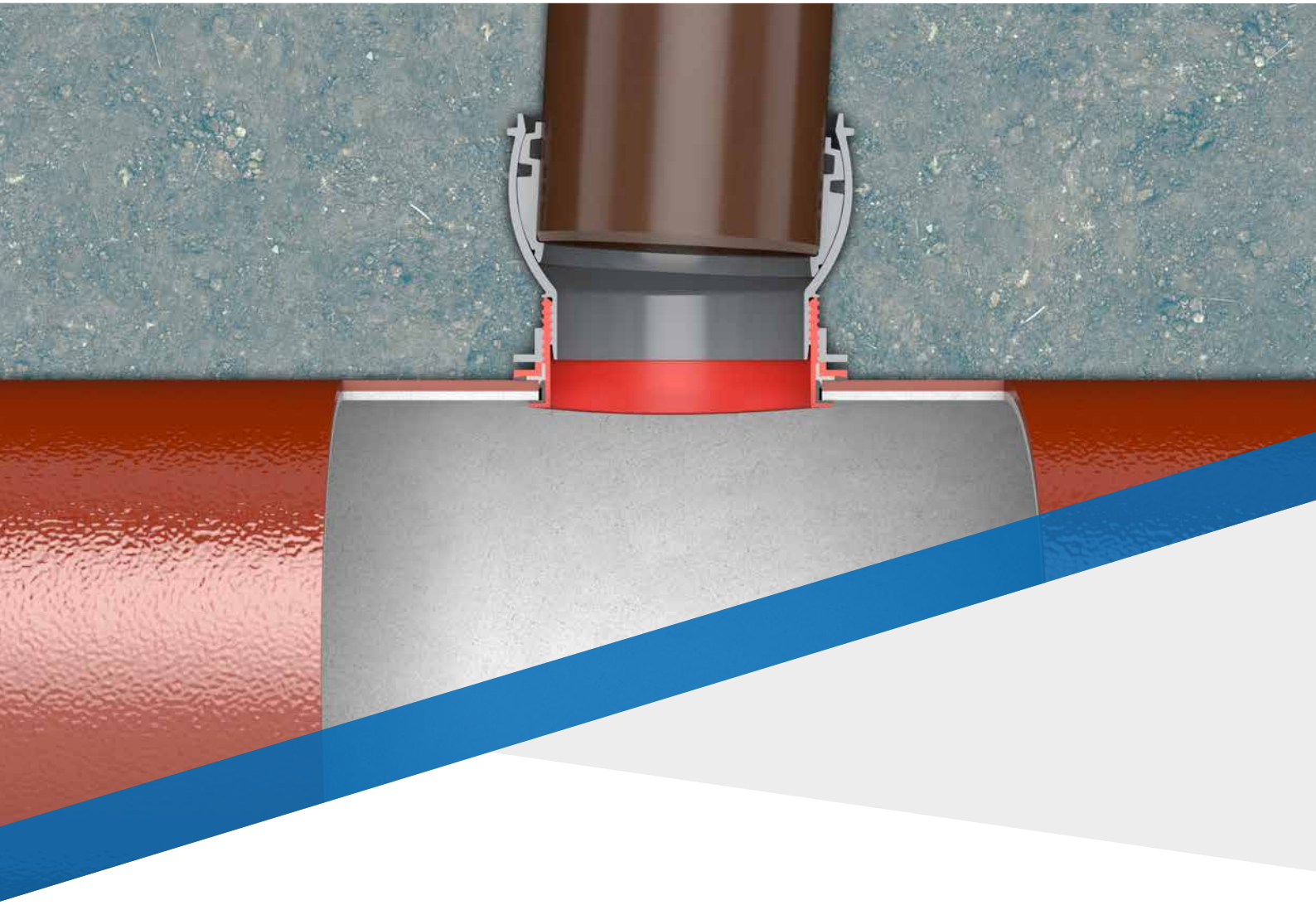
Funke Gruppe

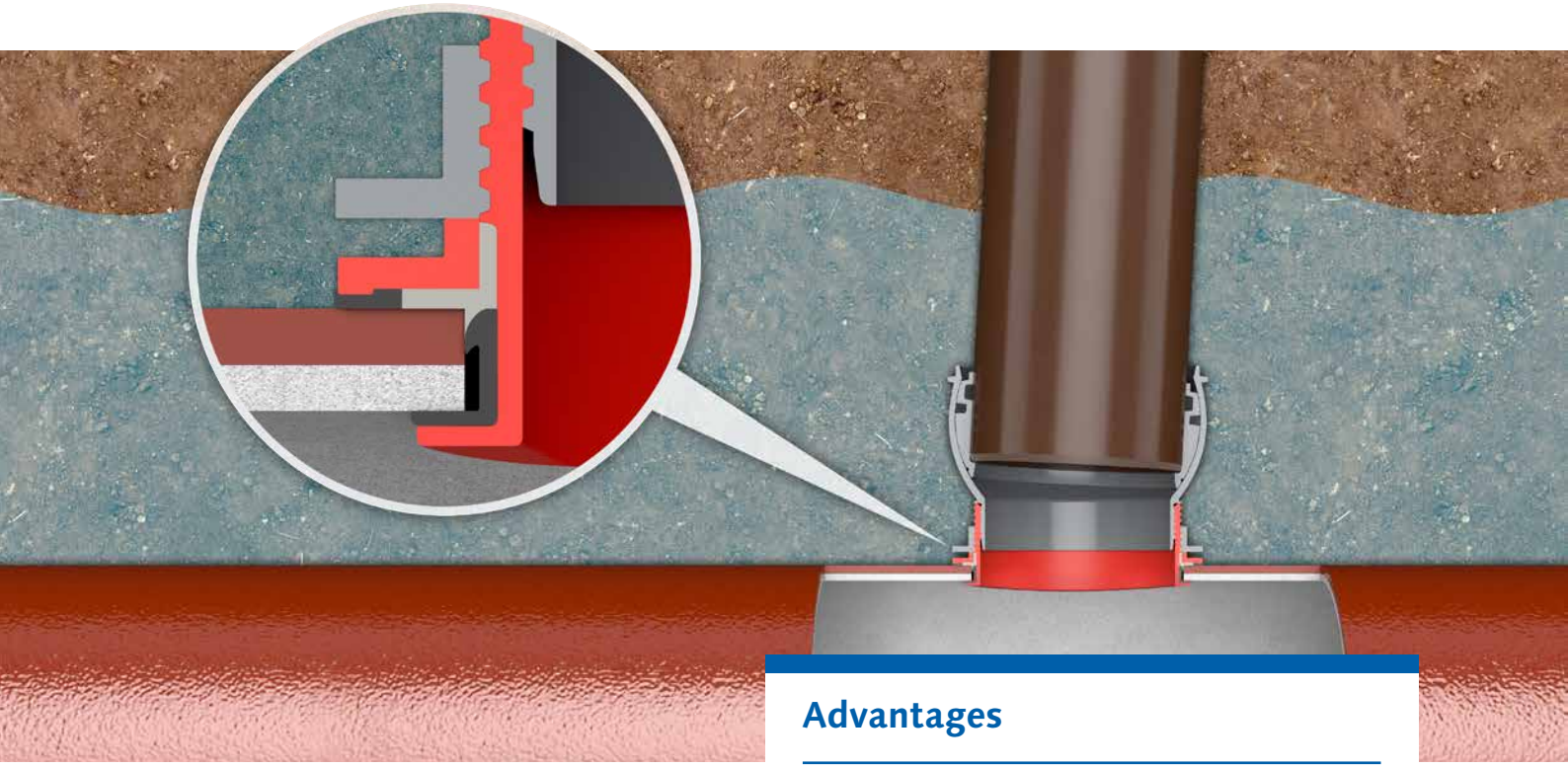


CONNEX Cast-Iron Pipe Junction System

The next generation of proven technology

CONNEX Cast-Iron Pipe Junction System

Perfect for connections to cast-iron pipes



The problem

When drilling holes in lined cast-iron sewer pipes in order to fit junctions for lateral connections, spalling of the rather brittle cement mortar lining can be a real problem, especially when using junction systems that require two additional drill holes for fixing screws in addition to the large inlet hole. The CONNEX Cast-Iron Pipe Junction System makes this kind of damage and the resulting repair work a thing of the past.

The solution

The CONNEX Cast-Iron Pipe Junction System is suitable for connecting lateral sewer pipes to cast-iron main sewer pipes, which are usually fitted with a cement mortar lining to protect against corrosion. The connection technology featured in the CONNEX Junction, in combination with a newly developed lower seal as well as the use of the 2-C sealant, ensures a tightly sealed sewer connection despite potential minor mortar spalling when drilling into the main pipe.

The product

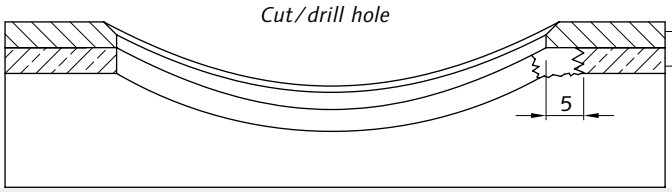
The junction is available in the nominal connection diameters **DN/OD 160** and **DN/OD 200**. It can be used for main pipes with nominal diameters ranging from DN 300 to DN 500. The CONNEX Cast-Iron Pipe Junction System consists of an upper section with an adjustable socket, a threaded ring nut, a spacer fitted with a seal as well as a lower section, which is also fitted with a seal. The latter is

Advantages

- Optimised seal presses itself into both the pipe and the drill hole recess
- Slight cement mortar spalling on the edge of the drill hole is covered (drawing 1)
- 2-C sealant ensures the level of leak tightness outlined in DIN EN 1610 is achieved
- Red-tinted lower section facilitates identification when performing CCTV inspections
- No need for additional drill holes to fasten the junction

Package contents including 2-C sealant

Drawing 1



The junction can cover minor spalling up to a maximum of 5 mm measured from the edge of the drill hole. Major spalling must be repaired according to the specifications of the main sewer pipe's manufacturer. The drill hole recess must always be sealed on site with the anticorrosive prescribed by the main sewer pipe's manufacturer.

CONNEX cast-iron pipe junction system DN/OD 160 and 200

(Tested and suitable for gravity lines, no application in pressure lines)

Main Sewer Pipe DN (Gravity Sewer)	Internal Diameter Main Sewer Pipe in mm	Wall Thickness Main Sewer Pipe in mm min.	Wall Thickness Main Sewer Pipe in mm not mind.	DN/OD Junction in mm	Diameter Drill Hole ±1 mm	Item No.
300	295 – 313	3.0	27.0	160	200	1601750001
400	392 – 412	3.0	27.0	160	200	1601750002
500	453 – 513	3.0	27.0	160	200	1601750003
300	295 – 313	3.0	27.0	200	200	1601750004
400	392 – 412	3.0	27.0	200	200	1601750005
500	453 – 513	3.0	27.0	200	200	1601750006

Junctions for other main sewer pipe dimensions will be available soon

coloured red so that the product can be clearly identified during a CCTV inspection.

Optimised seals

The CONNEX Cast-Iron Pipe Junction System is fitted with a seal that is optimised for the intended application. When professionally installed, it adapts to the drill hole recess in the main sewer pipe, forming a positive connection. The seal prevents the 2-C sealant from leaking into the cast-iron pipe's interior. Slight cement mortar spalling on the edge of the drill hole is covered.

(1) Interior view of pipe

(2) Sewer core drill with guide skids

(3) Installing the junction's lower section

(4) With threaded ring spanner for tightening the cast-iron pipe junction

(5) Applying the 2-C sealant

(6) With connected HS Sewer pipe SN16

CONNEX Cast-Iron Pipe Junction System

Quick installation guide

You can find the detailed installation instructions here:

(Tested and suitable for gravity lines, no application in pressure lines)

First, create a professional drill hole using a sewer core drill with guide skids. It must be chamfered on the outer edge (observe explosion protection guidelines). The mortar lining must be repaired according to the pipe manufacturer's specifications in case of spalling >5 mm. Then, degrease the drill hole recess and apply the anticorrosive specified by the pipe manufacturer **(1)**.

Degrease and clean every part of the cast-iron pipe junction that came into contact with the 2-C sealant during installation **(2)**. Fold the cleaning rag twice to a dimension of approximately 15 x 15 cm and place it in the drill hole parallel to the direction of flow. Then, hold the lower section in the drill hole so that one side of it rests completely against the rag **(3)** and pull it through the drill hole. After that, pull up the lower section using both hands **(4)**.

Ensure that the groove on the lower section and the filling hole in the spacer point upwards, then apply a sufficient amount of lubricant to the lower section's thread **(5)** and the thread of the grey threaded ring and tighten the threaded ring by hand. **The junction must not twist in the drill hole throughout the entire assembly process.** Use the threaded ring spanner to tightly screw in the threaded ring **(6)** and check by hand whether the seal makes contact all the way around. Lastly, use your palms to strike against the threaded ring spanner two or three times.

Then, coat the upper section's thread with a thick layer of lubricant **(7)** and apply lubricant to the lower section's thread. After inserting the upper section as evenly as possible, twist it anti-clockwise gently pressing down toward the main sewer pipe until the upper and lower sections' threads are perfectly aligned with each other. Then, without tilting it, twist it clockwise by hand until tight.

Next use the threaded ring spanner with the red adaptor **(8)** to firmly tighten the upper section, and then use your palms to strike the threaded rings spanner's handles two to three times (you must do this). After inserting the 2-C sealant into a cartridge gun with a thrust ratio of 25:1 (take off the cap and unscrew the mixing tube), squeeze out a few cartridge strokes worth of sealant. Once the 2-C sealant is uniformly grey, quickly fill it into the spacer's 8 mm hole **(9)**. When doing so, make sure to check whether the sealant leaks into the inside of the pipe (remove whatever leaks in if it does).

There is a 3 mm vent hole in the spacer on the opposite side of the filling hole. As soon as a larger amount of sealant leaks out of it **(10)**, the junction is tightly sealed.

The pipe trench can be filled in immediately. The permanently elastic sealant fully cures after 50 to 70 minutes, depending on weather conditions.

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