

Pentens[®] HP-023

High Pressure Crack Injection Systems & Equipment

INTRODUCTION

Pentens[®] continuously develops and refines Crack Injection Systems and recommendations. High Pressure Polyurethane is an important system used by thousands of applicators. Basic product knowledge helps users to reduce possible problems. The right injection technology should be identified before the project is started.

Epoxy injection resins usually “fail” in stopping active water leakage because of their slow reaction time and inability to bond to wet surfaces; this failure is resolved with the Pentens[®] Polyurethane System.

The actively flowing water will be stopped by injecting Pentens[®] PU-108, PU-168, PU-300 which reacts quickly with the water to form an expanding foam. The final product is a semi-rigid or flexible closed-cell and strong bonding seal. To control the speed of the chemical reaction a certain percentage of an accelerator is added. The amount of accelerator added allows to control the gel times between a few seconds and several minutes.

USES

All kinds of cracks and joints in concrete, such as:

- Cold joints
- Expansion joints
- Working cracks

ADVANTAGES

- Heavy duty for daily use
- Lightweight
- 10,000 PSI
- Easy to use, clean & maintain
- Single component
- Pressure gauge
- Hopper included
- Recommended for beginners and injection pros
- Compatible with the complete line of Pentens[®] PU Injection grouts including epoxy resins

PROFESSIONAL EQUIPMENT FOR PU INJECTION

MA023K – Injection Pump

Very powerful, extremely lightweight injection pump for the complete line of Pentens[®] injection grouts. Suitable for mid-size jobs and daily use this is the perfect machine for waterproofing contractors performing commercial work and residential injection. With this pump it is a snap to get in and out of basements and confined areas. The MA023K is very compact. But do not underestimate its power. It will create pressures in extend of 10,000psi!

The modular design keeps maintenance cost low and allows for easy cleaning. Parts can be replaced by the contractor to keep downtime at an absolute minimum.



Max. Pressure:	10,000psi
Flow:	0.74 liters/minute
Voltage:	110V / 220V
Weight:	9 kgs

PACKER SIZES:

Code	Sizes
AC023-8T	ø10mm×80mm
AC023-8	ø13mm×80mm
AC023-10	ø13mm×100mm
AC023-15	ø13mm×150mm
AC023-20	ø13mm×200mm
AC023-30	ø13mm×300mm

INSTRUCTION FOR USE

STEP 1: Clean Surface

Sometimes the concrete surface is hidden under a surface of mineral deposits left from long-term water leakage.

STEP 2: Drill Injection Holes

In order to inject the resin into the crack, it is necessary to install injection ports, also called mechanical packers.

The depth of the drill hole intersecting the crack should be somewhere close to the center of structure, if possible.

STEP 3: Insert Injection Packers

Place packers in the previously drilled hole, so that the top of the rubber sleeve is below the concrete surface. If the packer can't be pushed into the hole, tap it in. Tighten the packer with a wrench as tight as necessary.

STEP 4: Flush Crack If Necessary

In some circumstances, it can be very useful to flush the crack with water to improve the subsequent penetration of the Pentens® injection resin into thicker walls.

STEP 5: Crack Injection

Choose the proper resin for the correct application. The nature of the crack / joint and the conditions at the job site determine the choice of material. For general purpose, you may choose Pentens® PU-108. Active water flow at a high rate is best stopped by using Pentens® PU-168 for the first step then follows by PU-108. Moving cracks and expansion joints should be injected with Pentens® PU-168. Hairline cracks and dry cracks should be sealed using Pentens® T-800. Some problems are solved by using a combination of products.

STEP 6: Clean Up

Once the injection work is completed, a good and thorough clean up is essential. The packers can be removed within 24 hours and the holes should be patched by using Pentens® T-800.

For more details, please refer to our Technical Department.

CLEANING

Tools and equipment just can be clean with Pentens® SO3 or suitable thinner immediately after use.

SAFETY

Impervious gloves and barrier cream should be used when handling these products. Eye protection should be worn. In case of contact with eyes, wash thoroughly with plenty of water and seek medical advice if symptoms persist. If contact with skin occurs, it must be removed before curing takes place. Wash off with an industrial skin clearer followed by plenty of soap and water. Do not use solvent. Ensure adequate ventilation when using these products.

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