TOMPS Mould Making & Casting Guide 2006

Mould Support Cases

Essentially there are two types of mould support case. Those made of Glass Fibre or those made of plaster.

Their primary function is to provide support (as the name suggests) to soft moulding compounds like latex, silicone and Vinamold. First lets take a look at fibre glass versions.

First complete the construction of your mould. Allow it to fully dry or cure before starting on a support case.

In the case of latex, wrap the whole piece in foil and coat with wax to ensure good release. For silicone and Vinamold this step is not essential.

Decide on a split point, much the same as a multi-sectional mould, and build a clay or plasticine ridge along it. Paint that with PVA and wax it. Of course there will be occasions where the mould will sit in the case and be removable without splitting the case in two. If this is the case don't build in a split point for the hell of it!

Now follow the same procedure as if you were making a mould of the mould itself in two sections (see sectional GRP moulds and imagine the former is your mould), gelcoat then reinforcement. For a support case two layers is usually enough, for larger pieces more may be needed. When you have finished the first half remove the clay strip, pva and wax the flange showing and do the other side the same way.

To hide the fibres, paint a thixotropic resin or gelcoat top layer for a real professional look to the case. Don’t forget a little wax additive in either to assist with cure and ensure a tack free finish.

The final thing to consider is the side that the case and mould will sit on during casting. It should be flat and stable. Either that or it will have to be sat in a shallow bed of sand to stabilise it.

Allow it all to cure and then drill bolt holes throught the flanges. You can reinforce these with washers like the grp sectional mould if you like. Once all is cured, separate the two halves, remove the mould and its cast and reassemble the whole thing. The mould is now ready for use and the case will do all the support work.

For a plaster support case the principal is very similar. Instead of using resin you would be using plaster. And instead of glass fibres you would use jute scrim. The process is basically the same with a split point, clay ridge etc, but don't use PVA and wax for the release agents. Go for a sanding sealer or shellac and petroleum jelly. Seal first then apply the jelly.

Plaster support cases are not as strong as resin cases and they are significantly heavier than their composite counterparts. The joining points will wear much faster and if at all possible use a fibre glass case over a plaster case as the lifespan is so much greater.

Even if your mould is perfectly flat and level on the bottom and a single piece, still consider a small tray like case to sit it in. This will ensure that even if your working surface is rough, the mould will be straight and true. If you want to build such a case, carvbe small keyways into the base of your mould to make sure the mould always sits right in the tray.