

Plato Inline Counterforce System **28g pack size ----- Instruction of Use (IoU)**



Ideal size and dispenser for one offs and small multiples counterforces. The resin is designed to bond onto Fibreglass board but can also be used on other backing materials.

Prepping:

1. Clean equipment and prepare all the materials to be used.
2. Set up printing /embossing machine

Prepare Metal Die:

1. Clean die and remove any debris.
2. Liberally spray or apply suitable release agent (e.g. JetStream) and allow the release agent to dry completely on the die.

Backing Board:

1. Select correct thickness fibreglass board.
2. Cut fibreglass board at least 25mm bigger than die size.
3. Use a small detail (mouse) sander and sand down both sides of the board (36-60 Grit size).
4. Wipe both sides of the fibreglass board with a damp cloth to remove fibreglass dust.

Resin:

1. Break off nozzle cover/cap of the double barrel cartridge and the mixing strip moulded on the plunger.
2. With an even push of the dispensing plunger; the twin barrel cartridge will dispense equal amounts of resin and hardener onto a suitable mixing surface or mixing container.
3. Mix the resin and hardener thoroughly using a non-fibrous mixing aid and avoid creating air bubbles.

Other:

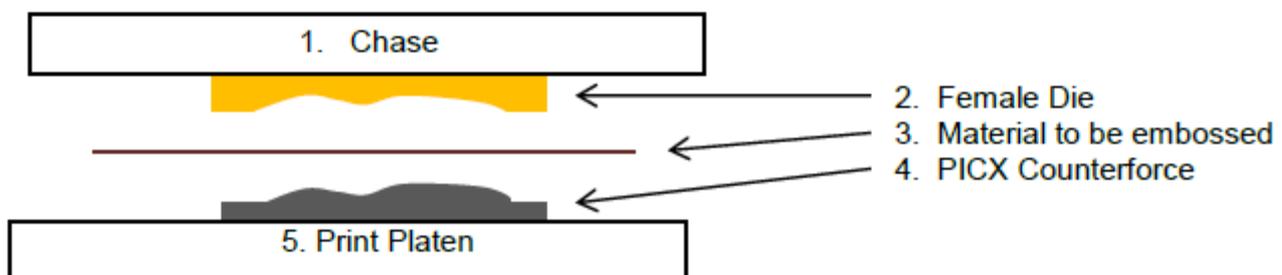
1. Do not mix on a metal surface or use a metal spatula / stirrer.
2. Ensure all mixing surfaces and tools are clean and best to prepare and work in a clean dust free environment.
3. A vacuum degasser is very useful to remove air bubbles in the mixed resin, but if one is not available then use some form of air pump, blower with a targeted and controllable jet of air.
4. Use suitable vinyl or neoprene gloves when mixing resins and heat resistant gloves when removing clamp chase from the oven and when removing and separating the die and the counterforce.

Profoil Systems Limited Foxtail Road, Ransomes Europark, Ipswich, Suffolk, IP3 9RT Tel: +44(0)1473 707222 Fax: +44(0)1473 721924 info@profoil.com www.profoil.com

Method:

1. The surface of the fiberglass backing board should be clean and dry, free from oil and grease. Roughen the surface of the backing board using coarse emery cloth or sandpaper. For best results use a small detail sander with a coarse grit sanding pad. Use suitable dust extraction equipment and use correct personal safety equipment. Remove all traces of fiberglass dust using IPA or similar solvent. If using water, use hair dryer or other heat source to properly dry the fiberglass board before use. If the counterforce is removed from the platen carefully after use, it can be reused again.
 2. Mount the die and fiberglass board opposite each other in print alignment. Setup / adjust the machine so the die and the fiberglass board make full contact, evenly.
 3. If removable chase, mount female die onto the chase and then evenly spray or brush apply suitable release agent. If machine hot, then spray release agent outside the machine away from heat and then mount die onto the chase without touching the surface of the die. If using liquid release agent, then you can apply directly on a pre-mounted hot die. If machine cold, then you can spray directly on a pre-mounted die. **Aerosol sprays usually contain highly flammable propellant so should never be sprayed on hot surfaces.**
 4. Prepare the print platen by centrally mounting the fiberglass board using the plate mounting tape. Stick wide masking tape or clear packing tape on the exposed print platen. Ensure there is no gap between the fiberglass backing board and the masking tape / film. The masking material will prevent the curing resin sticking to the print platen.
 5. If using cartridge, break off moulded nozzle cap and evenly press and push the plunger forwards so equal amounts of resin and hardener dispenses onto a suitable non-absorbent mixing surface. If using 1litre bottles pour or pump equal amounts on the mixing surface. Using a mixing stick; mix till both the resin and hardener are thoroughly mixed. The mixed resin sets very quickly so mixing, applying and forming must be all done and happen within a few minutes.
 6. Quickly apply the mixed resin onto the fiberglass board to produce around 1mm thick layer of mixed resin spread evenly in the area of the fiberglass board where the counterforce needs to be created. Run the machine for a minute or two, to create the impression required on the counterforce. The die presses onto the coating causing the materials to move and cluster and so form the design required. Once the resin sets, peel off the unwanted residue and masking film and then resume the pressure.
 7. If used on a letterpress machine with no heated chase then the cure time will be longer. At normal room temperatures, the initial platen to chase de-moulding (cure time) is around 20-30 minutes but that can be speeded up substantially by using a hair dryer with a narrow rectangular reducing nozzle and project the heat in between the chase and the Platen. When the platen is open use heat gun to heat up the newly formed counterforce, this will harden and toughen the counterforce and substantially increase its durability.
- * Note: Colder temperatures may slow down the initial cure speed of product.

- 1= Heated or non-heated Chase
 2 = Metal embossing or debossing die
 3 = Material to be embossed (paper or cardboard)
 4 = Formed Plato Inline Counterforce (PICX)
 5 = Print Platen/ Bed



Profoil Systems Limited Foxtail Road, Ransomes Europark, Ipswich, Suffolk, IP3 9RT Tel: +44(0)1473 707222 Fax: +44(0)1473 721924 info@profoil.com www.profoil.com

General Information

28ml Cartridge:

Volume of fill per chamber: ~14ml

Mix Ratio: 1:1

Total Volume fill: ~28ml

Inner Diameter: ~18 mm per chamber

Length of fill in chamber: ~75mm

Cartridge overall Dimensions: L ~165mm, W ~42mm T ~30mm

Total Cartridge Weight: ~55grams

Plato Embossing Counterforce system (PICX)

Application: A quick setting, fast curing* two-part Epoxy based Counterforce Resin System.

Gelling Time: ~5 Minutes at room temperature

Cure Temperature:

Cure Time:

Strength: up to 2500psi

Cure Colour: Black / Dark Grey

Product Code: UE-3420-28

Resin: Contains Bisphenol A (Epichlorhydrin).

Hardener: Contains Polysulphide Liquid Polymer, Tris- (Dimethylaminomsthy)phenol, reaction products with Formaldehyde and Dodecane-1-Thiol.

For Safety Information, see relevant data sheets.

Causes skin irritation. May cause an allergic skin reaction. Harmful / Toxic to aquatic life, with long lasting effects. Wash thoroughly with soap and water after handling and or use. Avoid release to the environment. Wear suitable protective clothing including, gloves, apron, and eye and face protection. If skin irritation occurs, seek medical advice / attention. Take off contaminated clothing. **IF IN EYES**, rinse cautiously with water for several minutes. If wearing contact lenses, remove if easy and or possible to do so, and continue to rinse. Seek medical advice / attention if required. Dispose of contents and or container to hazardous or special waste collection point.