

*Connect two pipes  
using the internal surface*



**ICON Coupling**

## The old challenges

In the past there have been several low pressure pipe connections which would challenge any coupling manufacturer.

### The main examples include:



Connecting with a flat bottomed concrete pipe



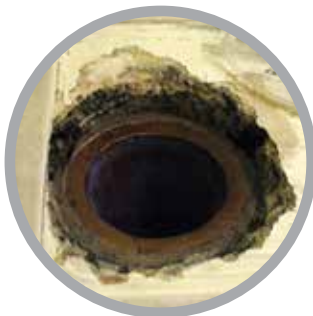
Creating a perfect seal with a spiral reinforced plastic pipe



When surface damage prevents a reliable external seal



When part of the exterior of the pipe is buried, or otherwise inaccessible



When a pipe is sheared close to a surface, with little or no stub or spigot

## The new solution

These challenges have now been overcome with the launch of the Flexseal Icon Coupling, a unique coupling which securely seals against the internal surface of two pipes. A secure, permanent, watertight and airtight connection is now guaranteed on pipes from DN150 to DN400 with an internal circular profile.

Specially designed bushes have also been created to complement the Icon Coupling, providing versatility to handle a wide range of pipe connection combinations.

With the same ease as any of our other flexible couplings, two pipes of irregular or inaccessible external profile can be securely connected.

The secure connection of a DN200 PVC pipe with a DN200 flat bottomed concrete pipe.

This quality of seal can only be achieved with the new Flexseal Icon Coupling.

**ICON Coupling**



# The ICON in detail

*A pipe connection innovation. See below the features & benefits of the Flexseal ICON Coupling.*

Spacer Bracket - Assists assembly, maintaining the spacing around the circumference between the two pipes

Body - Stainless steel body compresses the rubber against the internal surface of the pipe

Seal - Achieves high contact pressure for a flawless, watertight connection – even on imperfect concrete pipe interiors

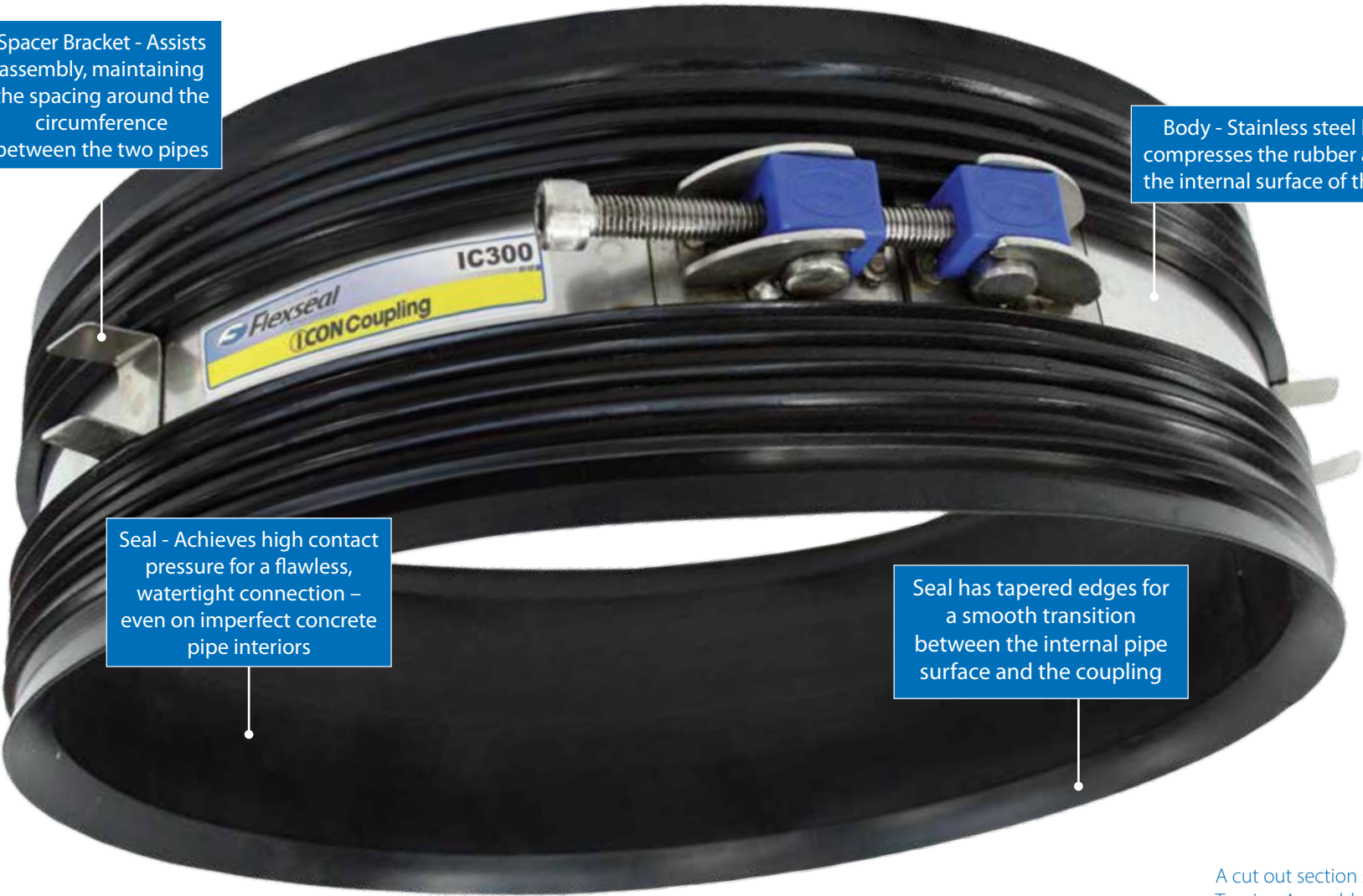
Seal has tapered edges for a smooth transition between the internal pipe surface and the coupling



Specially designed bushes are available to accommodate differences in the inner diameter of the pipes to be connected



A cut out section shows the Tension Assembly mechanism underneath the rubber.



# Technical information

## Features

- Available to suit pipes with internal diameters from 150 - 400mm. Larger diameters will be available in due course
- Overall width of coupling is 130mm
- Stainless steel components are Grade 1.4301 (304) material
- Sizes 150mm up to 300mm with single bolt assembly; sizes greater than 300mm with two bolt assembly
- Seal has tapered end sections for a smooth transition between the pipe bore and the coupling

## Performance

This range of couplings will satisfy the performance requirements of:

**BS EN 295:4 and WIS 4-41-01**

### NOTE:

- Internal bore reduction of fitted coupling is only 18mm.
- Pipes to be jointed should be of similar internal diameter.
- Ensure no significant surface flaws are within the sealing zone.
- Bushes can be used where there is a significant difference.

## The Range

Product Code	Nominal Dia. (mm)	Icon Bushes - Product Code			Information required to specify bushes
		1.5mm	2.5mm	4mm	
IC150	150	BCI015/150	BCI025/150	BCI040/150	DN, Ø, internal measurement and pipe material... for both pipes
IC200	200	BCI015/200	BCI025/200	BCI040/200	
IC225	225	BCI015/225	BCI025/225	BCI040/225	
IC250	250	BCI015/250	BCI025/250	BCI040/250	
IC300	300	BCI015/300	BCI025/300	BCI040/300	
IC400	400	BCI015/400	BCI025/400	BCI040/400	

## Icon Bushes

The unique Icon bushes fit snugly into the sawtooth profile of the Icon Coupling, providing no loss of pressure or security of seal.

3 thicknesses of bush are available - 1.5mm, 2.5mm and 4mm - offering many thickness options. Accurate measurements of the pipe internal diameters are required to ensure the correct bush combination is recommended.

The bush(es) are applied to the side of the Icon coupling to be fitted into the largest pipe opening. No bushes should be applied to the side of the coupling to be installed into the smallest pipe.

# Easy installation...



**1**

Ensure a defect free surface. For concrete pipes, lubricate the inside surface



**2**

Place the coupling into the end of the pipe that is already laid in the ground, ensuring that the tightening device(s) is(are) positioned correctly



**3**

Push the coupling into the pipe until the tightening and positioning brackets about the pipe face



**4**

Present the second pipe to the coupling, ensuring it is centred and aligned, and push it fully up to the tightening and positioning brackets



**5**

Tighten the M10 bolt(s) up to the recommended torque as indicated on the product label



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