

STRUCTURAL REPAIR WITH LOW VISCIOUS EPOXY INJECTION



DEL-090:

DEL-090 is a Double Component Low Viscosity Dry Epoxy Injection Agent and it is specialized repair and reinforcement material that is injected to cracks with dry to keep the initial concrete state by maintaining the best adhesiveness.

Material Required



DEL -090 -Double Component Low Viscosity



CY-1000- High pressure Grouting

Injection Dry Epoxy Injection Agent



Injection packer during grouting work: Surface Cleaning

Surface Preparation (making surface free from dust, dirt and any another unwanted material by using the wire brush or grinder).

Analyzing the leakage zone, Sometimes the concrete surface is hidden under a surface of mud/sludge deposits left from long-term water leakage.

Insert Injection Packers

Place packers in the drilled hole, at that the top of the rubber sleeve is below the concrete surface. If the packer cannot be pushed into the hole, tap it in. Tighten the packer with a wrench as tight as necessary. (usually 8mm T-Spanner)

Low Viscosity Dry Epoxy Injection

Epoxy injection low viscous two component product, has capability to freely flow and penetrate completely in to a crack area.

Inspection of cracks and surface treatment: work process should be determined by checking in advance the condition width, depth of cracks and measure its position.

Drill holes near the cracks using hammer drill, with 45° angle from surface, hole positions must be zigzag as image and also make hole distances with every 15~20cm

Insert packers into the drilled holes, Fasten packers tightly using T-wrench

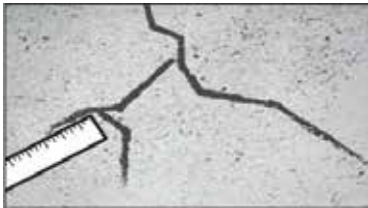
Mix Low Viscosity Dry Epoxy Injection Material: DEL 090 Using Electrical Injection Pump

Injection of Del Epoxy- Resin+ Hardener: Mix the low viscosity epoxy resin 2:1 ratio according to the mixing ratio mix only small quantity when initially mixing because the pot life will vary depending on the field environment and the material temperature.

Using Electrical injection Pump - Fill the 2:1 ratio Mixed Epoxy Agent of the injection pump Container With depends upon a site Conditions.
Connect the grease coupler with the installed packer. (Inject first at low area, and then go to upper area. Down → Up)
Push the switch for running machine, and inject Epoxy Resin into a hole. Start with low pressure, and increase pressure. When Epoxy Resin flows out from the cracks, stop injection, and move to another packer, and start injection again

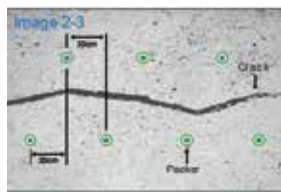
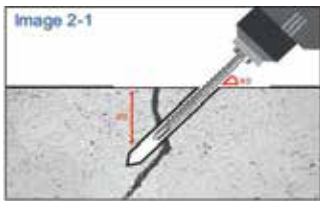
STEPS TO BE FOLLOWED

1. Check crack area and Clean up the surface with wire brush or grinder.



STEP - 2

Drill holes near cracks using hammer drill, with 45° angle from surface as image 2-1. To prevent that packers don't penetrate through a crack as image 2-2, hole positions must be zigzag as image 2-3, and also make hole distances with every 15~20cm



STEP - 3 Insert packers into the drilled holes



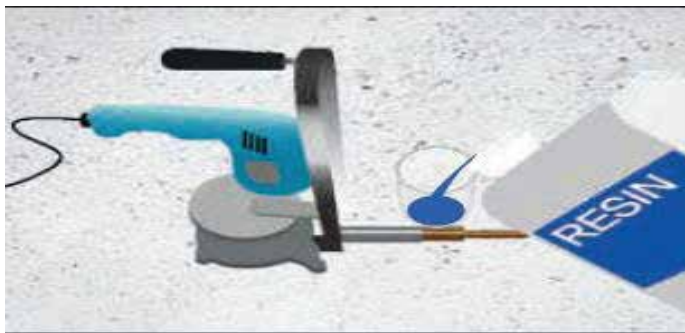
STEP - 4. Fasten packers tightly using T-wrench.



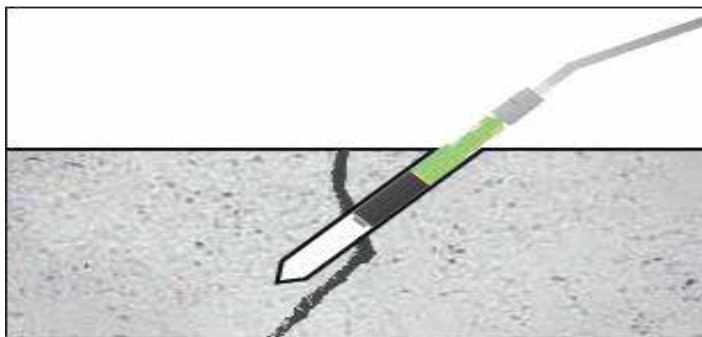
STEP - 5 connect the hose to the piston



STEP - 6. Pour the epoxy Resin to the plastic bottle



STEP - 7. Connect the grease coupler with the installed packer. (Inject first at low area, and then go to upper area). Down up



STEP - 8. Push the switch for running machine, and inject epoxy resin into a hole. Start with low pressure, and increase pressure. When epoxy resin flows out from the cracks, stop injection, and move to another packer, and start injection again



STEP - 9. After finishing injection work, remove packers by hitting packers using a hammer. Clean the surface using a scraper or a grinder, and if needed, coat with sealing materials. inject PU resin into a hole. Start with low pressure, and increase pressure. When foam flows out from the cracks, stop injection, and move to another packer, and start injection again

