

# A Cleaner Paint Line

Both the design and the material of your masking caps and plugs can make a difference to your paint line.

A common problem in painting is removing the masking, as there are times when the paint is effectively gluing the masks to the part. So, questions such as “how should we remove masks?” and “how can we get a cleaner paint line?” come up a lot to masking suppliers.

In the case of custom molded masks, it is easy to build in features to the design, which will ensure the masks perform in the particular application. The most common features to be incorporated into custom masks are handles and chamfers to make the masks faster to install and remove. However, masks can also be designed to leave a clean paint line or ensure the paint doesn't leave a jagged edge around where the mask has been.

## Some of the more common features to help with a clean paint line are as follows:

- ▶ Undercuts can be designed into the mask; an undercut can effectively shield an area and stop the paint from getting deep into a masked area. The undercut or overhang can be designed to cause the paint to feather out underneath the mask.
- ▶ A chamfer on the outside diameter of a cap can mean the paint coverage comes closer to the stud, whilst also feathering out the paint.
- ▶ Sharp edges of a taper can be flattened off in order to ensure that the paint line is consistent from one part to another.

- ▶ Handles of a custom mask can be designed to ensure that the mask doesn't shadow the paint. Whilst handles are important for removing masks, there needs to be a balance so they do not interfere with the finished paint coverage.

Another area to look at in order to improve the paint line is to review different materials for your masking plugs and caps. A different type of material may perform just as well in your application, but the paint may not adhere to it as much. A different material for your masking plug or cap could mean reduced cleaning and increased lifespan of your masking plugs and caps. In the case of rubber masking caps and plugs, there are a number of things that can be done with the compound which can impact how the paint adheres to them.

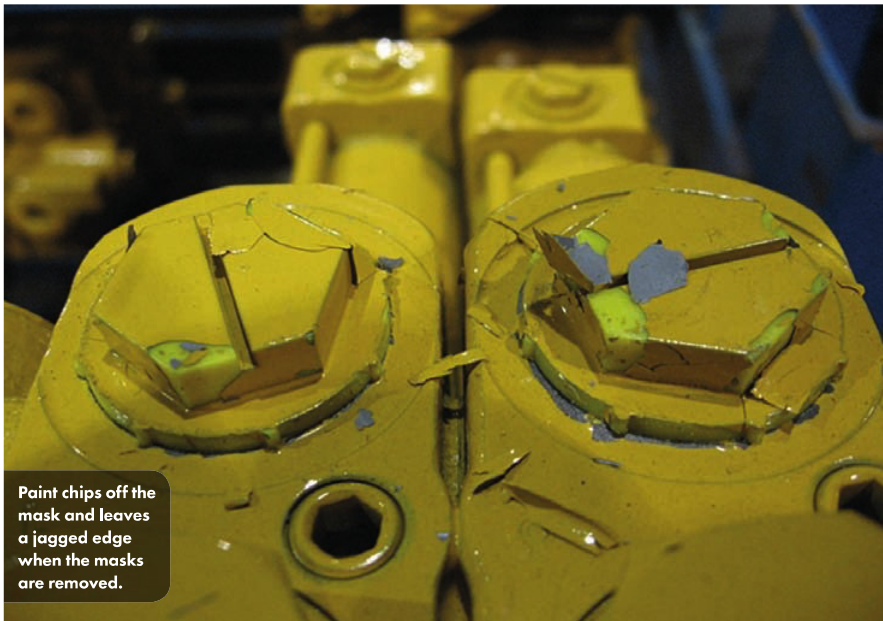
Tape is also often questioned when it comes to producing a clean paint line. There are a number of masking tapes available for the same surface finish process. Many tapes come in different versions, so often there is a thicker or thinner version of tape available. There are also different adhesion strengths available and tapes with a different temperature resistance. If you take the traditional green powder coating tape as an example, most good masking suppliers will have a version that is thinner, a version that is thicker, a version that will withstand a higher temperature and a version with a different adhesive strength. So, a version of your current tape that will withstand a higher temperature, may be better if you process parts which retain a lot of heat in them. It may also mean that the tape will strip off the part better if you remove the tape whilst it is hot.

If you are interested in improving your paint line, a good masking supplier such as Caplugs or any of their distribution partners such as Greentree can provide samples for you to evaluate.

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Paint chips off the mask and leaves a jagged edge when the masks are removed.



The same mask made from a different material means the paint doesn't chip off the mask and the mask leaves a smooth finish when removed.