16.0 RE-MACHINING OF PRODUCTS

16.0 Re-machining products (suggestions)

Jencan products can be re-machined without any problems whatsoever, as they are made from thermoplastic materials (reinforced technopolymer) and the inserts are made from machinable materials. However, avoid making errors which could affect the functionality of the product by following a few simple rules.

16.1 General

- When cutting thermoplastic, use a low cutting speed and a slow feed speed. This prevents excessive overheating of local areas of the material which can reach a softening temperature, and consequently cause a deterioration of the mechanical properties of the piece, wear of the cutters, formation of burrs which then have to be removed.
- For continual machining over a period of time, use hard metal tools. HSS tools have a short life. The cutter must always be sharp.
- Ensure that the machined part is well-cooled using ordinary emulsified water which helps disperse the heat from the product.

16.2 Widening the pilot axial hole

- The hole in a metal insert can be widened without too much trouble. We recommend machining the hole from the pilot hole section, in order to obtain a better centring of the hole.
- If there is a large difference between the pilot hole and the final hole, machine the hole in several passes with increasing diameters. The reason for this is that if a large amount is removed it generates an excessive overheating of the insert, which immediately transmits the heat to the surrounding plastic. Sometimes this heating can cause the plastic touching the metal to soften, which ruins the physical bond between the insert and the plastic, which in turn causes the insert to slip.
- For handwheels with small diameters, we suggest mounting the part on the spindle by gripping the hub.
- For control handwheels in families C and D, we suggest mounting the pieces on the spindle, by gripping them by the crown. This helps obtain a better centring of the hole and the handwheel. Ensure that the handwheel is accurately centred on the spindle.
- Ensure that the machined part is well-cooled using ordinary emulsified water which helps disperse the heat from the product.
- When transforming a non-through (female) hole into a through hole, the plastic does not chip when the drill exits.

16.3 Making a smooth or threaded radial hole

- Note that a threaded hole in plastic tends to be narrower than normal. Therefore plastic generates a light braking force on the grub screw.

17.0 PAD PRINTING

The increasing demand for customised products has led us to introduce a “pad printing” service. This technique, involving the transfer of ink, makes it possible for us to create any design on many of the handgrips presented in our catalogue.
Using this method we can reproduce logos, and narrative and functional texts. This is a further contribution by our company to enhance visibility and personalisation of the product, to make it more noticeable, to decorate it and to make it more attractive through a simple, low-cost system.
The image can be reproduced in one or up to a maximum of four colours. The drawing or design must be handed over to our technical department so that the printing system can be set up accordingly. Our design team is available for consultation if you wish to create original graphical elements or logos for your products.