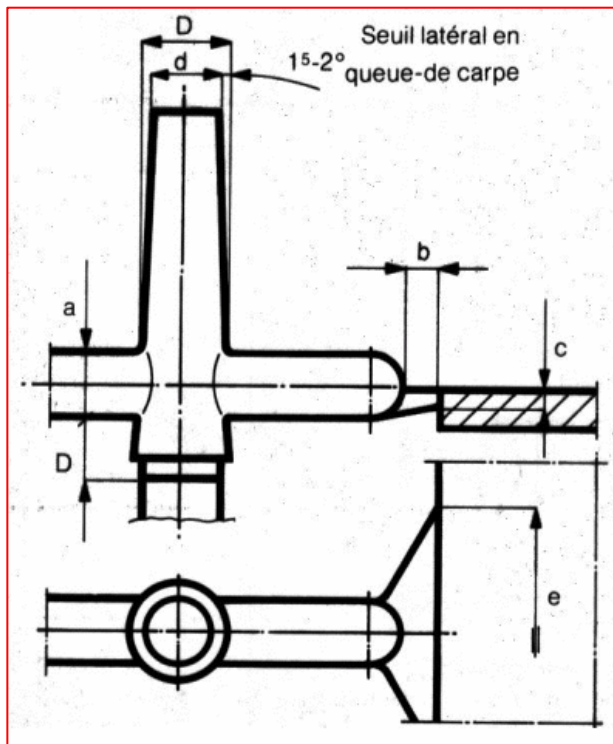


# Alumold 500

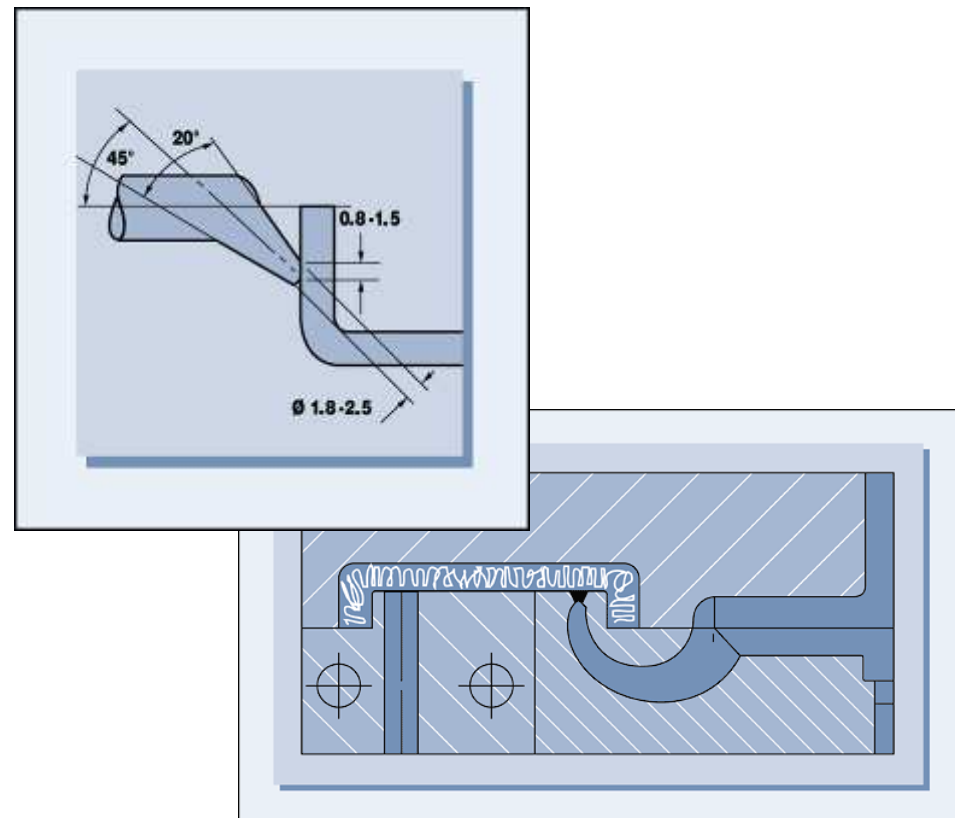
Design Guidelines – Channels

# Design rules

## Gate system



**Prefer fan gate when possible**



**When submarine / tunnel gate is required, use steel insert**

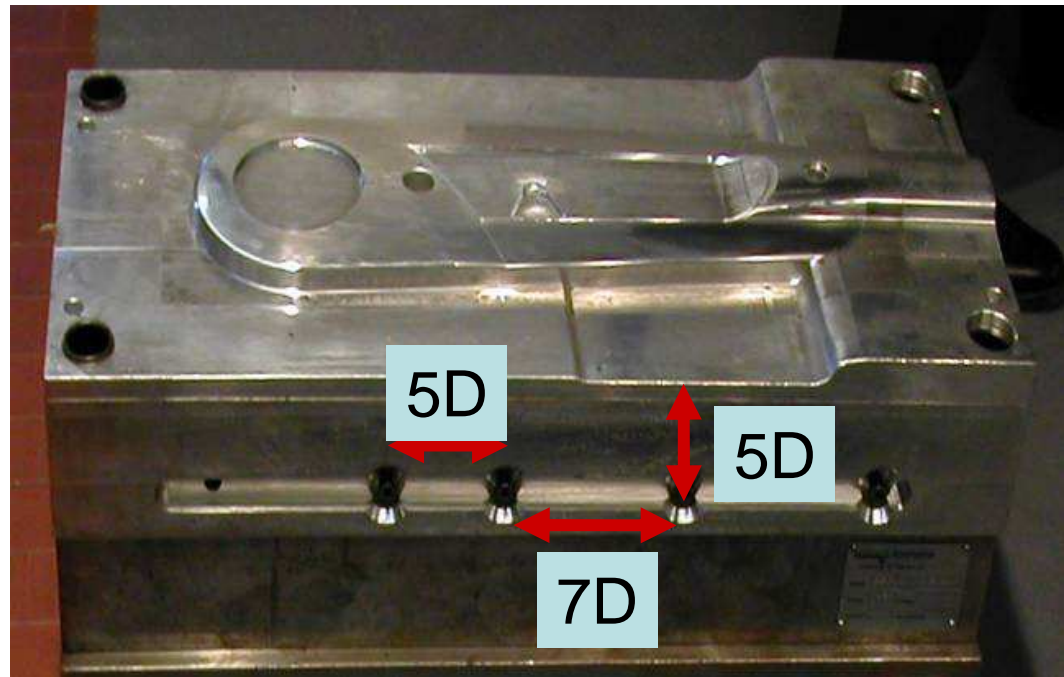
## Design rules Cooling channels

**Less cooling channels but of larger diameter, turbulent flow**

Distance between channels and from cavity to channels :

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

