 | 20,7 | 6,89 | 2,37 |
| | 2,3 | 1,06 | 5,172 | 28,3 | 9,44 | 2,34 |
| | 3,2 | 53,50 | 7,007 | 36,9 | 12,3 | 2,30 |
| 75×75 | 1,6 | 3,64 | 4,632 | 41,3 | 11,0 | 2,99 |
| | 2,3 | 5,14 | 6,552 | 57,1 | 15,2 | 2,95 |
| | 3,2 | 7,01 | 8,927 | 75,5 | 20,1 | 2,91 |
| | 4,5 | 9,55 | 12,17 | 98,6 | 26,3 | 2,85 |
| 80×80 | 2,3 | 5,50 | 7,012 | 69,9 | 17,5 | 3,16 |
| | 3,2 | 7,51 | 9,567 | 92,7 | 23,2 | 3,11 |
| | 4,5 | 10,3 | 13,07 | 122 | 30,4 | 3,05 |
| 90×90 | 2,3 | 6,23 | 7,932 | 101 | 22,4 | 3,56 |
| | 3,2 | 8,51 | 10,85 | 135 | 29,9 | 3,52 |
| 100×100 | 2,3 | 6,95 | 8,852 | 140 | 27,9 | 3,97 |
| | 3,2 | 9,52 | 12,13 | 187 | 37,5 | 3,93 |
| | 4,0 | 11,7 | 14,95 | 226 | 45,3 | 3,89 |
| | 4,5 | 13,1 | 16,67 | 249 | 49,9 | 3,87 |
| | 6,0 | 17,0 | 21,63 | 311 | 62,3 | 3,79 |
| | 9,0 | 24,1 | 30,67 | 408 | 81,6 | 3,65 |
| 125×125 | 12,0 | 30,2 | 38,53 | 471 | 94,3 | 3,50 |
| | 3,2 | 12,0 | 15,33 | 376 | 60,1 | 4,95 |
| | 4,5 | 16,6 | 21,17 | 506 | 80,9 | 4,89 |
| | 5,0 | 18,3 | 23,36 | 553 | 88,4 | 4,86 |
| | 6,0 | 21,7 | 27,63 | 641 | 103 | 4,82 |
| | 9,0 | 31,1 | 39,67 | 865 | 138 | 4,67 |
| 150×150 | 12,0 | 39,7 | 50,53 | 103×10 | 165 | 4,52 |
| | 4,5 | 20,1 | 25,67 | 896 | 120 | 5,91 |
| | 5,0 | 22,3 | 28,36 | 982 | 131 | 5,89 |
| | 6,0 | 26,4 | 33,63 | 115×10 | 153 | 5,84 |
| | 9,0 | 38,2 | 48,67 | 158×10 | 210 | 5,69 |
| | 175×175 | 4,5 | 23,7 | 30,17 | 145×10 | 166 |
| 5,0 | | 26,2 | 33,36 | 159×10 | 182 | 6,91 |
| 6,0 | | 31,1 | 39,63 | 186×10 | 213 | 6,86 |
| 200×200 | 4,5 | 27,2 | 34,67 | 219×10 | 219 | 7,95 |
| | 5,0(6,0) | 35,8 | 45,63 | 283×10 | 283 | 7,88 |
| | 6,0(8,0) | 46,9 | 59,79 | 362×10 | 362 | 7,78 |
| | 9,0 | 52,3 | 66,67 | 399×10 | 399 | 7,73 |
| | 12,0 | 67,9 | 86,53 | 498×10 | 498 | 7,59 |
| 250×250 | 5,0 | 38,0 | 48,36 | 481×10 | 384 | 9,97 |
| | 6,0 | 45,2 | 57,63 | 567×10 | 454 | 9,92 |
| | 8,0 | 59,5 | 75,79 | 732×10 | 585 | 9,82 |
| | 9,0 | 66,5 | 84,67 | 809×10 | 647 | 9,78 |
| | 12,0 | 86,8 | 110,5 | 103×10 ² | 820 | 9,63 |
| 300×300 | 4,5 | 41,3 | 52,67 | 763×10 | 508 | 12,0 |
| | 6,0 | 54,7 | 69,63 | 996×10 | 664 | 12,0 |
| | 9,0 | 80,6 | 102,7 | 143×10 ² | 956 | 11,8 |
| | 12,0 | 106 | 134,5 | 183×10 ² | 122×10 | 11,7 |
| | 16,0 | 138 | 175,2 | 231×10 ² | 154×10 | 11,5 |
| 350×350 | 9,0 | 94,7 | 120,7 | 232×10 ² | 132×10 | 13,9 |
| | 12,0 | 124 | 158,5 | 298×10 ² | 170×10 | 13,7 |
| | 16,0 | 163 | 207,2 | 379×10 ² | 216×10 | 13,5 |
| 400×400 | 9,0 | 109 | 138,7 | 351×10 ² | 175×10 | 15,9 |
| | 12,0 | 143 | 182,5 | 453×10 ² | 227×10 | 15,8 |
| | 16,0 | 188 | 239,2 | 579×10 ² | 290×10 | 15,6 |



일반구조용 각형강관

SQUARE AND RECTANGULAR PIPES RECTANGULAR KS D 3568 (JIS G 3466)

| Side length A × B | Wall thickness t | Unit weight Kg/m | Cross-sectional area cm ² | Geometrical moment of inertia cm ⁴ | | Modulus of section cm ³ | | Radius of gyration of area cm | |
|----------------------|---------------------|---------------------|---|--|---------|---------------------------------------|-------|----------------------------------|-------|
| | | | | Ix | Iy | Zx | Zy | ix | iy |
| 30×20 | 1.2 | 0,868 | 1,105 | 1,34 | 0,711 | 0,890 | 0,711 | 1,10 | 0,802 |
| 30×20 | 1.6 | 1,124 | 1,4317 | 1,66 | 0,879 | 1,11 | 0,879 | 1,80 | 0,784 |
| 40×20 | 1.2 | 1,053 | 1,3453 | 2,73 | 0,923 | 1,36 | 0,923 | 1,42 | 0,828 |
| 40×20 | 1.6 | 1,375 | 1,7517 | 3,43 | 1,15 | 1,72 | 1,15 | 1,40 | 0,810 |
| 50×20 | 1.6 | 1,63 | 2,072 | 6,08 | 1,42 | 2,43 | 1,42 | 1,71 | 0,829 |
| 50×20 | 2.3 | 2,25 | 2,872 | 8,00 | 1,83 | 3,20 | 1,83 | 1,67 | 0,798 |
| 50×30 | 1.6 | 1,88 | 2,392 | 7,96 | 3,60 | 3,18 | 2,40 | 1,82 | 1,23 |
| 50×30 | 2.3 | 2,62 | 3,332 | 10,6 | 4,76 | 4,25 | 3,17 | 1,79 | 1,20 |
| 60×30 | 1.6 | 2,13 | 2,712 | 12,5 | 4,25 | 4,16 | 2,83 | 2,15 | 1,25 |
| 60×30 | 2.3 | 2,98 | 3,792 | 16,8 | 5,65 | 5,61 | 3,76 | 2,11 | 1,22 |
| 60×30 | 3.2 | 3,99 | 5,087 | 21,4 | 7,08 | 7,15 | 4,72 | 2,05 | 1,18 |
| 75×20 | 1.6 | 2,25 | 2,872 | 17,6 | 2,10 | 4,6 | 2,10 | 2,47 | 0,855 |
| 75×20 | 2.3 | 3,16 | 4,022 | 23,7 | 2,73 | 6,3 | 2,73 | 2,43 | 0,824 |
| 75×45 | 1.6 | 2,88 | 3,672 | 28,4 | 12,9 | 7,56 | 5,75 | 2,78 | 1,88 |
| 75×45 | 2.3 | 4,06 | 5,172 | 38,9 | 17,6 | 10,4 | 7,82 | 2,74 | 1,84 |
| 75×45 | 3.2 | 5,50 | 7,007 | 50,8 | 22,8 | 13,5 | 10,1 | 2,69 | 1,80 |
| 80×40 | 1.6 | 2,88 | 3,672 | 30,7 | 10,5 | 7,68 | 5,26 | 2,89 | 1,69 |
| 80×40 | 2.3 | 4,306 | 5,172 | 42,1 | 14,3 | 10,5 | 7,14 | 2,85 | 1,66 |
| 80×40 | 3.2 | 5,50 | 7,007 | 54,9 | 18,4 | 13,7 | 9,21 | 2,80 | 1,62 |
| 90×45 | 2.3 | 4,60 | 5,862 | 61,0 | 20,8 | 13,6 | 9,22 | 3,23 | 1,88 |
| 90×45 | 3.2 | 6,25 | 7,967 | 80,2 | 27,0 | 17,8 | 12,0 | 3,17 | 1,84 |
| 100×20 | 1.6 | 2,88 | 3,672 | 38,1 | 2,78 | 7,61 | 2,78 | 3,22 | 0,870 |
| 100×20 | 2.3 | 4,06 | 5,172 | 51,9 | 3,64 | 10,4 | 3,64 | 3,17 | 0,839 |
| 100×40 | 1.6 | 3,38 | 4,312 | 53,5 | 12,9 | 10,7 | 6,44 | 3,52 | 1,73 |
| 100×40 | 2.3 | 4,78 | 6,092 | 73,9 | 17,5 | 14,8 | 8,77 | 3,48 | 1,70 |
| 100×40 | 4.2 | 8,32 | 10,60 | 120 | 27,6 | 24,0 | 10,6 | 3,36 | 1,61 |
| 100×50 | 1.6 | 3,64 | 4,632 | 61,3 | 21,1 | 12,3 | 8,43 | 3,64 | 2,13 |
| 100×50 | 2.3 | 5,14 | 6,552 | 84,8 | 29,0 | 17,0 | 11,6 | 3,60 | 2,10 |
| 100×50 | 3.2 | 7,01 | 8,927 | 112 | 30,8 | 22,5 | 15,2 | 3,55 | 2,06 |
| 100×50 | 4.5 | 9,55 | 12,17 | 147 | 48,9 | 29,3 | 19,5 | 3,47 | 2,00 |
| 125×40 | 1.6 | 4,01 | 5,112 | 94,4 | 15,8 | 15,1 | 7,91 | 4,30 | 1,76 |
| 125×40 | 2.3 | 5,69 | 7,242 | 131 | 21,6 | 20,9 | 10,8 | 4,25 | 1,73 |
| 125×75 | 2.3 | 6,95 | 8,852 | 192 | 87,5 | 30,6 | 23,3 | 4,65 | 3,14 |
| 125×75 | 3.2 | 9,52 | 12,13 | 257 | 117 | 41,1 | 31,3 | 4,60 | 3,10 |
| 125×75 | 4.0 | 11,7 | 14,95 | 311 | 141 | 49,7 | 37,5 | 4,56 | 3,07 |
| 125×75 | 4.5 | 13,1 | 16,67 | 342 | 155 | 54,8 | 41,2 | 4,53 | 3,04 |
| 125×75 | 6.0 | 17,0 | 21,63 | 428 | 192 | 68,5 | 51,1 | 4,45 | 2,98 |
| 150×75 | 3.2 | 10,8 | 13,73 | 402 | 137 | 53,6 | 36,6 | 5,41 | 3,16 |
| 150×80 | 4.5 | 15,2 | 19,37 | 563 | 211 | 75,0 | 52,9 | 5,39 | 3,30 |
| 150×80 | 5.0 | 16,8 | 21,36 | 614 | 230 | 81,9 | 57,5 | 5,36 | 3,28 |
| 150×80 | 6.0 | 19,8 | 25,23 | 710 | 264 | 94,7 | 66,1 | 5,31 | 3,24 |
| 150×100 | 3.2 | 12,0 | 15,33 | 488 | 262 | 65,1 | 52,5 | 5,64 | 4,14 |
| 150×100 | 4.5 | 16,6 | 21,17 | 658 | 352 | 87,7 | 70,4 | 5,58 | 4,08 |
| 150×100 | 6.0 | 21,7 | 27,63 | 835 | 444 | 111 | 88,8 | 5,50 | 4,01 |
| 150×100 | 9.0 | 31,1 | 39,67 | 113×10 | 595 | 151 | 119 | 5,33 | 3,87 |
| 200×100 | 4.5 | 20,1 | 25,67 | 133×10 | 455 | 133 | 90,9 | 7,20 | 4,21 |
| 200×100 | 6.0 | 26,4 | 33,63 | 170×10 | 577 | 170 | 115 | 7,12 | 4,14 |
| 200×100 | 9.0 | 38,2 | 48,67 | 235×10 | 782 | 235 | 156 | 6,94 | 4,01 |
| 200×150 | 4.5 | 23,7 | 30,17 | 176×10 | 113×10 | 176 | 151 | 7,64 | 6,13 |
| 200×150 | 6.0 | 31,1 | 39,63 | 227×10 | 146×10 | 227 | 194 | 7,56 | 6,06 |
| 200×150 | 9.0 | 45,3 | 57,67 | 317×10 | 202×10 | 317 | 270 | 7,41 | 5,93 |
| 300×200 | 6.0 | 45,2 | 57,63 | 737×10 | 396×10 | 491 | 396 | 11,3 | 8,29 |
| 300×200 | 9.0 | 66,5 | 84,67 | 105×10 ² | 563×10 | 702 | 563 | 11,2 | 8,16 |
| 300×200 | 12.0 | 86,8 | 110,5 | 134×10 ² | 711×10 | 890 | 711 | 11,0 | 8,02 |
| 350×150 | 6.0 | 45,2 | 57,63 | 891×10 | 239×10 | 509 | 319 | 12,4 | 6,44 |
| 350×150 | 9.0 | 66,5 | 84,67 | 127×10 ² | 337×10 | 726 | 449 | 12,3 | 6,31 |
| 350×150 | 12.0 | 86,8 | 110,5 | 161×10 ² | 421×10 | 921 | 562 | 12,1 | 6,17 |
| 400×200 | 6.0 | 54,7 | 69,63 | 148×10 ² | 509×10 | 739 | 509 | 14,6 | 8,55 |
| 400×200 | 9.0 | 80,6 | 102,7 | 213×10 ² | 727×10 | 107×10 | 727 | 14,4 | 8,42 |
| 400×200 | 12.0 | 106 | 134,5 | 273×10 ² | 923×10 | 136×10 | 923 | 14,2 | 8,23 |
| 450×250 | 8.0 | 85,4 | 109 | 300×10 ² | 1214×10 | 133×10 | 971 | 16,6 | 10,6 |
| 450×250 | 10.0 | 106 | 135 | 368×10 ² | 1481×10 | 164×10 | 1185 | 16,5 | 10,5 |
| 450×250 | 12.0 | 126 | 161 | 434×10 ² | 1735×10 | 193×10 | 1389 | 16,4 | 10,4 |
| 450×250 | 12,5 | 131 | 167 | 450×10 ² | 1797×10 | 200×10 | 1438 | 16,4 | 10,4 |
| 500×300 | 10.0 | 122 | 155 | 537×10 ² | 2443×10 | 215×10 | 1629 | 18,6 | 12,6 |
| 500×300 | 12.0 | 145 | 185 | 634×10 ² | 2873×10 | 253×10 | 1916 | 18,5 | 12,5 |
| 500×300 | 12,5 | 151 | 192 | 658×10 ² | 2978×10 | 263×10 | 1985 | 18,5 | 12,5 |
| 500×300 | 16.0 | 191 | 243 | 817×10 ² | 3676×10 | 327×10 | 2451 | 18,3 | 12,3 |



비닐하우스용 아연도 강관
GALVANIZED STEEL TUBES FOR THE VINYL HOUSE

| Thickness (mm) | | 1.0 | 1.2 | 1.4 | 1.5 | 1.6 | 1.7 | 2.0 | Characteristics and Applications |
|----------------|------|-------|-------|-------|-------|-------|-------|------|--|
| Standard(O.D) | | kg/m | kg/m | kg/m | kg/m | kg/m | kg/m | kg/m | |
| in | mm | | | | | | | | |
| 5/8 | 15.9 | 0.367 | 0.435 | 0.501 | 0.533 | 0.564 | | | <ul style="list-style-type: none"> • Outstanding corrosion resistance • Excellent workability • Special usage green house • Prime quality general structural fence |
| 3/4 | 19.1 | 0.446 | 0.530 | 0.611 | 0.651 | 0.690 | | | |
| 7/8 | 22.2 | 0.523 | 0.621 | 0.718 | 0.766 | 0.813 | | | |
| 1 | 25.4 | 0.602 | 0.716 | 0.829 | 0.884 | 0.939 | 0.994 | | |
| 1-1/8 | 28.6 | 0.681 | 0.811 | 0.939 | 1.00 | 1.07 | 1.13 | | |
| 1-1/4 | 31.8 | 0.760 | 0.906 | 1.050 | 1.121 | 1.192 | 1.26 | | |
| 1-1/2 | 38.1 | 0.915 | 1.092 | 1.267 | 1.354 | 1.440 | 1.53 | 1.78 | |
| 2 | 50.8 | | 1.468 | 1.705 | 1.824 | 1.941 | 2.06 | 2.41 | |

단관 비계
STEEL SCAFFOLDING PIPES

Standard

CARBON STEEL TUBES FOR GENERAL STRUCTURAL PURPOSES
 STK-500

Standard length · weight

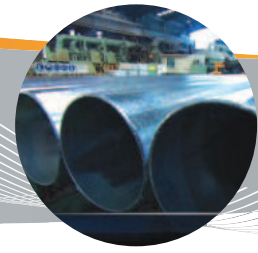
| Length (m) | 1 | 1.5 | 2 | 3 | 4 | 6 |
|-------------|------|------|------|------|-------|-------|
| Weight (kg) | 2.63 | 3.95 | 5.26 | 7.89 | 10.52 | 15.78 |

Mechanical nature

| | |
|------------------------|--|
| Yield Point | 36kg/mm ² Min.(355N/mm ² Min.) |
| Tensile Strength | 51kg/mm ² Min.(355N/mm ² Min.) |
| Moment of Inertia (I) | 9.32cm ⁴ |
| Section Modulus (Z) | 3.83cm ³ |
| Radius of Gyration (i) | 1.64cm |

Size

| | |
|------------------|-----------------|
| Outside Diameter | 48.6mm(1.913in) |
| Thickness | 2.3mm(0.094in) |



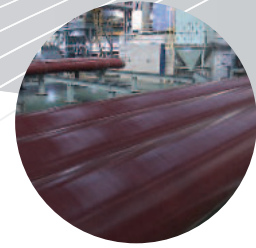
아연도금 강제전선관

RIGID STEEL CONDUITS / HEAVY GAUGE STEEL CONDUITS (KS C 8401 / JIS C 8305)

| Nominal size | Outside diameter | Tolerance of outside diameter | Thickness | Nominal inside diameter | Weight | Effective length of thread (mm) | |
|--------------|------------------|-------------------------------|-----------|-------------------------|--------|---------------------------------|-----|
| | mm | mm | mm | mm | kg/m | Max | Min |
| G 16 | 21.0 | ±0.3 | 2.3 | 16.4 | 1.06 | 19 | 16 |
| G 22 | 26.5 | ±0.3 | 2.3 | 21.9 | 1.37 | 22 | 19 |
| G 28 | 33.3 | ±0.3 | 2.5 | 28.3 | 1.90 | 25 | 22 |
| G 36 | 41.9 | ±0.3 | 2.5 | 36.9 | 2.43 | 28 | 25 |
| G 42 | 47.8 | ±0.3 | 2.5 | 42.8 | 2.79 | 28 | 25 |
| G 54 | 59.6 | ±0.3 | 2.8 | 54.0 | 3.92 | 32 | 28 |
| G 70 | 75.2 | ±0.3 | 2.8 | 69.6 | 5.00 | 36 | 32 |
| G 82 | 87.9 | ±0.3 | 2.8 | 82.3 | 5.88 | 40 | 36 |
| G 92 | 100.7 | ±0.4 | 3.5 | 93.7 | 8.39 | 42 | 36 |
| G 104 | 113.4 | ±0.4 | 3.5 | 106.4 | 9.48 | 45 | 39 |

CONDUIT TUBE THREAD (KS B 0223)

| Nominal thread | Nominal size | Number of threads per inch | Pitch | Height of thread | External thread | | |
|----------------|--------------|----------------------------|--------|------------------|-----------------|------------|------------|
| | | | | | Major dia. | Pitch dia. | Minor dia. |
| | | | | | Internal thread | | |
| | | | | | Major dia. | Pitch dia. | Minor dia. |
| CTG 16 | G 16 | 14 | 1,8143 | 1,017 | 20,955 | 19,793 | 18,922 |
| CTG 22 | G 22 | 14 | 1,8143 | 1,017 | 26,441 | 25,279 | 24,408 |
| CTG 28 | G 28 | 11 | 2,3091 | 1,294 | 33,249 | 31,770 | 30,661 |
| CTG 36 | G 36 | 11 | 2,3091 | 1,294 | 41,910 | 40,431 | 39,322 |
| CTG 42 | G 42 | 11 | 2,3091 | 1,294 | 47,803 | 46,324 | 45,215 |
| CTG 54 | G 54 | 11 | 2,3091 | 1,294 | 59,614 | 58,135 | 57,026 |
| CTG 70 | G 70 | 11 | 2,3091 | 1,294 | 75,184 | 73,705 | 72,026 |
| CTG 82 | G 82 | 11 | 2,3091 | 1,294 | 87,884 | 86,405 | 85,296 |
| CTG 92 | G 92 | 11 | 2,3091 | 1,294 | 100,330 | 98,851 | 97,742 |
| CTG 104 | G 104 | 11 | 2,3091 | 1,294 | 113,030 | 111,551 | 110,442 |

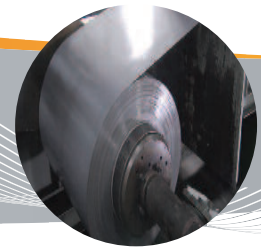


UL6 RIGID METAL CONDUITS (HEAVY)

| Nominal size | Nominal inside diameter | | Outside diameter | | Nominal wall thickness | | Length without coupling | | Weight | |
|--------------|-------------------------|--------|------------------|--------|------------------------|------|-------------------------|------|--------|-------|
| | in. | mm | in. | mm | in. | mm | ft. & in. | m | P.E | T.C |
| 1/2 | 0.632 | 16.05 | 0.840 | 21.34 | 0.104 | 2.64 | 9-11 1/4 | 3.03 | 0.371 | 0.376 |
| 3/2 | 0.836 | 21.23 | 1.050 | 26.67 | 0.107 | 2.72 | 9-11 1/4 | 3.03 | 0.490 | 0.499 |
| 1 | 1.049 | 26.64 | 1.315 | 33.40 | 0.126 | 3.20 | 9-11 | 3.02 | 0.726 | 0.739 |
| 1 1/4 | 1.380 | 35.05 | 1.660 | 42.16 | 0.133 | 3.38 | 9-11 | 3.02 | 0.985 | 1.000 |
| 1 1/2 | 1.610 | 40.89 | 1.900 | 48.26 | 0.138 | 3.51 | 9-11 | 3.02 | 1.181 | 1.200 |
| 2 | 2.067 | 52.50 | 2.375 | 60.33 | 0.146 | 3.71 | 9-11 | 3.02 | 1.579 | 1.610 |
| 2 1/2 | 2.469 | 62.71 | 2.875 | 73.03 | 0.193 | 4.90 | 9-10 1/2 | 3.01 | 2.509 | 2.590 |
| 3 | 3.068 | 77.93 | 3.500 | 88.90 | 0.205 | 5.21 | 9-10 1/2 | 3.01 | 3.277 | 3.370 |
| 1 1/2 | 3.548 | 90.12 | 4.000 | 101.60 | 0.215 | 5.46 | 9-10 1/4 | 3.00 | 3.945 | 4.100 |
| 4 | 4.026 | 102.26 | 4.500 | 114.30 | 0.225 | 5.72 | 9-10 1/4 | 3.00 | 4.668 | 4.790 |
| 5 | 5.047 | 128.19 | 5.563 | 141.30 | 0.245 | 6.22 | 9-10 | 3.00 | 6.315 | 6.510 |
| 6 | 6.065 | 154.05 | 6.625 | 168.28 | 0.266 | 6.76 | 9-10 | 3.00 | 8.207 | 8.520 |

ANSI C80.1 RIGID STEEL CONDUITS, ZINC COATED

| Nominal size | Nominal inside diameter | | Outside diameter | | Nominal wall thickness | | Length without coupling | | Weight | |
|--------------|-------------------------|-------|------------------|-------|------------------------|------|-------------------------|------|--------|--------|
| | in. | mm | in. | mm | in. | mm | ft. & in. | m | P.E | T.C |
| 3/8 | 0.493 | 12.5 | 0.675 | 17.1 | 0.091 | 2.31 | 9-11 1/2 | 3.04 | 51.5 | 23.36 |
| 1/2 | 0.632 | 16.1 | 0.840 | 21.3 | 0.104 | 2.64 | 9-11 1/4 | 3.03 | 79.0 | 35.83 |
| 3/4 | 0.836 | 21.2 | 1.050 | 26.7 | 0.107 | 2.72 | 9-11 1/4 | 3.03 | 105.0 | 47.63 |
| 1 | 1.063 | 27.0 | 1.315 | 33.4 | 0.126 | 3.20 | 9-11 | 3.02 | 153.0 | 69.40 |
| 1 1/4 | 1.394 | 35.4 | 1.660 | 42.2 | 0.133 | 3.38 | 9-11 | 3.02 | 201.0 | 91.17 |
| 1 1/2 | 1.624 | 41.2 | 1.900 | 48.3 | 0.138 | 3.51 | 9-11 | 3.02 | 249.0 | 112.95 |
| 2 | 2.083 | 52.9 | 2.375 | 60.3 | 0.146 | 3.71 | 9-11 | 3.02 | 332.0 | 150.60 |
| 2 1/2 | 2.489 | 63.2 | 2.875 | 73.0 | 0.193 | 4.90 | 9-10 1/2 | 3.01 | 527.0 | 239.05 |
| 3 | 3.090 | 78.5 | 3.500 | 88.9 | 0.205 | 5.21 | 9-10 1/2 | 3.01 | 682.6 | 309.63 |
| 3 1/2 | 3.570 | 90.7 | 4.000 | 101.6 | 0.215 | 5.46 | 9-10 1/4 | 3.00 | 831.0 | 376.94 |
| 4 | 4.050 | 102.9 | 4.500 | 114.3 | 0.225 | 5.72 | 9-10 1/4 | 3.00 | 972.3 | 441.04 |
| 5 | 5.073 | 128.9 | 5.563 | 141.3 | 0.245 | 6.22 | 9-10 | 3.00 | 1313.6 | 595.85 |
| 6 | 6.093 | 154.8 | 6.625 | 168.3 | 0.266 | 6.76 | 9-10 | 3.00 | 1745.3 | 791.67 |



ASTM 배관용 강관 (ASTM A53)

CARBON STEEL PIPE IN BLACK & HOT - DIPPED ZINC - COATED

| NPS Designator | Outside diameter | | Wall thickness | | Nominal weight | | | Weight class | Schedule No. | Test pressure | | | |
|----------------|------------------|-------|----------------|-------|----------------|-------|--------|--------------|--------------|---------------|-------|---------|-------|
| | | | | | Plain ends | | | | | Plain ends | | | |
| | in. | mm | in. | mm | lb/ft | kg/ft | kg/m | | | Grade A | | Grade B | |
| | | | | | | | | | | psi | kPa | psi | kPa |
| 1/2 | 0,840 | 21,3 | 0,109 | 2,77 | 0,85 | 0,39 | 1,27 | STD | 40 | 700 | 4830 | 700 | 4830 |
| | | | 0,147 | 3,73 | 1,09 | 0,49 | 1,62 | XS | 80 | 850 | 5860 | 850 | 5860 |
| 3/4 | 1,050 | 26,7 | 0,113 | 2,87 | 1,13 | 0,51 | 1,69 | STD | 40 | 700 | 4830 | 700 | 4830 |
| | | | 0,154 | 3,91 | 1,48 | 0,67 | 2,20 | XS | 80 | 850 | 5860 | 850 | 5860 |
| 1 | 1,315 | 33,4 | 0,133 | 3,38 | 1,68 | 0,76 | 2,50 | STD | 40 | 700 | 4830 | 700 | 4830 |
| | | | 0,179 | 4,55 | 2,17 | 0,98 | 3,24 | XS | 80 | 850 | 5860 | 850 | 5860 |
| 1 1/4 | 1,660 | 42,2 | 0,140 | 3,56 | 2,27 | 1,03 | 3,39 | STD | 40 | 1200 | 8270 | 1300 | 8960 |
| | | | 0,191 | 4,85 | 3,00 | 1,36 | 4,47 | XS | 80 | 1800 | 12410 | 1900 | 13100 |
| 1 1/2 | 1,900 | 48,3 | 0,145 | 3,68 | 2,72 | 1,23 | 4,05 | STD | 40 | 1200 | 8270 | 1300 | 8960 |
| | | | 0,200 | 5,08 | 3,63 | 1,65 | 5,41 | XS | 80 | 1800 | 12410 | 1900 | 13100 |
| 2 | 2,375 | 60,3 | 0,154 | 3,91 | 3,66 | 1,66 | 5,44 | STD | 40 | 2300 | 15860 | 2500 | 17240 |
| | | | 0,218 | 5,54 | 5,03 | 2,28 | 7,48 | XS | 80 | 2500 | 17240 | 2500 | 17240 |
| 2 1/2 | 2,875 | 73,0 | 0,203 | 5,16 | 5,80 | 2,63 | 8,63 | STD | 40 | 2500 | 17240 | 2500 | 17240 |
| | | | 0,276 | 7,01 | 7,67 | 3,48 | 11,41 | XS | 80 | 2500 | 17240 | 2500 | 17240 |
| 3 | 3,500 | 88,9 | 0,216 | 5,49 | 7,58 | 3,44 | 11,29 | STD | 40 | 2220 | 15310 | 2500 | 17240 |
| | | | 0,300 | 7,62 | 10,26 | 4,65 | 15,27 | XS | 80 | 2500 | 17240 | 2500 | 17240 |
| 3 1/2 | 4,000 | 101,6 | 0,226 | 5,74 | 9,12 | 4,14 | 13,57 | STD | 40 | 2030 | 14000 | 2370 | 16340 |
| | | | 0,318 | 8,08 | 12,52 | 5,68 | 18,63 | XS | 80 | 2800 | 19310 | 2800 | 19310 |
| 4 | 4,500 | 114,3 | 0,237 | 6,02 | 10,80 | 4,90 | 16,07 | STD | 40 | 1900 | 13100 | 2210 | 15240 |
| | | | 0,337 | 8,56 | 15,00 | 6,80 | 22,32 | XS | 80 | 2700 | 18620 | 2800 | 19310 |
| 5 | 5,563 | 141,3 | 0,258 | 6,55 | 14,63 | 6,64 | 21,77 | STD | 40 | 1670 | 11510 | 1950 | 13440 |
| | | | 0,375 | 9,52 | 20,80 | 9,43 | 30,94 | XS | 80 | 2430 | 16750 | 2800 | 19310 |
| 6 | 6,625 | 168,3 | 0,280 | 7,11 | 18,90 | 8,61 | 28,26 | STD | 40 | 1520 | 10480 | 1780 | 12270 |
| | | | 0,432 | 10,97 | 28,60 | 12,97 | 42,56 | XS | 80 | 2350 | 16200 | 2740 | 18890 |
| 8 | 8,625 | 219,1 | 0,250 | 6,35 | 22,38 | 10,15 | 33,31 | - | 20 | 1040 | 7170 | 1220 | 8410 |
| | | | 0,322 | 8,18 | 28,58 | 12,97 | 42,55 | STD | 40 | 1340 | 9240 | 1570 | 10820 |
| | | | 0,500 | 12,70 | 43,43 | 19,70 | 64,64 | XS | 80 | 2090 | 14410 | 2430 | 16750 |
| 10 | 10,750 | 273,0 | 0,250 | 6,35 | 28,00 | 12,73 | 41,75 | - | 20 | 840 | 5790 | 980 | 6760 |
| | | | 0,365 | 9,27 | 40,52 | 18,38 | 60,29 | STD | 40 | 1220 | 8410 | 1430 | 9860 |
| | | | 0,500 | 12,70 | 54,79 | 24,85 | 81,52 | XS | 60 | 1670 | 11510 | 1950 | 13440 |
| 12 | 12,750 | 323,8 | 0,250 | 6,35 | 33,41 | 15,15 | 49,71 | - | 20 | 710 | 4900 | 820 | 5650 |
| | | | 0,375 | 9,52 | 49,61 | 22,50 | 73,78 | STD | - | 1060 | 7310 | 1240 | 8550 |
| | | | 0,406 | 10,31 | 53,57 | 24,32 | 79,70 | - | 40 | 1150 | 7930 | 1340 | 9240 |
| | | | 0,500 | 12,70 | 65,48 | 29,70 | 97,43 | XS | - | 1410 | 9720 | 1650 | 11380 |
| 14 | 14,000 | 355,6 | 0,250 | 6,35 | 36,75 | 16,67 | 54,69 | - | 10 | 640 | 4410 | 750 | 5170 |
| | | | 0,312 | 7,92 | 45,65 | 20,71 | 67,90 | - | 20 | 800 | 5520 | 940 | 6480 |
| | | | 0,375 | 9,52 | 54,62 | 24,78 | 81,25 | STD | 30 | 960 | 6620 | 1120 | 7720 |
| | | | 0,438 | 11,13 | 63,60 | 28,80 | 94,55 | - | 40 | 1130 | 7790 | 1310 | 9030 |
| | | | 0,500 | 12,70 | 72,16 | 32,73 | 107,39 | XS | - | 1290 | 8890 | 1500 | 10340 |
| 16 | 16,000 | 406,4 | 0,250 | 6,35 | 42,09 | 19,09 | 62,64 | - | 10 | 560 | 3860 | 660 | 4550 |
| | | | 0,312 | 7,92 | 52,32 | 23,73 | 77,83 | - | 20 | 700 | 4830 | 820 | 5650 |
| | | | 0,375 | 9,52 | 62,64 | 28,41 | 93,17 | STD | 30 | 840 | 5790 | 980 | 6760 |
| | | | 0,500 | 12,70 | 82,85 | 37,58 | 123,30 | XS | 40 | 1120 | 7720 | 1310 | 9030 |
| 18 | 18,000 | 457,2 | 0,250 | 6,35 | 47,44 | 21,52 | 70,60 | - | 10 | 500 | 3450 | 580 | 4000 |
| | | | 0,312 | 7,92 | 58,99 | 26,76 | 87,75 | - | 20 | 620 | 4270 | 730 | 5030 |
| | | | 0,375 | 9,52 | 70,65 | 32,85 | 105,10 | STD | - | 750 | 5170 | 880 | 6070 |
| | | | 0,438 | 11,13 | 82,23 | 37,30 | 122,43 | - | 30 | 880 | 6070 | 1020 | 7030 |
| | | | 0,500 | 12,70 | 93,54 | 42,43 | 139,20 | XS | - | 1000 | 6890 | 1170 | 8070 |
| 20 | 20,000 | 508,0 | 0,250 | 6,35 | 52,78 | 23,94 | 78,55 | - | 10 | 450 | 3100 | 520 | 3590 |
| | | | 0,375 | 9,52 | 78,67 | 35,68 | 117,02 | STD | 20 | 680 | 4690 | 790 | 5450 |
| | | | 0,500 | 12,70 | 104,23 | 47,28 | 155,12 | XS | 30 | 900 | 6210 | 1050 | 7240 |

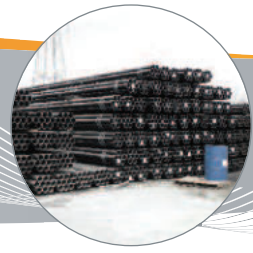
AJB's Product List



유정관

API 5CT TUBING

| Outside diameter | | Wall thickness | | Weight | | | | | | Test pressure (psi) | | | | Type of pipe |
|-------------------------------|-------|----------------|------|------------|-------|-------|---------------------|-------|-------|---------------------|-------|-----------|-------|----------------|
| | | | | Plain ends | | | Threaded & Coupling | | | H40 | | J55 & K55 | | |
| in. | mm | in. | mm | lb/ft | kg/ft | kg/m | lb/ft | kg/ft | kg/m | STD | ALT | STD | ALT | |
| 1,050 | 26.7 | 0.113 | 2.87 | 1.13 | 0.51 | 1.68 | 1.14 | 0.52 | 1.70 | 3,000 | 6,900 | 3,000 | 9,500 | Non-Upset |
| | | 0.113 | 2.87 | 1.13 | 0.51 | 1.68 | 1.20 | 0.54 | 1.79 | 3,000 | 6,900 | 3,000 | 9,500 | Ext. Upset |
| 1,315 | 33.4 | 0.133 | 3.38 | 1.68 | 0.76 | 2.50 | 1.70 | 0.77 | 2.53 | 3,000 | 6,500 | 3,000 | 8,900 | Non-Upset |
| | | 0.133 | 3.38 | 1.68 | 0.76 | 2.50 | 1.72 | 0.78 | 2.56 | 3,000 | 6,500 | 3,000 | 8,900 | Integral Joint |
| | | 0.133 | 3.38 | 1.68 | 0.76 | 2.50 | 1.80 | 0.82 | 2.68 | 3,000 | 6,500 | 3,000 | 8,900 | Ext. Upset |
| 1,660 | 42.2 | 0.125 | 3.18 | 2.05 | 0.93 | 3.05 | 2.10 | 0.95 | 3.13 | 3,000 | 4,800 | 3,000 | 6,600 | Integral Joint |
| | | 0.140 | 3.56 | 2.27 | 1.03 | 3.38 | 2.30 | 1.04 | 3.42 | 3,000 | 5,400 | 3,000 | 7,400 | Non-Upset |
| | | 0.140 | 3.56 | 2.27 | 1.03 | 3.38 | 2.33 | 1.06 | 3.47 | 3,000 | 5,400 | 3,000 | 7,400 | Integral Joint |
| | | 0.140 | 3.56 | 2.27 | 1.03 | 3.38 | 2.40 | 1.09 | 3.57 | 3,000 | 5,400 | 3,000 | 7,400 | Ext. Upset |
| 1,900 | 48.3 | 0.125 | 3.18 | 2.37 | 1.08 | 3.53 | 2.40 | 1.09 | 3.57 | 3,000 | 4,200 | 3,000 | 5,800 | Integral Joint |
| | | 0.145 | 3.68 | 2.72 | 1.23 | 4.05 | 2.75 | 1.25 | 4.09 | 3,000 | 4,900 | 3,000 | 6,700 | Non-Upset |
| | | 0.145 | 3.68 | 2.72 | 1.23 | 4.05 | 2.76 | 1.25 | 4.11 | 3,000 | 4,900 | 3,000 | 6,700 | Integral Joint |
| | | 0.145 | 3.68 | 2.72 | 1.23 | 4.05 | 2.90 | 1.32 | 4.32 | 3,000 | 4,900 | 3,000 | 6,700 | Ext. Upset |
| 2,063 | 52.4 | 0.156 | 3.96 | 3.18 | 1.44 | 4.73 | 3.25 | 1.47 | 4.84 | 3,000 | 4,800 | 3,000 | 6,700 | Integral Joint |
| 2 ³ / ₈ | 60.3 | 0.167 | 4.24 | 3.94 | 1.79 | 5.86 | 4.00 | 1.81 | 5.95 | 3,000 | 4,500 | 3,000 | 6,200 | Non-Upset |
| | | 0.190 | 4.83 | 4.44 | 2.01 | 6.59 | 4.60 | 2.09 | 6.85 | 3,000 | 5,100 | 3,000 | 7,000 | Non-Upset |
| | | 0.190 | 4.83 | 4.44 | 2.01 | 6.59 | 4.70 | 2.13 | 6.99 | 3,000 | 5,100 | 3,000 | 7,000 | Ext. Upset |
| 2 ⁷ / ₈ | 73.0 | 0.217 | 5.51 | 6.17 | 2.79 | 9.17 | 6.40 | 2.90 | 9.52 | 3,000 | 4,800 | 3,000 | 6,600 | Non-Upset |
| | | 0.217 | 5.51 | 6.17 | 2.79 | 9.17 | 6.50 | 2.95 | 9.67 | 3,000 | 4,800 | 3,000 | 6,600 | Ext. Upset |
| 3 ¹ / ₂ | 88.9 | 0.216 | 5.49 | 7.58 | 3.44 | 11.28 | 7.70 | 3.49 | 11.46 | 3,000 | 3,900 | 3,000 | 5,400 | Non-Upset |
| | | 0.254 | 6.45 | 8.81 | 4.00 | 13.11 | 9.20 | 4.17 | 13.69 | 3,000 | 4,600 | 3,000 | 6,400 | Ext. Upset |
| | | 0.254 | 6.45 | 8.81 | 4.00 | 13.11 | 9.30 | 4.22 | 13.84 | 3,000 | 4,600 | 3,000 | 6,400 | Ext. Upset |
| | | 0.289 | 7.34 | 9.92 | 4.50 | 14.75 | 10.20 | 4.63 | 15.18 | 3,000 | 5,300 | 3,000 | 7,300 | Non-Upset |
| 4 | 101.6 | 0.226 | 5.74 | 9.12 | 4.13 | 13.56 | 9.50 | 4.31 | 14.14 | 3,000 | 3,600 | 3,000 | 5,000 | Non-Upset |
| | | 0.262 | 6.65 | 10.47 | 4.74 | 15.57 | 11.00 | 4.99 | 16.37 | 3,000 | 4,200 | 3,000 | 5,800 | Ext. Upset |
| 4 ¹ / ₂ | 114.3 | 0.271 | 6.88 | 12.25 | 5.55 | 18.22 | 12.60 | 5.72 | 18.75 | 3,000 | 3,900 | 3,000 | 5,300 | Non-Upset |
| | | 0.271 | 6.88 | 12.25 | 5.55 | 18.22 | 12.75 | 5.78 | 18.97 | 3,000 | 3,900 | 3,000 | 5,300 | Ext. Upset |



유정관

API 5CT CASING

| Outside diameter | | Wall thickness | | Weight | | | | | | Test pressure (psi) | | | | Type of thread | | |
|------------------|--------|----------------|-------|------------|-------|--------|---------------------|-------|--------|---------------------|-------|-----------|-------|----------------|------|----------|
| | | | | Plain ends | | | Threaded & Coupling | | | H40 | | J55 & K55 | | Short | Long | Buttress |
| in. | mm | in. | mm | lb/ft | kg/ft | kg/m | lb/ft | kg/ft | kg/m | STD | ALT | STD | ALT | | | |
| 4 1/2 | 114,30 | 0,205 | 5,21 | 9,41 | 4,26 | 13,99 | 9,50 | 4,31 | 14,14 | 2,900 | - | 3,000 | 4,000 | x | | |
| | | 0,224 | 5,69 | 10,24 | 4,64 | 15,22 | 10,50 | 4,76 | 15,63 | - | - | 3,000 | 4,400 | x | | x |
| | | 0,250 | 6,35 | 11,36 | 5,15 | 16,89 | 11,60 | 5,26 | 17,26 | - | - | 3,000 | 4,900 | x | x | x |
| 5 | 127,00 | 0,220 | 5,59 | 11,24 | 5,09 | 16,71 | 11,50 | 5,22 | 17,11 | - | - | 3,000 | 3,900 | x | | |
| | | 0,253 | 6,43 | 12,84 | 5,82 | 19,09 | 13,00 | 5,90 | 19,35 | - | - | 3,000 | 4,500 | x | x | x |
| | | 0,296 | 7,52 | 14,88 | 6,74 | 22,13 | 15,00 | 6,80 | 22,32 | - | - | 3,000 | 5,200 | x | x | x |
| 5 1/2 | 139,70 | 0,244 | 6,20 | 13,71 | 6,21 | 20,39 | 14,00 | 6,35 | 20,83 | 2,800 | - | 3,000 | 3,900 | x | | |
| | | 0,275 | 6,99 | 15,36 | 6,96 | 22,84 | 15,50 | 7,03 | 23,07 | - | - | 3,000 | 4,400 | x | x | x |
| | | 0,304 | 7,72 | 16,89 | 7,65 | 25,11 | 17,00 | 7,71 | 25,30 | - | - | 3,000 | 4,900 | x | x | x |
| 6 5/8 | 168,28 | 0,288 | 7,32 | 19,51 | 8,84 | 29,01 | 20,00 | 9,07 | 29,76 | 2,800 | - | - | - | x | | |
| | | 0,288 | 7,32 | 19,51 | 8,84 | 29,01 | 20,00 | 9,07 | 29,76 | - | - | 3,000 | 3,800 | x | x | x |
| | | 0,352 | 8,94 | 23,60 | 10,70 | 35,09 | 24,00 | 10,89 | 35,72 | - | - | 3,000 | 4,700 | x | x | x |
| 7 | 177,80 | 0,231 | 5,87 | 16,72 | 7,57 | 24,85 | 17,00 | 7,71 | 25,30 | 2,100 | - | - | - | x | | |
| | | 0,272 | 6,91 | 19,56 | 8,86 | 29,08 | 20,00 | 9,07 | 29,76 | 2,500 | - | 3,000 | 3,400 | x | | |
| | | 0,317 | 8,05 | 22,65 | 10,26 | 33,68 | 23,00 | 10,43 | 34,23 | - | - | 3,000 | 4,000 | x | x | x |
| | | 0,362 | 9,19 | 25,69 | 11,64 | 38,19 | 26,00 | 11,79 | 38,69 | - | - | 3,000 | 4,600 | x | x | x |
| 7 5/8 | 193,68 | 0,300 | 7,62 | 23,49 | 10,65 | 34,95 | 24,00 | 10,89 | 35,72 | 2,500 | - | - | - | x | | |
| | | 0,328 | 8,33 | 25,59 | 11,59 | 38,04 | 26,40 | 11,97 | 39,29 | - | - | 3,000 | 3,800 | x | x | x |
| 8 5/8 | 219,08 | 0,264 | 6,71 | 23,60 | 10,69 | 35,08 | 24,00 | 10,89 | 35,72 | - | - | 2,700 | - | x | | |
| | | 0,304 | 7,72 | 27,04 | 12,26 | 40,21 | 28,00 | 12,70 | 41,67 | 2,300 | - | - | - | x | | |
| | | 0,352 | 8,94 | 31,13 | 14,11 | 46,28 | 32,00 | 14,51 | 47,62 | 2,600 | - | - | - | x | | |
| | | 0,352 | 8,94 | 31,13 | 14,11 | 46,28 | 32,00 | 14,51 | 47,62 | - | - | 3,000 | 3,600 | x | x | x |
| | | 0,400 | 10,16 | 35,17 | 15,94 | 52,30 | 36,00 | 16,33 | 53,58 | - | - | 3,000 | 4,100 | x | x | x |
| 9 5/8 | 244,48 | 0,312 | 7,92 | 31,06 | 14,07 | 46,18 | 32,30 | 14,65 | 48,07 | 2,100 | - | - | - | x | | |
| | | 0,352 | 8,94 | 34,89 | 15,81 | 51,88 | 36,00 | 16,33 | 53,58 | 2,300 | - | - | - | x | | |
| | | 0,352 | 8,94 | 34,89 | 15,81 | 51,88 | 36,00 | 16,33 | 53,58 | - | - | 3,000 | 3,200 | x | x | x |
| | | 0,395 | 10,03 | 38,97 | 17,66 | 57,95 | 40,00 | 18,14 | 59,53 | - | - | 3,000 | 3,600 | x | x | x |
| 10 3/4 | 273,05 | 0,279 | 7,09 | 31,23 | 14,15 | 46,43 | 32,75 | 14,86 | 48,74 | 1,200 | 1,700 | - | - | x | | |
| | | 0,350 | 8,89 | 38,91 | 17,64 | 57,86 | 40,50 | 18,37 | 60,27 | 1,600 | 2,100 | - | - | x | | |
| | | 0,350 | 8,89 | 38,91 | 17,64 | 57,86 | 40,50 | 18,37 | 60,27 | - | - | 2,100 | 2,900 | x | | x |
| | | 0,400 | 10,16 | 44,26 | 20,06 | 65,81 | 45,50 | 20,64 | 67,71 | - | - | 2,500 | 3,300 | x | | x |
| | | 0,450 | 11,43 | 49,55 | 22,45 | 73,67 | 51,00 | 23,13 | 75,90 | - | - | 2,800 | 3,700 | x | | x |
| 11 3/4 | 298,45 | 0,333 | 8,46 | 40,64 | 18,42 | 60,42 | 42,00 | 19,05 | 62,50 | 1,400 | 1,800 | - | - | x | | |
| | | 0,375 | 9,52 | 45,60 | 20,67 | 67,80 | 47,00 | 21,32 | 69,95 | - | - | 2,100 | 2,800 | x | | x |
| | | 0,435 | 11,05 | 52,62 | 23,85 | 78,23 | 54,00 | 24,49 | 80,36 | - | - | 2,400 | 3,300 | x | | x |
| | | 0,489 | 12,42 | 58,87 | 26,68 | 87,52 | 60,00 | 27,22 | 89,29 | - | - | 2,700 | 3,700 | x | | x |
| 13 3/8 | 339,73 | 0,330 | 8,38 | 46,02 | 20,86 | 68,43 | 48,00 | 21,77 | 71,43 | 1,200 | 1,600 | - | - | x | | |
| | | 0,380 | 9,65 | 52,79 | 23,92 | 78,49 | 54,50 | 24,72 | 81,11 | - | - | 1,900 | 2,500 | x | | x |
| | | 0,430 | 10,92 | 59,50 | 26,97 | 88,47 | 61,00 | 27,67 | 90,78 | - | - | 2,100 | 2,800 | x | | x |
| | | 0,480 | 12,19 | 66,17 | 29,99 | 98,38 | 68,00 | 30,84 | 101,20 | - | - | 2,400 | 3,200 | x | | x |
| 16 | 406,40 | 0,375 | 9,52 | 62,64 | 28,39 | 93,13 | 65,00 | 29,48 | 96,73 | 1,100 | - | - | - | x | | |
| | | 0,438 | 11,13 | 72,86 | 32,99 | 108,22 | 75,00 | 34,02 | 111,61 | - | - | 1,800 | - | x | | x |
| | | 0,495 | 12,57 | 82,05 | 37,18 | 121,99 | 84,00 | 38,10 | 125,01 | - | - | 2,000 | - | x | | x |
| 18 5/8 | 473,08 | 0,435 | 11,05 | 84,59 | 38,33 | 125,77 | 87,50 | 39,69 | 130,22 | 1,100 | - | 1,500 | - | x | | |
| | | 0,435 | 11,05 | 84,59 | 38,33 | 125,77 | 87,50 | 39,69 | 130,22 | - | - | 1,500 | - | | | x |
| 20 | 508,00 | 0,438 | 11,13 | 91,59 | 41,51 | 136,19 | 94,00 | 42,64 | 139,89 | 1,100 | - | 1,400 | - | x | x | |
| | | 0,438 | 11,13 | 91,59 | 41,51 | 136,19 | 94,00 | 42,64 | 139,89 | - | - | 1,400 | - | | | x |
| | | 0,500 | 12,70 | 104,23 | 47,23 | 154,97 | 106,50 | 48,31 | 158,49 | - | - | 1,600 | - | x | x | x |



유정관 (열처리)

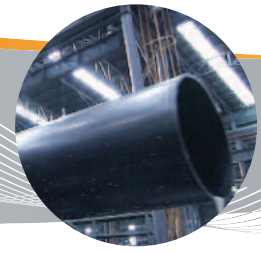
API 5CT TUBING (FULL-BODY HEAT TREATMENT)

| Outside diameter | | Wall thickness | | Weight | | | | | | Test pressure (psi) | | | | | |
|------------------|-------|----------------|------|------------|-------|-------|---------------------|-------|-------|---------------------|-------|-----------|-------|---------------|-------|
| | | | | Plain ends | | | Threaded & Coupling | | | H40 | | J55 & K55 | | N80-1 & N80-Q | L80-1 |
| in. | mm | in. | mm | lb/ft | kg/ft | kg/m | lb/ft | kg/ft | kg/m | STD | ALT | STD | ALT | | |
| 1,050 | 26.7 | 0,113 | 2,87 | 1,13 | 0,51 | 1,68 | 1,14 | 0,52 | 1,70 | 3,000 | 6,900 | 3,000 | 9,500 | 10000 | 10000 |
| | | 0,113 | 2,87 | 1,13 | 0,51 | 1,68 | 1,20 | 0,54 | 1,79 | 3,000 | 6,900 | 3,000 | 9,500 | - | - |
| 1,315 | 33.4 | 0,133 | 3,38 | 1,68 | 0,76 | 2,50 | 1,70 | 0,77 | 2,53 | 3,000 | 6,500 | 3,000 | 8,900 | 10000 | 10000 |
| | | 0,133 | 3,38 | 1,68 | 0,76 | 2,50 | 1,72 | 0,78 | 2,56 | 3,000 | 6,500 | 3,000 | 8,900 | - | - |
| | | 0,133 | 3,38 | 1,68 | 0,76 | 2,50 | 1,80 | 0,82 | 2,68 | 3,000 | 6,500 | 3,000 | 8,900 | - | - |
| 1,660 | 42.2 | 0,125 | 3,18 | 2,05 | 0,93 | 3,05 | 2,10 | 0,95 | 3,13 | 3,000 | 4,800 | 3,000 | 6,600 | - | - |
| | | 0,140 | 3,56 | 2,27 | 1,03 | 3,38 | 2,30 | 1,04 | 3,42 | 3,000 | 5,400 | 3,000 | 7,400 | 10000 | 10000 |
| | | 0,140 | 3,56 | 2,27 | 1,03 | 3,38 | 2,33 | 1,06 | 3,47 | 3,000 | 5,400 | 3,000 | 7,400 | - | - |
| | | 0,140 | 3,56 | 2,27 | 1,03 | 3,38 | 2,40 | 1,09 | 3,57 | 3,000 | 5,400 | 3,000 | 7,400 | - | - |
| 1,900 | 48.3 | 0,125 | 3,18 | 2,37 | 1,08 | 3,53 | 2,40 | 1,09 | 3,57 | 3,000 | 4,200 | 3,000 | 5,800 | - | - |
| | | 0,145 | 3,68 | 2,72 | 1,23 | 4,05 | 2,75 | 1,25 | 4,09 | 3,000 | 4,900 | 3,000 | 6,700 | 9800 | 9800 |
| | | 0,145 | 3,68 | 2,72 | 1,23 | 4,05 | 2,76 | 1,25 | 4,11 | 3,000 | 4,900 | 3,000 | 6,700 | - | - |
| | | 0,145 | 3,68 | 2,72 | 1,23 | 4,05 | 2,90 | 1,32 | 4,32 | 3,000 | 4,900 | 3,000 | 6,700 | - | - |
| 2,063 | 52.4 | 0,156 | 3,96 | 3,18 | 1,44 | 4,73 | 3,25 | 1,47 | 4,84 | 3,000 | 4,800 | 3,000 | 6,700 | 9700 | 9700 |
| 2 3/8 | 60.3 | 0,167 | 4,24 | 3,94 | 1,79 | 5,86 | 4,00 | 1,81 | 5,95 | 3,000 | 4,500 | 3,000 | 6,200 | 9000 | 9000 |
| | | 0,190 | 4,83 | 4,44 | 2,01 | 6,59 | 4,60 | 2,09 | 6,85 | 3,000 | 5,100 | 3,000 | 7,000 | 10000 | 10000 |
| | | 0,190 | 4,83 | 4,44 | 2,01 | 6,59 | 4,70 | 2,13 | 6,99 | 3,000 | 5,100 | 3,000 | 7,000 | - | - |
| 2 7/8 | 73.0 | 0,217 | 5,51 | 6,17 | 2,79 | 9,17 | 6,40 | 2,90 | 9,52 | 3,000 | 4,800 | 3,000 | 6,600 | 9700 | 9700 |
| | | 0,217 | 5,51 | 6,17 | 2,79 | 9,17 | 6,50 | 2,95 | 9,67 | 3,000 | 4,800 | 3,000 | 6,600 | - | - |
| 3 1/2 | 88.9 | 0,216 | 5,49 | 7,58 | 3,44 | 11,28 | 7,70 | 3,49 | 11,46 | 3,000 | 3,900 | 3,000 | 5,400 | 7900 | 7900 |
| | | 0,254 | 6,45 | 8,81 | 4,00 | 13,11 | 9,20 | 4,17 | 13,69 | 3,000 | 4,600 | 3,000 | 6,400 | 9300 | 9300 |
| | | 0,254 | 6,45 | 8,81 | 4,00 | 13,11 | 9,30 | 4,22 | 13,84 | 3,000 | 4,600 | 3,000 | 6,400 | - | - |
| | | 0,289 | 7,34 | 9,92 | 4,50 | 14,75 | 10,20 | 4,63 | 15,18 | 3,000 | 5,300 | 3,000 | 7,300 | 10000 | 10000 |
| 4 | 101.6 | 0,226 | 5,74 | 9,12 | 4,13 | 13,56 | 9,50 | 4,31 | 14,14 | 3,000 | 3,600 | 3,000 | 5,000 | 7200 | 7200 |
| | | 0,262 | 6,65 | 10,47 | 4,74 | 15,57 | 11,00 | 4,99 | 16,37 | 3,000 | 4,200 | 3,000 | 5,800 | 8400 | 8400 |
| 4 1/2 | 114.3 | 0,271 | 6,88 | 12,25 | 5,55 | 18,22 | 12,60 | 5,72 | 18,75 | 3,000 | 3,900 | 3,000 | 5,300 | 7700 | 7700 |
| | | 0,271 | 6,88 | 12,25 | 5,55 | 18,22 | 12,75 | 5,78 | 18,97 | 3,000 | 3,900 | 3,000 | 5,300 | - | - |

유정관 (열처리)

API 5CT CASING (FULL-BODY HEAT TREATMENT)

| Outside diameter | | Wall thickness | | Weight | | | | | | Test pressure (psi) | | | | | |
|------------------|--------|----------------|------|------------|-------|-------|---------------------|-------|-------|---------------------|-----|-----------|-------|---------------|-------|
| | | | | Plain ends | | | Threaded & Coupling | | | H40 | | J55 & K55 | | N80-1 & N80-Q | L80-1 |
| in. | mm | in. | mm | lb/ft | kg/ft | kg/m | lb/ft | kg/ft | kg/m | STD | ALT | STD | ALT | | |
| 4 1/2 | 114.30 | 0,205 | 5,21 | 9,41 | 4,26 | 13,99 | 9,50 | 4,31 | 14,14 | 2,900 | - | 3,000 | 4,000 | - | - |
| | | 0,224 | 5,69 | 10,24 | 4,64 | 15,22 | 10,50 | 4,76 | 15,63 | - | - | 3,000 | 4,400 | - | - |
| | | 0,250 | 6,35 | 11,36 | 5,15 | 16,89 | 11,60 | 5,26 | 17,26 | - | - | 3,000 | 4,900 | 7100 | 7100 |
| 5 | 127.00 | 0,220 | 5,59 | 11,24 | 5,09 | 16,71 | 11,50 | 5,22 | 17,11 | - | - | 3,000 | 3,900 | - | - |
| | | 0,253 | 6,43 | 12,84 | 5,82 | 19,09 | 13,00 | 5,90 | 19,35 | - | - | 3,000 | 4,500 | - | - |
| | | 0,296 | 7,52 | 14,88 | 6,74 | 22,13 | 15,00 | 6,80 | 22,32 | - | - | 3,000 | 5,200 | 7600 | 7600 |
| 5 1/2 | 139.70 | 0,244 | 6,20 | 13,71 | 6,21 | 20,39 | 14,00 | 6,35 | 20,83 | 2,800 | - | 3,000 | 3,900 | - | - |
| | | 0,275 | 6,99 | 15,36 | 6,96 | 22,84 | 15,50 | 7,03 | 23,07 | - | - | 3,000 | 4,400 | - | - |
| | | 0,304 | 7,72 | 16,89 | 7,65 | 25,11 | 17,00 | 7,71 | 25,30 | - | - | 3,000 | 4,900 | 7100 | 7100 |
| 6 5/8 | 168.28 | 0,288 | 7,32 | 19,51 | 8,84 | 29,01 | 20,00 | 9,07 | 29,76 | 2,800 | - | - | - | - | - |
| | | 0,288 | 7,32 | 19,51 | 8,84 | 29,01 | 20,00 | 9,07 | 29,76 | - | - | 3,000 | 3,800 | - | - |
| | | 0,352 | 8,94 | 23,60 | 10,70 | 35,09 | 24,00 | 10,89 | 35,72 | - | - | 3,000 | 4,700 | 5800 | 5800 |
| 7 | 177.8 | 0,231 | 5,87 | 16,72 | 7,57 | 24,85 | 17,00 | 7,71 | 25,30 | 2,100 | - | - | - | - | - |
| | | 0,272 | 6,91 | 19,56 | 8,86 | 29,08 | 20,00 | 9,07 | 29,76 | 2,500 | - | 3,000 | 3,400 | - | - |
| | | 0,317 | 8,05 | 22,65 | 10,26 | 33,68 | 23,00 | 10,43 | 34,23 | - | - | 3,000 | 4,000 | 5800 | 5800 |
| | | 0,362 | 9,19 | 25,69 | 11,64 | 38,19 | 26,00 | 11,79 | 38,69 | - | - | 3,000 | 4,600 | 6600 | 6600 |



BS 배관용 강관 (BS 1387)

STEEL TUBES AND TUBULARS SUITABLE FOR SCREWING TO BS21 PIPES THREADS

| Tube | Nominal size | | Outside diameter | | | | Wall thickness | | Weight | | | | | |
|---------------|--------------|-------|------------------|-------|-------|-------|----------------|--------|------------|--------|--------|----------------------|--------|--------|
| | | | max. | | min. | | | | Plain ends | | | Screwed and socketed | | |
| | in. | mm | in. | mm | in. | mm | in. | mm | lb/ft | kg/ft | kg/m | lb/ft | kg/ft | kg/m |
| Light (L) | 1/4 | 8 | 0,535 | 13,6 | 0,520 | 13,2 | 0,071 | 1,8 | 0,346 | 0,157 | 0,515 | 0,349 | 0,158 | 0,519 |
| | 3/8 | 10 | 0,673 | 17,1 | 0,657 | 16,7 | 0,071 | 1,8 | 0,450 | 0,204 | 0,670 | 0,454 | 0,206 | 0,676 |
| | 1/2 | 15 | 0,843 | 21,4 | 0,827 | 21,0 | 0,079 | 2,0 | 0,636 | 0,289 | 0,947 | 0,642 | 0,291 | 0,956 |
| | 3/4 | 20 | 1,059 | 26,9 | 1,039 | 26,4 | 0,091 | 2,3 | 0,927 | 0,421 | 1,380 | 0,934 | 0,424 | 1,390 |
| | 1 | 25 | 1,331 | 33,8 | 1,307 | 33,2 | 0,102 | 2,6 | 1,331 | 0,603 | 1,980 | 1,344 | 0,610 | 2,000 |
| | 1 1/4 | 32 | 1,673 | 42,5 | 1,650 | 41,9 | 0,102 | 2,6 | 1,707 | 0,774 | 2,540 | 1,727 | 0,783 | 2,570 |
| | 1 1/2 | 40 | 1,906 | 48,4 | 1,882 | 47,8 | 0,114 | 2,9 | 2,171 | 0,984 | 3,230 | 2,198 | 0,997 | 3,270 |
| | 2 | 50 | 2,370 | 60,2 | 2,346 | 59,6 | 0,114 | 2,9 | 2,742 | 1,244 | 4,080 | 2,789 | 1,265 | 4,150 |
| | 2 1/2 | 65 | 2,992 | 76,0 | 2,961 | 75,2 | 0,126 | 3,2 | 3,837 | 1,740 | 5,710 | 3,918 | 1,777 | 5,830 |
| | 3 | 80 | 3,492 | 88,7 | 3,461 | 87,9 | 0,126 | 3,2 | 4,516 | 2,048 | 6,720 | 4,630 | 2,100 | 6,890 |
| 4 | 100 | 4,484 | 113,9 | 4,449 | 113,0 | 0,142 | 3,6 | 6,552 | 2,972 | 9,750 | 6,721 | 3,048 | 10,000 | |
| Medium (M) | 1/4 | 8 | 0,547 | 13,9 | 0,524 | 13,3 | 0,091 | 2,3 | 0,431 | 0,195 | 0,641 | 0,433 | 0,197 | 0,645 |
| | 3/8 | 10 | 0,685 | 17,4 | 0,661 | 16,8 | 0,091 | 2,3 | 0,564 | 0,256 | 0,839 | 0,568 | 0,258 | 0,845 |
| | 1/2 | 15 | 0,854 | 21,7 | 0,831 | 21,1 | 0,102 | 2,6 | 0,813 | 0,396 | 1,210 | 0,820 | 0,372 | 1,220 |
| | 3/4 | 20 | 1,071 | 27,2 | 1,047 | 26,6 | 0,102 | 2,6 | 1,048 | 0,475 | 1,560 | 1,055 | 0,479 | 1,570 |
| | 1 | 25 | 1,346 | 34,2 | 1,315 | 33,4 | 0,126 | 3,2 | 1,620 | 0,735 | 2,410 | 1,633 | 0,741 | 2,430 |
| | 1 1/4 | 32 | 1,689 | 42,9 | 1,657 | 42,1 | 0,126 | 3,2 | 2,083 | 0,945 | 3,100 | 2,104 | 0,954 | 3,130 |
| | 1 1/2 | 40 | 1,921 | 48,8 | 1,890 | 48,0 | 0,126 | 3,2 | 2,399 | 1,088 | 3,570 | 2,426 | 1,100 | 3,610 |
| | 2 | 50 | 2,394 | 60,8 | 2,354 | 59,8 | 0,142 | 3,6 | 3,380 | 1,533 | 5,030 | 3,427 | 1,554 | 5,100 |
| | 2 1/2 | 65 | 3,016 | 76,6 | 2,969 | 75,4 | 0,142 | 3,6 | 4,328 | 1,963 | 6,440 | 4,402 | 1,996 | 6,550 |
| | 3 | 80 | 3,524 | 89,5 | 3,496 | 88,1 | 0,157 | 4,0 | 5,625 | 2,551 | 8,370 | 5,739 | 2,603 | 8,540 |
| 4 | 100 | 4,524 | 114,9 | 4,461 | 113,3 | 0,177 | 4,5 | 8,199 | 3,718 | 12,200 | 8,401 | 3,810 | 12,500 | |
| 5 | 125 | 5,535 | 140,6 | 5,461 | 138,7 | 0,197 | 5,0 | 11,156 | 5,059 | 16,600 | 11,492 | 5,212 | 17,100 | |
| 6 | 150 | 6,539 | 166,1 | 6,461 | 164,1 | 0,197 | 5,0 | 13,239 | 6,004 | 19,700 | 13,643 | 6,187 | 20,300 | |
| Heavy (H) | 1/4 | 8 | 0,547 | 13,9 | 0,524 | 13,3 | 0,114 | 2,9 | 0,514 | 0,233 | 0,765 | 0,517 | 0,234 | 0,769 |
| | 3/8 | 10 | 0,685 | 17,4 | 0,661 | 16,8 | 0,114 | 2,9 | 0,685 | 0,311 | 1,020 | 0,692 | 0,314 | 1,030 |
| | 1/2 | 15 | 0,854 | 21,7 | 0,831 | 21,1 | 0,126 | 3,2 | 0,968 | 0,439 | 1,440 | 0,974 | 0,442 | 1,450 |
| | 3/4 | 20 | 1,071 | 27,2 | 1,047 | 26,6 | 0,126 | 3,2 | 1,257 | 0,570 | 1,870 | 1,263 | 0,573 | 1,880 |
| | 1 | 25 | 1,346 | 34,2 | 1,315 | 33,4 | 0,157 | 4,0 | 1,976 | 0,896 | 2,940 | 1,989 | 0,902 | 2,960 |
| | 1 1/4 | 32 | 1,689 | 42,9 | 1,657 | 42,1 | 0,157 | 4,0 | 2,554 | 1,158 | 3,800 | 2,574 | 1,167 | 3,830 |
| | 1 1/2 | 40 | 1,921 | 48,8 | 1,890 | 48,0 | 0,157 | 4,0 | 2,944 | 1,335 | 4,380 | 2,970 | 1,347 | 4,420 |
| | 2 | 50 | 2,394 | 60,8 | 2,354 | 59,8 | 0,177 | 4,5 | 4,160 | 1,887 | 6,190 | 4,207 | 1,908 | 6,260 |
| | 2 1/2 | 65 | 3,016 | 76,6 | 2,969 | 75,4 | 0,177 | 4,5 | 5,329 | 2,417 | 7,930 | 5,410 | 2,454 | 8,050 |
| | 3 | 80 | 3,524 | 89,5 | 3,469 | 88,1 | 0,197 | 5,0 | 6,922 | 3,139 | 10,300 | 7,057 | 3,200 | 10,500 |
| 4 | 100 | 4,524 | 114,9 | 4,461 | 113,3 | 0,213 | 5,4 | 9,745 | 4,419 | 14,500 | 9,946 | 4,511 | 14,800 | |
| 5 | 125 | 5,535 | 140,6 | 5,461 | 138,7 | 0,213 | 5,4 | 12,030 | 5,456 | 17,900 | 12,366 | 5,608 | 18,400 | |
| 6 | 150 | 6,539 | 166,1 | 6,461 | 164,1 | 0,213 | 5,4 | 14,315 | 6,492 | 21,300 | 14,718 | 6,675 | 21,900 | |

AJB's Product List

송유관

API 5L

| Nominal size | Outside diameter | | Wall thickness | | | Weight | | | Test pressure | | | | | | | |
|--------------|------------------|-------|----------------|-------|-------|--------|------|-------|---------------|-----|---------|-----|---------|-----|---------|---|
| | | | | | | | | | A | | | | B | | | |
| | | | | | | | | | STD | | ALT | | STD | | ALT | |
| in. | mm | Grade | in. | mm | lb/ft | kg/ft | kg/m | psi | kPa×100 | psi | kPa×100 | psi | kPa×100 | psi | kPa×100 | |
| 3/8 | 0,675 | 17,1 | STD | 0,091 | 2,3 | 0,57 | 0,26 | 0,84 | 700 | 48 | - | - | 700 | 48 | - | - |
| | | | XS | 0,126 | 3,2 | 0,74 | 0,36 | 1,10 | 850 | 59 | - | - | 850 | 59 | - | - |
| 1/2 | 0,840 | 21,3 | STD | 0,109 | 2,8 | 0,85 | 0,40 | 1,28 | 700 | 48 | - | - | 700 | 48 | - | - |
| | | | XS | 0,147 | 3,7 | 1,09 | 0,35 | 1,61 | 580 | 59 | - | - | 850 | 59 | - | - |
| 3/4 | 1,050 | 26,7 | STD | 0,113 | 2,9 | 1,13 | 0,52 | 1,70 | 700 | 48 | - | - | 700 | 48 | - | - |
| | | | XS | 0,154 | 3,9 | 1,47 | 0,67 | 2,19 | 850 | 59 | - | - | 850 | 59 | - | - |
| 1 | 1,315 | 33,4 | STD | 0,133 | 3,4 | 1,68 | 0,77 | 2,52 | 700 | 48 | - | - | 700 | 48 | - | - |
| | | | XS | 0,179 | 4,5 | 2,17 | 0,98 | 3,21 | 850 | 59 | - | - | 850 | 59 | - | - |
| 1 1/4 | 1,660 | 42,2 | STD | 0,140 | 3,6 | 2,27 | 1,05 | 3,43 | 1200 | 83 | - | - | 1300 | 90 | - | - |
| | | | XS | 0,191 | 4,9 | 3,00 | 1,38 | 4,51 | 1800 | 124 | - | - | 1900 | 131 | - | - |
| 1 1/2 | 1,900 | 48,3 | STD | 0,145 | 3,7 | 2,72 | 1,24 | 4,07 | 1200 | 83 | - | - | 1300 | 90 | - | - |
| | | | XS | 0,200 | 5,1 | 3,63 | 1,66 | 5,43 | 1800 | 124 | - | - | 1900 | 131 | - | - |
| 2 3/8 | 2,375 | 60,3 | STD | 0,083 | 2,1 | 2,03 | 0,92 | 3,01 | 1260 | 87 | 1570 | - | 1470 | 101 | 1830 | - |
| | | | | 0,109 | 2,8 | 2,64 | 1,21 | 3,97 | 1650 | - | 2070 | - | 1930 | - | 2410 | - |
| | | | | 0,125 | 3,2 | 3,00 | 1,37 | 4,51 | 1890 | - | 2370 | - | 2210 | - | 2500 | - |
| | | | | 0,141 | 3,6 | 3,36 | 1,53 | 5,03 | 2140 | - | 2500 | - | 2490 | - | 2500 | - |
| | | | | 0,154 | 3,9 | 3,65 | 1,65 | 5,42 | 2330 | 161 | 2500 | - | 2500 | 172 | 2500 | - |
| | | | | 0,172 | 4,4 | 4,05 | 1,85 | 6,07 | 2500 | 172 | 2500 | - | 2500 | 172 | 2500 | - |
| | | | | 0,188 | 4,8 | 4,39 | 2,00 | 6,57 | 2500 | 172 | 2500 | - | 2500 | 172 | 2500 | - |
| | | | | 0,218 | 5,5 | 5,02 | 2,26 | 7,43 | 2500 | 172 | 2500 | - | 2500 | 172 | 2500 | - |
| | | | | 0,250 | 6,4 | 5,67 | 2,59 | 8,51 | 2500 | 172 | 2500 | - | 2500 | 172 | 2500 | - |
| | | | | 0,281 | 7,1 | 6,28 | 2,84 | 9,31 | 2500 | 172 | 2500 | - | 2500 | 172 | 2500 | - |
| 2 7/8 | 2,875 | 73,0 | STD | 0,083 | 2,1 | 2,47 | 1,12 | 3,67 | 1040 | 71 | 1300 | - | 1210 | 83 | 1210 | - |
| | | | | 0,109 | 2,8 | 3,22 | 1,48 | 4,85 | 1360 | - | 1710 | - | 1590 | - | 1590 | - |
| | | | | 0,125 | 3,2 | 3,67 | 1,68 | 5,51 | 1570 | - | 1960 | - | 1830 | - | 1830 | - |
| | | | | 0,141 | 3,6 | 4,12 | 1,88 | 6,16 | 1770 | - | 2210 | - | 2060 | - | 2060 | - |
| | | | | 0,156 | 4,0 | 4,53 | 2,08 | 6,81 | 1950 | 136 | 2440 | - | 2280 | 158 | 2280 | - |
| | | | | 0,172 | 4,4 | 4,97 | 2,27 | 7,44 | 2150 | 150 | 2500 | - | 2500 | 172 | 2500 | - |
| | | | | 0,188 | 4,8 | 5,40 | 2,46 | 8,07 | 2350 | 163 | 2500 | - | 2500 | 172 | 2500 | - |
| | | | | 0,203 | 5,2 | 5,79 | 2,65 | 8,69 | 2500 | 172 | 2500 | - | 2500 | 172 | 2500 | - |
| | | | | 0,216 | 5,5 | 6,13 | 2,79 | 9,16 | 2500 | 172 | 2500 | - | 2500 | 172 | 2500 | - |
| | | | | 0,250 | 6,4 | 7,01 | 3,20 | 10,51 | 2500 | 172 | 2500 | - | 2500 | 172 | 2500 | - |
| 3 1/2 | 3,500 | 88,9 | STD | 0,083 | 2,1 | 3,03 | 1,37 | 4,50 | 850 | 59 | 1070 | - | 1000 | 68 | 1250 | - |
| | | | | 0,109 | 2,8 | 3,95 | 1,81 | 5,95 | 1120 | - | 1400 | - | 1310 | - | 1640 | - |
| | | | | 0,125 | 3,2 | 4,51 | 2,06 | 6,76 | 1290 | 89 | 1610 | - | 1500 | 104 | 1880 | - |
| | | | | 0,141 | 3,6 | 5,06 | 2,31 | 7,57 | 1450 | - | 1810 | - | 1690 | - | 2120 | - |
| | | | | 0,156 | 4,0 | 5,57 | 2,55 | 8,37 | 1600 | 112 | 2010 | - | 1870 | 130 | 2340 | - |
| | | | | 0,172 | 4,4 | 6,61 | 2,80 | 9,17 | 1770 | 123 | 2210 | - | 2060 | 143 | 2500 | - |
| | | | | 0,188 | 4,8 | 6,65 | 3,03 | 9,95 | 1930 | 134 | 2420 | - | 2260 | 156 | 2500 | - |
| | | | | 0,216 | 5,5 | 7,58 | 3,45 | 11,31 | 2220 | 154 | 2500 | - | 2500 | 172 | 2500 | - |
| | | | | 0,250 | 6,4 | 8,68 | 3,97 | 13,02 | 2500 | 172 | 2500 | - | 2500 | 172 | 2500 | - |
| | | | | 0,281 | 7,1 | 9,66 | 4,36 | 14,32 | 2500 | 172 | 2500 | - | 2500 | 172 | 2500 | - |
| 4 | 4,000 | 101,6 | STD | 0,083 | 2,1 | 3,47 | 1,57 | 5,15 | 750 | 51 | 930 | - | 870 | 60 | 1090 | - |
| | | | | 0,109 | 2,8 | 4,53 | 2,08 | 6,82 | 980 | 68 | 1230 | - | 1140 | 80 | 1430 | - |
| | | | | 0,125 | 3,2 | 5,17 | 2,37 | 7,76 | 1130 | 78 | 1410 | - | 1310 | 91 | 1640 | - |
| | | | | 0,141 | 3,6 | 5,81 | 2,65 | 8,70 | 1270 | 88 | 1590 | - | 1480 | 102 | 1850 | - |
| | | | | 0,156 | 4,0 | 6,40 | 2,94 | 9,63 | 1400 | 98 | 1760 | - | 1640 | 114 | 2050 | - |
| | | | | 0,172 | 4,4 | 7,03 | 3,22 | 10,55 | 1550 | 108 | 1940 | - | 1810 | 125 | 2260 | - |
| | | | | 0,188 | 4,8 | 7,65 | 3,49 | 11,46 | 1690 | 117 | 2120 | - | 1970 | 137 | 2470 | - |
| | | | | 0,226 | 5,7 | 9,11 | 4,11 | 13,48 | 1930 | 139 | 2540 | - | 2370 | 162 | 2800 | - |
| | | | | 0,250 | 6,4 | 10,01 | 4,58 | 15,02 | 2250 | 156 | 2800 | - | 2630 | 182 | 2800 | - |
| | | | | 0,281 | 7,1 | 11,16 | 5,04 | 16,55 | 2350 | 174 | 2800 | - | 2800 | 193 | 2800 | - |
| 4 | 4,000 | 101,6 | XS | 0,318 | 8,1 | 12,50 | 5,69 | 18,68 | 2800 | 193 | 2800 | - | 2800 | 193 | 2800 | - |

AJB's Product List

송유관

API 5L

| Nominal size | Outside diameter | | Wall thickness | | Weight | | | Test pressure | | | | | | | | | |
|--------------|------------------|-------|----------------|-------|--------|-------|-------|---------------|---------|------|---------|------|---------|------|---------|------|---|
| | | | | | | | | A | | | | B | | | | | |
| | | | | | | | | STD | | ALT | | STD | | ALT | | | |
| in. | mm | Grade | in. | mm | lb/ft | kg/ft | kg/m | psi | kPa×100 | psi | kPa×100 | psi | kPa×100 | psi | kPa×100 | | |
| 4 1/2 | 4,500 | 114,3 | STD | 0,083 | 2,1 | 3,92 | 1,77 | 5,81 | 660 | 46 | 830 | - | 770 | 53 | 970 | - | |
| | | | | 0,125 | 3,2 | 5,84 | 2,67 | 8,77 | 1000 | 70 | 1250 | - | 1170 | 81 | 1460 | - | |
| | | | | 0,141 | 3,6 | 6,56 | 3,00 | 9,83 | 1130 | 78 | 1410 | - | 1320 | 91 | 1650 | - | |
| | | | | 0,156 | 4,0 | 7,24 | 3,32 | 10,88 | 1250 | 87 | 1560 | - | 1460 | 101 | 1820 | - | |
| | | | | 0,172 | 4,4 | 7,95 | 3,36 | 11,92 | 1380 | 96 | 1720 | - | 1610 | 111 | 2010 | - | |
| | | | | 0,188 | 4,8 | 8,66 | 3,95 | 12,96 | 1500 | 104 | 1880 | - | 1750 | 121 | 2190 | - | |
| | | | | 0,203 | 5,2 | 9,32 | 4,26 | 13,99 | 1620 | 113 | 2030 | - | 1890 | 132 | 2370 | - | |
| | | | | 0,219 | 5,6 | 10,01 | 4,58 | 15,01 | 1750 | 122 | 2190 | - | 2040 | 142 | 2560 | - | |
| | | | | 0,237 | 6,0 | 10,79 | 4,88 | 16,02 | 1900 | 130 | 2370 | - | 2210 | 152 | 2770 | - | |
| | | | | 0,250 | 6,4 | 11,35 | 5,19 | 17,03 | 2000 | 139 | 2500 | - | 2330 | 162 | 2800 | - | |
| | | | | 0,281 | 7,1 | 12,66 | 5,72 | 18,77 | 2250 | 154 | 2800 | - | 2620 | 180 | 2800 | - | |
| | | | | 0,312 | 7,9 | 13,96 | 6,32 | 20,73 | 2500 | 172 | 2800 | - | 2800 | 193 | 2800 | - | |
| | | | | 0,337 | 8,6 | 14,98 | 6,83 | 22,42 | 2700 | 187 | 2800 | - | 2800 | 193 | 2800 | - | |
| | | | | 0,438 | 11,1 | 19,00 | 8,61 | 28,25 | 2800 | 193 | 2800 | - | 2800 | 193 | 2800 | - | |
| | | | | XS | 0,531 | 13,5 | 22,51 | 10,23 | 33,56 | 2800 | 193 | 2800 | - | 2800 | 193 | 2800 | - |
| 5 9/16 | 5,563 | 141,3 | STD | 0,083 | 2,1 | 4,86 | 2,20 | 7,21 | 540 | 37 | - | - | 630 | 43 | - | - | |
| | | | | 0,125 | 3,2 | 7,26 | 3,32 | 10,90 | 810 | 56 | - | - | 940 | 65 | - | - | |
| | | | | 0,156 | 4,0 | 9,01 | 4,13 | 13,54 | 1010 | 70 | - | - | 1180 | 82 | - | - | |
| | | | | 0,188 | 4,8 | 10,79 | 4,93 | 16,16 | 1220 | 84 | - | - | 1420 | 98 | - | - | |
| | | | | 0,219 | 5,6 | 12,50 | 5,71 | 18,74 | 1420 | 98 | - | - | 1650 | 115 | - | - | |
| | | | | 0,258 | 6,6 | 14,62 | 6,68 | 21,92 | 1670 | 116 | - | - | 1950 | 135 | - | - | |
| | | | | 0,281 | 7,1 | 15,85 | 7,16 | 23,50 | 1820 | 125 | - | - | 2120 | 145 | - | - | |
| | | | | 0,312 | 7,9 | 17,50 | 7,92 | 25,99 | 2020 | 139 | - | - | 2360 | 162 | - | - | |
| | | | | 0,344 | 8,7 | 19,17 | 8,67 | 28,45 | 2230 | 153 | - | - | 2600 | 178 | - | - | |
| | | | | XS | 0,375 | 9,5 | 20,78 | 9,41 | 30,88 | 2430 | 167 | - | - | 2800 | 193 | - | - |
| 0,500 | 12,7 | 27,04 | 12,28 | 40,28 | 2800 | 193 | - | - | 2800 | 193 | - | - | | | | | |
| 0,625 | 15,9 | 32,96 | 14,99 | 49,17 | 2800 | 193 | - | - | 2800 | 193 | - | - | | | | | |
| 6 5/8 | 6,625 | 168,3 | STD | 0,083 | 2,1 | 5,80 | 2,62 | 8,61 | 450 | 31 | 560 | 39 | 530 | 37 | 660 | 45 | |
| | | | | 0,109 | 2,8 | 7,59 | 3,48 | 11,43 | 590 | 41 | 740 | 51 | 690 | 48 | 860 | 59 | |
| | | | | 0,125 | 3,2 | 8,68 | 3,97 | 13,03 | 680 | 47 | 850 | 59 | 790 | 54 | 990 | 68 | |
| | | | | 0,141 | 3,6 | 9,76 | 4,46 | 14,62 | 770 | 53 | 960 | 66 | 890 | 61 | 1120 | 77 | |
| | | | | 0,156 | 4,0 | 10,78 | 4,94 | 16,21 | 850 | 59 | 1060 | 73 | 990 | 68 | 1240 | 85 | |
| | | | | 0,172 | 4,4 | 11,85 | 5,42 | 17,78 | 930 | 64 | 1170 | 81 | 1090 | 75 | 1360 | 94 | |
| | | | | 0,188 | 4,8 | 12,92 | 5,90 | 19,35 | 1020 | 70 | 1280 | 88 | 1190 | 82 | 1490 | 103 | |
| | | | | 0,203 | 5,2 | 13,92 | 6,37 | 20,91 | 1100 | 76 | 1380 | 95 | 1290 | 89 | 1610 | 111 | |
| | | | | 0,219 | 5,6 | 14,98 | 6,85 | 22,47 | 1190 | 82 | 1490 | 103 | 1390 | 96 | 1740 | 120 | |
| | | | | 0,250 | 6,4 | 17,02 | 7,79 | 25,55 | 1360 | 94 | 1700 | 117 | 1580 | 109 | 1980 | 136 | |
| | | | | 0,280 | 7,1 | 18,97 | 8,60 | 28,22 | 1520 | 105 | 1900 | 131 | 1780 | 123 | 2220 | 153 | |
| | | | | 0,312 | 7,9 | 21,04 | 9,53 | 31,25 | 1700 | 117 | 2120 | 146 | 1980 | 136 | 2470 | 170 | |
| | | | | 0,344 | 8,7 | 23,08 | 10,44 | 34,24 | 1870 | 129 | 2340 | 161 | 2180 | 150 | 2500 | 172 | |
| | | | | 0,375 | 9,5 | 25,03 | 11,34 | 37,20 | 2040 | 141 | 2550 | 176 | 2380 | 164 | 2800 | 193 | |
| | | | | XS | 0,432 | 11,0 | 28,57 | 13,01 | 42,67 | 2350 | - | 2800 | - | 2740 | - | 2800 | - |
| | | | | 0,500 | 12,7 | 32,71 | 14,85 | 48,73 | 2720 | 187 | 2800 | 193 | 2800 | 193 | 2800 | 193 | |
| | | | | 0,562 | 14,3 | 36,39 | 16,55 | 54,31 | 2800 | 193 | 2800 | 193 | 2800 | 193 | 2800 | 193 | |
| 0,625 | 15,9 | 40,05 | 18,21 | 59,76 | 2800 | 193 | 2800 | 193 | 2800 | 193 | 2800 | 193 | | | | | |
| 0,719 | 18,3 | 45,35 | 20,26 | 67,69 | 2800 | 193 | 2800 | 193 | 2800 | 193 | 2800 | 193 | | | | | |
| 0,750 | 19,1 | 47,06 | 21,42 | 70,27 | 2800 | 193 | 2800 | 193 | 2800 | 193 | 2800 | 193 | | | | | |

AJB's Product List

송유관

API 5L

| Nominal size | Outside diameter | | Wall thickness | | | Weight | | | Test pressure | | | | | | | | |
|--------------------------------|------------------|--------|----------------|--------------------------------|--------|--------|-------|--------|---------------|-------|---------|-------|---------|------|---------|------|-----|
| | | | | | | | | | A | | | | B | | | | |
| | | | | | | | | | STD | | ALT | | STD | | ALT | | |
| in. | mm | Grade | in. | mm | lb/ft | kg/ft | kg/m | psi | kPa×100 | psi | kPa×100 | psi | kPa×100 | psi | kPa×100 | | |
| 8 ⁵ / ₈ | 8,625 | 219,1 | STD | 0,125 | 3,2 | 11,35 | 5,19 | 17,04 | 520 | 36 | 650 | 45 | 610 | 42 | 760 | 52 | |
| | | | | 0,156 | 4,0 | 14,11 | 6,47 | 21,22 | 650 | 45 | 810 | 56 | 760 | 52 | 950 | 65 | |
| | | | | 0,188 | 4,8 | 16,94 | 7,73 | 25,37 | 780 | 54 | 980 | 68 | 920 | 63 | 1140 | 79 | |
| | | | | 0,203 | 5,2 | 18,26 | 8,36 | 27,43 | 850 | - | 1060 | - | 990 | - | 1240 | - | |
| | | | | 0,219 | 5,6 | 19,66 | 8,99 | 29,48 | 910 | 63 | 1140 | 79 | 1070 | 74 | 1330 | 92 | |
| | | | | 0,250 | 6,4 | 22,36 | 10,23 | 33,57 | 1040 | 72 | 1300 | 90 | 1220 | 84 | 1520 | 105 | |
| | | | | 0,277 | 7,0 | 24,70 | 11,16 | 36,61 | 1160 | 80 | 1450 | 100 | 1350 | 93 | 1690 | 116 | |
| | | | | 0,312 | 7,9 | 27,70 | 12,54 | 41,14 | 1300 | 90 | 1630 | 112 | 1520 | 105 | 1900 | 131 | |
| | | | | 0,322 | 8,2 | 28,55 | 13,00 | 42,65 | 1340 | 92 | 1680 | 116 | 1570 | 108 | 1960 | 135 | |
| | | | | 0,344 | 8,7 | 30,42 | 13,76 | 45,14 | 1440 | 99 | 1790 | 123 | 1680 | 116 | 2090 | 144 | |
| | | | | 0,375 | 9,5 | 33,04 | 14,97 | 49,10 | 1570 | 108 | 1960 | 135 | 1830 | 126 | 2280 | 157 | |
| | | | | 0,438 | 11,1 | 38,30 | 17,36 | 56,94 | 1830 | 126 | 2290 | 158 | 2130 | 147 | 2670 | 184 | |
| | | | | XS | 0,500 | 12,7 | 43,39 | 19,70 | 64,64 | 2090 | - | 2610 | - | 2430 | - | 2800 | - |
| | | | | | 0,562 | 14,3 | 48,40 | 22,10 | 72,22 | 2350 | 162 | 2800 | 193 | 2740 | 189 | 2800 | 193 |
| | | | | | 0,625 | 15,9 | 53,40 | 24,28 | 79,67 | 2610 | 180 | 2800 | 193 | 2800 | 193 | 2800 | 193 |
| | | | | | 0,719 | 18,3 | 60,71 | 27,62 | 90,62 | 2800 | 193 | 2800 | 193 | 2800 | 193 | 2800 | 193 |
| | | | | | 0,750 | 19,1 | 63,08 | 28,71 | 94,20 | 2800 | 193 | 2800 | 193 | 2800 | 193 | 2800 | 193 |
| | | | | | 0,812 | 20,6 | 67,76 | 30,74 | 100,84 | 2800 | 193 | 2800 | 193 | 2800 | 193 | 2800 | 193 |
| 10 ³ / ₄ | 10,750 | 273,1 | STD | 0,156 | 4,0 | 17,65 | 8,09 | 26,54 | 520 | 36 | 650 | 45 | 610 | 42 | 760 | 52 | |
| | | | | 0,188 | 4,8 | 21,21 | 9,68 | 31,76 | 630 | 43 | 790 | 54 | 730 | 50 | 920 | 63 | |
| | | | | 0,203 | 5,2 | 22,87 | 10,47 | 34,35 | 680 | - | 850 | - | 790 | - | 990 | - | |
| | | | | 0,219 | 5,6 | 24,63 | 11,26 | 36,94 | 730 | 50 | 920 | 63 | 860 | 59 | 1070 | 74 | |
| | | | | 0,250 | 6,4 | 28,04 | 12,83 | 42,09 | 840 | 58 | 1050 | 72 | 980 | 68 | 1220 | 84 | |
| | | | | 0,279 | 7,1 | 31,20 | 14,19 | 46,57 | 930 | 64 | 1170 | 81 | 1090 | 75 | 1360 | 94 | |
| | | | | 0,307 | 7,8 | 34,24 | 15,55 | 51,03 | 1030 | 71 | 1290 | 89 | 1200 | 83 | 1500 | 103 | |
| | | | | 0,344 | 8,7 | 38,23 | 17,29 | 56,72 | 1150 | 79 | 1440 | 99 | 1340 | 92 | 1680 | 116 | |
| | | | | 0,365 | 9,3 | 40,48 | 18,44 | 60,50 | 1220 | 84 | 1530 | 105 | 1430 | 99 | 1780 | 123 | |
| | | | | 0,438 | 11,1 | 48,24 | 21,86 | 71,72 | 1470 | 101 | 1830 | 126 | 1710 | 118 | 2140 | 147 | |
| | | | | XS | 0,500 | 12,7 | 54,74 | 24,86 | 81,55 | 1670 | - | 2090 | - | 1950 | - | 2440 | - |
| | | | | | 0,562 | 14,3 | 61,15 | 27,82 | 91,26 | 1880 | 130 | 2350 | 162 | 2200 | 152 | 2740 | 189 |
| | | | | | 0,625 | 15,9 | 67,58 | 30,74 | 100,85 | 2090 | 144 | 2620 | 181 | 2440 | 168 | 2800 | 193 |
| | | | | | 0,719 | 18,3 | 77,03 | 35,05 | 114,99 | 2410 | 166 | 2800 | 193 | 2800 | 193 | 2800 | 193 |
| | | | | | 0,812 | 20,6 | 86,18 | 39,10 | 128,27 | 2720 | 187 | 2800 | 193 | 2800 | 193 | 2800 | 193 |
| | | | | | 0,875 | 22,2 | 92,28 | 41,87 | 137,36 | 2800 | 193 | 2800 | 193 | 2800 | 193 | 2800 | 193 |
| | | | | 0,938 | 23,8 | 98,30 | 44,59 | 146,30 | 2800 | 193 | 2800 | 193 | 2800 | 193 | 2800 | 193 | |
| | | | | 12 ³ / ₄ | 12,750 | 323,9 | STD | 0,172 | 4,4 | 23,11 | 10,57 | 34,67 | 490 | 34 | 610 | 42 | 570 |
| 0,188 | 4,8 | 25,22 | 11,51 | | | | | 37,77 | 530 | 37 | 660 | 45 | 620 | 43 | 770 | 53 | |
| 0,203 | 5,2 | 27,20 | 12,46 | | | | | 40,87 | 570 | - | 720 | - | 670 | - | 840 | - | |
| 0,219 | 5,6 | 29,31 | 13,40 | | | | | 43,96 | 620 | 43 | 770 | 53 | 720 | 50 | 900 | 62 | |
| 0,250 | 6,4 | 33,38 | 15,27 | | | | | 50,11 | 710 | 49 | 880 | 61 | 820 | 56 | 1030 | 71 | |
| 0,281 | 7,1 | 37,42 | 16,91 | | | | | 55,47 | 790 | 54 | 990 | 68 | 930 | 64 | 1160 | 80 | |
| 0,312 | 7,9 | 41,45 | 18,76 | | | | | 61,56 | 880 | 61 | 1100 | 73 | 1030 | 71 | 1280 | 88 | |
| 0,330 | 8,4 | 43,77 | 19,92 | | | | | 65,35 | 930 | 64 | 1160 | 80 | 1090 | 75 | 1360 | 94 | |
| 0,344 | 8,7 | 45,58 | 20,61 | | | | | 67,62 | 970 | 67 | 1210 | 83 | 1130 | 78 | 1420 | 98 | |
| 0,375 | 9,5 | 49,56 | 22,45 | | | | | 73,65 | 1060 | 73 | 1320 | 91 | 1240 | 85 | 1540 | 106 | |
| 0,406 | 10,3 | 53,52 | 24,28 | | | | | 79,65 | 1150 | - | 1430 | - | 1340 | - | 1670 | - | |
| 0,438 | 11,1 | 57,59 | 26,10 | | | | | 85,62 | 1240 | 85 | 1550 | 107 | 1440 | 99 | 1800 | 124 | |
| XS | 0,500 | 12,7 | 65,42 | | | | | 29,71 | 97,46 | 1410 | - | 1760 | - | 1650 | - | 2060 | - |
| | 0,562 | 14,3 | 73,15 | | | | | 33,28 | 109,18 | 1590 | 110 | 1980 | 136 | 1850 | 127 | 2310 | 159 |
| | 0,625 | 15,9 | 80,93 | | | | | 36,81 | 120,76 | 1760 | 121 | 2210 | 152 | 2060 | 142 | 2570 | 177 |
| | 0,688 | 17,5 | 88,63 | | | | | 40,30 | 132,23 | 1940 | 134 | 2430 | 167 | 2270 | 156 | 2800 | 193 |
| | 0,750 | 19,1 | 96,12 | | | | | 43,76 | 143,56 | 2120 | 146 | 2650 | 183 | 2470 | 170 | 2800 | 193 |
| | 0,812 | 20,6 | 103,53 | | | | | 49,96 | 154,08 | 2290 | 158 | 2800 | 193 | 2670 | 184 | 2800 | 193 |
| 0,875 | 22,2 | 110,97 | 50,34 | 165,17 | 2470 | 170 | 2800 | 193 | 2800 | 193 | 2800 | 193 | | | | | |
| 0,938 | 23,8 | 119,33 | 53,68 | 176,13 | 2650 | 183 | 2800 | 193 | 2800 | 193 | 2800 | 193 | | | | | |

AJB's Product List

송유관

API 5L

| Nominal size | Outside diameter | | Wall thickness | | | Weight | | | Test pressure | | | | | | | |
|--------------|------------------|--------|----------------|--------|--------|--------|--------|--------|---------------|------|---------|------|---------|------|---------|----|
| | | | | | | | | | A | | | | B | | | |
| | | | | | | | | | STD | | ALT | | STD | | ALT | |
| in. | mm | Grade | in. | mm | lb/ft | kg/ft | kg/m | psi | kPa×100 | psi | kPa×100 | psi | kPa×100 | psi | kPa×100 | |
| 14 | 14.000 | 355.6 | STD | 0.188 | 4.8 | 27.73 | 12.66 | 41.52 | 480 | 33 | 600 | 41 | 560 | 39 | 700 | 48 |
| | | | | 0.203 | 5.2 | 29.91 | 13.69 | 44.93 | 520 | 36 | 650 | 45 | 610 | 42 | 760 | 52 |
| | | | | 0.210 | 5.3 | 30.93 | 13.95 | 45.78 | 540 | - | 680 | - | 630 | - | 790 | - |
| | | | | 0.219 | 5.6 | 32.23 | 14.73 | 48.33 | 560 | - | 700 | - | 660 | - | 820 | - |
| | | | | 0.250 | 6.4 | 36.71 | 16.80 | 55.11 | 640 | 44 | 800 | 55 | 750 | 52 | 940 | 65 |
| | | | | 0.281 | 7.1 | 41.17 | 18.60 | 61.02 | 720 | 50 | 900 | 62 | 840 | 58 | 1050 | 72 |
| | | | | 0.312 | 7.9 | 45.61 | 20.65 | 67.74 | 800 | 55 | 1000 | 69 | 940 | 65 | 1170 | 81 |
| | | | | 0.344 | 8.7 | 50.17 | 22.68 | 74.42 | 880 | 61 | 1110 | 76 | 1030 | 71 | 1290 | 89 |
| | | | | 0.375 | 9.5 | 54.57 | 24.71 | 81.08 | 960 | 66 | 1210 | 83 | 1120 | 77 | 1410 | 97 |
| | | | | 0.406 | 10.3 | 58.94 | 26.73 | 87.71 | 1040 | - | 1310 | - | 1220 | - | 1520 | - |
| | | | 0.438 | 11.1 | 63.44 | 28.74 | 94.30 | 1130 | 78 | 1410 | 97 | 1310 | 90 | 1640 | 113 | |
| | | | 0.469 | 11.9 | 67.78 | 30.74 | 100.86 | 1210 | - | 1510 | - | 1410 | - | 1760 | - | |
| | | | 0.500 | 12.7 | 72.09 | 32.73 | 107.39 | 1290 | 89 | 1610 | 111 | 1500 | 103 | 1880 | 130 | |
| | | | 0.562 | 14.3 | 80.66 | 36.69 | 120.36 | 1450 | 100 | 1810 | 125 | 1690 | 116 | 2110 | 145 | |
| | | | 0.625 | 15.9 | 89.28 | 40.60 | 133.19 | 1610 | 111 | 2010 | 168 | 1880 | 130 | 2340 | 161 | |
| | | | 0.688 | 17.5 | 97.81 | 44.47 | 145.91 | 1770 | 122 | 2210 | 152 | 2060 | 142 | 2580 | 178 | |
| | | | 0.750 | 19.1 | 106.13 | 48.31 | 158.49 | 1930 | 133 | 2410 | 166 | 2250 | 155 | 2800 | 193 | |
| | | | 0.812 | 20.6 | 114.37 | 51.87 | 170.18 | 2090 | 144 | 2610 | 180 | 2440 | 168 | 2800 | 193 | |
| | | | 0.875 | 22.2 | 122.65 | 55.63 | 182.52 | 250 | 155 | 2800 | 193 | 2620 | 181 | 2800 | 193 | |
| | | | 0.938 | 23.8 | 130.85 | 59.36 | 194.74 | 2412 | 166 | 2800 | 193 | 2800 | 193 | 2800 | 193 | |
| 1.000 | 25.4 | 138.84 | 63.04 | 206.83 | 2570 | 177 | 2800 | 193 | 2800 | 193 | 2800 | 193 | | | | |
| 1.062 | 27.0 | 146.74 | 66.69 | 218.79 | 2730 | 189 | 2800 | 193 | 2800 | 193 | 2800 | 193 | | | | |
| 1.125 | 28.6 | 154.69 | 70.30 | 230.63 | 2800 | 193 | 2800 | 193 | 2800 | 193 | 2800 | 193 | | | | |
| 1.250 | 31.8 | 170.21 | 77.21 | 253.31 | 2800 | 193 | 2800 | 193 | 2800 | 193 | 2800 | 193 | | | | |
| 16 | 16.000 | 406.4 | STD | 0.188 | 4.8 | 31.75 | 14.49 | 47.54 | 420 | 29 | 530 | 37 | 490 | 34 | 620 | 43 |
| | | | | 0.203 | 5.2 | 34.25 | 15.68 | 51.45 | 460 | 32 | 570 | 39 | 530 | 37 | 670 | 46 |
| | | | | 0.219 | 5.6 | 36.91 | 16.87 | 55.35 | 490 | 34 | 620 | 43 | 570 | 39 | 720 | 50 |
| | | | | 0.250 | 6.4 | 42.05 | 19.24 | 63.13 | 560 | 39 | 700 | 48 | 660 | 45 | 820 | 56 |
| | | | | 0.281 | 7.1 | 47.17 | 21.31 | 69.91 | 630 | 43 | 790 | 54 | 740 | 51 | 920 | 63 |
| | | | | 0.312 | 7.9 | 52.27 | 23.66 | 77.63 | 700 | 48 | 880 | 61 | 820 | 56 | 1020 | 70 |
| | | | | 0.344 | 8.7 | 57.52 | 26.01 | 85.32 | 770 | 53 | 970 | 67 | 900 | 62 | 1130 | 78 |
| | | | | 0.375 | 9.5 | 62.58 | 28.34 | 92.98 | 840 | 58 | 1050 | 72 | 980 | 68 | 1230 | 85 |
| | | | | 0.406 | 10.3 | 67.62 | 30.67 | 100.61 | 910 | - | 1110 | - | 1070 | - | 1330 | - |
| | | | | 0.438 | 11.1 | 72.80 | 32.98 | 108.20 | 990 | 68 | 1230 | 85 | 1150 | 79 | 1440 | 99 |
| | | | 0.469 | 11.9 | 77.79 | 35.29 | 115.77 | 1060 | - | 1320 | - | 1230 | - | 1540 | - | |
| | | | 0.500 | 12.7 | 82.77 | 37.58 | 123.30 | 1120 | 77 | 1410 | 97 | 1310 | 90 | 1640 | 113 | |
| | | | 0.562 | 14.3 | 92.66 | 42.14 | 138.27 | 1260 | 87 | 1580 | 109 | 1480 | 102 | 1840 | 127 | |
| | | | 0.625 | 15.9 | 102.63 | 46.67 | 153.11 | 1410 | 97 | 1760 | 121 | 1640 | 113 | 2050 | 141 | |
| | | | 0.688 | 17.5 | 112.51 | 51.15 | 167.83 | 1550 | 107 | 1940 | 134 | 1810 | 125 | 2260 | 156 | |
| | | | 0.750 | 19.1 | 122.15 | 55.60 | 182.42 | 1690 | 116 | 2110 | 145 | 1970 | 136 | 2460 | 169 | |
| | | | 0.812 | 20.6 | 131.71 | 59.73 | 195.98 | 1830 | 126 | 2280 | 157 | 2130 | 147 | 2660 | 183 | |
| | | | 0.875 | 22.2 | 141.34 | 64.11 | 210.33 | 1970 | 136 | 2460 | 169 | 2300 | 158 | 2800 | 193 | |
| | | | 0.938 | 23.8 | 150.89 | 68.44 | 224.55 | 2110 | 145 | 2640 | 182 | 2460 | 169 | 2800 | 193 | |
| | | | 1.000 | 25.4 | 160.20 | 72.74 | 238.64 | 2250 | 155 | 2800 | 193 | 2620 | 181 | 2800 | 193 | |
| 1.062 | 27.0 | 169.43 | 77.00 | 252.61 | 2390 | 165 | 2800 | 193 | 2790 | 192 | 2800 | 193 | | | | |
| 1.125 | 28.6 | 178.72 | 81.21 | 266.45 | 2530 | 174 | 2800 | 193 | 2800 | 193 | 2800 | 193 | | | | |
| 1.188 | 30.2 | 187.93 | 85.40 | 280.17 | 2670 | 185 | 2800 | 193 | 2800 | 193 | 2800 | 193 | | | | |
| 1.250 | 31.8 | 196.91 | 89.54 | 293.76 | 2800 | 193 | 2800 | 193 | 2800 | 193 | 2800 | 193 | | | | |

AJB's Product List

송유관

API 5L

| Nominal size | Outside diameter | | Wall thickness | | | Weight | | | Test pressure | | | | | | | |
|--------------|------------------|--------|----------------|--------|--------|--------|--------|--------|---------------|------|---------|------|---------|------|---------|------|
| | | | | | | | | | A | | | | B | | | |
| | | | | | | | | | STD | | ALT | | STD | | ALT | |
| in. | mm | Grade | in. | mm | lb/ft | kg/ft | kg/m | psi | kPa×100 | psi | kPa×100 | psi | kPa×100 | psi | kPa×100 | |
| 18 | 18,000 | 457,0 | STD | 0,188 | 4,8 | 35,76 | 16,32 | 53,53 | 380 | 26 | 470 | 32 | 440 | 30 | 550 | 38 |
| | | | | 0,219 | 5,6 | 41,59 | 19,00 | 62,34 | 440 | 30 | 550 | 38 | 510 | 35 | 640 | 44 |
| | | | | 0,250 | 6,4 | 47,39 | 21,68 | 71,12 | 500 | 34 | 620 | 43 | 580 | 40 | 730 | 50 |
| | | | | 0,281 | 7,1 | 53,18 | 24,01 | 78,77 | 560 | 39 | 700 | 48 | 660 | 45 | 820 | 56 |
| | | | | 0,312 | 7,9 | 58,94 | 26,67 | 87,49 | 620 | 43 | 780 | 54 | 730 | 50 | 910 | 63 |
| | | | | 0,344 | 8,7 | 64,87 | 29,32 | 96,18 | 690 | 48 | 860 | 59 | 800 | 55 | 1000 | 69 |
| | | | | 0,375 | 9,5 | 70,59 | 31,96 | 104,84 | 750 | 52 | 940 | 65 | 880 | 61 | 1090 | 75 |
| | | | | 0,406 | 10,3 | 76,29 | 34,58 | 113,46 | 810 | - | 1020 | - | 950 | - | 1180 | - |
| | | | | 0,438 | 11,1 | 82,15 | 37,20 | 122,05 | 880 | 61 | 1100 | 76 | 1020 | 70 | 1280 | 88 |
| | | | | 0,469 | 11,9 | 87,81 | 39,81 | 130,62 | 940 | - | 1170 | - | 1090 | - | 1370 | - |
| | | | XS | 0,500 | 12,7 | 93,45 | 42,41 | 139,15 | 1000 | 69 | 1250 | 86 | 1170 | 81 | 1460 | 101 |
| | | | | 0,562 | 14,3 | 104,67 | 47,58 | 156,11 | 1120 | 77 | 1400 | 96 | 1310 | 90 | 1640 | 113 |
| | | | | 0,625 | 15,9 | 115,98 | 52,72 | 172,95 | 1250 | 86 | 1560 | 107 | 1460 | 101 | 1820 | 125 |
| | | | | 0,688 | 17,5 | 127,21 | 57,81 | 189,67 | 1380 | 95 | 1720 | 119 | 1610 | 111 | 2010 | 138 |
| | | | | 0,750 | 19,1 | 138,17 | 62,87 | 206,25 | 1500 | 103 | 1880 | 130 | 1750 | 121 | 2190 | 151 |
| | | | | 0,812 | 20,6 | 149,06 | 67,57 | 221,69 | 1620 | 112 | 2030 | 140 | 1890 | 130 | 2370 | 163 |
| | | | | 0,875 | 22,2 | 160,03 | 72,55 | 238,03 | 1750 | 121 | 2190 | 151 | 2040 | 141 | 2550 | 176 |
| | | | | 0,938 | 23,8 | 170,92 | 77,50 | 254,25 | 1880 | 130 | 2340 | 161 | 2190 | 151 | 2740 | 189 |
| | | | | 1,000 | 25,4 | 181,56 | 82,40 | 270,34 | 2000 | 138 | 2500 | 172 | 2330 | 161 | 2800 | 193 |
| | | | | 1,062 | 27,0 | 192,11 | 87,26 | 286,30 | 2120 | 146 | 2660 | 183 | 2480 | 171 | 2800 | 193 |
| 1,125 | 28,6 | 202,75 | 92,09 | 302,14 | 2250 | 155 | 2800 | 193 | 2620 | 181 | 2800 | 193 | | | | |
| 1,188 | 30,2 | 213,31 | 96,88 | 317,85 | 2370 | 163 | 2800 | 193 | 2770 | 191 | 2800 | 193 | | | | |
| 1,250 | 31,8 | 223,61 | 101,63 | 333,44 | 2500 | 172 | 2800 | 193 | 2800 | 193 | 2800 | 193 | | | | |
| 20 | 20,000 | 508,0 | STD | 0,219 | 5,6 | 46,27 | 21,15 | 69,38 | 390 | 27 | 490 | 34 | 460 | 32 | 570 | 39 |
| | | | | 0,250 | 6,4 | 52,73 | 24,13 | 79,16 | 450 | 31 | 560 | 39 | 520 | 36 | 660 | 45 |
| | | | | 0,281 | 7,1 | 59,18 | 26,73 | 87,70 | 510 | 35 | 630 | 43 | 590 | 41 | 740 | 51 |
| | | | | 0,312 | 7,9 | 65,60 | 29,70 | 97,43 | 50 | 39 | 700 | 48 | 660 | 45 | 820 | 56 |
| | | | | 0,344 | 8,7 | 72,21 | 32,65 | 107,12 | 620 | 43 | 770 | 53 | 720 | 50 | 900 | 62 |
| | | | | 0,375 | 9,5 | 78,60 | 35,59 | 116,78 | 680 | 47 | 840 | 58 | 790 | 54 | 980 | 68 |
| | | | | 0,406 | 10,3 | 84,96 | 38,53 | 126,41 | 730 | - | 910 | - | 850 | - | 1070 | - |
| | | | | 0,438 | 11,1 | 91,51 | 41,46 | 136,01 | 790 | 54 | 990 | 68 | 920 | 63 | 1150 | 79 |
| | | | | 0,469 | 11,9 | 97,83 | 44,37 | 145,58 | 840 | - | 1060 | - | 980 | - | 1230 | - |
| | | | | XS | 0,500 | 12,7 | 104,13 | 47,28 | 155,12 | 900 | 62 | 1120 | 77 | 1050 | 72 | 1310 |
| | | | 0,562 | | 14,3 | 116,67 | 53,07 | 174,10 | 1010 | 70 | 1260 | 87 | 1180 | 81 | 1480 | 102 |
| | | | 0,625 | | 15,9 | 129,33 | 58,81 | 192,95 | 1120 | 77 | 1410 | 97 | 1310 | 90 | 1640 | 113 |
| | | | 0,688 | | 17,5 | 141,90 | 64,52 | 211,68 | 1240 | 85 | 1550 | 107 | 1440 | 99 | 1810 | 125 |
| | | | 0,750 | | 19,1 | 154,19 | 70,19 | 230,27 | 1350 | 93 | 1690 | 116 | 1580 | 109 | 1970 | 136 |
| | | | 0,812 | | 20,6 | 166,40 | 75,47 | 247,60 | 1460 | 101 | 1830 | 126 | 1710 | 118 | 2130 | 147 |
| | | | 0,875 | | 22,2 | 178,72 | 81,06 | 265,95 | 1580 | 109 | 1970 | 136 | 1840 | 127 | 2300 | 158 |
| | | | 0,938 | | 23,8 | 190,96 | 86,62 | 284,18 | 1690 | 116 | 2110 | 145 | 1970 | 136 | 2460 | 169 |
| | | | 1,000 | | 25,4 | 202,92 | 92,13 | 302,28 | 1800 | 124 | 2250 | 155 | 2100 | 145 | 2620 | 181 |
| | | | 1,062 | | 27,0 | 214,80 | 97,62 | 320,26 | 1910 | 132 | 2390 | 165 | 2230 | 154 | 2750 | 189 |
| | | | 1,125 | 28,6 | 226,78 | 103,06 | 338,11 | 2020 | 139 | 2530 | 174 | 2360 | 162 | 2750 | 189 | |
| 1,188 | 30,2 | 238,68 | 108,46 | 355,83 | 2140 | 147 | 2670 | 184 | 2490 | 172 | 2750 | 189 | | | | |
| 1,250 | 31,8 | 250,31 | 113,82 | 373,43 | 2250 | 155 | 2750 | 189 | 2620 | 181 | 2750 | 189 | | | | |
| 1,312 | 33,3 | 261,86 | 118,81 | 389,91 | 2360 | 162 | 2750 | 189 | 2750 | 189 | 2750 | 189 | | | | |
| 1,375 | 34,9 | 273,51 | 124,11 | 407,17 | 2480 | 171 | 2750 | 189 | 2750 | 189 | 2750 | 189 | | | | |



FUSION BOND EPOXY COATED PIPE(AWWA C213)

→ 강관(KSD 3562)

→ 에폭시(FEB)

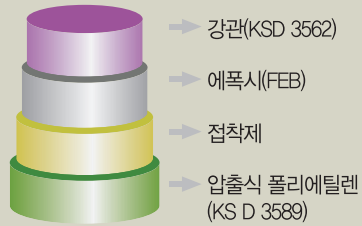
- **피복방법**
 - 외부 : KS D 3589 _ 압출식 폴리에틸렌 2층 피복방법
 - 1층 : 접착제
 - 2층 : 폴리에틸렌
 - 내부 : 도장없음
 - 원관 : 연료 가스 배관용 탄소 강관 (KS D 3631)

피복강관 용도 구분 DIVISION OF COATED PIPES USES

| 구 분 | 적용피복 | | 적용규격 | | 용도 |
|---------|-------------------------------|--------------|-----------|--|-------------------------------|
| | 외부 | 내부 | 국내 | 해외 | |
| 가스관 | Polyethylene Polypropylene | - | KS D 3589 | DIN30670 DIN30678 AS/NZS 1518 AWWA C215 | 가스관(LPG, LNG, 도시가스) |
| 송유관 | Polyethylene Polypropylene | - | KS D 3589 | DIN30670 DIN30678 AS/NZS 1518 AWWA C215 | 석유 수송관 석유 적재관 유정관 |
| 상수도관 | Polyethylene Polypropylene | Liquid epoxy | KS D 3565 | AWWA C210 | 건물 내외면 및 지하매설용의 상수(식수)용 배관 |
| 해상파일용강관 | Polyethylene Polypropylene | - | KS D 3589 | DIN30670 DIN30678 AS/NZS 1518 AWWA C215 | 해상파일용 강관 |
| 특수관 | Powder epoxy (FBE) | - | - | AWWA C213 | 기타 지하매설관 고온 다습지역의 배관재 |



폴리에틸렌 3층 피복강관 (KS D 3562)



○ 피복방법

- 외부 : 압출식 폴리에틸렌 3층 피복방법
 - 1층 : 에폭시(FEB)
 - 2층 : 접착제
 - 3층 : 폴리에틸렌
- 내부 : 도장없음
- 원관 : KS D 3507, 3631, 3562, API 5L, ASTM

관의 종류 및 수압시험의 압력 THE TYPES OF PIPES AND THE PRESSURE IN THE HYDROSTATIC TEST

| No. of schedules | 10 | 20 | 30 | 40 | 60 | 90 |
|------------------|------|------|------|------|--------|----------|
| Tested pressure | 20 | 35 | 50 | 60 | 90 | 120 |
| | (20) | (34) | (49) | (59) | 90(88) | 120(118) |

관의 규격 THE STANDARDS OF THE PIPES (KS D 3562)

| Nominal diameter | | Outside diameter | Nominal diameter | | | | | | | | | | | |
|------------------|-------|------------------|------------------|--------------|---------------|--------------|---------------|--------------|---------------|--------------|---------------|--------------|---------------|--------------|
| A | B | | Schedule 10 | | Schedule 20 | | Schedule 30 | | Schedule 40 | | Schedule 50 | | Schedule 60 | |
| | | mm | Thickness(mm) | Weight(kg/m) | Thickness(mm) | Weight(kg/m) | Thickness(mm) | Weight(kg/m) | Thickness(mm) | Weight(kg/m) | Thickness(mm) | Weight(kg/m) | Thickness(mm) | Weight(kg/m) |
| 6 | 1/8 | 10.5 | - | - | - | - | - | - | 1.7 | 0.6 | 2.2 | 0.45 | 2.4 | 0.48 |
| 8 | 1/4 | 13.8 | - | - | - | - | - | - | 2.2 | 0.6 | 2.4 | 0.675 | 3.0 | 0.799 |
| 10 | 3/8 | 17.3 | - | - | - | - | - | - | 2.3 | 0.9 | 8.8 | 1.00 | 3.2 | 1.11 |
| 15 | 1/2 | 21.7 | - | - | - | - | - | - | 2.8 | 1.3 | 3.2 | 1.45 | 3.7 | 1.64 |
| 20 | 3/4 | 27.2 | - | - | - | - | - | - | 2.9 | 1.7 | 3.4 | 2.00 | 3.9 | 2.24 |
| 25 | 1 | 34.0 | - | - | - | - | - | - | 3.4 | 2.6 | 3.9 | 2.89 | 4.5 | 3.27 |
| 32 | 1 1/4 | 42.7 | - | - | - | - | - | - | 3.6 | 3.5 | 4.5 | 4.24 | 4.9 | 4.57 |
| 40 | 1 1/2 | 48.6 | - | - | - | - | - | - | 3.7 | 4.1 | 4.5 | 4.89 | 5.1 | 5.47 |
| 50 | 2 | 60.0 | - | - | 3.2 | 4.52 | - | - | 3.9 | 5.4 | 4.9 | 6.72 | 5.5 | 7.46 |
| 65 | 2 1/2 | 76.3 | - | - | 4.5 | 7.97 | - | - | 5.2 | 9.1 | 6.0 | 10.4 | 7.0 | 12.0 |
| 80 | 3 | 89.1 | - | - | 4.5 | 9.39 | - | - | 5.5 | 11.3 | 6.6 | 13.4 | 7.6 | 15.3 |
| 90 | 3 1/2 | 101.6 | - | - | 4.5 | 10.8 | - | - | 5.7 | 13.5 | 7.0 | 16.3 | 8.1 | 18.7 |
| 100 | 4 | 114.3 | - | - | 4.9 | 13.2 | - | - | 6.0 | 16 | 7.1 | 18.8 | 8.6 | 22.4 |
| 125 | 5 | 139.8 | - | - | 5.1 | 16.9 | - | - | 6.6 | 21.7 | 8.1 | 26.3 | 9.5 | 30.5 |
| 150 | 6 | 165.2 | - | - | 5.5 | 21.7 | - | - | 7.1 | 27.7 | 9.3 | 35.8 | 11.0 | 41.8 |
| 200 | 8 | 216.3 | - | - | 6.4 | 33.1 | 7.0 | 36.1 | 8.2 | 42.1 | 10.3 | 52.3 | 12.7 | 63.8 |
| 250 | 10 | 267.5 | - | - | 6.4 | 41.2 | 7.8 | 49.9 | 9.3 | 59.2 | 12.7 | 79.8 | 15.1 | 93.9 |
| 300 | 12 | 318.5 | - | - | 6.4 | 49.3 | 8.4 | 64.2 | 10.3 | 78.3 | 14.3 | 107 | 17.4 | 129 |
| 350 | 14 | 355.6 | 6.4 | 55.1 | 7.9 | 67.7 | 9.5 | 81.1 | 11.1 | 94.3 | 15.1 | 127 | 19.0 | 158 |
| 400 | 16 | 404.6 | 6.4 | 63.1 | 7.9 | 77.6 | 11.1 | 93 | 12.7 | 123 | 16.7 | 160 | 21.4 | 203 |
| 450 | 18 | 457.2 | 6.4 | 71.1 | 7.9 | 87.5 | 12.7 | 122 | 14.3 | 156 | 19.0 | 205 | 23.8 | 254 |
| 500 | 20 | 508.0 | 6.4 | 79.2 | 9.5 | 117 | 12.7 | 155 | 15.1 | 184 | 20.3 | 248 | 26.2 | 311 |
| 550 | 22 | 558.8 | 6.4 | 87.8 | 9.5 | 129 | 14.3 | 171 | 15.9 | 213 | - | - | - | - |
| 600 | 24 | 609.6 | 6.4 | 95.2 | 9.5 | 141 | 14.3 | 228 | - | - | - | - | - | - |
| 650 | 26 | 660.4 | 7.9 | 103 | 12.7 | 203 | - | - | - | - | - | - | - | - |



상수도용 도복장 강관(KS D 3565)/일반 용수용 도복장 강관(KS D 3626)

- 액상 에폭시(KS D 8502)
- 강관(KS D 3562)
- 에폭시(FEB)
- 접착제
- 압출식 폴리에틸렌 (KS D 3589)

○ 피복방법

- 외부 : 압출식 폴리에틸렌 3층 피복강관
 - 1층 : 에폭시(FEB)
 - 2층 : 접착제
 - 3층 : 폴리에틸렌
- 내부 : 수도용 액상에폭시 수지 도료 및 도장방법
- 원관 : KS D 3565

관의 종류 및 수압시험의 압력 THE TYPES OF PIPES AND THE PRESSURE IN THE HYDROSTATIC TEST

| Tested pressure | Types and symbols | | | |
|-----------------|-------------------|----------|-------------------|-----|
| | STWW 290 | STWW 370 | STWW 400 | |
| | | | Nominal thickness | |
| | A | B | A | B |
| 2.5 | | 3.4 | 2.5 | 2.0 |

관의 규격 STANDARDS OF PIPES (KS D 3565)

| Nominal diameter (A) | Outer diameter (mm) | Types of symbols | | | | | | | |
|----------------------|---------------------|------------------|--------------|---------------|--------------|------------------|--------------|---------------|--------------|
| | | STWW 290 | | STWW 370 | | STWW 400 | | | |
| | | | | | | Nominal diameter | | | |
| | | A | | B | | A | | B | |
| | | Thickness(mm) | Weight(kg/m) | Thickness(mm) | Weight(kg/m) | Thickness(mm) | Weight(kg/m) | Thickness(mm) | Weight(kg/m) |
| 80 | 89.1 | 4.2 | 8.78 | 4.5 | 9.39 | - | - | - | - |
| 100 | 114.3 | 4.5 | 12.2 | 4.9 | 13.2 | - | - | - | - |
| 125 | 139.0 | 4.5 | 15.0 | 5.1 | 16.9 | - | - | - | - |
| 150 | 165.2 | 5.0 | 19.8 | 5.5 | 21.7 | - | - | - | - |
| 200 | 216.3 | 5.8 | 30.1 | 6.4 | 33.1 | - | - | - | - |
| 250 | 267.4 | 6.6 | 42.4 | 6.4 | 41.2 | - | - | - | - |
| 300 | 318.5 | 6.9 | 53.0 | 6.4 | 49.3 | - | - | - | - |
| 350 | 355.6 | - | - | - | - | 6.0 | 51.7 | - | - |
| 400 | 406.4 | - | - | - | - | 6.0 | 59.2 | - | - |
| 450 | 457.2 | - | - | - | - | 6.0 | 66.8 | - | - |
| 500 | 508.0 | - | - | - | - | 6.0 | 74.3 | - | - |
| 600 | 609.6 | - | - | - | - | 6.0 | 89.3 | - | - |
| 700 | 711.2 | - | - | - | - | 7.0 | 122 | 6.0 | 104 |
| 800 | 812.8 | - | - | - | - | 8.0 | 159 | 7.0 | 139 |
| 900 | 914.4 | - | - | - | - | 8.0 | 179 | 7.0 | 157 |
| 1000 | 1016.0 | - | - | - | - | 9.0 | 223 | 8.0 | 199 |
| 1100 | 1117.6 | - | - | - | - | 10.0 | 273 | 8.0 | 219 |
| 1200 | 1219.2 | - | - | - | - | 11.0 | 328 | 9.0 | 269 |
| 1350 | 1371.6 | - | - | - | - | 12.0 | 402 | 10.0 | 336 |
| 1500 | 1524.0 | - | - | - | - | 14.0 | 521 | 11.0 | 410 |
| 1600 | 1625.6 | - | - | - | - | 15.0 | 596 | 12.0 | 477 |
| 1650 | 1676.4 | - | - | - | - | 15.0 | 615 | 12.0 | 493 |
| 1800 | 1828.8 | - | - | - | - | 16.0 | 715 | 13.0 | 582 |
| 1900 | 1930.4 | - | - | - | - | 17.0 | 802 | 14.0 | 662 |
| 2000 | 2032.0 | - | - | - | - | 18.0 | 894 | 15.0 | 746 |
| 2100 | 2133.6 | - | - | - | - | 19.0 | 991 | 16.0 | 836 |
| 2200 | 2235.2 | - | - | - | - | 20.0 | 1093 | 16.0 | 876 |
| 2300 | 2336.8 | - | - | - | - | 21.0 | 1199 | 17.0 | 973 |
| 2400 | 2438.4 | - | - | - | - | 22.0 | 1311 | 18.0 | 1074 |
| 2500 | 2540.0 | - | - | - | - | 23.0 | 1428 | 18.0 | 1119 |
| 2600 | 2641.6 | - | - | - | - | 24.0 | 1549 | 19.0 | 1229 |
| 2700 | 2743.2 | - | - | - | - | 25.0 | 1676 | 20.0 | 1343 |
| 2800 | 2844.8 | - | - | - | - | 26.0 | 1807 | 21.0 | 1462 |
| 2900 | 2946.4 | - | - | - | - | 27.0 | 1944 | 21.0 | 1515 |
| 3000 | 3048.0 | - | - | - | - | 29.0 | 2159 | 22.0 | 1642 |