

## Profoil Systems Limited

# Plato Inline Counterforce System

### 28g pack size ----- Instruction of Use (IoU)



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

#### Prepare Metal Die:

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



#### Prepare Backing Board:

1. Select correct thickness fibreglass board. 0.4mm and 0.8mm is available from Profoil.
2. Cut fibreglass board at least 25mm bigger than die size.
3. 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.
4. Wipe both sides of the fibreglass board with a damp cloth to remove excess fibreglass dust and ensure dry before proceeding.



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### Other:

1. Do not mix resin on a metal surface or use a metal spatula / stirrer - use a non-fibrous mixing aid like a plastic spoon.
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 mixing process.
4. Use suitable vinyl or neoprene gloves when mixing resins and heat resistant gloves when working with a heated chase and heating appliances.

### Method:

1. If using the cartridge system, 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 – for example a plastic disposable cup. If using 1litre bottles pour or pump equal amounts on the mixing surface. Using your mixing aid, 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.

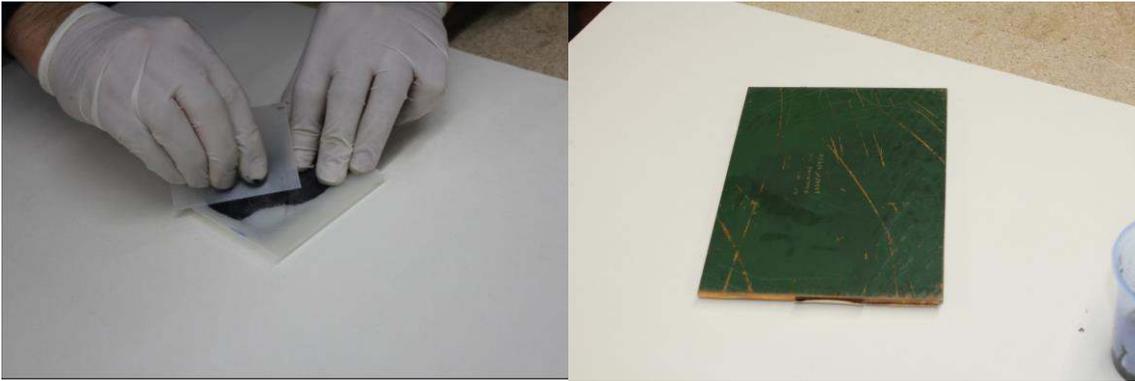


2. Quickly apply the mixed resin to the image surface of the female embossing die, ensuring all of the image is filled in sufficiently. Try to complete avoid over-applicating - small excess is ok. Then position your fibreglass board carefully over your female die.



3. With using a solid spatula or another piece of fibreglass board as an aid, exert pressure in all directions over the surface of your backing board. This helps to ensure all areas of your image are sufficiently and evenly covered with the mix. Once complete, apply even pressure over your counter die and leave at room temperature for 20-30 minutes – do not disturb. You can use a vertical pressure press or clamp if you have one, alternatively a heavy weight for example a heavy copper die or bookshelf weight will be sufficient.

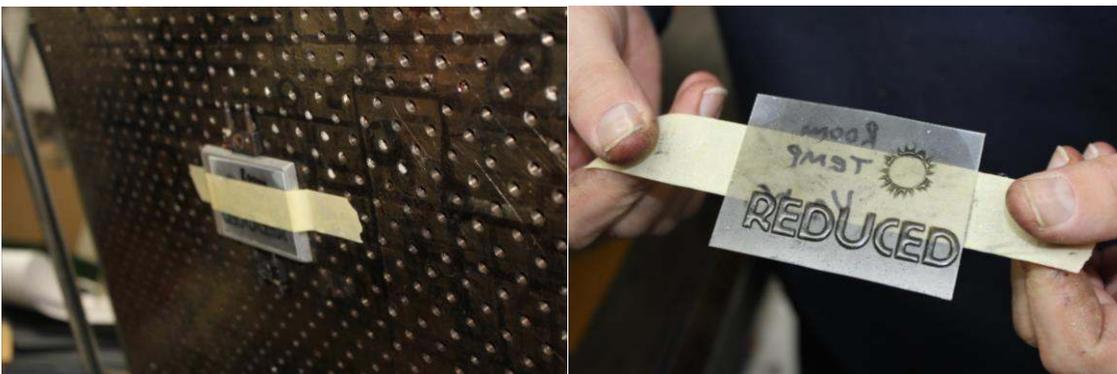
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4. Remove weight/pressure and then carefully separate the newly formed counterforce from the female die. The counterforce should be relatively hard but remains part-cured at this stage. Remove any access resin with sand/glass paper from the image surface and the edges.



5. To complete the final curing process with heat, you can use a hair-dryer/heat gun with a narrow nozzle for 3-5 mins. Alternatively mount the die and counterforce together with a decent masking tape for a solid hold in your platen press for 5 minutes at approximately 90 degrees, after-which the counterforce should now be fully cured for use.



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### **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:** ~20-30 minutes at room temperature

**Cure Temperature:** Approximately 90 degrees

**Cure Time:** ~5 minutes

**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.