







Dear Reader,

You are looking at the documentation of Tracon international. In this documentation you find the technical information of our products.

COMPANY

Since the late 1980's Tracon International B.V. is active on the international market as manufacturer of high quality stainless steel repair products. In this period we have build up a great deal of (technical) expertise and experience. This experience we not only used within our production, but also to develop new kind of products and finding solutions for specific repair problems.

PRODUCT

Each repair clamp is entirely made out of stainless steel (AISI 304 or AISI316) and all parts are

automatically welded to obtain a constant high quality. Within each repair clamp the diameter range is pressed in, meaning no confusion and even after many years in the ground, clearly visible. Furthermore, we use a NBR (or optional EPDM) gasket inside, proper for gas as well as (drinking) water usage. The gasket has tapered ends and a waffle profile providing an optimum sealing. This way the repair clamps can withstand a working pressure of up to PN16 (water) and PN4 (gas).

Finally, during the production process we constantly check the materials and before dispatch all the repair clamps are individually checked, cleaned and if required labelled.

SUPPORT

we can support you by sending documentation and give you technical assistance. It is also possible to put your company logo on the labels and mounting sheet for the repair clamps, tapping tees and other products.

Please enjoy our documentation. If you have any further questions, we are always at your disposal.

Kind regards,

Tracon International BV



TRACON STANDARD STAINLESS STEEL REPAIR PRODUCT RANGE



-TS-Stainless steel repair clamp

Used for emergency and permanent repair of breaks, pitting, cracks and holes in pipes. This type of repair clamp can be offered in many variations. Pending the pipe diameter and the tolerance these clamps are available in one, two or three sections. paq. 1



Stainless steel repair clamp -NG-This repair clamp has cast stainless steel lugs and can be used as plain repair clamp as well as service connection. Available in one and two section repair clamps. pag. 2



Stainless steel repair clamp -BAS-This repair clamp is a stripped down version of the Standard (STA) repair clamp. This means that only the necessary parts are on this clamp. All other parts and cost increasing actions are removed. pag. 3



Stainless steel "C" repair clamp -TC-This repair clamp is only partially covered with a NBR or EPDM gasket, suitable for repairing small holes in water pipelines. It is available in one and two sections. paq. 3



Stainless steel "HEA" Clamp -HEA-If you come across a space problem while installing the clamp. the HEA. Clamp is the solution. Because of its removable closing mechanism you only need 10 mm of free space to install the clamp. paq. 3



Stainless steel snap clamp -T0-This repair clamp is suitable for repairing small holes in water pipelines. Because of its construction, this type can only be used on the smaller pipe sizes. pag. 4



Stainless steel service connection -TG-Suitable for making service connections. It is possible to supply an extensive range of outlets, for instance, BSP, BSO and BSD outlets. Available in one, two and three sections. paq. 5



Saddle with threaded outlet

The saddle and strap are complete made out of stainless steel AISI 304. Standard, the bolts are directed upwards. The strap is 60 mm. wide with a thickness of 1,5 mm. pag. 6















-TT-Stainless steel tapping sleeve

Because of its light-weight and easy installation it is extremely useful to make flange connections on pipes, even under pressure. Available in two or three sections. pag. 7



PE Insert

-TI-

This product is used as insert for PE pipe material. The range of the stainless steel inserts starts at 50 mm. up to 355 mm. Available in the lengths 100, 120 and 200 mm. pending the diameter. paq. 9

Restrain clamp

-TR-

This stainless steel clamp is used for giving extra strength to a pipe connection. Available in all different diameters. pag. 10



Saddle strap

Stainless steel saddle straps are available in all different widths, strengths and lengths. With sidebars, bolts or nuts. All costom made. Additional information available upon request.

Emergency repair boxes

The Emergency repair boxes are available in three different editions. The EMSA S is used for repairs between OD. 60 - 170mm. The EMSA L is used for repairs between OD. 48 - 359mm and the EMSA XL is for repairs between OD. 213 and 669mm. pag. 11

High Pressure Clamp

This repair clamp is suitable for repairing large sized pipes (up to DN 4000.) or for high pressure repairs (up to PN25). It can also be used as coupling between pipes of the same size (max open space pag. 14 15mm).

Drilling Machines & Additional

Drilling Machines are designed for under pressure drilling with a maximum working pressure of 16 bar. Suitable for drilling ND 65 to ND 200. Available in 3 sizes. paq. 15

SMARTGRIP THE FUTURE STANDARD!

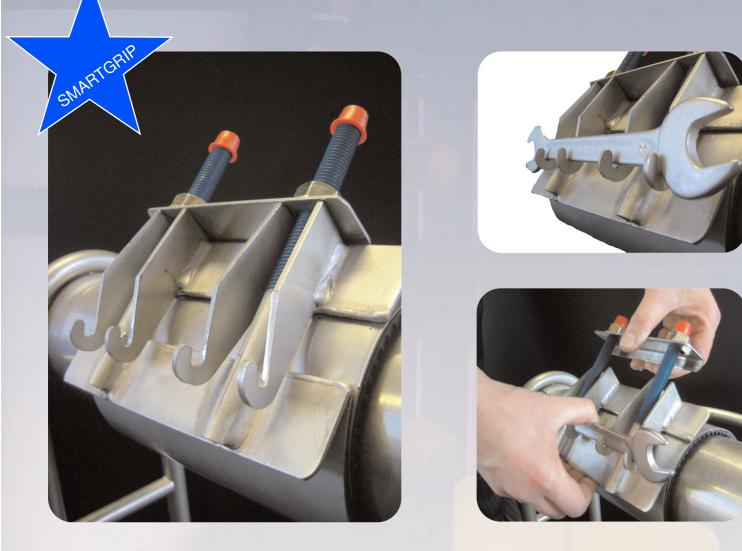
An often heard problem with repair clamps is that it is not always easy to install them around a pipe. Numerous suppliers have been struggling with this issue for a long time and came up with several idea's, but always resulting in price increases and/or quality loss.

Now we can present you with our latest development, that will make installing the clamp not only a lot easier but will do so without any price increases or compromising on quality.

We like to call this solution "the SmartGrip System"

This system will be the new standard for the upcoming decade. Even imagine the advantage it will give you on your competitors.

Please check www.smartgrip.eu for more information or simply contact us.



Tacon International BV - Bossekamp 12 - 5301 LZ Zaltbommel - Tel: +31 418 84 00 03 - Fax: +31 418 84 00 04 - www.traconinternational.com

TRACON STANDARD RANGE OF STAINLESS STEEL REPAIR PRODUCTS

- 100% stainless steel (AISI 304 or AISI 316) repair clamp are proper for emergency and permanent repair of broken, cracked or pitted pipes;
- Stainless steel is light in weight and therefore easy to install. An all stainless steel repair clamp is around half the weight of a conventional cast iron clamp;
- In terms of corrosion resistance, stainless steel is the best material available today from which to construct repair clamps;
- There are less bolts and nuts on an all stainless steel repair clamp, because the components are stronger than those produced in iron;
- The bolts are fixed to the clamp by welding, so the only moving part is the lifter bar. At no time during assembly it is necessary to remove any of the component parts of the clamp, eliminating the risk of dropping bits into the sand;
- All welding takes place by robot to ensure consistent precision and optimum quality;
- The bolts can be P.T.F.E. coated to ensure free running for life;
- No sharp edges, preventing injuries when mounting;
 - Diameter range is stamped in the plate to still be visible after many years in the ground;
- Yellow passivated nuts;
- Repair clamps are passivated to obtain high corrosion resistance;
- NBR gasket (DVGW approved according DIN 3535/3 (gas) and for water KTW approved) with waffle structure and tapered ends;
- Gasket is silicone sprayed for easier installation;
- Every week tests are carried out to ensure quality;
- All repair clamps are individually inspected by hand before packed;
- Can be packed in solid cardboard box.

Cracks or full breaks in AC and iron pipes. pipes. plastic pipes. Splits in AC, iron, steel and

Pinholes in pitted iron and steel

Holes in AC, iron, steel and

plastic pipes.



Pulled ferrules.

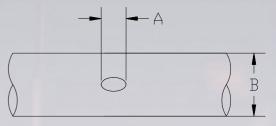
Pipe ends with slight separation.

Pipe-ends slightly deflected.

up till 2 degrees

Pipe-ends slightly misaligned.

When calculating the length of the repair clamp you have to add up the size -A- with the nominal diameter of the pipe -B-. For PVC and HPE you have to add 50% to this total. If possible we advise to use an insert for PE pipes.



working range	One Section	Two Section	Three Section
20 - 87	Х		
88 - 269	Х	Х	
270 - 350	Х	Х	Х
351 - 835		Х	Х
836 - 970			Х

The more sections a clamp has, the bigger the range of pipe-diameters it can be used on. Where pipes in the ground are known, one section repair clamp may be sufficient. If the sizes are not known or clearly recorded, clamps which exist of more sections, will provide more stocking flexibility, as they cover a larger range of sizes they can repair per piece. At extremely large pipe sizes it is even possible to produce 4 to 9 sections repair clamps.

ICULATING

SECTIONS OF A REPAIR

CALMP

THE LENGTH

Used for emergency and permanent repair of breaks, pitting, cracks and holes in pipes. This type of repair clamp can be offered in many variations. Pending the pipe diameter and the tolerance these clamps are available in one, two or three sections.

SPECIFICATIONS:

Thread protection caps	- Plastic caps to protect the thread.
Bolts	 Stainless steel AISI 304 (A2); Dimensions depend on diameter. M12, M14 or M16 (metric thread according DIN267). Thread is PTFE (Telfon[™]) coated to ensure free running.
Lifterbar	- Stainless steel AISI 304 (A2). L shaped. Lips hold bolts in position while tightening.
Nuts	- Stainless steel AISI 304 (A2). Size M12, M14 or M16 according DIN934. Extra yellow passivated to optimize free running.
Washer	- Stainless steel AISI 304 (A2). Size M12, M14 or M16.
Body Shell	- Stainless steel AISI 304 (A2)
Armour plate	- Vulcanised into the gasket for all standard clamps Stainless steel AISI 304.
Gasket	 NBR gasket, proper for both gas and water purposes. It has a waffle structure and tapered ends. EPDM or Viton gaskets are optional.
Sidebar	- Stainless steel AISI 304
Guide finger	- Stainless steel AISI 304, Guide fingers keep the bolts in position.
Additional	 After welding all stainless steel parts are passivated to obtain a high corrosion resistance. Further to the above mentioned technical specifications; products are also available in AISI 316/316L quality.

WORKING PRESSURE:

One section repairclamp		Two section	Two section repairclamp			Three section repairclamp		
	WATER	GAS		WATER	GAS		WATER	GAS
20 - 95	20	5	88 - 282	16	4	270 - 460	10	3
106 - 219	16	4	295 - 510	10	3	475 - 630	6	2
237 - 350	10	3	520 - 625	6	-	702 - 780	4	-
			705 - 755	4	-	813 - 970	2	

All mentioned working pressures on all our documents are only valid in optimum circumstances and based on document 2009.04.24.PRES-N002. please contact us for a copy of this document. Tracon International BV reserves the right to vary specifications or delete models from the range without prior notice. Tracon International BV takes no responsibility for printing errors.

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PAIR CLAM

ш £

2

NDA

STAN









WELDING







Tracon breaks new grounds with the innovation of the NG repair clamp is equipped with **cast stainless steel (A2) lugs**. This exclusive design requires no welding and therefore no chemical treatment to passivate the clamps. We again like to emphasize that the production process is environmentally friendly, without compromising on quality. Due to its design it is very easy to handle and to install.

SPECIFICATIONS:

Thread protection caps	- Plastic caps to protect the thread.
Bolts	- Stainless steel AISI 304 (A2); M16 (metric thread according DIN267). Thread is PTFE (Telfon [™]) coated to ensure free running.
Nuts	 Stainless steel AISI 304 (A2). Size M16 according DIN934. Extra yellow passivated to optimize free running.
Body Shell	- Stainless steel AISI 304 (A2).
Armour plate	- Vulcanised into the gasket for all standard clamps, Stainless steel AISI 304.
Gasket	 NBR gasket, proper for both gas and water purposes. It has a waffle structure and tapered ends. EPDM or Viton gaskets are optional.
Additional	- Further to the above mentioned technical specifications; Body shell, bolts and nuts are also available in AISI 316/316L quality.

WORKING PRESSURE:

NG10 (one section)			NG20 (two sections)	NG20 (two sections)		
	WATER	GAS	WATER	GAS		
25 - 102	16	5	108 - 273 16	4		
105 - 230	16	4	292 - 510 10	3		
237 - 324	10	3	530 < 6	-		

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