Injection Pump CY-1000



Drill packer hole through the crack

One of the principle methods of repairing cracks in concrete is the injection process. The injection process is an economical method of repairing non-moving cracks in concrete walls, slabs, columns and piers. Hydrophobic polyurethane injection is suitable for waterproofing, whilst epoxy injection is capable of restoring the concrete to the pre cracked strength.



Typical construction joint problem

EN 1504-9 Principle No.	Principle Definition	Application Method
Principle 1 (PI)	Protection Against Ingress	1.4 Filling Cracks
Principle 4 (SS)	Structural Strengthening	4.5 Injecting cracks, voids or interstices



Epoxy injection

Principle 1 (PI)	Protection Against Ingress	1.4 Filling Cracks		
Principle 4 (SS)	Structural Strengthening	4.5 Injecting cracks, voids or interstices		
CY - 1000 Portable, Powerful,				



PU injection



High pressure (600-100 kgf/cm2) grouting injection pump for epoxy and polyurethane foam







Injection Pump Crack Repair Method

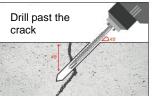


Surface Preparation:

Clean the crack surface to exactly locate the crack. Wire brush or grinder are useful cleaning tools.

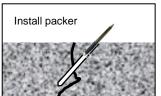
Packer Installation:

Drill holes along the side of the crack at a 45 degree angle. Drill the hole to intersect the crack midway through the substrate. Spacing of the injection port depends on crack width, but normal range 15 – 25 cm. Once packers are in place tighten.



Set up Pump equipment:

- Connect the hose to the piston
- · Pour the resin into the plastic bottle
- · Connect grease coupler with the installed packer

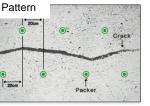


Pressure Inject Grout::

Push the switch to run the machine. Inject PU foam or epoxy resin into the packer location. Start with a low pressure, increasing pressure gradually. When the PU foam or Epoxy flows out from the crack, stop injecting, and move to another packer, and start injecting again.

Finishing and Cleaning Equipment:: On completion of the injection process

On completion of the injection process, remove or cut packers. This job can be completed with hammer and/or grinder. The work area will generally require surface cleaning and either sealing or coating.



Finally the pump should be flushed, stripped and cleaned immediately after use with gun wash ready for the next job.









