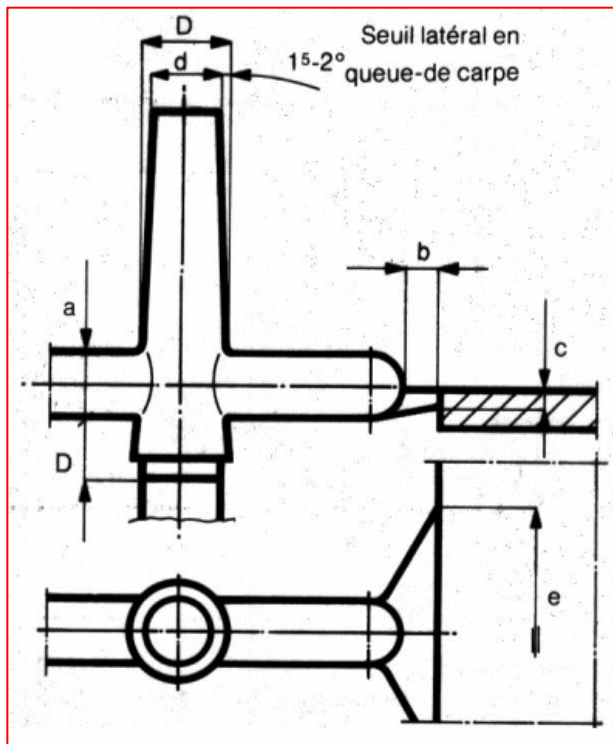


Alumold 500

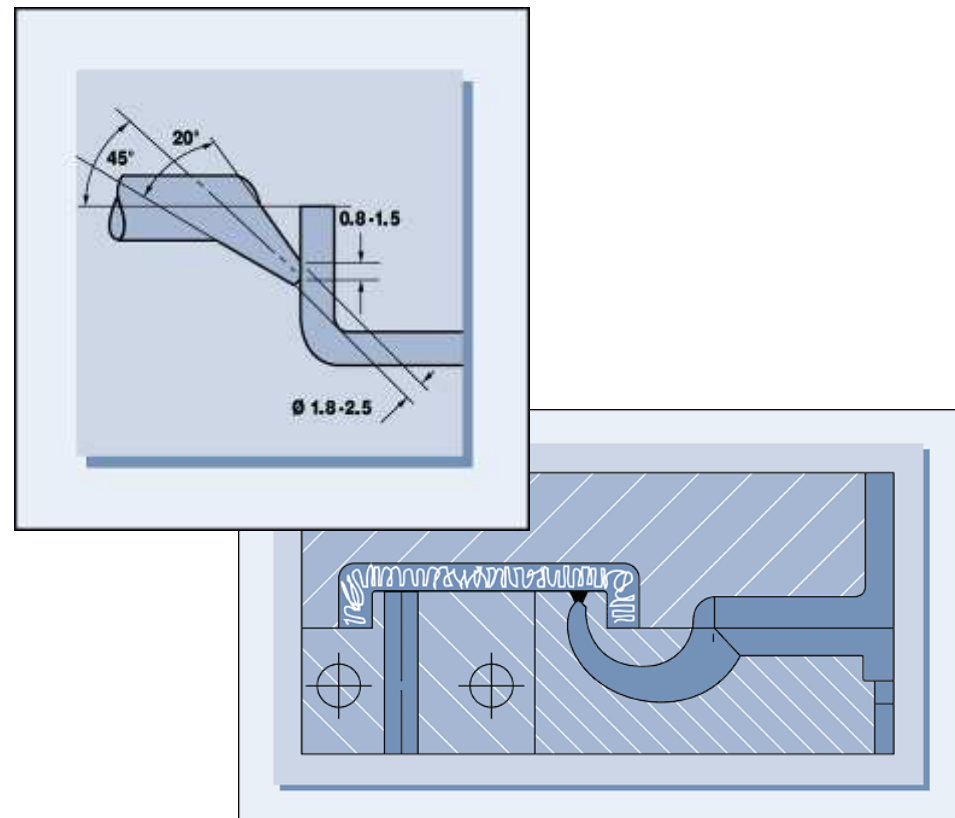
Design Guidelines – Channels

Design rules

Gate system



Prefer fan gate when possible



When submarine / tunnel gate is required, use steel insert

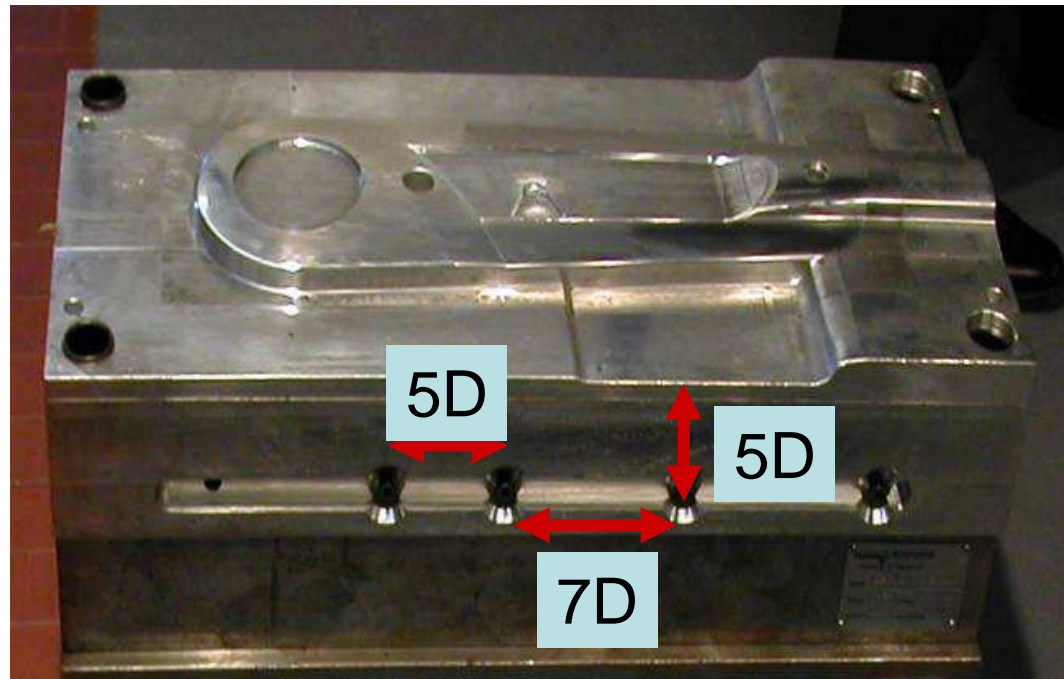
Design rules Cooling channels

Less cooling channels but of larger diameter, turbulent flow

Distance between channels and from cavity to channels :

- steel molds = **$2D \times 2D$** with **$D = \text{channel } \varnothing = 8 - 10 \text{ mm}$**
- aluminum mold = **$5D \times 5D$** with **$D = 12 - 14 \text{ mm}$**

! flow rate conditions to meet :
Reynolds number > 4000
(turbulent flow)



Design rules

Cooling channels

Influence of the distance between channels and to the surface

