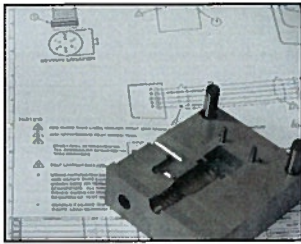


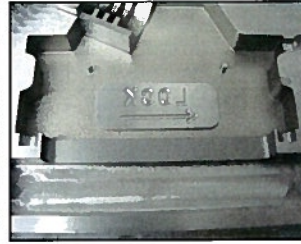
Last month, our first Capability Series article described an overview of Intercon's over-molding process. To further demonstrate the process from tool making to finished product, we present this step by step pictorial.



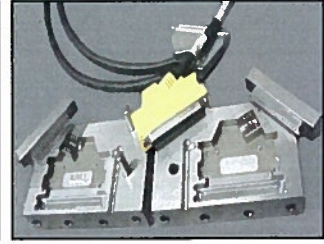
Mold tools are designed in-house from concept, drawings, part design specification, or product sample.



A graphite image of the part is fabricated with precision CNC equipment.



Next an Electrical Discharge Machine is used to erode away metal. A cavity is left exactly mirroring the desired image.



Further customization can include smooth or matte finish and 'molded in' part numbers, lettering, and logos.



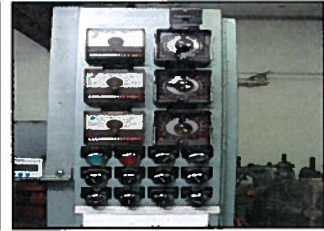
Pelletized thermoplastic elastomer material used in injection mold equipment.



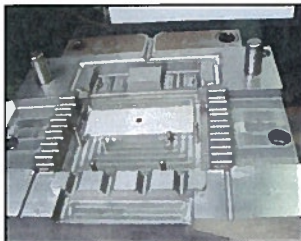
Loading TPE pellets in hopper on Autojector 30 ton vertical mold press.



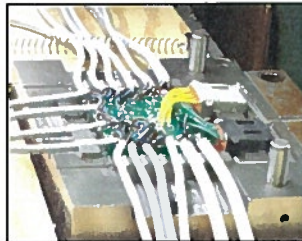
Adjusting injection 'shot' size of molten materials.



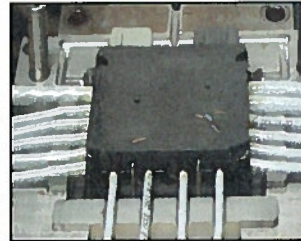
Temperature, injection speed, cycle and dwell time settings.



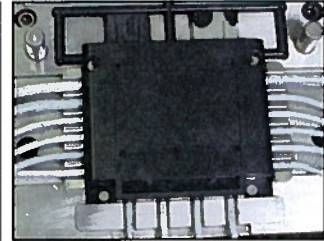
This mold, one of our largest and most complex, is ready to receive the assembly for over molding. ( A large assortment of basic mold tools are readily available. )



Circuit board assembly interfacing 2 connectors and 16 cables placed in mold.



Inner shot: an initial thin layer of plastic, applied at low pressure, is molded to contain PCB and wires, and also seal the connectors and cable openings.



Outer shot: a second layer of plastic is molded around the first to further seal the components to protect it from the environment and give the assembly its matte finish. (a logo and lettering are included in this mold design.)

Many of our customers are able to improve their cable assembly performance and longevity by incorporating over-molding in their designs. The result is an assembly that is protected from environmental factors and the cost effective solution of replacing mechanical back-shells, or epoxies which require days to cure. As a value added service, the engineers at Intercon work with our customer's engineers to formulate these solutions.

**For more information on this topic please feel free to contact us. We are happy to help you with your requirements and challenges. (434) 525-3390 & sales@interconinc.com**



[www.interconinc.com](http://www.interconinc.com)