



ProInjekt®403 Injection hose - multiple injections

ProInjekt®403 is a very functionally reliable injection system (an "injection hose") for the subsequent sealing of construction joints on concrete structures using injection resins or cement suspensions. ProInjekt®403 is characterised by a number of application-related advantages that other hoses do not offer in this form and is also very cost-efficient due to its simple but well thought-out design.

The benefits - at a glance :

ProInjekt®403 can be rinsed free after each injection and therefore (if necessary) used for further injections.

ProInjekt®403 is extremely flexible and therefore easy and simple to install even around sharp corners, edges and cracks (even in winter!)

The square cross-section of ProInjekt®403 guarantees an excellent, flat joint contact and thus an optimal distribution of the injection material - much better than conventional round injection hoses!

With ProInjekt®403 - rinsed free in a vacuum process - the tightness of the joint can be easily proven by injecting water after the injection! An important advantage for safety and warranty in critical objects!

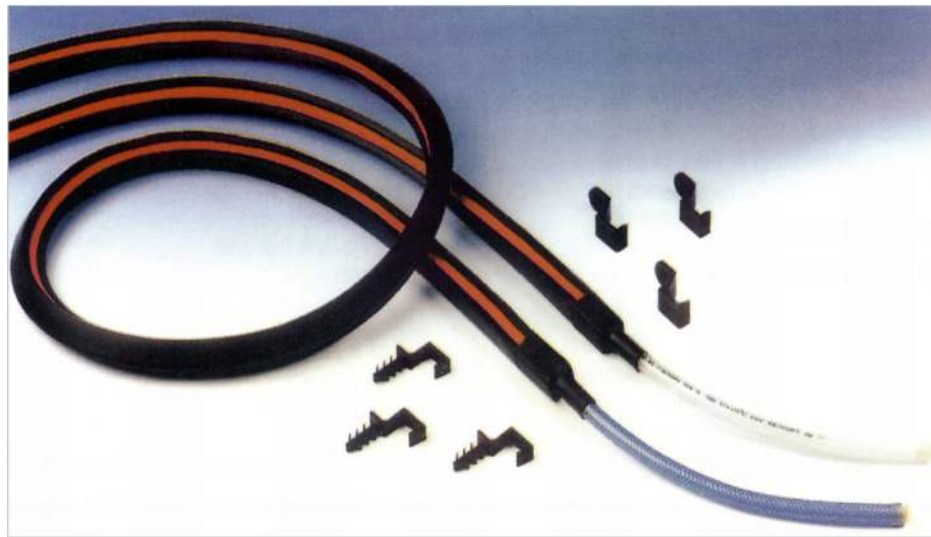
Securing of the Joint tapes in a tunnel* against circulation with ProInjekt®403

*Building "Siegquerung"
the new ICE Frankfurt-
Cologne line in 1999
More than 50 thousand
metres of ProInjekt®403
have been installed here.



The ProInjekt®403 profile consists of two parts: An inner hose made of flexible plastic, with a trapezoidal cross-section, which is slotted on one side so that the inner channel allows a medium to escape to the outside at low pressure. This inner hose is enclosed on three sides by a precisely fitting foam rubber jacket.

The jacket profile stabilises the inner hose, covers the slits and prevents cement paste and slurry from penetrating the inner hose. When cleaning/rinsing the inner hose, the jacket acts as a valve, seals the slits in the inner hose by means of the vacuum and prevents the injection agent previously introduced into the joint space from being sucked out by the vacuum during vacuuming!



Well thought-out accessories complement the profile and make installation easy even for inexperienced workers*. ProInjekt®403 is fastened to the concrete with clips, with dowel plugs, for drill holes.

The connecting ends of the hoses are safely supplied until injection in a suitable storage box, but can also be attached to injection valves ("nail packers") or, if necessary, simply led out of the formwork without additional protection.

*) To avoid mistakes during installation, detailed, illustrated installation instructions are enclosed with each packaging unit.



ProInjekt®403 is supplied in the standard packaging ready for installation. The effective length is 10 meters. The profile can be easily adjusted to fixed dimensions at the construction site if required. For this purpose, ProInjekt®403 is shortened in the middle by the corresponding length (a sharp knife is sufficient), the remaining ends are plugged together with a connecting sleeve and fixed with a drop of super glue. The cut-out parts can be inserted into other profiles using the same procedure.

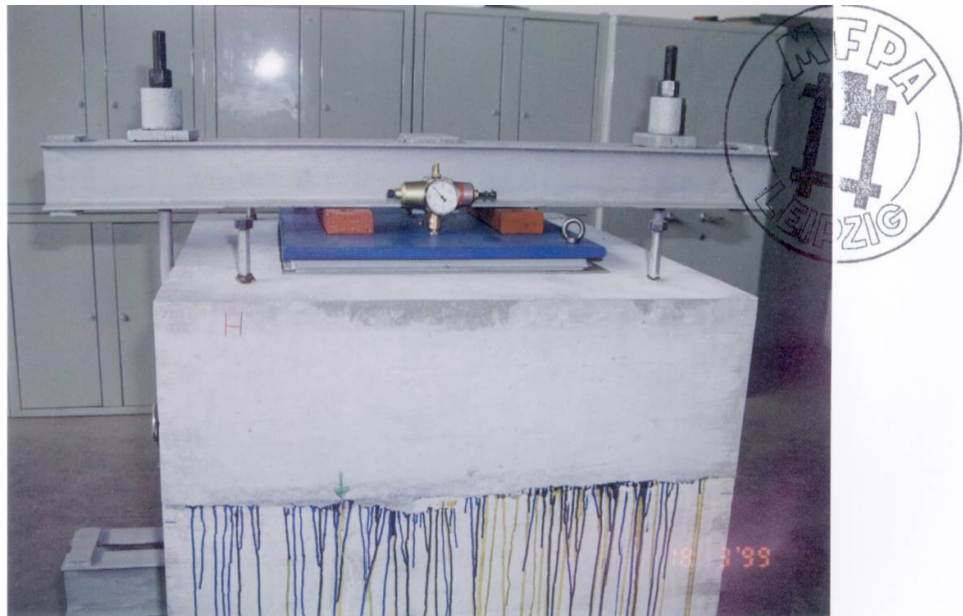
On request, other useful lengths and rolls are also available.

If object-related finishing is to be carried out on site, we also supply ProInjekt®403 as roll goods in lengths of 50 metres. Sets with pre-fabricated pressing ends, shrink sleeves cut to size and adhesive are available as accessories.

ProInjekt®403 has been specially developed as a multiple grouting system. If water-soluble or water-emulsifiable resins are used for injection, it is possible to remove the injection resin remaining in the hose by vacuum method after the injection process and to flush the hose channel so that it can be reused for further injections if necessary.

This procedure - developed and proven by our experts as early as 1990 - makes it possible to carry out safe joint sealing by injection even where the highest demands are placed on the tightness of structural connections, such as in the case of catchment facilities for water-polluting substances.

**Leakproof -
even with
modification of
joint cross-section**



Leak test under pressure. Test specimen for ProInjekt® made of concrete - with variable joint gap [MFPA Leipzig].

The installed and injected injection hose ProInjekt®403 was cleaned after the injection by vacuum method and rinsed with water. After curing of the resin, the joint gap was widened and the hose was injected for the second time.
The used injection resin HydroBloc®Injekt 583* was coloured in different colours (blue and yellow) for control purposes.

This test impressively proved that with our technology construction joints can be sealed again, even after changes in the joint cross section and under high water pressure!

*HydroBloc®Injekt is a water soluble acrylate resin developed by ARCAN Waterproof especially for injection hoses.
When cured, HydroBloc®Injekt 583 swells in water and thus supports the sealing process.
HydroBloc®Injekt 583 is a solid injection resin, not a gel!

Another advantage of this system is the possibility to check and verify the tightness of the joint, shortly after injection and before the load case.

To do this, it is sufficient to press water into the joint via the injection hose which has been rinsed free. If the joint is tight, the water pressure remains constant !

Complex re-injections with complicated and expensive drilling work are thus simply and elegantly avoided!

Functionally reliable and easy to process injection resins - all tested, certified and, of course, approved for use in contact with drinking water, complement the product.

HydroBloc®Injekt 583

Water-swellaable acrylate hybrid resin, Drinking water tested. Dilutable with water.
Machine cleaning with water, ideal for multiple injections even after years. Processing in
Mixing ratio 1:1.

HydroBloc®AC 555

Acrylate hybrid resin emulsifiable in water. Hard, with high strength. Very well suited for contact grouting in moist environments. Drinking water tested. Machine cleaning with water. Ideal for multiple injections even after years.

HydroBloc®Polygel 530

Acrylate hydrogel . Tested according to the regulations of Deutsche Bahn AG (AIB "Richtlinien für die Vergelung von Verkehrsbau-werken der DB AG"), KTW-tested. Ideal for multiple injections even after years

HydroBloc®PU 500.

PUR injection resin for waterproofing injections, elastic and water swellable. Processing in Mixing ratio 1:1.

HydroBloc®575 INTEGRAL

Special low-viscosity resin - with only one component! Ready to use as delivered, no second component, no mixing, fast curing in the joint - even with a lot of water! And swellable, too! Drinking water tested.

These technical information describe the present-day state of knowledge these product. They should only inform about the possibilities of application and could not release the applicator of his commitment to check the possibility to use the product for the required application. Information for processing can be found in processing instructions of our product. Information about safe handling can be found in our current safety data sheet.

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ARCAN Waterproof

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passion to invent 