

# **Icon Mechanical** Couplings

- Achieves a secure connection when or where traditional couplings cannot be used
- Permanent, watertight and airtight connection is achieved
- High quality components
- Installation is simple and carried out with everyday tools
- Specially designed bushes are available to accommodate small differences in internal diameter, enabling a wide range of pipe combinations to be connected
- Removes the joint step created by connecting different pipe materials
- Creates a smooth transition between pipe invert levels
- Conforms to all testing requirements of WIS 4-41-01 and BS EN 295-4:2013





Fernco manufactures a wide range of couplings that connect rainwater and wastewater pipelines using the internal surface, we call these 'lcon' (internal connection) couplings.

Traditionally flexible couplings connect to the outside of pipelines to ensure the internal surface is free from obstruction. However, there are occasions where internal couplings are necessary and in many cases required...

- Pipe has been encased in concrete
- Pipe surrounded by brick
- Pipe cut flush with the floor or wall, leaving no stub or excess to connect on to

 Damaged or flat bottom pipe (Aids natural flow by removal of pipe joint, Increased shear load support)

Fernco Icon Couplings have been specifically designed to create a strong permanent connection whilst having minimal impact to natural flow. Tapered edges aid flow and thin coupling wall keeps bore reduction to a minimum.

# Connecting DN150-DN600 pipes

These couplings feature a strong stainless steel body which provides excellent resistance to lateral shear loads, protecting pipe alignment over the joint.

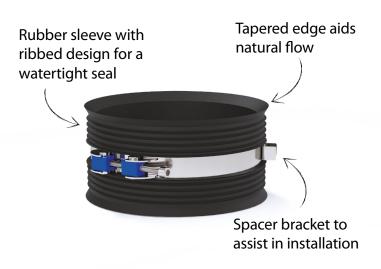
These couplings are inserted into the pipes to be connected, and tightened from the outside with a standard 8mm hex-head screw bit. During tightening the stainless steel body expands to compress the rubber sleeve against the internal surface of the pipes creating a watertight seal.

It's widely known that the external diameters of pipes within the same nominal diameter can differ, but so can the internal diameters especially at larger sizes. (For this reason, we manufacture Icon Mechanicals to specific site requirements to ensure our customers have a coupling that's exactly as they need it. We manufacture to order within 24hrs and use rapid delivery options to get it on site when it's needed.)



Fit horizontally or vertically for above or below ground applications





Product Code	ICXXX			
Description	Fernco Icon Mechanical Coupling			
Size Range	DN150-DN600			
Material	EPDM 1.4301 (304) Stainless Steel			
Pressure Rating	Upto 2.5bar, 36.25psi			
Jetting Resistance	180bar			
Temperature Range	-50°c to 80°c constant, 100°c intermittent			
Tightening Torque	15Nm			
Standards	WIS 4-41-01 BS EN 681-1:1995 BS EN 295-4:2013 WRC Approved - PT/491/1221			





Product Code	Size Manufactured Within (mm)	Size Range Tolerance (mm)	Icon Bushes - Product Code			Maximum difference
			1.5mm	2.5mm	4mm	between pipes ID's before an Icon Bush is required (mm)
IC150	147 - 187	5	BCI015/150	BCI025/150	BCI040/150	3
IC200	188 - 219	5	BCI015/200	BCI025/200	BCI040/200	3
IC225	220 - 234	5	BCI015/225	BCI025/225	BCI040/225	3
IC250	235 - 289	5	BCI015/250	BCI025/250	BCI040/250	3
IC300	290 - 364	5	BCI015/300	BCI025/300	BCI040/300	3
IC375	365 - 378	5	BCI015/375	BCI025/375	BCI040/375	3
IC400	379 - 428	5	BCI015/400	BCI025/400	BCI040/400	3
IC450	429 - 478	5	BCI015/450	BCI025/450	BCI040/450	3
IC500	479 - 503	5	BCI015/500	BCI025/500	BCI040/500	3
IC525	504 - 578	5	BCI015/525	BCI025/525	BCI040/525	3
IC600	579 - 603	5	BCI015/600	BCI025/600	BCI040/600	3

Note: Icon Mechanicals are made bespoke to the exact requirements of the connection. 'Size Manufactured Within' in the table above is an indication of what size each coupling can be manufactured within.









- 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, ensure that the tightening device(s) is (are) positioned correctly.
- 3. Push the coupling into the pipe until the bolt housing(s) and spacer brackets touch the pipe face.
- 4. Slide the second pipe to over coupling, ensure it is centred and aligned, and push it fully up to the spacer bracket(s) and bolt haising(s).
- 5. Tighten the bolt(s) to 15Nm.







# **Quality, Standards and Approvals**

Fernco has been certified by the British Standards Institution (BSI) as a company of assessed capability, with a quality management system which meets the requirements of BS EN ISO 9001:2015

Fernco UK, part of a global group of companies, are the leaders in wastewater connection innovation; utilising the most advanced methods and techniques for precision-manufactured products, all of which comply with or exceed relevant British and European standards to ensure reliability and sustainability.

Icon 'internal' Mechanical couplings have been approved for use by Highways England.



#### **Environment**

Fernco operate Environmental Management Systems which are certified to ISO 14001: 2015.

## **Supply**

Fernco are proud members of the Builders Merchants Federation (BMF). All Fernco products are supplied through a national and global network of distribution and merchant partners. For stockist details, contact Fernco.

# **Technical Support**

Fernco have a team of product experts on hand to support all customers with technical support and advise.

**Contact Fernco Technical Department:** 

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## **Enquiries**

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