

ANDRONACO ^{s.a.s.}

www.AndronacoSAS.com

Pipe Clamp



Pipe Repair Clamps Full Circle

- Andronaco S.A.S. repair clamps are highly flexible clamps made of one or several stainless steel bands with lugs. Bolts and nuts mounted on these lugs allow installation of the clamp on damaged pipes.
- Beveled at the ends with a vulcanized bridge plate, the inner gasket ensures maximum tightness all around the pipe as well as guaranteeing a good distribution of the lugs' compression force.
- Andronaco S.A.S. are easy to repair and do not require any specific tool. Repairs are effective and permanent once the clamp is set on the pipe and correctly positioned on the part to be repaired with its bolts tightened.
- The Andronaco S.A.S. clamp offers a quick and efficient repair, as well as a cost-saving, long-term solution.

Advantages from using Full Circle clamps :

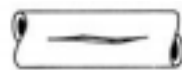
- Minimizes Repair Time: Just one operator equipped with a wrench can quickly install the clamp, with no need to completely stop the line supply. This avoids the risk of contaminating the distributed fluid.
- Minimizing Stock Quantities : Each clamp can be used for all pipe diameters included in its range of tolerance.
- Full Circle, F22 range from 98 to 108mm.
- Minimizing Cost of Repair : Only the damaged part needs repair, which can also be performed underwater. The repair is permanent.
- Easy to Use : With no need for special tools, the clamp repairs can be performed by just one operator. The Full Circle is also lighter than traditional ductile iron clamps.



Full break – In or Out of Alignment



Straight



Cracks



Reduction








Pinholes



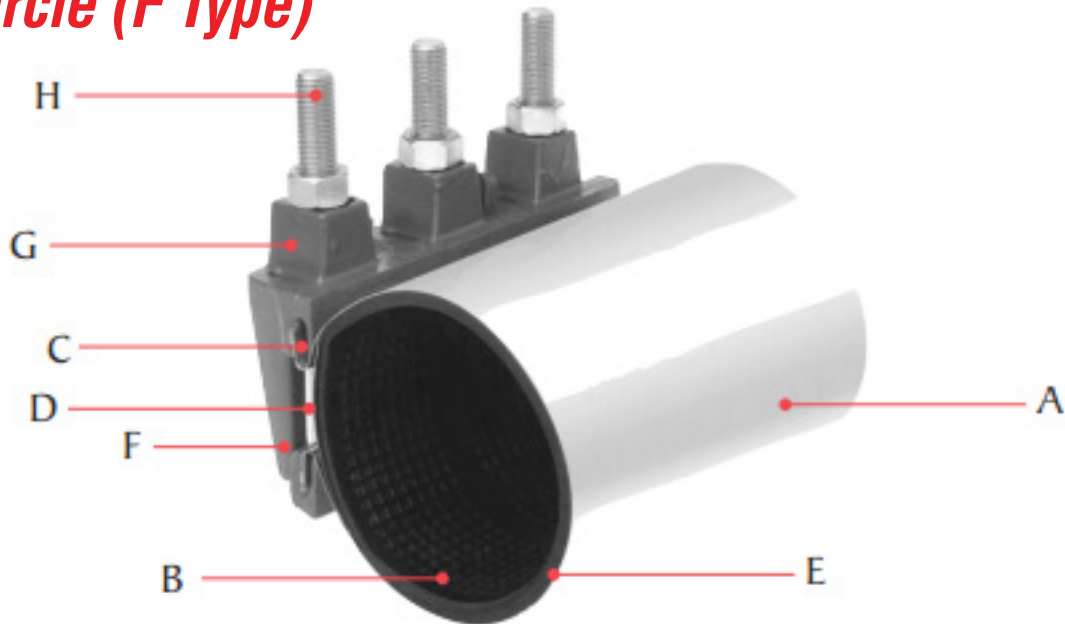
Tapping Sleeves

Manufacturing Program

Damage Products	Full Break	Leaks and Cracks	Cracks on connection	Straight	Reduction	Tapping Sleeves
F-Type 	Nominal diameter : 40 a 900 mm		Nominal diameter: 40 a 900 mm			
R-Type 		Nominal diameter: 20 a 400 mm				
RF-Type 			Nominal diameter: 20 a 200 mm			
FO-Type 			Nominal diameter: 40 a 900 mm			
FB-Type 	Nominal diameter A: Nominal diameter B: (consult us for other dimensions)					
	(A<)1,08B					

The pressure that a repair clamp will withstand depends on the diameter of the pipe, length of clamps, torque applied to the bolts, and service conditions (temperature, etc.)

Full Circle (F Type)

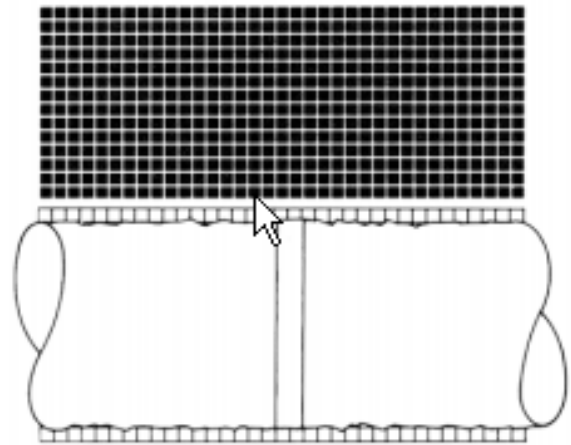


- A** Full circumference single or multiple section stainless steel bands available in 127, 190, 254, 318, 381, 508 and 762 mm width.
- B** A fine gripped gasket provides a continuous and uniform seal over the clamp range, even on irregular surfaces.
- C** The band locking system uses a unique lug core design as well as a band hemming process that resists pull-out and provides maximum band retention.
- D** The stainless steel bridge plate, flush-mounted into the gasket, provides 100% uniform gasket pressure and prevents any gasket extrusion while under pressure.
- E** A permanent adhesive ensures that the gasket bonds to the steel band, even after removing it to adjust or replace it.
- F** Long fingered lugs ensure proper bolt alignment and a higher acceptable torque without deformation of the bolts.
- G** Computer designed ductile iron lugs are not only stronger but also lighter, and easier to install.
- H** M16 bolting is available in standard, galvanized steel, or stainless steel versions. The unique square shape under the screw head prevents the bolt from rotating during tightening. Bolting is mounted to be interdependent with lugs.

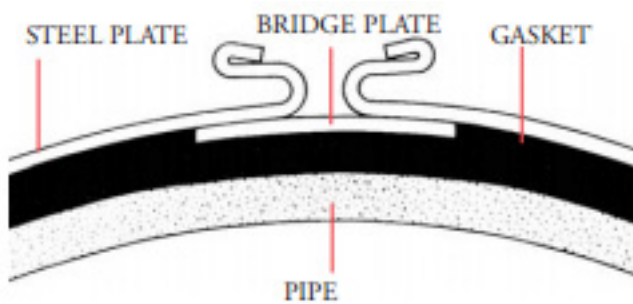
Full Circle (F Type)



The band locking system allows fast run-down of nuts against the clamp, while equalizing tension along the full length of the clamp.



Finely gridded gasket – 16 grids by square inch forms a series of dams to conform to irregularities on the pipe surface, and seals effectively against the roughness of pitted surfaces to prevent development of a leak path.



Bridge plates are precision set, flush mounted and securely bonded into the gasket during the molding operation. This provides a smooth surface which ensures 100% encirclement of uniform gasket pressure. This provides a dependable sealing method.

UNIFORM DISTRIBUTION OF GASKET PRESSURE OVER ENTIRE CIRCUMFERENCE OF PIPE

- NBR** - For potable water, gas and oil products.
Temperatures from -40°C to 100°C.
- VITON** - For acids, ammonia, etc.
Temperatures from -40°C to 200°C.

Full Circle (F Type)

Full Circle with Tapped Outlets :

- Full Circle Clamps with tapped outlets in stainless steel 304 combine the technical features of the standard Full Circle and RediClamp.
- The Full Circle Clamp with tapped outlets repairs the damaged pipe, and allows it to maintain the original location of its connection, thereby minimizing costs of intervention.
- The use of the Full Circle Clamp with tapped outlets consolidates the entire pipe, transferring the efforts of the connected pipe onto a new part designed to accept very high forces, without the risk of over-charging the old pipe.

Always use a repair clamp where the diameter is twice the tapped outlet diameter.

Full Circle with Tapping Sleeves :

- Gasket in NBR suitable for potable water.
- 304 stainless steel band.
- Cast iron GS lugs.
- M16 bolts and nuts.

Full Circle clamps with tapping sleeves minimize :

- 1.** Installation time – one operator can make the connection without a specific tool.
- 2.** Stock – one tapping sleeve can be used on a diameter range from 20mm to 100mm without changing the lower part of the tapping sleeve.
- 3.** Pollution – connection under pressure eliminates risk of pollution.
- 4.** Cost – no need to purge the network, no loss of water.

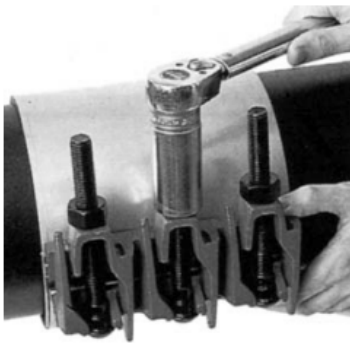
Anchoring is not required. Thanks to their flexibility, stainless steel bands fit all types and sizes of pipes.

Full Circle (F Type)

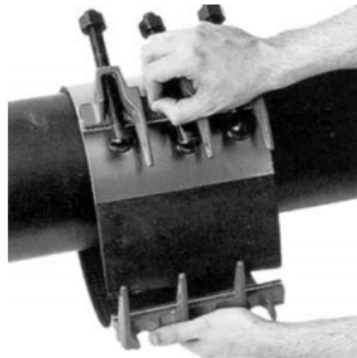
Installation Procedure :



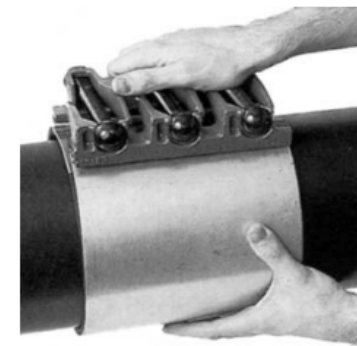
1. Thoroughly clean the pipe where the clamp will be installed. If possible, place a reference mark on the pipe at a measured distance from the center of the damaged area.



2. Place the clamp around the pipe, centered over the damaged area, with the gasket flap on top.



3. Tuck the gasket flap in place and mesh the lug fingers. Set the centermost bolt in place and tighten finger-tight.
Note: the clamp may be assembled beside the damaged area and slid into position, if the pipe surface is wet or has been lubricated.



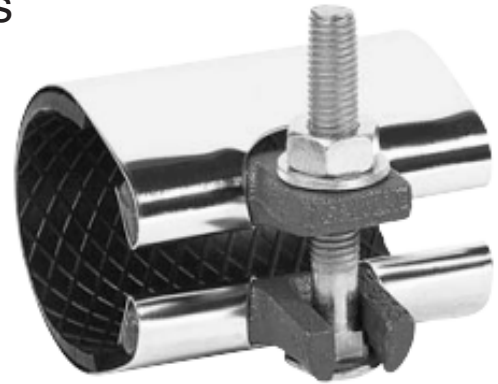
4. Rotate the clamp according to the arrow, placing the center bolt over the damaged area (check its position according to the reference mark). Tighten the bolts, working from the center outward. Completely tightening the center bolt will usually stop or sufficiently minimize the leakage, making completion of installation easier.

RediClamp (R Type)

The RediClamp is ideal for repairing leaks in pipes (pin-holes, punctures or splits).

Material Specification :

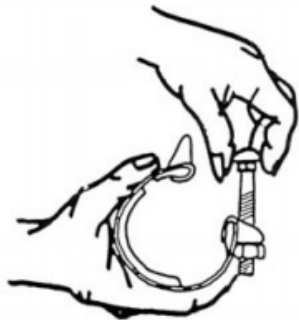
- Bands : Stainless steel 304.
- Lugs : Ductile iron AFNOR 400-12.
- Bolts & nuts : Electro galvanized steel 4/6
- Gasket : Stainless steel 18/8 upon, request
- Gasket : NBR gasket



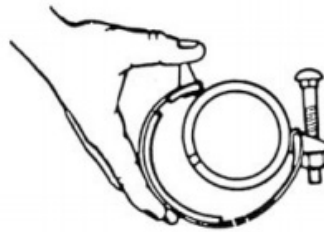
Principle :

- Precision-cast ductile iron lugs with a contoured surface equalize clamping pressure around the pipe.
- The lug design includes a drop-in bolt feature that eliminates loose parts, saves time and helps installation under difficult conditions.
- RediClamps are available in the following lengths : 76, 152, 228, 304 mm.

Installation Instructions:



1



2



3

- 1 – Clean the pipe if possible. Put the RediClamp in place.
- 2 – Slide it on the damaged part.
- 3 – Tighten the bolt. This should be done under pressure, without interrupting the supply.

RediClamp Full Circle (RF Type)

RediClamp Full Circle allows a quick and efficient connection, especially in case of cracks on pipe connections.

Material specification :

- **Bands :** Stainless steel 304.
- **Lugs :** Ductile iron AFNOR 400-12.
- **Bolts & Nuts :** Electro galvanized steel 4/6
Stainless steel 18/8 upon request
- **Gasket :** NBR gasket

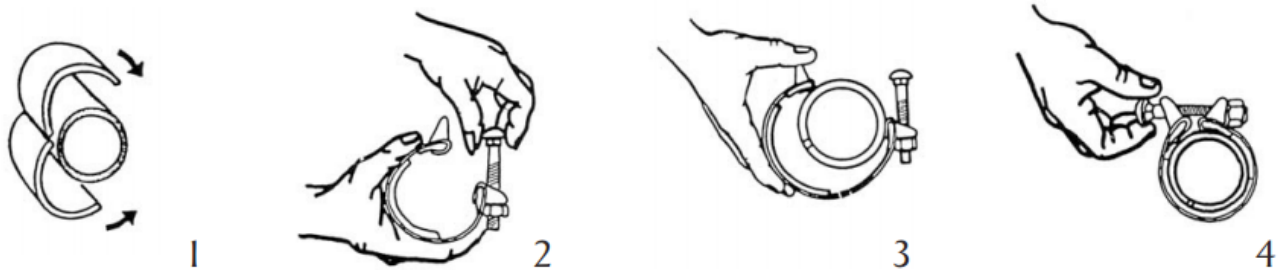


Principle :

Two types :

- 1 – Butt sealing for steel pipes from ND 15 to ND 50mm.
- 2 – Tapered and lapped gasket sealing from all pipes from ND 50 to 200mm.

Installation Instructions :



- 1 – Clean the pipe if possible.
- 2 – Install the RediClamp Full Circle gasket.
- 3 – Slide it on the damaged part.
- 4 – Tighten the bolt. This should be done under pressure, without interrupting the supply.

Recommended Use

Special Instructions :

Cracks or breaks – With deflection – can be repaired with a Full Circle clamp coupling. The best method is to use a 10" or longer clamp with a multiple section lug. Align the joint in the lug sections with the break. The clamp will then articulate to conform to the deflection.

When a gap between the ends of the pipe is 1 inch or greater a short section of pipe should be put in the opening with a thin strip of sheet metal wrapped around it to provide support to the gasket.

When a section of pipe wall equal to 40% or more of the pipe circumference is broken away, a section of sheet metal should be placed over the opening to provide a sealing surface for the gasket.

Full Circle clamp coupling wider than the 30" widths listed in the catalogue are available on special order. If the damage is extensive enough to require a clamp wider than 30", the feasibility and economics of replacing the damaged section with a new pipe using a flexible coupling rather than repairing it should be considered.

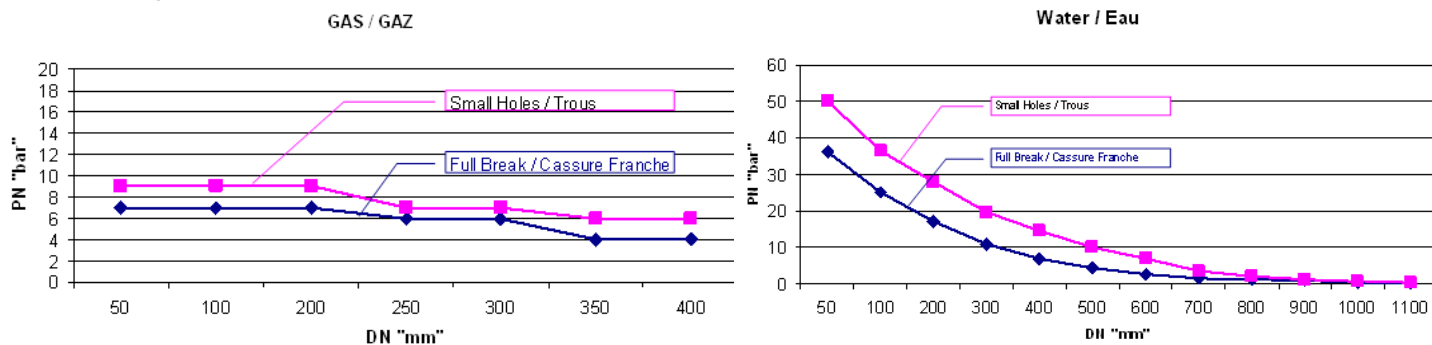
Warranty :

ANDRONACO SAS warrants its products only against defects in materials and workmanship.

ANDRONACO SAS liability and customer's exclusive remedy under this warranty or any warranty extends for a period of one (1) year from the date of ANDRONACO SAS shipment and is expressly limited to repayment of the purchase price, repair, or replacement, at option, during said period, upon proof satisfactory to ANDRONACO SAS and upon customer's returning and prepaying all charges on such products to factory or warehouse designated by ANDRONACO SAS.

THIS WARRANTY IS MADE EXPRESSLY IN LIEU OF ALL OTHER WARRANTIES, EXPRESS, OR STATUTORY, WITH RESPECT TO QUALITY, MERCHANTABILITY, OR FITNESS FOR A PARTICULAR PURPOSE.

Allowable pressure :



These values refer to tests carried out in a laboratory, under specific conditions. They are given as an indication.

REMEMBER THAT PROPER ANCHORING IS VITAL TO A WELL-OPERATING PIPE SYSTEM

Recommended Use

IMPORTANT:

This pipe O.D. guide is included for your convenience and is based on the latest pipe standards and information supplied by pipe manufacturers. Due to occasional changes in outside diameters by pipe manufacturers, the pipe O.D. or circumference should always be checked and given when ordering repair clamps.

ND (mm)	PVC PE	Steel		Cast Iron GS	Cast Iron Frise	Fiber Reinforced - AC					Uralita Type B&C	
		ISO	DIN			Class 5	Class 10	Class 15	Class 20	Class 25		
15		21.3										
20		26.9										
25		33.5										
32		42.4										
40		48.3		55	54							
50	50	60.3	57	66	68	70						
60	63			76								
65	75	76		80								
80	90	88.9		98	95	98-100	96-98	96-98	98	100	98	
100	107-110	114.3	108	118	122	118-120	118	118	120	126	118	
125	125-140	139.7	133	144	148	143-145	145	145	149	153	143-145	
150	160-180	168.3	159	170	174	168-170	170	174	176	184	170-174	
175			186	197	202							197-174
200	200-225	219	211	222	228	232	250	232-238	238-244	215	224-233	
225				248	257					246		
250	250-280	273		274	284	274-278	270-274	280	288	306	280-284	
300	315	323.9	318	326	337	328-333	324-334	334	346	368	334-340	
350	355		365	378		380-387	378-390	390	404		388-398	
400	400	406.4	416	429	444	432-467	432-446	446	460		442-454	
450	450					484-490	486-500	502	518		496-510	
500	500	508	506	532	548	540-542	540	558	574		550-568	
550	560											
600	630		606	632	658	648-650	648-668	668	690		660-680	
650												
700	710			735	768	754-758	756-780	780	806		770-784	
750												
800	800			842		860-866	864-890	876	920		880-896	
850												
900				945		968-974	956-1002	972	1036		990-1008	

Test Bench

Andronaco SAS pipe repair clamps boast tightness and durability proven through years of use. A test bench has been developed to show this quality.

Beginning of the test...

- Angular Misalignment: -2°
- Linear Misalignment: -5 mm

...Step by step increase until :

- Angular Misalignment: -5°
- Linear Misalignment: -30 mm

Repair clamps under a 30 bar pressure remain tight during the test.



The repair clamps' elasticity provides an excellent tightness capacity, enabling the pipe to move without creating a weak area, which would lead to another break. A manufacturing patent confers on its originality.

Demand THE ORIGINAL!

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