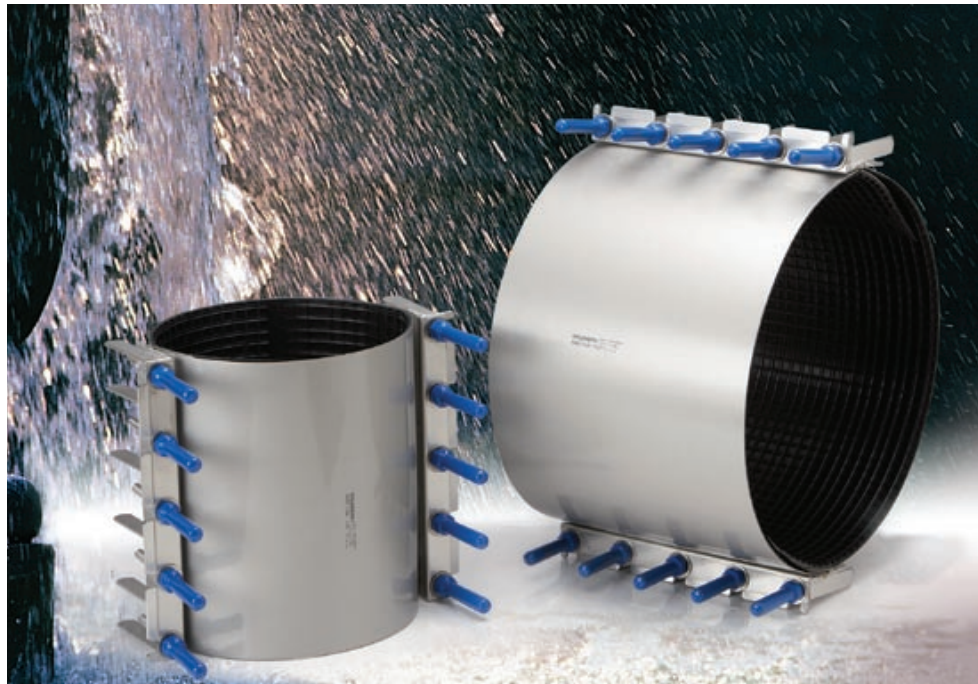


Stainless steel repair clamps for permanent repairs onto most pipe types and sizes. Manufactured in accordance with AS 4181. DN 200 – DN 450.

WANG Repair Clamps – Double-part

- Simple to install.
- Fully constructed from 316 stainless steel for high corrosion protection.
- Full-circle nitrile rubber gasket.
- Each clamp fits a number of pipe diameters.
- Can be installed on a pressurized main.
- Able to adapt to pipe irregularities or ovality.
- Fully passivated.
- Supplied with plastic thread protectors.
- Sharp surfaces finished to avoid harm to installer.
- Minimum downtime to affected mains.
- Molybond coated fasteners to prevent galling.
- Available for most pipe types and sizes.
- Dispatched with installation instructions.
- Manufactured in accordance with ISO 9001 quality standards.



General applications

The *Wang* Stainless Steel Double-part Repair Clamp offers the advantage of greater size range over single-part clamps. It provides a permanent repair to most damaged pipes, with holes, cracks and breaks. Each clamp has the capability to fit a wide variety of types and classes of pipe, so reducing stock requirements. Use of quality materials and superior clamp design allows application onto high pressure pipelines and non-pressure pipelines in a variety of industries.

Technical data

Size Range: DN 200 - DN 450
Brochures for Single-part and Multi-part repair clamps also available.

Maximum Operating Pressure: 1600 kPa.

Temperature Range: -10°C to 60°C.

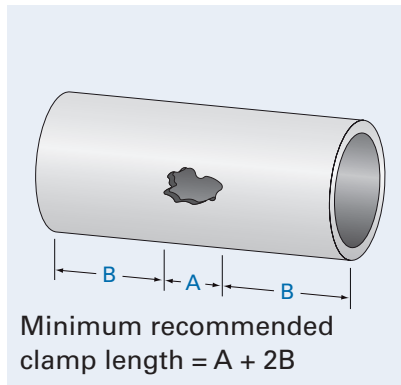
Relevant Standards: AS 4181.

Note. *Wang* repair clamps do not provide axial restraint.

Selecting the repair clamp length

When repairing a damaged pipe, it is important to consider the extent of the pipe damage and the most suitable clamp length for the purpose. It is important that there is sufficient gasket contact between the edge of the damage and the end of the clamp.

The following table gives a guide to selecting the clamp of recommended length, where 'B' is the minimum sealing width between damaged area and the end of the clamp.



Recommended seal length. B

Nom. dia. DN	Min. seal length B. mm
200	65
225 - 300	100
350 - 450	150

AS 4181 minimum clamp lengths

Nom. dia. DN	Length mm
200	200
225 - 300	300
350 - 450	400

Top Number = Clamp Size
(Start of OD Range)

Bottom Number = Pipe OD. mm

WANG double part repair clamp sizes for pressure pipe

Nom. size DN	DACL AS/NZS 2280	Steel	UPVC		ABS		Hobas AS 3571	Copper AS 1432
		MSCL AS 1579	Series 1 AS/NZ S1477	Series 2 AS/NZS 4441	Series 1 AS 3518	Series 2 AS 3518		
200	-215 232mm	-215 218mm	-215 225mm	-215 232mm	-215 225mm	-215 232mm	-215 232mm	N/A 203mm
225	-250 259mm	-250 250mm	-250	-250 259mm	-250 250mm	-250 259mm	-250 259mm	-215 229mm
250	-270 286mm	-270 273mm	-270 280mm	-270 286mm		-270 286mm	-270 286mm	
300	-330 345mm	-310 324mm	-310 315mm	-330 345mm	-310 315mm	-330 345mm	-330 345mm	
350		-350 355mm	-350 355mm		-350 355mm		-390 399mm	
375	-410 426mm	-400 406mm	-400 400mm	-410 426mm	-400 400mm	-410 426mm	-410 426mm	
400		-450 457mm	-450 450mm		-450 450mm		-450 450mm	
450	-490 507mm	-490 508mm	-490 500mm	-490 507mm	-490 507mm	-490 507mm	-490 507mm	

Standard clamp data

Nom. size <i>DN</i>	Standard clamp lengths	No. of studs	Stud No. code	No. of parts code	Clamp length code	Stud size	OD range <i>mm</i>
200 - 450	400	10	K10	B	D	M16	20
300 - 450	600	14	K14	B	F	M16	20



CICL		Asbestos		RC	PE
B <i>AS 1724</i>	C <i>AS 2544</i>	AB <i>AS 1711</i>	CD <i>AS 1711</i>	<i>AS 4058</i>	Actual OD <i>AS/NZS 4130</i>
215 <i>232mm</i>	-215 <i>232mm</i>	-215 <i>232mm</i>	-215 <i>232mm</i>		-215 <i>225mm</i>
-250 <i>259mm</i>	-250 <i>259mm</i>	-250 <i>259mm</i>	-250 <i>259mm</i>	-270 <i>279mm</i>	-250 <i>250mm</i>
-270 <i>286mm</i>	-270 <i>286mm</i>	-270 <i>286mm</i>	-270 <i>286mm</i>		-270 <i>280mm</i>
-330 <i>334mm</i>	-330 <i>345mm</i>	-330 <i>334mm</i>	-330 <i>345mm</i>	-350 <i>362mm</i>	-310 <i>315mm</i>
					350 <i>355mm</i>
-410 <i>413mm</i>	-410 <i>426mm</i>	-410 <i>413mm</i>	-410 <i>426mm</i>	-440 <i>445mm</i>	-400 <i>400mm</i>
					-450 <i>450mm</i>
-490 <i>492mm</i>	-490 <i>507mm</i>	-490 <i>492mm</i>	-490 <i>507mm</i>	N/A <i>533mm</i>	

WANG double part repair clamp typical specifying sequence

Example 1	K	10	-	350	B	D
K	= Clamp code					
10	= Number of studs <i>Refer to Standard Clamp Data Table on page 3</i>					
-	= Delineator					
350	= Clamp size – start of OD range <i>Refer to Clamp Size Table on page 2</i>					
B	= Number of parts – <i>double part clamp</i>					
C	= Clamp length. mm A = 150 / B = 200 / C = 300 / D = 400 / F = 600					

Note. This specifying sequence is not to be used to construct a clamp of your own configuration, it must comply with the standard range as listed.

Example 2

You require a clamp to repair a DN350 UPVC Series 1 pipe with a 90mm hole.

1 Determine the minimum required clamp length.

$$\begin{aligned} \text{Minimum clamp length} &= A + 2B \\ &= 90 + (2 \times 150) \\ &= 390\text{mm} \end{aligned}$$

where

A = damaged dimension

B = recommended sealing length (refer to table)

2 Find standard available clamp length.

From the Standard Clamp Data Table select the clamp length for the required pipe diameter (DN 350) that is equal to or greater than the above minimum clamp length that you calculate above.

$$\text{DN } 300 - 450 = 400\text{mm}$$

This also gives you the required clamp code and number of studs.

Code = K10

The number of parts code = B

The clamp length code = D

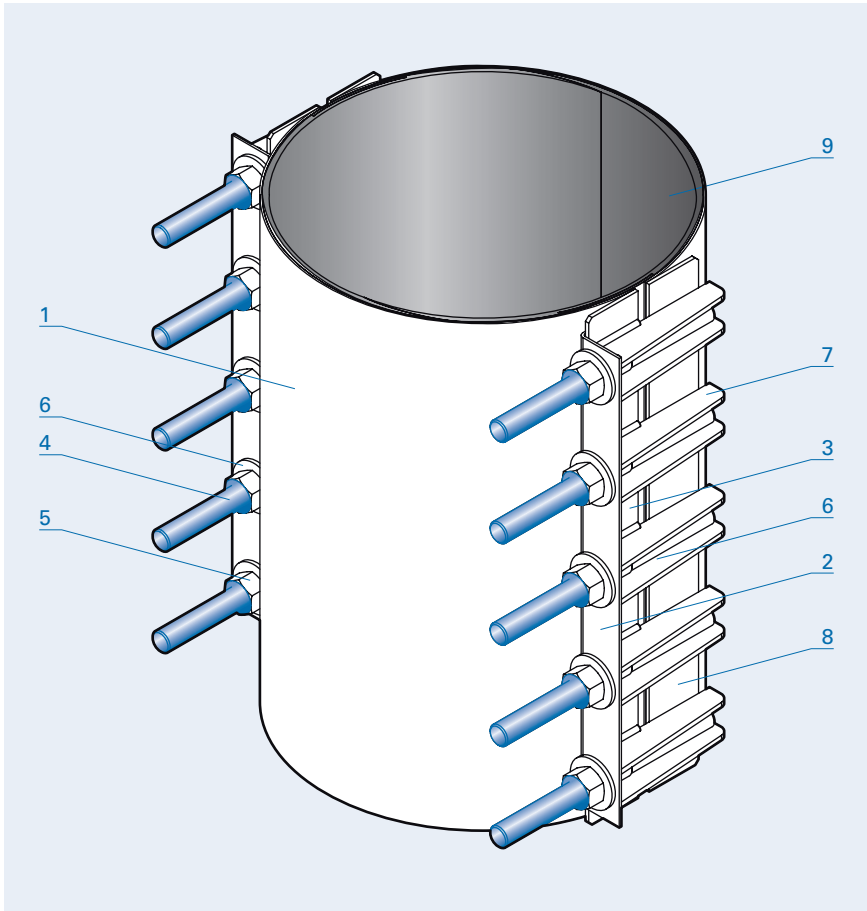
3 Determine the clamp size.

From the clamp selection table find the intersection of DN 350 pipe and UPVC Series 1 pipe.

Starting size = -350

Pipe OD = 355mm

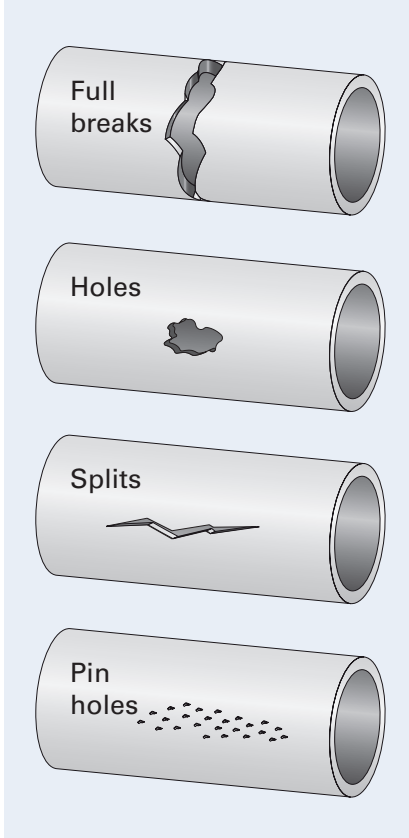
Therefore the clamp ordering code would be: K10-350BD



WANG
double part
repair clamp
parts list

No.	Description / Material / Standard
1	Skin 316 Stainless Steel ASTM A240M
2	Locking Plate 316 Stainless Steel ASTM A240M
3	Bridge Plate 316 Stainless Steel bonded to gasket ASTM A240M
4	Studs 316 Stainless Steel – Molybond coated ASTM A276
5	Nuts 316 Stainless Steel – Molybond coated AS 1112.1
6	Washers 316 Stainless Steel ISO 7089
7	Lugs 316 Stainless Steel ASTM A276
8	Flat Bars 316 Stainless Steel ASTM A276
9	Sealing Gasket Full-circle Nitrile (NBR) Compound AS 1646 and AS/NZS 4020

WANG double part repair clamp typical applications



Note. The pressure that a repair clamp can contain is affected by the torque applied to the studs, the uniformity of stud tightening, the type and extent of pipe damage, the surface condition of the pipe, environmental conditions and installation workmanship.
A tension wrench is recommended for proper installation.

WANG Clamps and Couplings

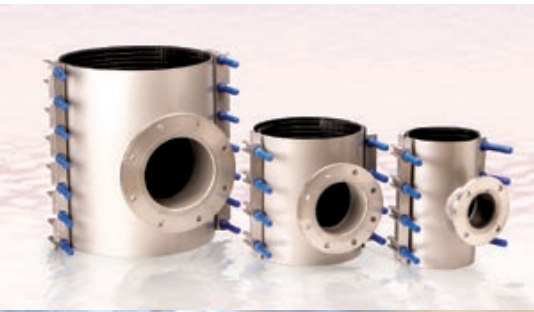
Tyco Water *Wang Components* is one of the leading suppliers of Grade 316 Stainless Steel Repair and Tapped Clamps as well as Couplings for reticulated water, sewerage and gas distribution mains including industrial piping systems.

As part of the Tyco Water business, *Wang Components* products have become synonymous with quality and reliability. Our product range is widely utilised and relied upon by Water Authorities and Councils throughout

Australia in the installation and maintenance of their supply mains and reticulation network.

Wang Components products are Australian made and can be sourced through the Tyco Water national sales and service network of customer centres.

Tyco Water is a specialist in integrated solutions for all your water and wastewater pipeline system requirements.



◀ Flanged Offtake Clamp

A cost effective means of achieving a 'T' connection or under pressure tapping. DN 100 - DN 900

KWIK Clamp ▶

A full circle repair clamp for small bore galvanised steel, copper and PVC pipe. DN 15 - DN 50



◀ Sewer OB Junction Clamp

A quick method of installing a new property service connection on a sewer main. DN 100 - DN 450

Repair Clamp ▶

A fast, permanent and economical repair solution for most pipe types and sizes. DN 50 - DN 1200



◀ Socket Joint Leak Clamp

Provides a permanent and economical seal over a leaking socket-spigot joint. DN 80 - DN 1200

Tapped Clamp ▶

A reliable means of tapping into old, unstable or damaged pipe. DN 50 - DN 1200



◀ Vari-Gib Coupling

Designed to provide a mechanical joint between similar or dissimilar pipes. DN 50 - DN 1200

Tapping Saddle – Rigid pipe ▶

Variable OD stainless steel saddle for tapping into rigid pipe. DN 40 - DN 450

