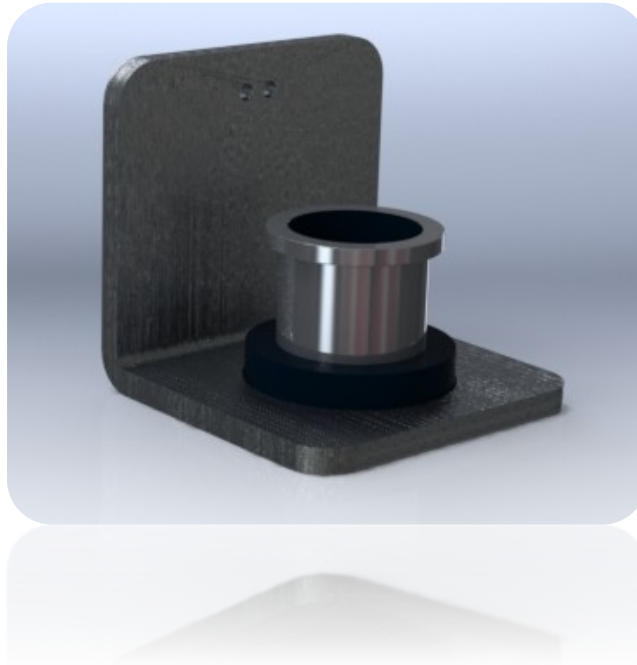


Preparing Electrode Samples Using the Moulding Kit

Casing assembly. Part number 38610
Extraction tool. Part number 38530



A step-by-step guide to creating electrodes for corrosion testing
using the moulding kit.

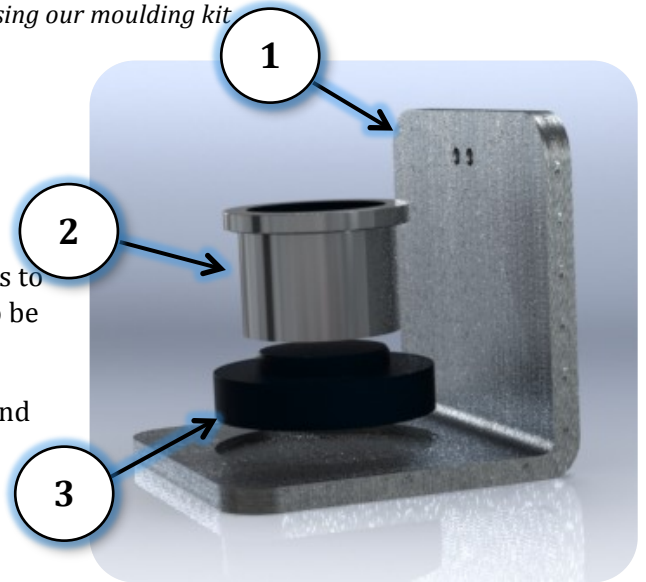
Technical note 1. Zebrafish – Preparing the Three in one Electrode using our moulding kit

The Moulding Kit consists of three parts:

1. Stand
2. Mould Cylinder
3. Base Plug

The base plug fits into the mould cylinder, allowing electrodes to be placed inside the cup and casting fluid (e.g. epoxy resin) to be poured in.

The stand has an indent where the base plug is to be placed and features dual holes in the back-plate so electrode wires can be tied off to ensure accurate placement of electrodes during curing.

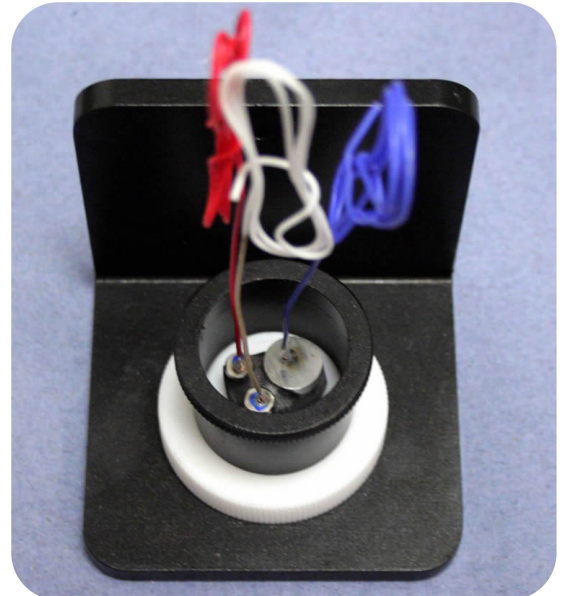


Step 1

Insert the base plug into the mould cylinder as shown in the photo above. Place the base and mould into the indent on the stand.

Step 2

Arrange the electrodes within the cylinder, ensuring the all electrodes are situated within the guide ring that is visible on the base plug. Tie the electrode wires off to the dual holes in the back-plate, using cable ties or twist ties if required.



IMPORTANT: Electrodes must be placed within guide ring

Step 3

Pour the casting fluid into the mould cylinder until the level reaches the fill line, visible inside the cylinder. Being careful not to displace the electrodes, move the entire assembly to the kiln and cure as required.

Step 4

Once fully cured, untie the cable ties and lift the base and cylinder off the stand. Using a twisting motion, carefully remove the base plug from the cylinder. Use the extraction tool or similar to push the finished sensor through the cylinder, being careful not to damage the Teflon coating inside the cylinder.

Using tools on the mould kit that are not provided, or being overly aggressive may damage the non-stick coating or the base plug, reducing the life of the mould kit.



Note.

When using the Three in One Electrode, it is important that with repeated use, grinding and polishing the face between experiments, the face remains perpendicular to the outside diameter. This is important to maintain the integrity of the sealing face.