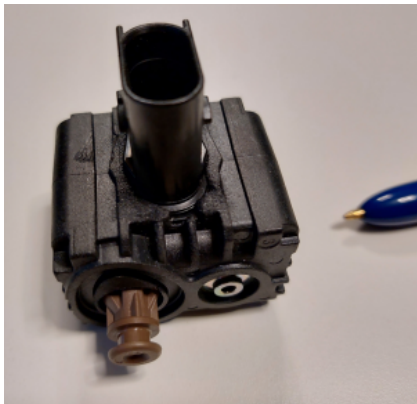


# TP overmolding with TP/elastomer

Hereafter a list of a few (so far) commercial applications for which our polymers have been used in a plastic insert overmolding process.

## CONFIDENTIAL INFORMATION

| Application                     | Picture                                                                             | Polymer           | Insert material         | CTD ref / Comments                                                                                                                 |
|---------------------------------|-------------------------------------------------------------------------------------|-------------------|-------------------------|------------------------------------------------------------------------------------------------------------------------------------|
| Single use surgical instruments |                                                                                     | PARA Ixef GS-1022 | KetaSpire KT-880 SL     | F. Baruffi                                                                                                                         |
| Push-fit fitting                |                                                                                     | PARA Ixef 1022    | Cyclic olefin copolymer | M. Schelles                                                                                                                        |
| Fryer cover                     |                                                                                     | PBT               | PESU Veradel            | P. Martin                                                                                                                          |
| Stop valve                      |    | PP                | PPSU Radel              | P. Martin                                                                                                                          |
| Thermostat housing              |                                                                                     | Silicone rubber   | PPA Amodel              | P. Martin                                                                                                                          |
| Handle for garden tools         |  | TPE               | PARA Ixef               | P. Brasseur                                                                                                                        |
| Solenoid                        |  | PPS R4-240        | PPS BR42B               | 2 solenoid valves (bobbin, connectors, internal magnets...) are overmolded (2 overmolding steps)<br><br>M. Schelles/ E. Piedemonte |

|                        |                                                                                                             |                              |               |                                                                                                                         |
|------------------------|-------------------------------------------------------------------------------------------------------------|------------------------------|---------------|-------------------------------------------------------------------------------------------------------------------------|
| Gas cock valve         |                            | Liquid<br>Silicone<br>Rubber | PPA AS-1566   |                                                                                                                         |
| AdBlue supply pump     | <p>LSR silicone seal</p>  | Liquid<br>Silicone<br>Rubber | PPA A-1133 HS |                                                                                                                         |
| digital mirror housing |                          | PA6                          | PPS BR111     | Philippe Brasseur<br>warpage was an issue (Moldflow calculations performed to illustrate the reasons and the solutions) |