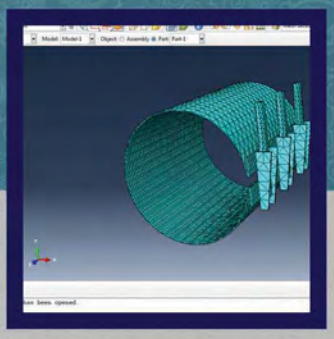
# SKCLAMP

## شرکت سیال کاران



Designer and manufacturer of the repairing clamps and tapping clamps.
The inventor of tapping system of under pressure tick lines.

## Introduction:

SAYYAL KARAN KAVIR YAZD COMPANY has begun its activity in Yazd province since 2008 as the first local manufacturer of various types of repairing and tapping in type of stainless steel and now trough establishing the new site in Mehriz indystry town, using its technical power and technology and cooperating with the most valid suppliers of the raw materials in Iran and also with special laboratory and accurate foresight , will be forerunner in designing and manufacturing the modern products of water an waste water industry.

## Contents


| | |
|---|---|
| Repairing Clamp : Model RC1 | 4 |
| Repairing Clamp : Model RC2 | 5 |
| Repairing Clamp : Model RC3 | 6 |
| High pressure Repairing Clamp : Model RC-HP | 7 |
| Repairing Clamp Box | 8 |
| Tapping Tee Clamp : TTC (Flange) | 9 |
| High pressure Tapping Tee Clamp : Model TTC-HP | 11 |
| Tapping Tee Clamp : Model TBC (Threaded socket) | 14 |
| Clamps selection Guide | 16 |
| Hottaping system | 17 |
| Installation Guide | 18 |
| Bell joint leak clamp | 19 |
| Installing Guide for bell joint leak clamp | 20 |
| Technical specifications Steel 304 | 21 |
| SKClamp INDUSTRIES , INC | 22 |

SK clamp
SN:3940704

# Repairing Clamp : Model RC1

| DN | | O.D | | USES | | | | |
|---|---|---|---|---|---|---|---|---|
| Nominal size | Nominal size | min | max | Asbestos - Cement Pipe | Steel Pipe | Ductile Iron Pipe | Grp Pipe | Pe & Upvc Pipe |
| inch | mm | mm | mm | mm | mm | mm | mm | mm |
| 1.1/2 | 50 | 45 | 53 | - | 40 | - | - | 50 |
| 2 | 60 | 60 | 68 | - | 50 | - | - | 63 |
| | | 80 | 90 | 60 B-C-D | - | - | - | - |
| 3 | 80 | 88 | 99 | - | 80 | 80 | - | 90 |
| | | 98 | 108 | 80 B-C-D | - | 80 | 100 | - |
| 4 | 100 | 110 | 120 | - | 100 | 100 | - | 110 |
| | | 120 | 130 | 100 B-C-D | - | - | - | 125 |
| 5 | 125 | 135 | 145 | 125 | 125 | - | - | 140 |
| 6 | 150 | 155 | 165 | - | - | - | 150 | 160 |
| | | 165 | 175 | - | 150 | 150 | - | - |
| | | 176 | 189 | 150 B-C-D | - | - | - | 180 |
| 8 | 200 | 200 | 210 | - | - | - | 200 | 200 |
| | | 218 | 228 | 200 B | 200 | 200 | - | 225 |
| | | 230 | 240 | 200 C | - | - | - | - |
| | | 245 | 255 | 200 D | - | - | - | 250 |
| 10 | 250 | 260 | 270 | - | - | - | 250 | - |
| | | 271 | 281 | 250 B | 250 | 250 | - | 280 |
| | | 285 | 295 | 250 C | - | - | - | - |
| | | 300 | 310 | 250 D | - | - | - | - |

**The clamps can be used to repair the following pipe types :**

-Asebetos Cement (AC)

- PE

- PVC & UPVC

- Cast Iron (CI)

- Ductile Iron(DI)

**Material Specification :**

- All metal parts stainless steel 304.

- Standard Certified rubber gaskets NBR.

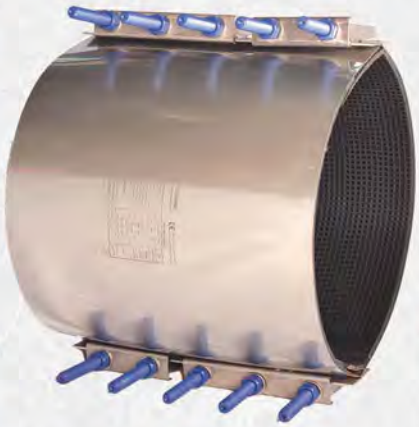
- The rubber is tapered and has a waffle pattern.

- Bridge plate is vulcanized into the rubber gasket.

Using this clamp includes the following advantages:

- Easy mounting
- Increase in maneuver speed
- Reduction of water transfer system
- Reduction of operational costs
- More duration
- Increase in public satisfaction

# Repairing Clamp : Model RC2



**The clamps can be used to repair the following pipe types :**

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**Material Specification :**

- All metal parts stainless steel 304.

- Standard Certified rubber gaskets NBR.

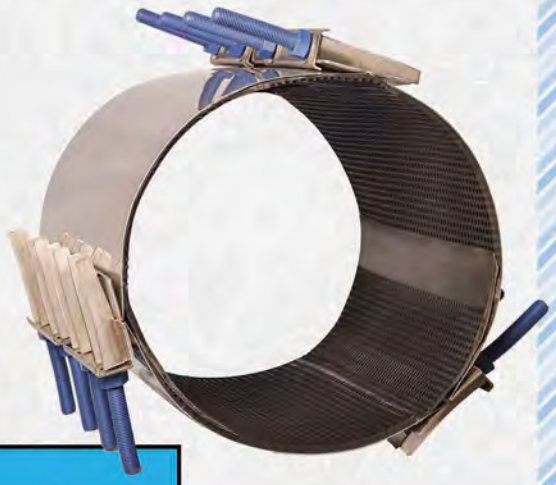
- The rubber is tapered and has a waffle pattern.

- Bridge plate is vulcanized into the rubber gasket.

| DN | | O.D | | USES | | | | |
|---|---|---|---|---|---|---|---|---|
| Nominal size | Nominal size | min | max | Asbestos - Cement Pipe | Steel Pipe | Ductile Iron Pipe | Grp Pipe | Pe & Upvc Pipe |
| inch | mm | mm | mm | mm | mm | mm | mm | mm |
| 8 | 200 | 205 | 225 | - | 200 | 200 | 200 | 225 |
| | | 230 | 252 | 200 C-D | - | - | - | 250 |
| 10 | 250 | 262 | 282 | 250 B | 250 | 250 | 250 | 280 |
| | | 288 | 308 | 250 C-D | - | - | - | - |
| 12 | 300 | 310 | 330 | - | 300 | 300 | 300 | 315 |
| | | 335 | 358 | 300 B-C | 350 | - | 350 | 355 |
| | | 345 | 368 | 300 C-D | 350 | - | 350 | 355 |
| 14 | 350 | 345 | 365 | 300 C | 350 | - | 350 | 355 |
| | | 370 | 392 | 350 B | - | 350 | - | - |
| | | 405 | 430 | 350 C-D | 400 | 400 | 400 | - |
| 16 | 400 | 390 | 410 | 350 B-C | 400 | - | - | 400 |
| | | 420 | 440 | 350 D | - | 400 | - | - |
| | | 463 | 488 | 400 C-D | - | - | 450 | - |
| 18 | 450 | 440 | 463 | 400 B | 450 | - | - | 450 |
| | | 490 | 510 | 450 B | 500 | - | - | 500 |
| | | 512 | 535 | 450 C | - | 500 | 500 | - |
| | | 540 | 560 | 450 d | - | - | - | - |
| 20 | 500 | 495 | 515 | 450 B | 500 | - | 500 | 500 |
| | | 520 | 540 | 450 C | - | 500 | - | - |
| | | 568 | 588 | 500 C | - | - | - | - |
| | | 600 | 620 | 500 d | 600 | - | 600 | - |
| 22 | 550 | 550 | 570 | - | 550 | - | - | 560 |
| 24 | 600 | 604 | 625 | 500 d | 600 | - | 600 | - |
| | | 625 | 645 | - | - | 600 | - | 630 |
| | | 655 | 675 | 600 B | 650 | - | - | - |
| | | 685 | 705 | 600 C | - | - | - | - |
| | | 720 | 740 | 600 d | - | - | - | - |
| 26 | 650 | 650 | 670 | - | 650 | - | - | - |
| 28 | 700 | 705 | 725 | - | 700 | - | 700 | 710 |
| | | 725 | 745 | 600 d | - | 700 | - | - |
| | | 788 | 810 | 700 C | - | - | - | - |
| | | 820 | 840 | 700 d | - | - | - | - |
| 30 | 750 | 755 | 775 | 700 B | 750 | - | - | - |
| | | 780 | 800 | - | - | 750 | - | - |
| 32 | 800 | 790 | 810 | 700 C | - | - | - | 800 |
| | | 810 | 830 | - | 800 | - | 800 | - |
| | | 835 | 855 | - | - | 800 | - | - |
| | | 865 | 885 | 800 B | - | - | - | - |
| | | 900 | 920 | 800 C | - | - | - | - |
| | | 935 | 960 | 800 d | - | - | - | - |

Using this clamp is recommended in order to mend and repair the damaged pipes in water and waste water industry and gas and petrochemical industry. The special structure of this clamp includes a compound of steel and special rubber (resistant to corrosion), high flexibility and also long life. In order to repair the damaged pipes, after determination of the damaged accurate point and after correct selection of clamp considering the size and type of the pipe, it is enough to fasten the clamp on the pipe and fix it by a simple worker without need of any special tool and also without stopping water of clamp according to the relevant instruction.

# Repairing Clamp : Model RC3



| DN | | O.D | | USES | | | | |
|---|---|---|---|---|---|---|---|---|
| Nominal size | Nominal size | min | max | Asbestos - Cement Pipe | Steel Pipe | Ductile Iron Pipe | Grp Pipe | Pe & Upvc Pipe |
| inch | mm | mm | mm | mm | mm | mm | mm | mm |
| 28 | 700 | 705 | 740 | - | 700 | 700 | 700 | 710 |
| | | 771 | 806 | 700 B-C | - | 750 | - | 800 |
| | | 810 | 845 | 700 D | 800 | 800 | 800 | - |
| 30 | 750 | 760 | 795 | - | 750 | 750 | - | - |
| 32 | 800 | 795 | 830 | - | 800 | - | 800 | 800 |
| | | 830 | 865 | - | - | 800 | - | - |
| | | 860 | 895 | 800 B | - | - | - | - |
| | | 895 | 930 | 800 C | 900 | - | 900 | 900 |
| | | 930 | 965 | 800 D | - | 900 | - | - |
| 36 | 900 | 885 | 920 | 800 C | 900 | - | - | 900 |
| | | 912 | 950 | - | 900 | 900 | 900 | - |
| | | 970 | 1005 | 900 B | - | - | - | 1000 |
| | | 1010 | 1045 | 900 C | 1000 | - | 1000 | - |
| | | 1050 | 1085 | 900 D | - | - | - | - |
| 40 | 1000 | 995 | 1030 | - | 1000 | - | 1000 | 1000 |
| | | 1030 | 1065 | - | - | 1000 | - | - |
| | | 1075 | 1110 | 1000 B | - | - | - | - |
| | | 1095 | 1130 | 1000 C | - | - | - | - |
| | | 1165 | 1200 | 1000 D | - | - | - | 1200 |
| 48 | 1200 | 1210 | 1240 | - | 1200 | - | 1200 | - |
| | | 1230 | 1260 | - | - | 1200 | - | - |
| 56 | 1400 | 1420 | 1450 | - | 1400 | - | 1400 | - |
| | | 1450 | 1480 | - | - | 1400 | - | - |
| 64 | 1600 | 1630 | 1660 | - | 1600 | - | 1600 | - |
| | | 1650 | 1680 | - | - | 1600 | - | - |
| 80 | 2000 | 2030 | 2060 | - | 2000 | - | 2000 | - |
| | | 2060 | 2090 | - | - | 2000 | - | - |

**The clamps can be used to repair the following pipe types :**

-Asebetos Cement (AC)

- PE

- PVC & UPVC

- Cast Iron (CI)

- Ductile Iron(DI)

**Material Specification :**

- All metal parts stainless steel 304.

- Standard Certified rubber gaskets NBR.

- The rubber is tapered and has a waffle pattern.

- Bridge plate is vulcanized into the rubber gasket.

To order this clamp, the following information is useful:

- Diameter of the main pipe in order to determine the clamp coverage range
- Type of the event in order to determine the length of clamp coverage

"Repairing clamps" & "Tapping Tee Clamps" with Brand SKClamp are made according to AWWA C223 . Also our products are producible for nominal pressure from 16 to 25 bar (250 to 350 psi) . and producible for nominal size from 60 to 2000 mm .(2 to 80 inch).

# High pressure Repairing Clamp : Model RC-HP

**The clamps can be used to repair the following pipe types :**

- Cast Iron (CI)
- Ductile Iron(DI)

**Material Specification :**

- All metal parts stainless steel 304.
- Standard Certified rubber gaskets NBR.
- The rubber is tapered and has a waffle pattern.
- Bridge plate is vulcanized into the rubber gasket.

| DN | | O.D | | USES | |
|---|---|---|---|---|---|
| Nominal size | Nominal size | min | max | Steel Pipe | Ductile Iron Pipe |
| inch | mm | mm | mm | mm | mm |
| 12 | 300 | 315 | 335 | 300 | 300 |
| 14 | 350 | 345 | 365 | 300 | * |
| | | 370 | 390 | * | 300 |
| 16 | 400 | 400 | 420 | 400 | * |
| | | 420 | 440 | * | 400 |
| 18 | 450 | 450 | 470 | 450 | * |
| 20 | 500 | 500 | 520 | 500 | * |
| | | 535 | 555 | * | 500 |
| 22 | 550 | 550 | 570 | 550 | * |
| 24 | 600 | 600 | 620 | 600 | * |
| | | 625 | 645 | * | 600 |
| 26 | 650 | 650 | 670 | 650 | * |
| 28 | 700 | 702 | 722 | 700 | * |
| | | 730 | 750 | * | 700 |
| 30 | 750 | 755 | 775 | 750 | * |
| | | 780 | 800 | * | 750 |
| 32 | 800 | 814 | 835 | 800 | * |
| | | 834 | 855 | * | 800 |

This clamp is used for the damaged pipes in water and waste water and also in gas and petro chemistry industry. This clamp is produced in different sizes and types The complementary information is given in the relevant tables.

"Repairing clamps" & "Tapping Tee Clamps" with Brand SKClamp are made according to AWWA C223 . Also our products are producible for nominal pressure from 16 to 25 bar (250 to 350 psi) . and producible for nominal size from 60 to 2000 mm .(2 to 80 inch).

# Repairing Clamp Box

| TYPE | OD | | NO.PART | LENGTH |
|---|---|---|---|---|
| **RCN-600** | 213 | 670 | 5 | 500 mm |
| **RCN-800** | 395 | 960 | 6 | 600 mm |
| **RCN-1200** | 650 | 1250 | 6 | 800 mm |

**Type: RCN - 600**

| name part | O.D | | USES | | | | |
|---|---|---|---|---|---|---|---|
| | min | max | Asbestos - Cement Pipe | Steel Pipe | Ductile Iron Pipe | Grp Pipe | Pe & Upvc Pipe |
| | mm | mm | mm | mm | mm | mm | mm |
| A+B | 213 | 233 | | 200 | 200 | | 225 |
| A+C | 233 | 253 | 200 C-D | | | | 250 |
| B+C | 253 | 273 | | | | 250 | |
| A+D | 264 | 284 | 200 B | 250 | 250 | | 280 |
| B+D | 284 | 304 | 200 C | | | | |
| A+E | 294 | 314 | 200 D | | | | |
| C+D | 304 | 324 | | | | 300 | 315 |
| B+E | 314 | 334 | | 300 | 300 | | 315 |
| C+E | 335 | 355 | 300 B-C | 350 | | | 355 |
| A+B+C | 354 | 384 | 300 D | 350 | 350 | | 355 |
| A+B+D | 386 | 416 | 350 B-C | 400 | | 400 | 400 |
| A+C+D | 406 | 440 | 350 D | | 400 | 400 | |
| A+B+E | 416 | 446 | 350 D | | 400 | | |
| B+C+D | 426 | 456 | 350 D | | 400 | | 450 |
| A+C+E | 436 | 470 | 400 B-C | 450 | | 450 | 450 |
| B+C+E | 456 | 486 | 400 C | | | | |
| A+D+E | 476 | 498 | 400 D | | 450 | | |
| B+D+E | 487 | 517 | 450 B | 500 | | 500 | 500 |
| C+D+E | 508 | 540 | 450 C | | 500 | 500 | |
| A+B+C+D | 527 | 568 | 450 D<br>500 B | 550 | 500 | | 560 |
| A+B+C+E | 558 | 600 | 500 C | | | | |
| A+B+D+E | 589 | 630 | 500 D | 600 | | 600 | |
| A+C+D+E | 609 | 650 | | | 600 | 600 | 630 |
| B+C+D+E | 629 | 670 | 600 B | 650 | 600 | | |

# Tapping Tee Clamp : TTC (Flange)

Using these clamps is recommended instead of mounting the cast iron and polyethylene tees on the operated water transfer pipes and the its instruction is in this way that first the clamp is set up on the pipe and then the drawer tap with similar size of flange is set up , finally using tapping system , drilling is done.

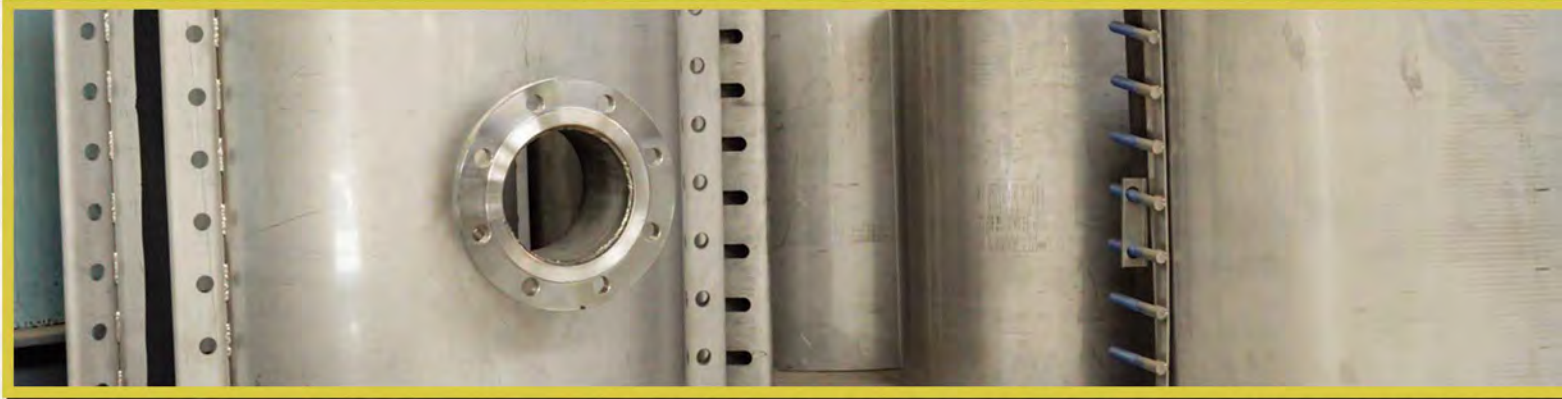
| DN | | O.D | | USES | | | | | Branch / Outlet **2** Inch | | | Branch / Ou | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Nominal size | Nominal size | min | max | Asbestos - Cement Pipe | Steel Pipe | Ductile Iron Pipe | Grp Pipe | PE & Upvc Pipe | Length | Num . Bolts | Bolts size | Length | Num Bol |
| inch | mm | mm | mm | mm | mm | mm | mm | mm | mm | | mm | mm | |
| 4 | 100 | 105 | 125 | 100 B | 100 | 100 | 100 | 110 | 200 | 4 | 14 | 300 | 6 |
| | | 115 | 135 | 100 B-C-D | - | 100 | - | - | 200 | 4 | 14 | 300 | 6 |
| 5 | 125 | 122 | 145 | 100 D | 125 | - | - | 125 | 200 | 4 | 14 | 300 | 6 |
| 6 | 150 | 155 | 175 | 150 B | 150 | 150 | 150 | 160 | 200 | 4 | 14 | 300 | 6 |
| | | 176 | 189 | 150 B-C-D | - | 150 | - | 180 | 200 | 4 | 14 | 300 | 6 |
| 8 | 200 | 190 | 210 | - | - | - | - | 200 | 200 | 4 | 14 | 300 | 6 |
| | | 205 | 225 | - | 200 | 200 | 200 | 225 | 200 | 4 | 14 | 300 | 6 |
| | | 230 | 252 | 200 C-D | - | - | - | - | 200 | 4 | 14 | 300 | 6 |
| 10 | 250 | 240 | 260 | - | - | - | - | 250 | 200 | 4 | 16 | 300 | 6 |
| | | 262 | 282 | 251 B | 250 | 250 | 250 | - | 200 | 4 | 16 | 300 | 6 |
| | | 288 | 308 | 250 C-D | - | - | - | 280 | 200 | 4 | 16 | 300 | 6 |
| 12 | 300 | 310 | 330 | - | 300 | 300 | 300 | 315 | 200 | 4 | 16 | 300 | 6 |
| | | 335 | 358 | 300 B-C | 350 | - | 350 | - | 200 | 4 | 16 | 300 | 6 |
| | | 345 | 368 | 300 C-D | 350 | - | 350 | 355 | 200 | 4 | 16 | 300 | 6 |
| 14 | 350 | 345 | 365 | 300 C | 350 | - | 350 | 355 | 300 | 6 | 16 | 300 | 6 |
| | | 370 | 392 | 350 B | - | 350 | - | - | 300 | 6 | 16 | 300 | 6 |
| | | 405 | 430 | 350 C-D | 400 | 400 | 400 | - | 300 | 6 | 16 | 300 | 6 |
| 16 | 400 | 390 | 410 | 350 B-C | 400 | - | - | 400 | 300 | 6 | 16 | 300 | 6 |
| | | 420 | 440 | 350 D | - | 400 | - | - | 300 | 6 | 16 | 300 | 6 |
| | | 463 | 488 | 400 C-D | - | - | 450 | - | 300 | 6 | 16 | 300 | 6 |
| 18 | 450 | 440 | 463 | 400 B | 450 | - | - | 450 | 300 | 6 | 16 | 300 | 6 |
| | | 490 | 510 | 450 B | 500 | - | - | 500 | 300 | 6 | 16 | 300 | 6 |
| | | 512 | 535 | 450 C | - | 500 | 500 | - | 300 | 6 | 16 | 300 | 6 |
| | | 540 | 560 | 450 D | - | - | - | - | 300 | 6 | 16 | 300 | 6 |
| 20 | 500 | 495 | 515 | 450 B | 500 | - | 500 | 500 | 300 | 6 | 16 | 300 | 6 |
| | | 520 | 540 | 450 C | - | 500 | - | - | 300 | 6 | 16 | 300 | 6 |
| | | 568 | 588 | 500 C | - | - | - | - | 300 | 6 | 16 | 300 | 6 |
| | | 600 | 620 | 500 D | 600 | - | 600 | - | 300 | 6 | 16 | 300 | 6 |
| 22 | 550 | 550 | 570 | - | 550 | - | - | 560 | 300 | 6 | 16 | 400 | 8 |
| 24 | 600 | 604 | 625 | 500 D | 600 | - | 600 | - | 300 | 6 | 16 | 400 | 8 |
| | | 625 | 645 | - | - | 600 | - | 630 | 300 | 6 | 16 | 400 | 8 |
| | | 655 | 675 | 600 B | 650 | - | - | - | 300 | 6 | 16 | 400 | 8 |
| | | 685 | 705 | 600 C | - | - | - | - | 300 | 6 | 16 | 400 | 8 |
| | | 720 | 740 | 600 D | - | - | - | - | 300 | 6 | 16 | 400 | 8 |
| 26 | 650 | 650 | 670 | - | 650 | - | - | - | 300 | 6 | 16 | 400 | 12 |
| 28 | 700 | 705 | 725 | - | 700 | - | 700 | 710 | 300 | 6 | 16 | 400 | 12 |
| | | 725 | 745 | 600 D | - | 700 | - | - | 300 | 6 | 16 | 400 | 12 |
| | | 788 | 810 | 700 C | - | - | - | - | 300 | 6 | 16 | 400 | 12 |
| | | 820 | 840 | 700 D | - | - | - | - | 300 | 6 | 16 | 400 | 12 |

Using this system includes the following advantages:

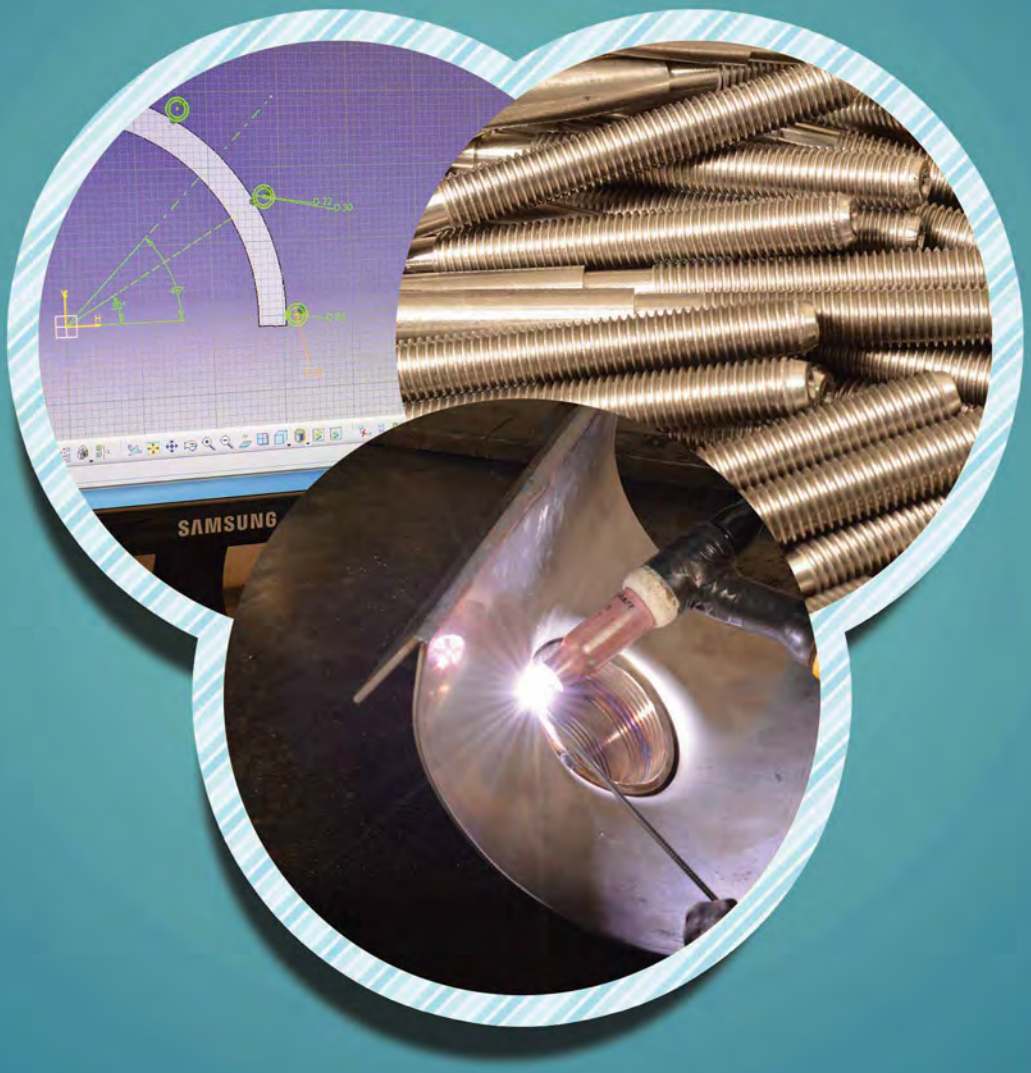
- Easy mounting
- Avoiding water stopping
- Reduction of pollution in water transfer system
- Reduction of operational costs
- Not need for specialist force
- More duration
- Increase in public satisfaction

| tlet **3** Inch | | Branch / Outlet **4** Inch | | | Branch / Outlet **5** Inch | | | Branch / Outlet **6** Inch | | | Branch / Outlet **8** Inch | | | Branch / Outlet **10** Inch | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ts | Bolts size | Length | Num . Bolts | Bolts size | Length | Num . Bolts | Bolts size | Length | Num . Bolts | Bolts size | Length | Num . Bolts | Bolts size | Length | Num . Bolts | Bolts size |
| | mm | mm | | mm | mm | | mm | mm | | mm | mm | | mm | mm | | mm |
| | 14 | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * |
| | 14 | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * |
| | 14 | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * |
| | 14 | 400 | 8 | 14 | * | * | * | * | * | * | * | * | * | * | * | * |
| | 14 | 400 | 8 | 14 | 500 | 10 | 16 | * | * | * | * | * | * | * | * | * |
| | 14 | 400 | 8 | 14 | 500 | 10 | 16 | 500 | 10 | 16 | * | * | * | * | * | * |
| | 14 | 400 | 8 | 14 | 500 | 10 | 16 | 500 | 10 | 16 | * | * | * | * | * | * |
| | 14 | 400 | 8 | 14 | 500 | 10 | 16 | 500 | 10 | 16 | * | * | * | * | * | * |
| | 16 | 400 | 8 | 16 | 500 | 10 | 16 | 500 | 10 | 16 | * | * | * | * | * | * |
| | 16 | 400 | 8 | 16 | 500 | 10 | 16 | 500 | 10 | 16 | * | * | * | * | * | * |
| | 16 | 400 | 8 | 16 | 500 | 10 | 16 | 500 | 10 | 16 | 600 | 16 | 16 | * | * | * |
| | 16 | 400 | 8 | 16 | 500 | 10 | 16 | 500 | 10 | 16 | 600 | 16 | 16 | * | * | * |
| | 16 | 400 | 8 | 16 | 500 | 10 | 16 | 500 | 10 | 16 | 600 | 16 | 16 | * | * | * |
| | 16 | 400 | 8 | 16 | 500 | 10 | 16 | 500 | 10 | 16 | 600 | 16 | 16 | 800 | 22 | 16 |
| | 16 | 400 | 8 | 16 | 500 | 10 | 16 | 500 | 10 | 16 | 600 | 16 | 16 | 800 | 22 | 16 |
| | 16 | 400 | 8 | 16 | 500 | 10 | 16 | 500 | 10 | 16 | 600 | 16 | 16 | 800 | 22 | 16 |
| | 16 | 400 | 8 | 16 | 500 | 10 | 16 | 500 | 10 | 16 | 600 | 16 | 16 | 800 | 22 | 16 |
| | 16 | 400 | 8 | 16 | 500 | 10 | 16 | 500 | 10 | 16 | 600 | 16 | 16 | 800 | 22 | 16 |
| | 16 | 400 | 8 | 16 | 500 | 10 | 16 | 500 | 10 | 16 | 600 | 16 | 16 | 800 | 22 | 16 |
| | 16 | 400 | 8 | 16 | 500 | 10 | 16 | 500 | 10 | 16 | 600 | 16 | 16 | 800 | 22 | 16 |
| | 16 | 400 | 8 | 16 | 500 | 10 | 16 | 500 | 10 | 16 | 600 | 16 | 16 | 800 | 22 | 16 |
| | 16 | 400 | 8 | 16 | 500 | 10 | 16 | 500 | 10 | 16 | 600 | 16 | 16 | 800 | 22 | 16 |
| | 16 | 400 | 8 | 16 | 500 | 10 | 16 | 500 | 10 | 16 | 600 | 16 | 16 | 800 | 22 | 16 |
| | 16 | 400 | 8 | 16 | 500 | 10 | 16 | 500 | 10 | 16 | 600 | 16 | 16 | 800 | 22 | 16 |
| | 16 | 400 | 8 | 16 | 500 | 10 | 16 | 500 | 10 | 16 | 600 | 16 | 16 | 800 | 22 | 16 |
| | 16 | 400 | 8 | 16 | 500 | 10 | 16 | 500 | 10 | 16 | 600 | 16 | 16 | 800 | 22 | 16 |
| | 16 | 500 | 10 | 16 | 600 | 12 | 16 | 600 | 12 | 16 | 700 | 20 | 16 | 800 | 22 | 16 |
| | 16 | 500 | 10 | 16 | 600 | 12 | 16 | 600 | 12 | 16 | 700 | 20 | 16 | 800 | 22 | 16 |
| | 16 | 500 | 10 | 16 | 600 | 12 | 16 | 600 | 12 | 16 | 700 | 20 | 16 | 800 | 22 | 16 |
| | 16 | 500 | 10 | 16 | 600 | 12 | 16 | 600 | 12 | 16 | 700 | 20 | 16 | 800 | 22 | 16 |
| | 16 | 500 | 10 | 16 | 600 | 12 | 16 | 600 | 12 | 16 | 700 | 20 | 16 | 800 | 22 | 16 |
| | 16 | 500 | 10 | 16 | 600 | 12 | 16 | 600 | 12 | 16 | 700 | 20 | 16 | 800 | 22 | 16 |
| 2 | 16 | 500 | 14 | 16 | 600 | 16 | 16 | 600 | 16 | 16 | 700 | 20 | 16 | 800 | 22 | 16 |
| 2 | 16 | 500 | 14 | 16 | 600 | 16 | 16 | 600 | 16 | 16 | 700 | 20 | 16 | 800 | 22 | 16 |
| 2 | 16 | 500 | 14 | 16 | 600 | 16 | 16 | 600 | 16 | 16 | 700 | 20 | 16 | 800 | 22 | 16 |
| 2 | 16 | 500 | 14 | 16 | 600 | 16 | 16 | 600 | 16 | 16 | 700 | 20 | 16 | 800 | 22 | 16 |
| 2 | 16 | 500 | 14 | 16 | 600 | 16 | 16 | 600 | 16 | 16 | 700 | 20 | 16 | 800 | 22 | 16 |

| DN | | O.D | | | | Branch / Outlet **6** Inch | | | Branch / Outle | |
|---|---|---|---|---|---|---|---|---|---|---|
| Nominal size | Nominal size | min | max | Steel Pipe | Ductile Iron Pipe | Length | Num . Bolts | Bolts size | Length | Num . Bolts |
| inch | mm | mm | mm | mm | mm | mm | | mm | mm | |
| 16 | 400 | 400 | 420 | 400 | * | 600 | 18 | 18 | 600 | 18 |
| | | 420 | 440 | * | 400 | 600 | 18 | 18 | 600 | 18 |
| 18 | 450 | 450 | 470 | 450 | * | 600 | 18 | 18 | 600 | 18 |
| 20 | 500 | 500 | 520 | 500 | * | 600 | 18 | 18 | 600 | 18 |
| | | 535 | 555 | * | 500 | 600 | 18 | 18 | 600 | 18 |
| 22 | 550 | 550 | 570 | 550 | * | 600 | 18 | 18 | 600 | 18 |
| 24 | 600 | 600 | 620 | 600 | * | 600 | 18 | 18 | 700 | 18 |
| | | 625 | 645 | * | 600 | 600 | 18 | 18 | 700 | 18 |
| 26 | 650 | 650 | 670 | 650 | * | 600 | 18 | 18 | 700 | 18 |
| 28 | 700 | 702 | 722 | 700 | * | 600 | 18 | 18 | 700 | 18 |
| | | 730 | 750 | * | 700 | 600 | 18 | 18 | 700 | 18 |
| 30 | 750 | 755 | 775 | 750 | * | 600 | 18 | 18 | 700 | 18 |
| | | 780 | 800 | * | 750 | 600 | 18 | 18 | 700 | 18 |
| 32 | 800 | 814 | 835 | 800 | * | 600 | 18 | 18 | 700 | 18 |
| | | 834 | 855 | * | 800 | 600 | 18 | 18 | 700 | 18 |



| et **8** Inch | | Branch / Outlet **10** Inch | | | Branch / Outlet **12** Inch | | | Branch / Outlet **14** Inch | | | Branch / Outlet **16** Inch | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Bolts size | Length | Num . Bolts | Bolts size | Length | Num . Bolts | Bolts size | Length | Num . Bolts | Bolts size | Length | Num . Bolts | Bolts size |
| | mm | mm | | mm | mm | | mm | mm | | mm | mm | | mm |
| | 18 | 800 | 20 | 18 | 1000 | 24 | 18 | 1200 | 28 | 18 | 1500 | 40 | 18 |
| | 18 | 800 | 20 | 18 | 1000 | 24 | 18 | 1200 | 28 | 18 | 1500 | 40 | 18 |
| | 18 | 800 | 20 | 18 | 1000 | 24 | 18 | 1200 | 28 | 18 | 1500 | 40 | 18 |
| | 18 | 800 | 20 | 18 | 1000 | 24 | 18 | 1200 | 28 | 18 | 1500 | 40 | 18 |
| | 18 | 800 | 20 | 18 | 1000 | 24 | 18 | 1200 | 28 | 18 | 1500 | 40 | 18 |
| | 18 | 800 | 20 | 18 | 1000 | 24 | 18 | 1200 | 28 | 18 | 1500 | 40 | 18 |
| | 18 | 800 | 20 | 18 | 1000 | 24 | 18 | 1200 | 28 | 18 | 1500 | 40 | 18 |
| | 18 | 800 | 20 | 18 | 1000 | 24 | 18 | 1200 | 28 | 18 | 1500 | 40 | 18 |
| | 18 | 800 | 20 | 18 | 1000 | 24 | 18 | 1200 | 28 | 18 | 1500 | 40 | 18 |
| | 18 | 800 | 20 | 18 | 1000 | 24 | 18 | 1200 | 28 | 18 | 1500 | 40 | 18 |
| | 18 | 800 | 20 | 18 | 1000 | 24 | 18 | 1200 | 28 | 18 | 1500 | 40 | 18 |
| | 18 | 800 | 20 | 18 | 1000 | 24 | 18 | 1200 | 28 | 18 | 1500 | 40 | 18 |
| | 18 | 800 | 20 | 18 | 1000 | 24 | 18 | 1200 | 28 | 18 | 1500 | 40 | 18 |
| | 18 | 800 | 20 | 18 | 1000 | 24 | 18 | 1200 | 28 | 18 | 1500 | 40 | 18 |
| | 18 | 800 | 20 | 18 | 1000 | 24 | 18 | 1200 | 28 | 18 | 1500 | 40 | 18 |
| | 18 | 800 | 20 | 18 | 1000 | 24 | 18 | 1200 | 28 | 18 | 1500 | 40 | 18 |


SAMSUNG

شرکت اسپیل کلاو
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# Tapping Tee Clamp : Model TBC (Threaded socket)

| DN | | O.D | | USES | | | | | Branch / Outlet 1 Inch | | | Branch / Outlet 2 Inch | | | Branch / Outlet 3 Inch | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Nominal size | Nominal size | min | max | Asbestos - Cement Pipe | Steel Pipe | Ductile Iron Pipe | Grp Pipe | PE & Upvc Pipe | Length | Num . Bolts | Bolts size | Length | Num . Bolts | Bolts size | Length | Num . Bolts | Bolts size |
| inCh | mm | mm | mm | mm | mm | mm | mm | mm | mm | | mm | mm | | mm | mm | | mm |
| 4 | 100 | 100 | 120 | | | | | 110 | 200 | 4 | 14 | 300 | 6 | 14 | 400 | 8 | 14 |
| | | 105 | 125 | 100 B | 100 | 100 | 100 | | 200 | 4 | 14 | 200 | 4 | 14 | 300 | 6 | 14 |
| | | 115 | 135 | 100 B-C-D | | 100 | | | 200 | 4 | 14 | 200 | 4 | 14 | 300 | 6 | 14 |
| 5 | 125 | 122 | 145 | 100 D | 125 | | | 125 | 200 | 4 | 14 | 300 | 6 | 14 | 400 | 8 | 14 |
| 6 | 150 | 150 | 170 | | | | | 160 | 200 | 4 | 14 | 300 | 6 | 14 | 400 | 8 | 14 |
| | | 155 | 175 | 150 B | 150 | 150 | 150 | | 200 | 4 | 14 | 200 | 4 | 14 | 300 | 6 | 14 |
| | | 176 | 189 | 150 B-C-D | | 150 | | | 200 | 4 | 14 | 200 | 4 | 14 | 300 | 6 | 14 |
| 8 | 200 | 190 | 210 | | | | | 200 | 200 | 4 | 14 | 300 | 6 | 14 | 400 | 8 | 16 |
| | | 205 | 225 | | 200 | 200 | 200 | | 200 | 4 | 16 | 200 | 4 | 16 | 300 | 6 | 16 |
| | | 230 | 252 | 200 C-D | | | | | 200 | 4 | 16 | 200 | 4 | 16 | 300 | 6 | 16 |
| 10 | 250 | 240 | 260 | | | | | 250 | 200 | 4 | 16 | 300 | 6 | 16 | 400 | 8 | 16 |
| | | 262 | 282 | 251 B | 250 | 250 | 250 | | 200 | 4 | 16 | 200 | 4 | 16 | 300 | 6 | 16 |
| | | 288 | 308 | 250 C-D | | | | | 200 | 4 | 16 | 200 | 4 | 16 | 300 | 6 | 16 |
| 12 | 300 | 305 | 325 | | | | | 315 | 200 | 4 | 16 | 300 | 6 | 16 | 400 | 8 | 16 |
| | | 310 | 330 | | 300 | 300 | 300 | | 200 | 4 | 16 | 200 | 4 | 16 | 300 | 6 | 16 |
| | | 335 | 358 | 300 B-C | 350 | | 350 | | 200 | 4 | 16 | 200 | 4 | 16 | 300 | 6 | 16 |
| | | 345 | 368 | 300 C-D | 350 | | 350 | | 200 | 4 | 16 | 200 | 4 | 16 | 300 | 6 | 16 |
| 14 | 350 | 345 | 365 | | | | | 355 | 200 | 4 | 16 | 300 | 6 | 16 | 400 | 8 | 16 |
| | | 345 | 365 | 300 C | 350 | | 350 | | 200 | 4 | 16 | 200 | 4 | 16 | 300 | 6 | 16 |
| | | 370 | 392 | 350 B | | 350 | | | 200 | 4 | 16 | 200 | 4 | 16 | 300 | 6 | 16 |
| | | 405 | 430 | 350 C-D | 400 | 400 | 400 | | 200 | 4 | 16 | 200 | 4 | 16 | 300 | 6 | 16 |

# CLAMPS Selection Guide :

## To oreder, attaion to following note:

1- PIPE DIAMETER

2 - PIPE TYPE

3 - Working Pressure

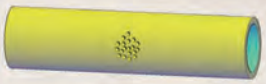
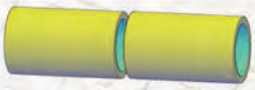
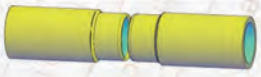
4 - Kind of leakage

5 - Environmental conditions

## In general, is essential according to two points :

1- The length of clamp should not be less than the pipe diameter.

2- The Length of clamp should properly cover the leak location.

| | | |
|---|---|---|
|  | Modified caries | length of clamp > length of leak location+ $\frac{2^* \text{ pipe diameter}}{3}$ |
| | Modified hole | length of clamp > length of leak location+ $\frac{2^* \text{ pipe diameter}}{3}$ |
| | Modified cracking | length of clamp > length of leak location+ $\frac{2^* \text{ pipe diameter}}{3}$ |
| | Modified branch | Length of clamp = 150 or 200 mm |
|  | Connect two pipes | Length of clamp = 200 or 300 mm |
|  | Alternative couplings | used of coupling Clamp |
| | | Length of clamp = 300 mm |

For To determine number of part following notes should be considered :

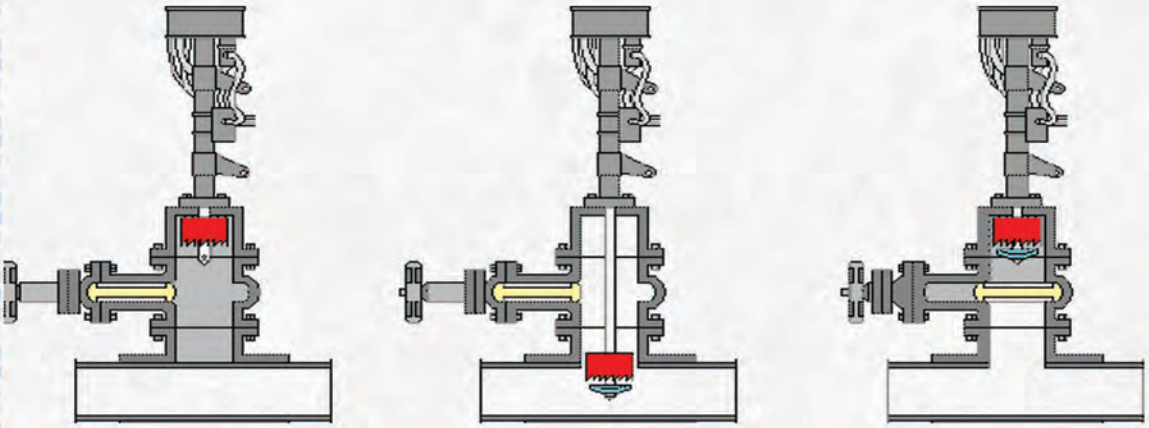
1- In Similar sized multi-jaw clamp covers a higher pressure.

2- For environments that are hard screwdrivers, single clamping jaw is suggested.

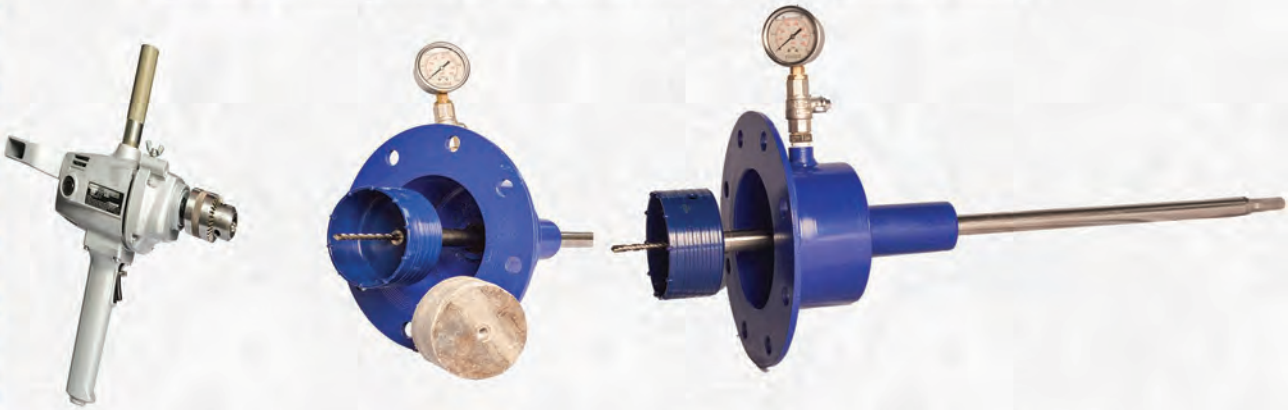
* Notably, the number of bolts and their intervals are determined based on a standard that can be changed if necessary.

# Hot Tapping systems

Hot tapping,or pressure tapping, is the method of making a connection to existing piping or pressure vessels without the interruption of emptying that section of pipe or vessel. This means that a pipe or tank can continue to be in operation whilst maintenance or modifications are being done to it.
The process is also used to drain off pressurised casing fluids.



| TYPE | USES | | | | | SIZE | Pressure | Length shaft |
|---|---|---|---|---|---|---|---|---|
| | Asbestos - Cement Pipe | Steel Pipe | Ductile Iron Pipe | Grp Pipe | Pe & Upvc Pipe | inch | bar | mm |
| H.T.D.2 | * | | | | | 2 | 10 | 600 |
| H.T.S.2 | | * | * | * | * | 2 | 10 | 600 |
| H.T.D.3 | * | | | | | 3 | 10 | 600 |
| H.T.S.3 | | * | * | * | * | 3 | 10 | 600 |
| H.T.D.4 | * | | | | | 4 | 10 | 800 |
| H.T.S.4 | | * | * | * | * | 4 | 10 | 800 |
| H.T.D.6 | * | | | | | 6 | 10 | 800 |
| H.T.S.6 | | * | * | * | * | 6 | 10 | 800 |
| H.T.D.8 | * | | | | | 8 | 10 | 800 |
| H.T.S.8 | | * | * | * | * | 8 | 10 | 800 |
| **H.T.Total** | * | * | * | * | * | **2-3-4-6-8** | **10** | **800** |



## Installation Guide :

Before installing the clamp make sure you select the correct size.

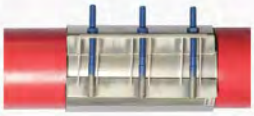
### Notation:

- Control the pipe diameter & chech the clamp size.
- Clean the pipe surface.
- Clean the outer surface of the clamp.
- Clean the threaded of clamp.

- Viscous liquid such as water and soap can be used for better sealing.
- When installing ,make sure Rubbers are at the right place.
- Accessories include straps put behind the guide and Put the nut on the bolt.

- Fasten Nuts By hands.
- Make sure that all components are so right put together.

- Tighten the nuts with a torque-meter wrench.
- Tighten the nuts up to 110 Nm .



- After 1 hour re-tighten the nuts.

## Bell joint leak clamp :

Nominal Sizes : 3 - 20 inches

Working Pressure: Up to 150 psi.

Application:

Used for repair or leak prevention in bells, caulked or rubber ring joints.

Pipe Compatibility:

Recommended for use on cast iron, ductile iron and C900 PVC pipe.

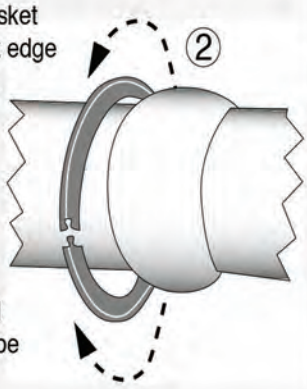
our products are producible for nominal pressure from 16 to 25 bar (250 to 350 psi) . and producible for nominal size from 60 to 2000 mm .(2 to 80 inch).

| DN | | USES | | | | Specifications | | |
|---|---|---|---|---|---|---|---|---|
| Nominal size | Nominal size | Asbestos - Cement Pipe | Ductile Iron Pipe | Grp Pipe | Upvc Pipe | Num Part | Num Bolts | Bolts size |
| inch | mm | mm | mm | mm | mm | - | - | mm |
| 3 | 80 | 80 C | - | - | - | 4 | 4 | 14 |
| | | 80 D | - | - | - | 4 | 4 | 14 |
| | | - | 80 | - | - | 4 | 4 | 14 |
| 4 | 100 | 100 C | - | - | - | 4 | 4 | 14 |
| | | 100 D | - | - | - | 4 | 4 | 14 |
| | | - | 100 | - | - | 4 | 4 | 14 |
| | | - | - | 100 | 110 | 4 | 4 | 14 |
| 5 | 125 | - | - | - | 125 | 4 | 4 | 14 |
| 6 | 150 | 150 C | - | - | - | 4 | 4 | 14 |
| | | 150 D | - | - | - | 4 | 4 | 14 |
| | | - | 150 | - | - | 4 | 4 | 14 |
| | | - | - | 150 | - | 4 | 4 | 14 |
| | | - | - | - | 160 | 4 | 4 | 14 |
| 8 | 200 | 200 C | - | - | - | 4 | 6 | 14 |
| | | 200 D | - | - | - | 4 | 6 | 14 |
| | | - | 200 | - | - | 4 | 6 | 14 |
| | | - | - | 200 | - | 4 | 6 | 14 |
| | | - | - | - | 200 | 4 | 6 | 14 |
| 10 | 250 | 250 C | - | - | - | 8 | 8 | 16 |
| | | 250 D | - | - | - | 8 | 8 | 16 |
| | | - | 250 | - | - | 8 | 8 | 16 |
| | | - | - | 250 | - | 8 | 8 | 16 |
| | | - | - | - | 250 | 8 | 8 | 16 |
| 12 | 300 | 300 C | - | - | - | 8 | 8 | 16 |
| | | 300 D | - | - | - | 8 | 8 | 16 |
| | | - | 300 | - | - | 8 | 8 | 16 |
| | | - | - | 300 | - | 8 | 8 | 16 |
| | | - | - | - | 315 | 8 | 8 | 16 |
| 14 | 350 | 350 C | - | - | - | 8 | 12 | 16 |
| | | 350 D | - | - | - | 8 | 12 | 16 |
| | | - | 350 | - | - | 8 | 12 | 16 |
| | | - | - | 350 | - | 8 | 12 | 16 |
| | | - | - | - | 355 | 8 | 12 | 16 |
| 16 | 400 | 400 C | - | - | - | 8 | 12 | 16 |
| | | 400 D | - | - | - | 8 | 12 | 16 |
| | | - | 400 | - | - | 8 | 12 | 16 |
| | | - | - | 400 | - | 8 | 12 | 16 |
| | | - | - | - | 400 | 8 | 12 | 16 |
| 18 | 450 | 450 C | - | - | - | 8 | 12 | 16 |
| | | 450 D | - | - | - | 8 | 12 | 16 |
| | | - | 450 | - | - | 8 | 12 | 16 |
| | | - | - | 450 | - | 8 | 12 | 16 |
| | | - | - | - | 450 | 8 | 12 | 16 |
| 20 | 500 | 500 C | - | - | - | 8 | 12 | 16 |
| | | 500 D | - | - | - | 8 | 12 | 16 |
| | | - | 500 | - | - | 8 | 12 | 16 |
| | | - | - | 500 | - | 8 | 12 | 16 |
| | | - | - | - | 500 | 8 | 12 | 16 |

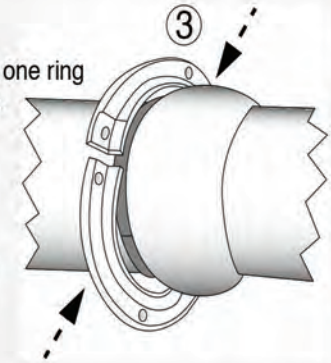
# Installing Guide for bell joint leak clamp:

**Step 1** • Check the BJLC parts to insure that no damage has occurred during transit. Clean all around the pipe and on the face of the bell where the gasket will contact. These surfaces must be free of all dirt, etc.

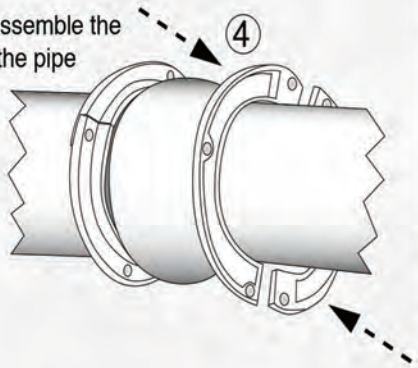
**Step 2** • Wrap the gasket around the pipe with the thick edge of the gasket toward the bell. The gasket ends should meet so that the puzzle joints interlocks, holding the ends of the gasket together. Lubricate the gasket with a suitable gasket lubricant. The joint in the gasket should be 90° from the joint in the pipe ring.



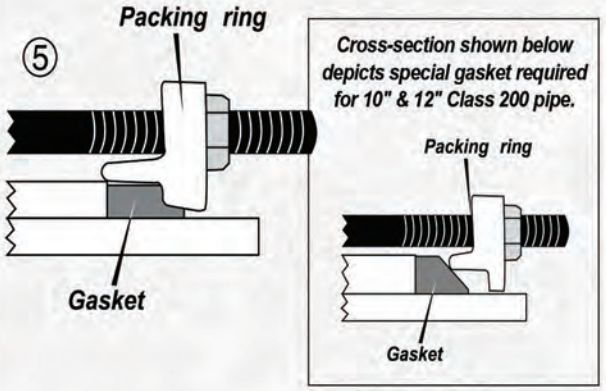

**Step 3** • Assemble one ring around the pipe, (it may be necessary to insert one bolt with nuts to hold ring segments together) push the assembled ring and gasket against the face of the pipe bell.



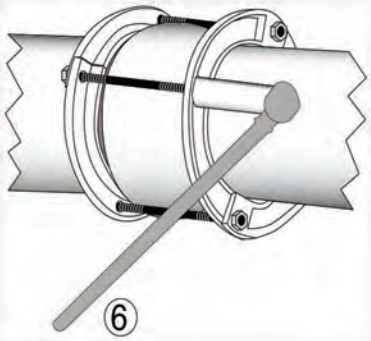

**Step 4** • Assemble the other ring around the pipe behind the bell. Insert bolts and hand tighten all nuts.10" and 12" come with flat washers.




**Step 5** • Make certain the gasket is under the packing ring as shown in the sketch.




**Step 6** • Tighten bolts evenly around the pipe in 15 ft-lbs increments.




| Nom. Pipe Size | Torque |
|---|---|
| 4"-8" | 35-45ft.-lbs. |
| 10"-12" | 50 - 60 ft-lbs |

**Note:**
45 ft-lbs. torque = 12" wrench w/45 lbs. force
60 ft-lbs. torque = 12" wrench w/60 lbs. force

For best results, wait 10 minutes and re-torque.

**Step 7** • Check for leaking. Re-tighten the bolts evenly around the pipe as necessary to stop leaking.

# STAINLESS STEEL SUMMARY OF GRADES

| Grade AISI/AST M A276 | | CHEMICAL COMPOSITION LIMITS PERCENT | | | | | | | | | | TYPICAL MECHANICAL PROPERTIES | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | C | Si | Mn | Ni | Cr | Mo | P | S | N | Yield MPa Min. | U.T.S MPa Min. | Elong'n % in 50mm Min. | Hard-ness Brinell Max. |
| 304 | Min. | - | - | - | 8.00 | 18.00 | - | - | - | - | 205 | 515 | 40 | 195 |
| | Max. | 0.08 | 1.00 | 2.00 | 11.00 | 20.00 | - | 0.045 | 0.03 | 0.10 | | | | |
| **DESCRIPTION & TYPICAL APPLICATIONS**<br>304 is a general purpose 18/8 stainless steel with good strength and good atmospheric corrosion resistance. Most versatile and widely used of the 300 series. Used for food processing, architectural trim, brewing and oil refinery equipment. | | | | | | | | | | | | | | |
| 304L | Min. | - | - | - | 8.00 | 18.00 | - | - | - | - | 170 | 485 | 30 | 195 |
| | Max. | 0.03 | 1.00 | 2.00 | 12.00 | 20.00 | - | 0.045 | 0.03 | 0.10 | | | | |
| **DESCRIPTION & TYPICAL APPLICATIONS**<br>304L is a low carbon variant of 304. It is more suitable for welding. | | | | | | | | | | | | | | |
| 316 | Min. | - | - | - | 10.00 | 16.00 | 2.00 | - | - | - | 205 | 515 | 40 | 195 |
| | Max. | 0.08 | 1.00 | 2.00 | 14.00 | 18.00 | 3.00 | 0.045 | 0.03 | 0.10 | | | | |
| **DESCRIPTION & TYPICAL APPLICATIONS**<br>An enhanced 18/8 stainless with 2-4% molybdenum for improved corrosion resistance. 316 contains higher levels of nickel and molybdenum improving its corrosion or pitting resistance values over 304. | | | | | | | | | | | | | | |
| 316L | Min. | - | - | - | 10.00 | 16.00 | 2.00 | - | - | - | 170 | 485 | 40 | 195 |
| | Max. | 0.03 | 1.00 | 2.00 | 14.00 | 18.00 | 3.00 | 0.045 | 0.03 | 0.10 | | | | |
| **DESCRIPTION & TYPICAL APPLICATIONS**<br>316L is a low carbon variant of 316. More suitable for welding. | | | | | | | | | | | | | | |

SKClamp INDUSTRIES, INC مشخصات فنی کلمپ های استیل

Note:Clamps meet the requirements of AWWAC223

MATERIALS:

**Flange**: 304 Stainless Steel Flange per AWWA C228-08. ANSI PN 10 & 16 drillings and recessed to accept tapping valve. GTAW welded to neck.

**Stainless Steel:** Meets or exceeds ASTM A 240 type 304 UNS designated S30400.

**Outlet** : Heavy gauge 304L Stainless Steel. Fused to shell by SMAW weld on the outside and GTAW weld on the inside.

**Shell** : Heavy gauge Stainless Steel top half 304L back half 304.

**Sidebars** : Heavy gauge 304 Stainless Steel, SMAW welded to form permanent usion with shell.

**Lugs** : 304 Stainless Steel, fused to sidebars by SMAW welding.

**Bolts**: 304 Stainless Steel, 4 inch clamps use 14mm rolled thread, 6 - 12 inch clamps use 16 mm rolled thread. Bolts are GMAW welded to sidebar. With PTFE coated.(xlyan 1070)

**Nuts**: Heavy hex, 304 Stainless Steel, 4 inch nominal size sleeves uses 14mm threads, 6 inch nominal size and larger sleeves uses 16mm thread. Nuts coated to PTFE.

**Washers**: 17mm 304 Stainless Steel flat washers. 17mm Plastic washer prevents galling between nut or stainless steel washer and lifter bar on all sizes.

**Armors**: Heavy gauge 304 Stainless Steel.

**Lifter Bars**: 304 Stainless Steel, lip curved to hold position while tightening. Heavy gauge serves as bearing surface for nuts.

**Gaskets**: NBR rubber compounded for water and sewer service in accordance with ASTM D 2000 MAA 610.
Specially designed grid pattern and tapered ends to assure seal around full circumference of pipe. Reinforced ring atoutlet provides hydrodynamic seal. Other compounds available for petroleum or high temperature service, or otherspecial applications.

WELDS: GMAW and GTAW weld processes. 308L Stainless Steel filler wire used as appropriate. All welds fully passivated for enhanced corrosion resistance.

Pressure When properly installed, the SKclamp Style Clamps can work at these pressures ratings:

| Pipe Size | Working Pressure | Test Pressure |
|---|---|---|
| 2"-8" | 12 PN | 16 PN |
| 8" - 24" | 10 PN | 12 PN |

سیال کاران

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