

DOOR PANEL

FLEXflow
F A M I L Y

FEATURES:

- > Pressure lines removal
- > Cosmetic improvements



Fig. 1

GENERAL INFORMATION

Application field:	Automotive interior
Molded part:	Door panel
Nominal weight:	1450 g
Nominal thickness:	2.5 mm
Material:	PP
Technology:	FLEXflow

HOT RUNNER SYSTEM LAYOUT

The hot runner system is composed by n. 7 nozzles Gp series with conical valve gate and through the cavity end rings. Each nozzle is managed by a FLEXflow electric motor with lateral configuration (Fig.2).

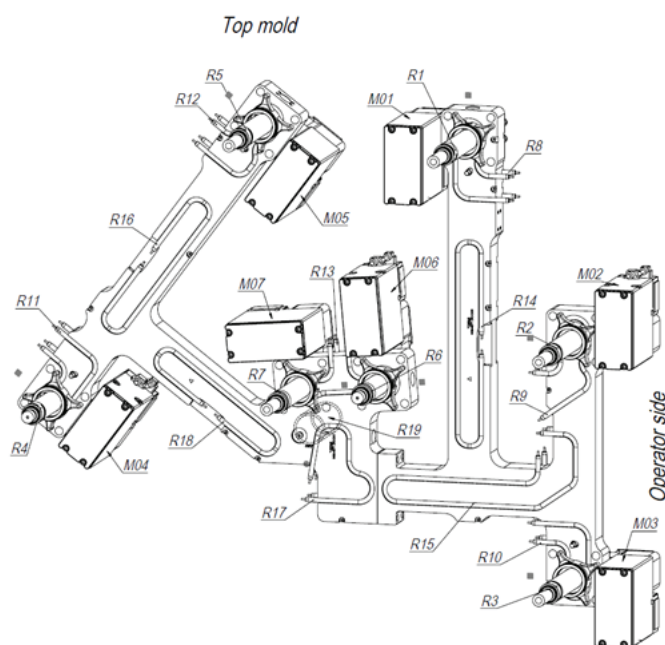


Fig. 2

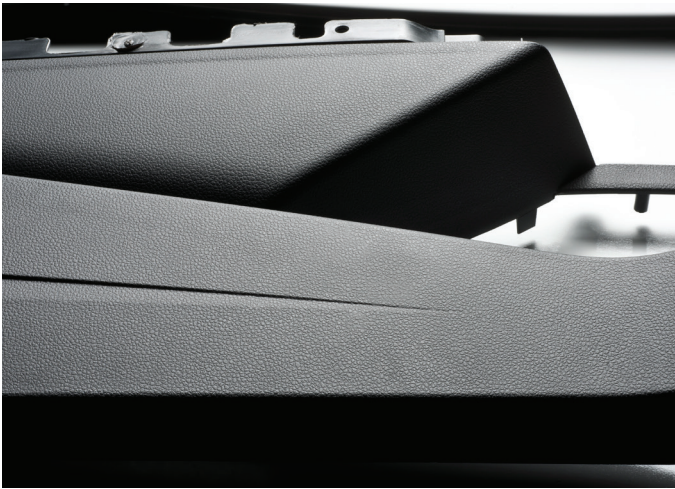
CUSTOMER'S EXPECTATIONS

Interior parts as door panel obviously require very high cosmetic standard and perfect surface quality. The customer's target for this application was to avoid important aesthetical defects such as pressure lines.



Standard sequence: pressure line

Fig. 3



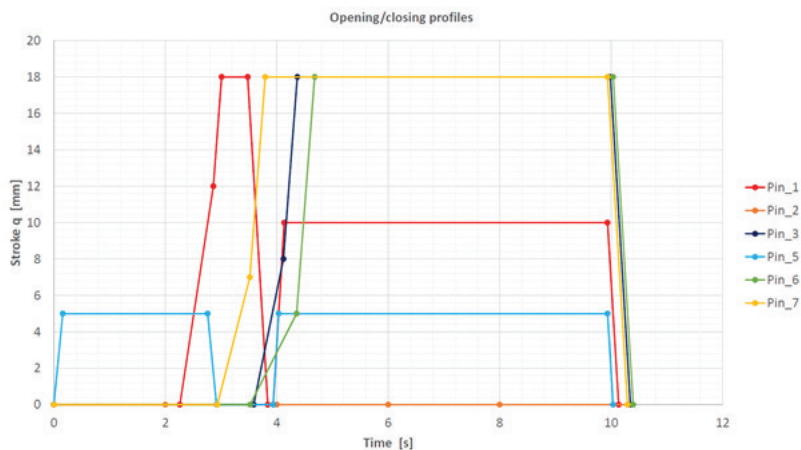
FLEXflow sequence: pressure line removed

Fig. 4

SOLUTION

With the traditional sequential opening, an important pressure line appeared in the lower central area due to fast opening of needle M3, [Fig. 3].

Aesthetical appearance was easily improved setting an optimized opening profile of the valve pin M3. The pressure line was definitely removed, as it is showed in Fig.4.



FLEXflow valve pin opening/closing settings

Fig. 5