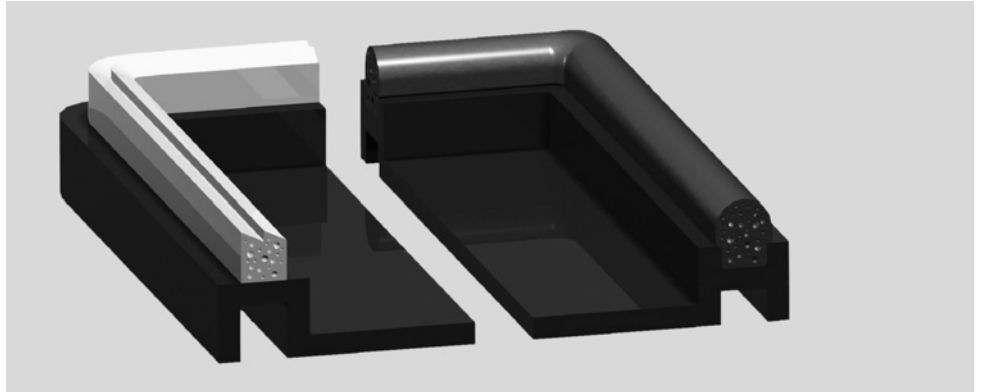


Datasheet

1. Foamed TPE sealing

Advantages of foamed TPE sealing

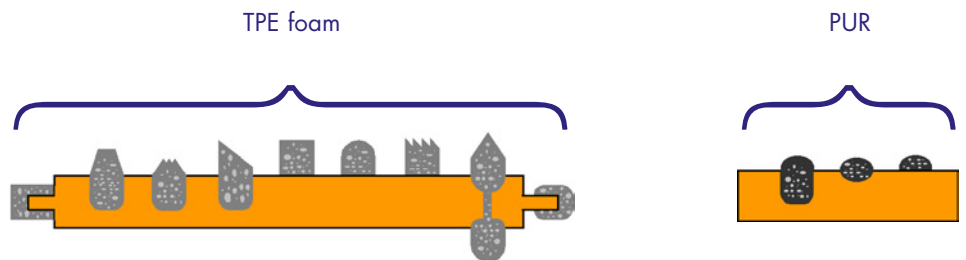


two components injection moulding
with TPE sealing

one component injection moulding
with subsequent PUR application

Possibilities of configuration

By using the form bounded manufacturing for the sealing the geometry is free available and limited by mould technical feasibilities only.

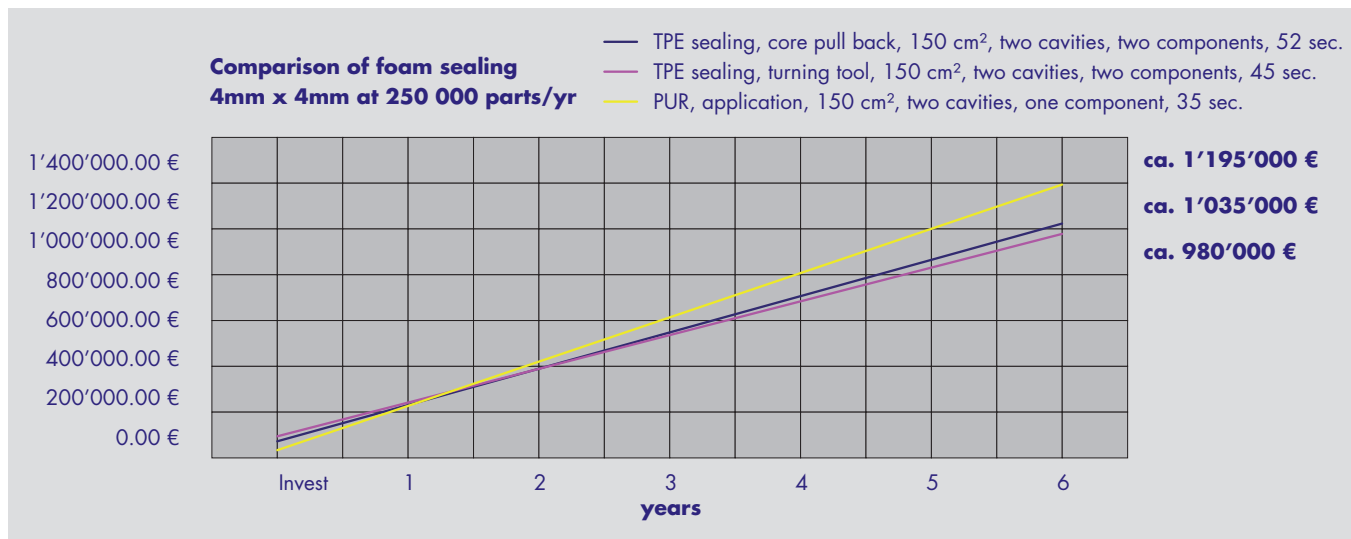


Comparison of manufacturing processes

TPE foam	PUR foam
1. injection moulding of hard components and TPE foam	1. injection moulding of hard component
	2. transport of semi-finished product for applying PUR foam
	3. application of PUR foam
2. shipping finished part to customer	4. shipping finished part to customer
<i>One process with two steps up to the finished part</i>	<i>Two processes with four steps up to the finished part</i>

Due to the process integration two process steps can be left. This allows to reduce manufacturing time, production cost as well as quality risk.

Comparison of cost: 250 000 parts/yr



The comparison of cost shows the break-even point of the TPE sealing at 250 000 parts/yr within the second year of output.

Material selection

Indication	TS101	TS102	TS103	TS201	TS202	TS203
Sealing (g/cm ³)	0.65	0.6	0.69	0.63	0.63	0.72
Shore A	8	0	13	9	9	10
DVR 80°/24h (%)	30	87	31	43	57	46
Adhesion at PP	+	+	+	+	+	o
Adhesion at PA	-	-	-	-	-	+
Food admission	BfR,FDA.2002/ 72/EC	BfR,FDA.2002/ 72/EC	BfR,FDA.2002/ 72/EC	+	+	-
Fire protection classification UL	HB qualified / not listed	HB qualified / not listed	HB qualified / not listed	not listed	not listed	not listed
Temperature resistance	until 120 °C	until 110 °C	until 120 °C	until 120 °C	until 120 °C	until 120 °C
UV resistance	o	o	+	+	+	+
Petrol resistance	-	-	o	+	+	+
Diesel resistance	-	-	-	+	+	+
Oil resistance	-	-	-	+	+	+

Legend: yes +
 limited o
 no -

Several foam versions are available whereas the diversification is growing continuously.