

## Ductile Iron Band Repair Clamp (ZR)



ZR-1



ZR-2

### Product Information

Band repair clamp is good at quick repairing pipeline leakage which is caused by aging or rusting pipe sand holes or breaks. Its repair work is under pressure and no need of changing pipes. These series of clamp has advantages of safe, convenient and efficiency in pipeline repairing work. And no special tool needed to installation them. It is highly adopted for general use and no strict requests to the pipeline ellipticity of pipe arc.

#### Product Features:

The band repair clamp is used on repairing different kinds of pipelines like Cast Iron, Ductile Iron, Steel, Asbestos Cement, Copper, Aluminum, PVC, HDPE, Fiberglass and other kinds of pipes. It can provide a quick and economic way in repairing Longitudinal, holes and breaks.

#### Clamp Construction

Shell: 18-8 SS304

Sealing Ring Sleeve: NBR, EPDM, Silicon, Viton is available

Ears: Ductile iron with painting

Bolts and Nuts and packing: Low alloy heavy duty Galvanized steel

★Note: Seal ring sleeve choice

NBR Temperature: -20°C~+80°C Media: Gas, oil, fuel and other hydrocarbon.

EPDM Temperature : -20°C~+120°C; Media: water, drainage, air, solid and chemicals

Silicon Temperature: -75°C~+200°C

Viton Temperature: -95°C~+350°C

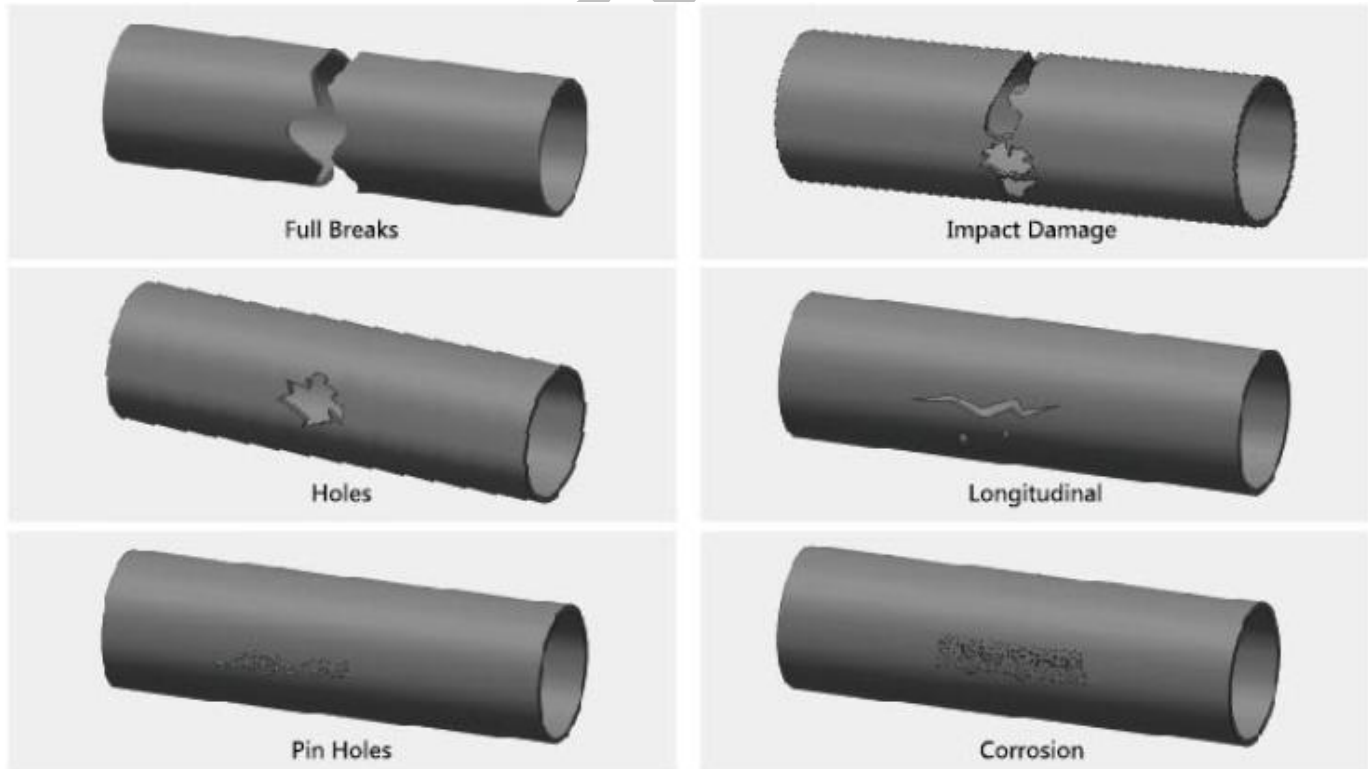
**Standard: AS4181-2013**

### Dimension Data sheet

OD Scope mm ZR1	W.P. (Bar)	OD Scope mm ZR2	W.P. (Bar)	OD Scope mm ZR1	W.P. (Bar)	OD Scope mm ZR1	W.P. (Bar)	Clamp Width mm
59-67	16							150-600
65-73	16							150-600
69-76	16							150-600
75-83	16							150-600
86-94	16	88-108	16					150-600
108-118	16	108-128	16					150-2000
113-121	16	113-133	16					150-2000
121-131	16	120-141	16					150-2000
126-136	16	168-188	16					150-2000
132-142	16	174-194	16					150-2000
145-155	16	219-239	16					150-2000
151-161	16	228-249	16					150-2000
159-170	16	238-258	16					150-2000
166-177	16	258-278	16					150-2000
170-180	16	273-293	16					150-2000
174-184	16	282-302	10					150-2000
179-189	16	295-316	10					150-2000
189-199	16	324-344	10					150-2000
218-228	16	335-356	10					150-2000
222-233	16	347-367	10					150-2000
229-239	16	357-376	10					150-2000
236-246	16	365-384	10					150-2000
248-258	16	383-402	10					150-2000
250-260	16	404-423	10					150-2000
252-263	10	421-440	10					150-2000
261-271	10	436-455	10					150-2000
271-281	10	453-472	10					150-2000

280-291	10	469-488	10			150-2000	
288-298	10	488-507	10			150-2000	
298-309	10	505-525	10			150-2000	
300-310	10	526-545	8			150-2000	
304-314	10	547-566	8			150-2000	
321-331	10	562-581	8	630-660	8	150-2000	
333-343	10	582-601	8	670-700	8	150-2000	
340-351	10	630-650	8	720-750	8	150-2000	
348-358	10	670-690	8	770-800	6	150-2000	
356-366	10	720-740	8	820-850	6	150-2000	
				870-900	6	150-2000	
				920-950	6	150-2000	
					920-960	6	150-2000
					1020-1060	6	150-2000
					1070-1110	6	150-2000
					1220-1260	6	150-2000

### ZR clamps for what kind of pipe defects:



## Installation Guide

How to choose a repair clamp?

- 1) Confirm the Pipe O.D and leak point size and type.
- 2) Choose the right band clamp ( ZR1, ZR2, ZR3 or ZR4), confirm the band width.
- 3) According to the pipe OD, confirm the clamp size scope.
- 4) Pipe OD≤300mm, the defected area both ends should be covered ≥80mm; Pipe OD≥300mm, the defect area both ends should be covered≥100mm

## Installation Tips:

- 1) Clean the pipe surface as possible as you can. No soil, mud and other debris which make the sealing rubber against the pipe more suitable and tight.
- 2) Mark on the pipeline, when finished the repair work, it can confirm if the clamp width in a correct coverage
- 3) Use water or soap water lubricate pipe surface, which can reduce friction and make sealing ring sleeve easy to installation.
- 4) Clean and lubricate bolts which make it easy to tightening to the nuts.
- 5) Keep a stable water pressure in pipeline to prevent contaminants into pipe through leak point.
- 6) Make the water level higher than the pipe position, which can control the water spray and help a quick installation
- 7) Tight the middle position bolts and nut, which can control the spray water much better and then tight the other bolts and nuts in turn.
- 8) Drill a hole in both ends of the pipe crack which can decrease the pressure and control the crack expands.

## Urgent repair for large pipelines tips

If urgent repair need to be done on large size pipes, combine some little size clamps to one bigger one is much useful.

- 1) Confirm the defected pipe OD.
- 2) Choose two or three little size clamps which size sum equal to the defected pipe OD.
- 3) No need use the same little size clamps, but must be sure the sizes do not have big different.

For example, the defected ductile iron pipe is DN500, OD is 510mm, choose 3pc DN150 clamps, whose size scope is 159-170mm, so the final combined clamp size is 501~534 which can cover 510mm defected pipe OD..

$$159+12+159+12+159=501$$

$$170+12+170+12+170=534$$

## For two pieces of pipe connection installation tips:

When the two pipe gap more than 25mm, a short pipe or a thin metal sheet needed to filled the gap which can support the sealing ring and make the repair more successfully and more durable.

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