



Nuts, bolts and magnets for masking

Masking isn't only about rubber caps and plugs. The perfect masking solution can include masks with built-in magnets, metal plates, washers, nuts and bolts.

A custom mask can be a simple rubber plug that pushes into an odd shaped hole or a rubber cap moulded to cover a complex shape. The possibilities are endless when it comes to custom masking. Sometimes, however, a combination of rubber and other components can be used to produce the ultimate masking solution.

One area that is often over looked when it comes to masking is how rubber can be combined with other materials to create a mask. It is possible to use a number of materials such as magnets, metal plates, washers, nuts and bolts in conjunction with rubber to produce a masking solution.

A good masking company producing custom masks should have the ability to produce rubber to metal bonded parts. Rubber to metal bonding can be used to embed items such as washers, metal plates or nuts into a rubber mask. Those embedded items can form part of a sophisticated overall masking solution such as a straight-sided plug that can be expanded to fill a hole once it is in position in the part. A metal plate bonded inside a rubber mask can be used to strengthen a mask. Metal plates with threaded holes in them can be bonded into masks to allow the mask to be clamped onto a surface or jig.

Rubber to metal bonding locks the metal piece into the rubber on a permanent basis. For parts that may need replacing at some point, pockets can be moulded into rubber masks that will allow items such as metal plates, nuts, washers or magnets to be held in a pocket so they can be removed if they or the rubber ever need replacing.

Magnets can be used to help hold a mask together when it has to be split in order to wrap around a complex shape. Magnets can

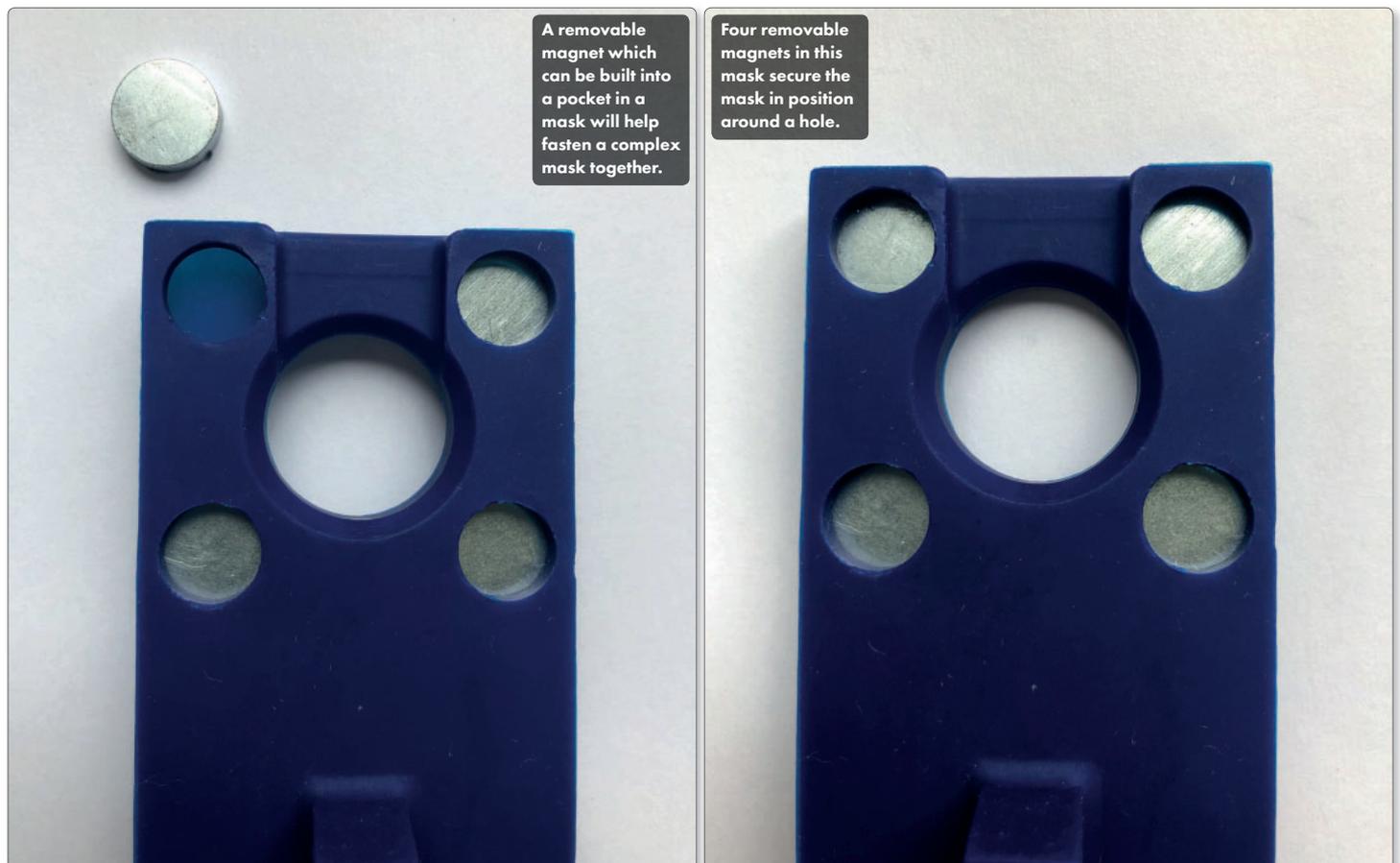
either be built into the mask to grip onto the surface of the part the mask is covering, or magnets can be built into tabs on the mask. Those tabs will then stick together once the mask is in place on the part.

With smart design the rubber can help stop the metal fasteners from damaging the part that is being masked. Pockets or recesses can be created to hold metal items or magnets to ensure the metal will not touch the part that is being painted or plated.

If you need more information on using magnets or fasteners in custom masking, a good masking supplier such as Caplugs or any of their distribution partners such as Greentree can provide help.

John D. Gill

John D. Gill is an Engineer with experience in masking and product protection throughout the UK, Europe and USA. He can be reached at www.johndgill.com and via Twitter @masking101



A removable magnet which can be built into a pocket in a mask will help fasten a complex mask together.

Four removable magnets in this mask secure the mask in position around a hole.