

## Physical Characteristics and Technical Data

Contributors: K. Metzger & M. Young

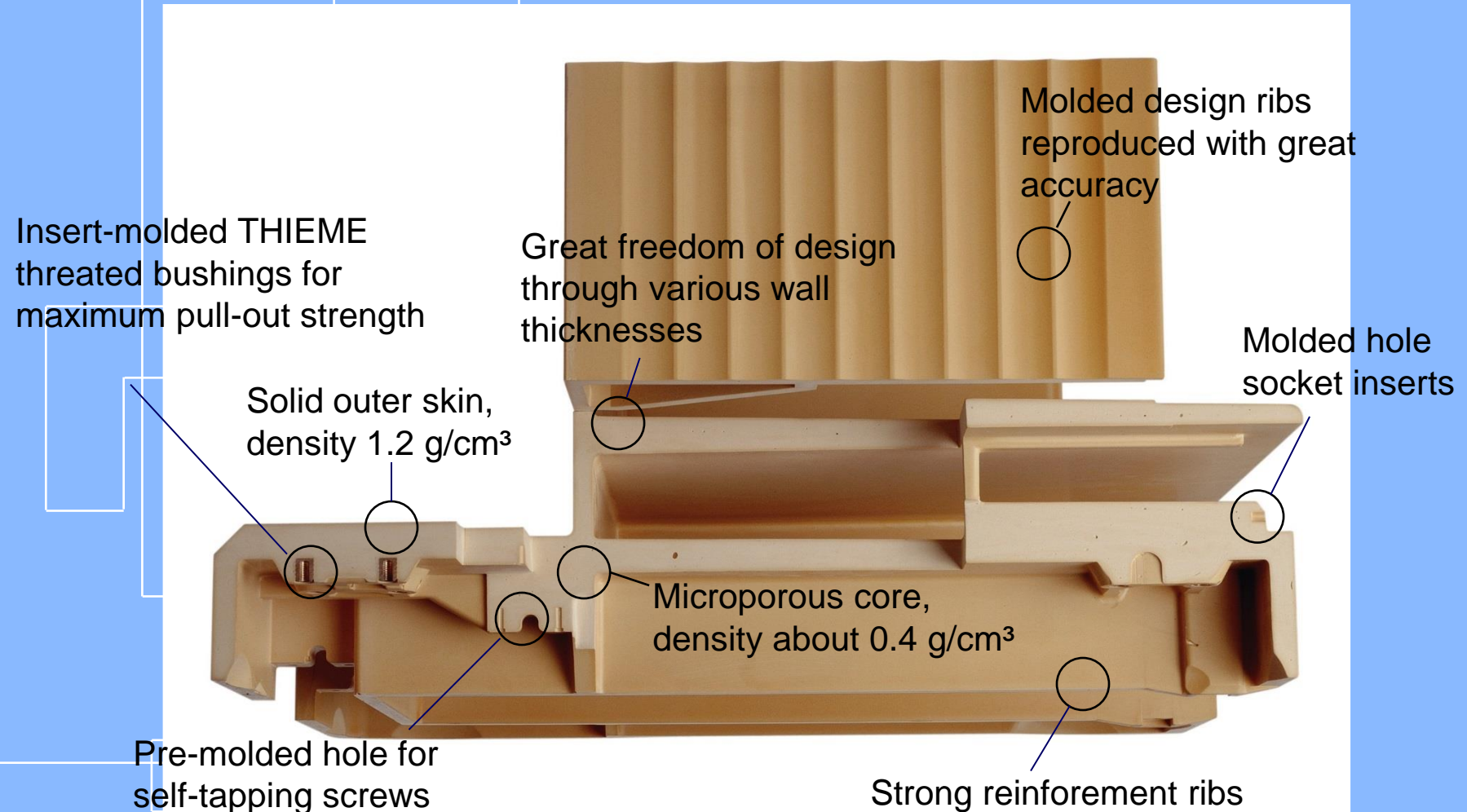
Polyurethan

THIEME Corporation St. Charles, IL USA 248-628-2930

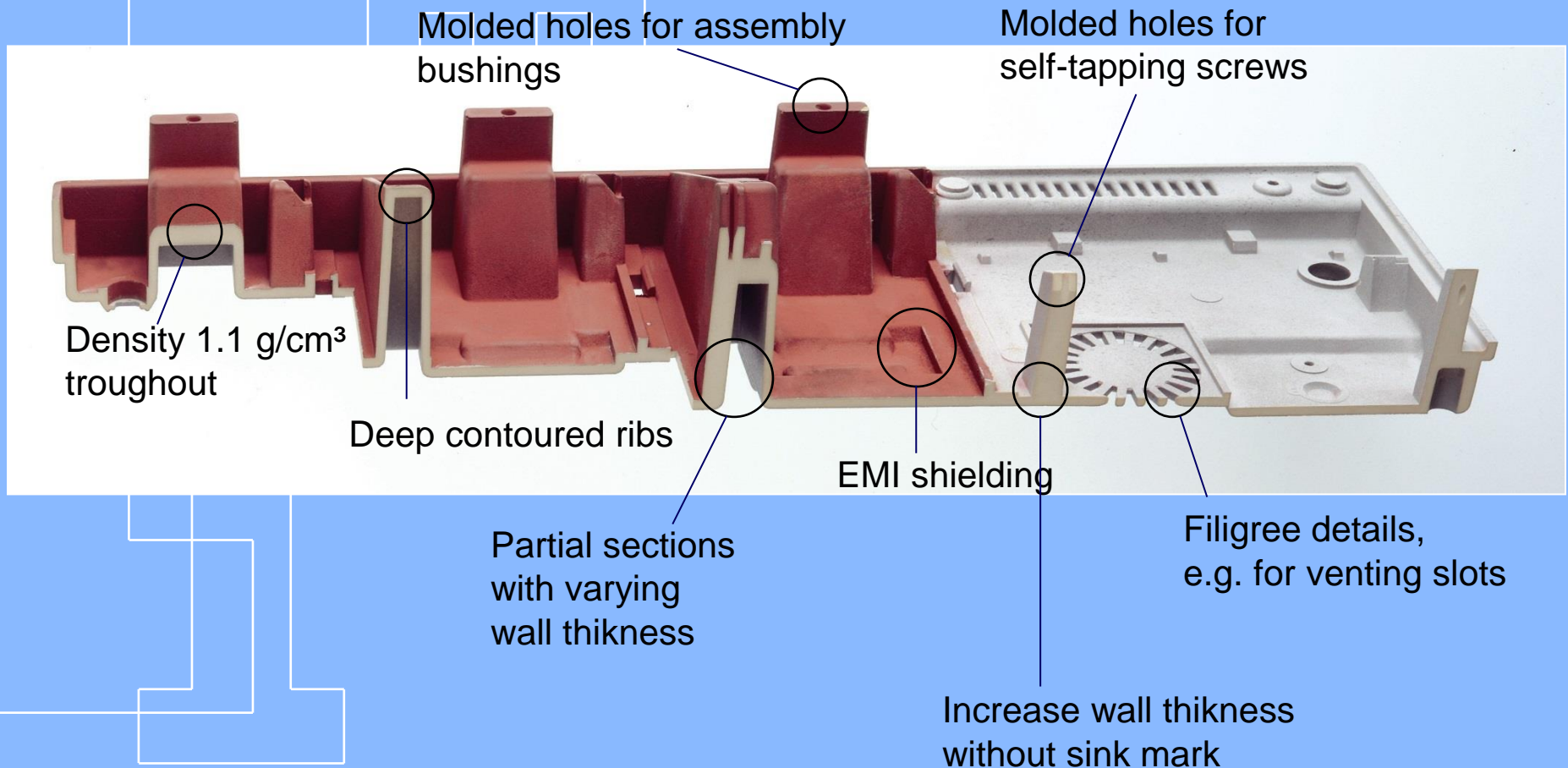
## **Polyurethane – the ideal material for state-of-the-art design**

- **PUR-Systems**
  - Baydur® 60
  - Baydur® 110
  - Baydur® GS
  - Bayflex®

## Features



## Features



# Baydur® 726 vs. Prism CM-200 PUR

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## Physical Characteristics

	Baydur® 726	Prism CM-200
Wall thickness	5-30 mm partial 2 mm possible	3-12 mm partial 1 mm possible
Draft angle	1 Degree	1 Degree
Different wall thickness possible	yes (up to 30 mm)	yes (up to 20 mm)
Sink mark with different wall thicknesses	no	possible
Inmoulded inserts	yes	yes (in consideration of specific requirements)
Mounted inserts	yes	yes
Self-tapping screws	yes	yes
Snap-fit fastner	no	yes

## Design and technical construction

### Material and processing characteristics

	Baydur® 726	Prism CM 200
Tooling	Aluminium	Aluminium
Mould release agent necessary	no	no
Lots size	ex 100 pieces	ex 300 pieces
Painting	yes	yes
Optional pigmentation	yes	yes
Density	0,6 kg/dm <sup>3</sup>	1,1 kg/dm <sup>3</sup>
Inside mould pressure	4-5 bar	15-20 bar
Deflection temperature under load	118°C DIN 53432	115°C DIN 53461 (method B)
shrinkage	0,35 - 0,7 % Depending on the wall thickness	0,5 – 0,9 % Depending on the wall thickness

# Design and technical construction

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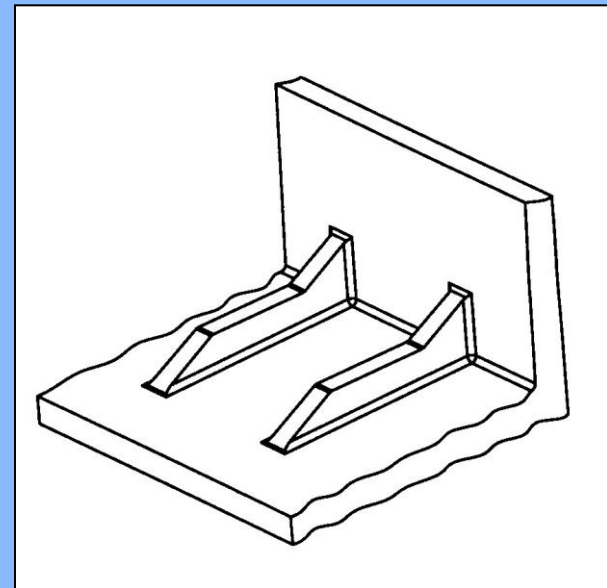
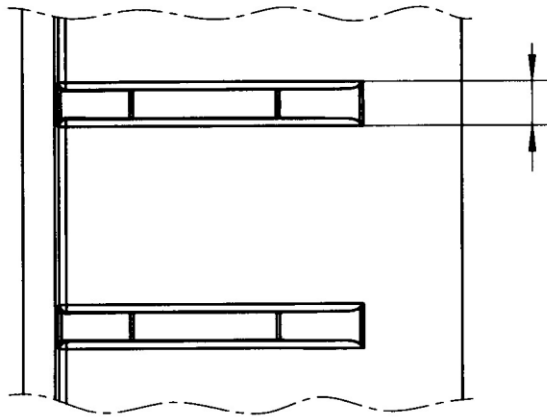
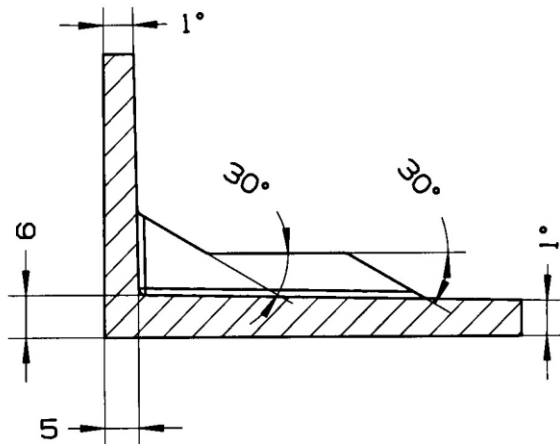
## Material and processing characteristics

	Baydur® 726	Prism CM -200
Flame retardant according to UL 94 V-O	yes	Yes
Impact strength	18 kJ/m <sup>2</sup> DIN 53432	45 kJ/n <sup>2</sup> DIN 53453 Test sample 120 x 15 x 10
Flexural modulus of elasticity	950 MPa (N/mm <sup>2</sup> ) DIN 53432	2000 MPa (N/mm <sup>2</sup> ) DIN 53457
Impact strength	21 MPa (N/mm <sup>2</sup> ) DIN 53432	50 MPa (N/mm <sup>2</sup> ) DIN 53455
Water absorption 24h/RT / DIN 53495	< 0,4 %	< 0,5 %
Thermal Elongation Koefficient (RT) / DIN 53572	$73 \times 10^{-6} \times K^{-1}$	$90 \times 10^{-6} \times K^{-1}$

## Examples of configurations

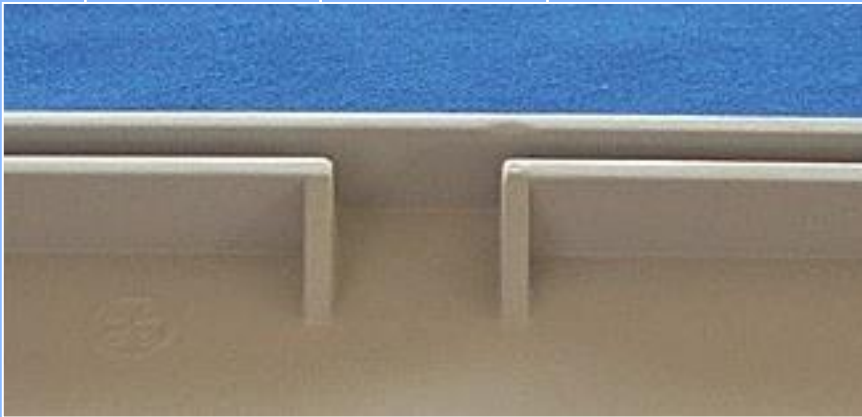


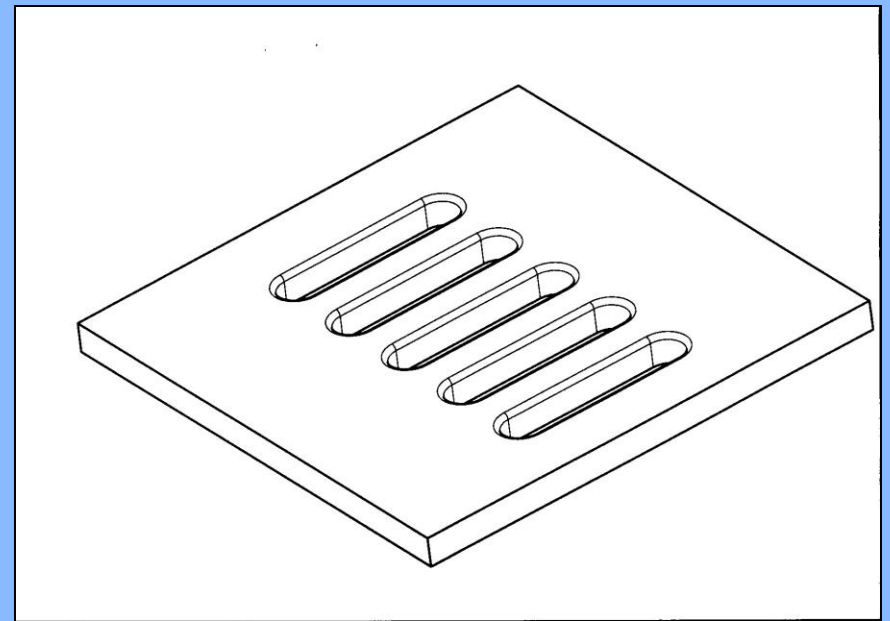
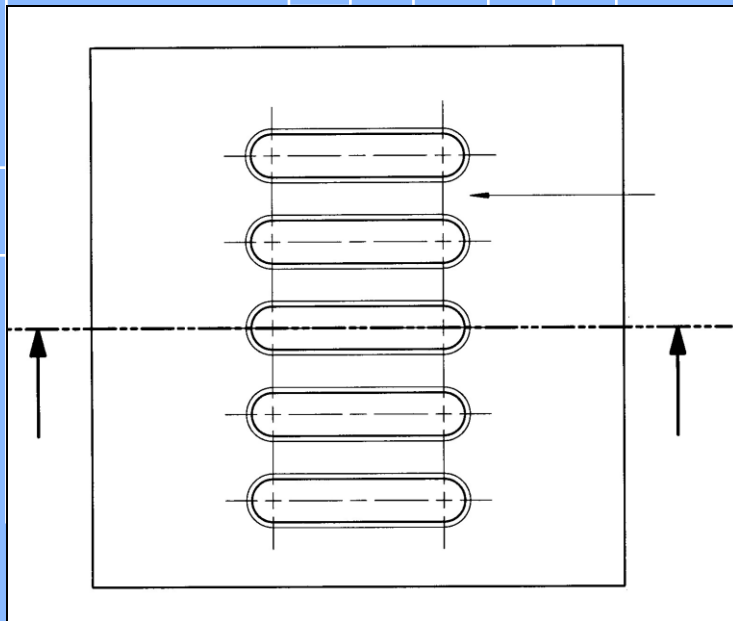
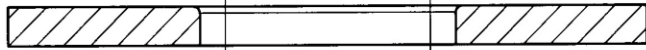
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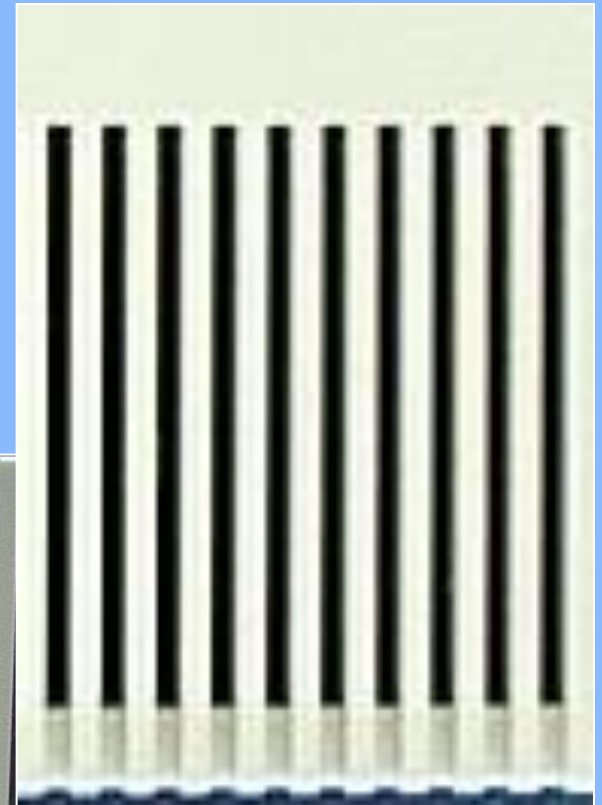
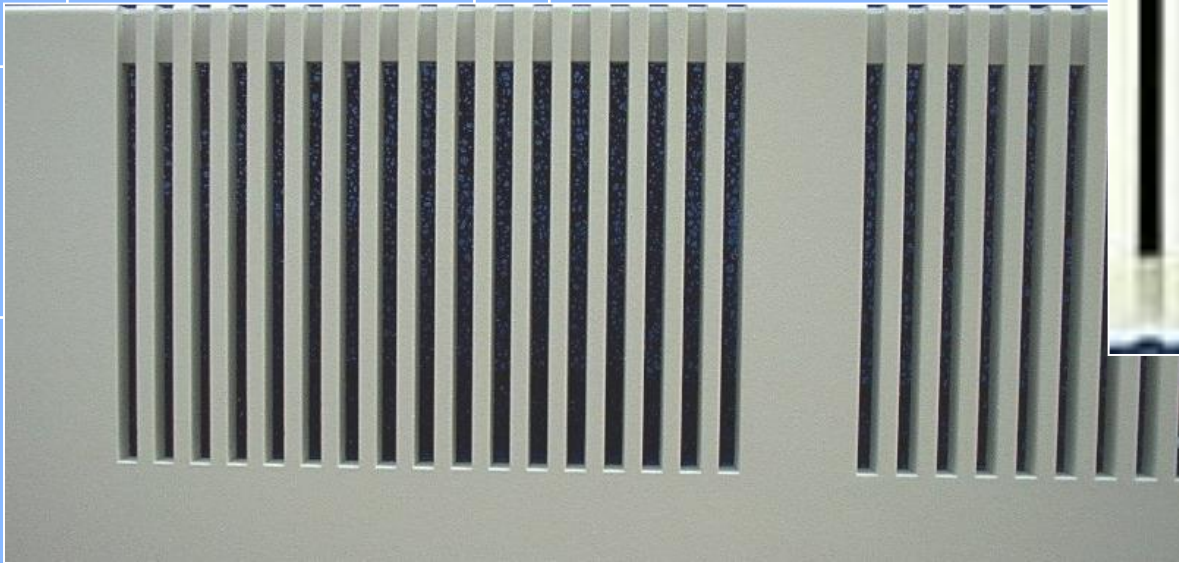
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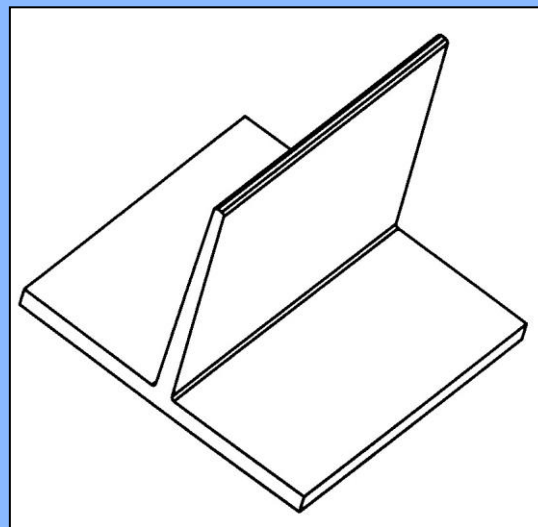
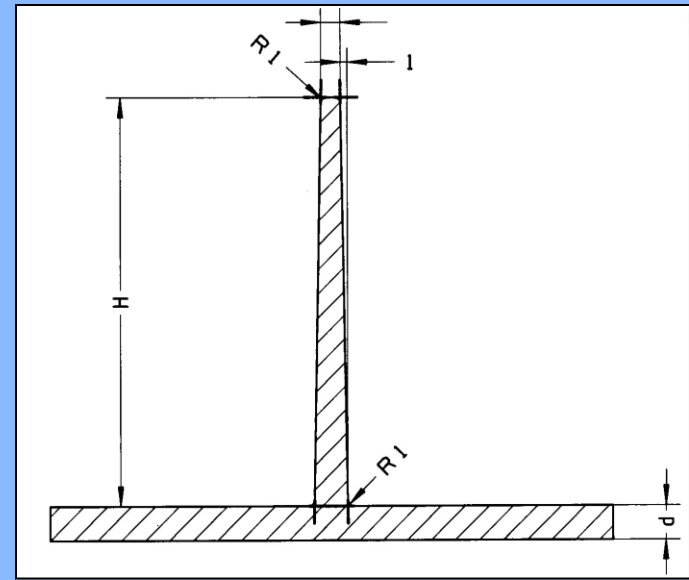
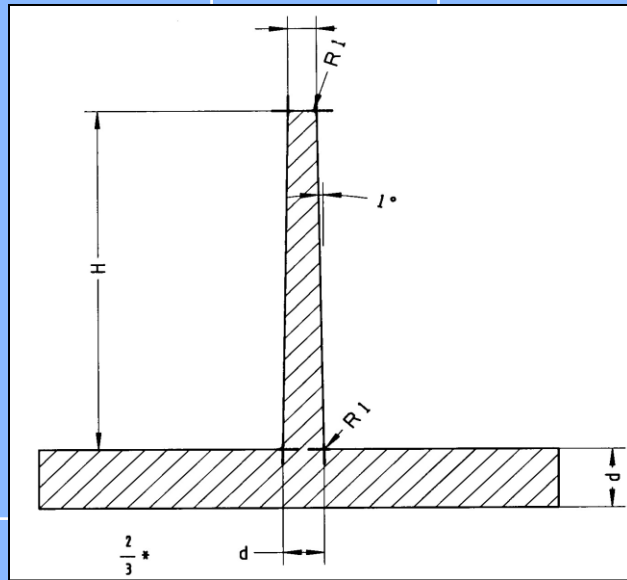




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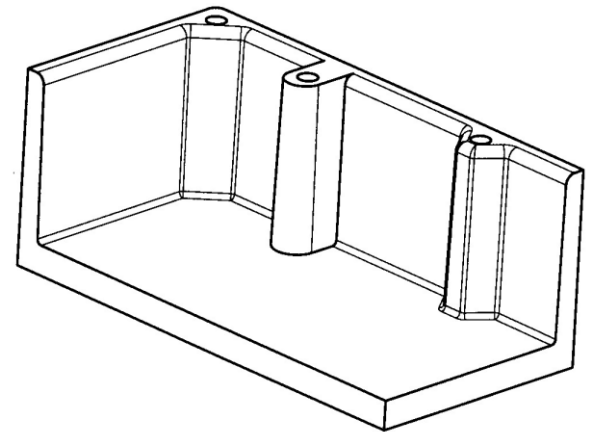
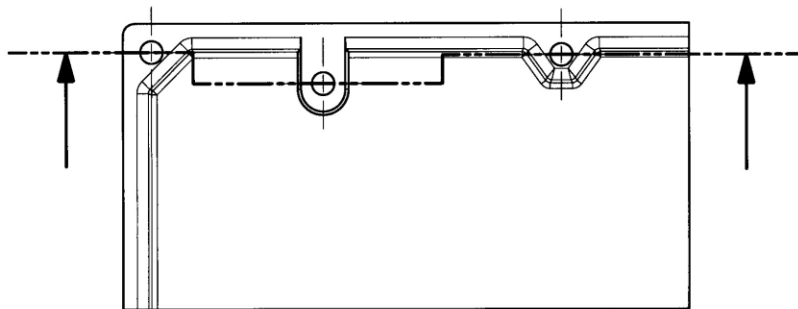
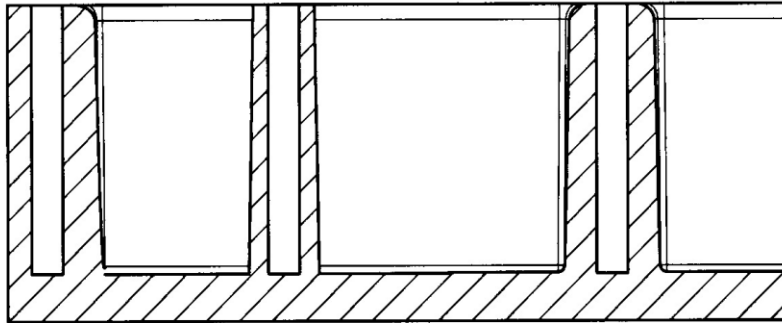
# Design and technical construction

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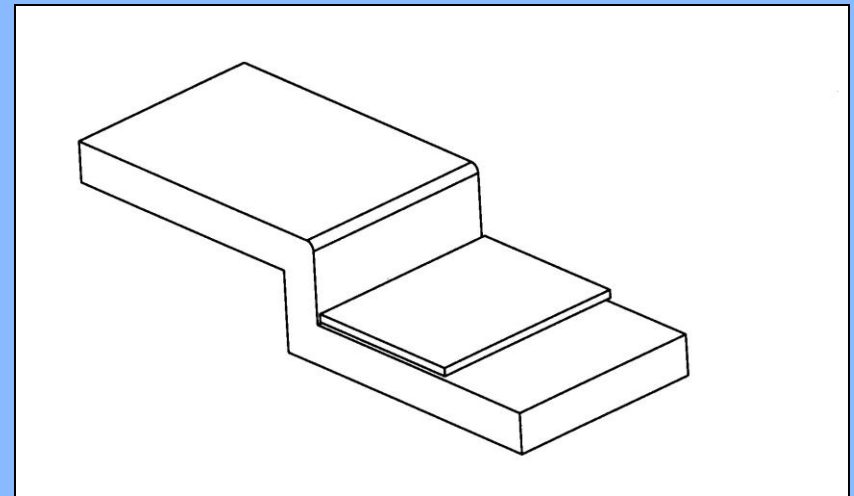
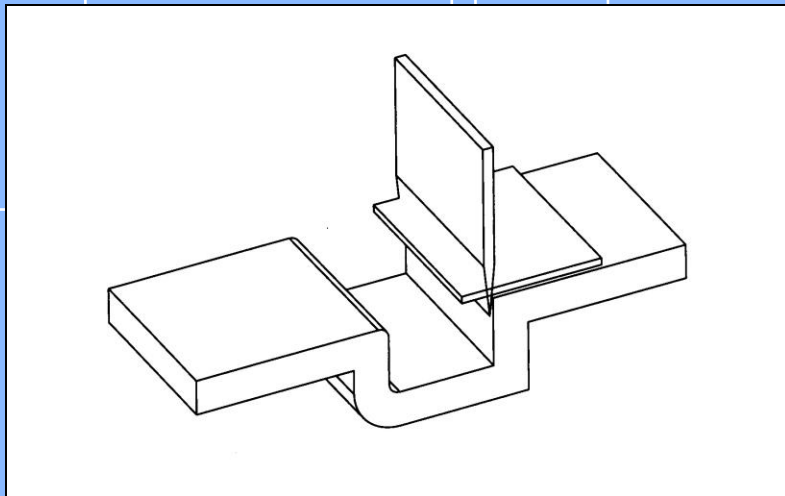
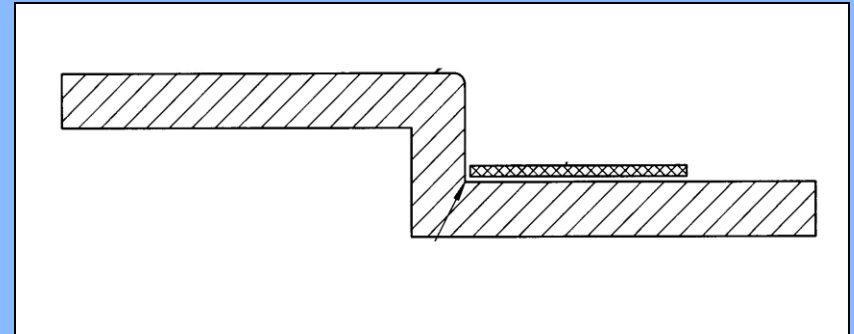
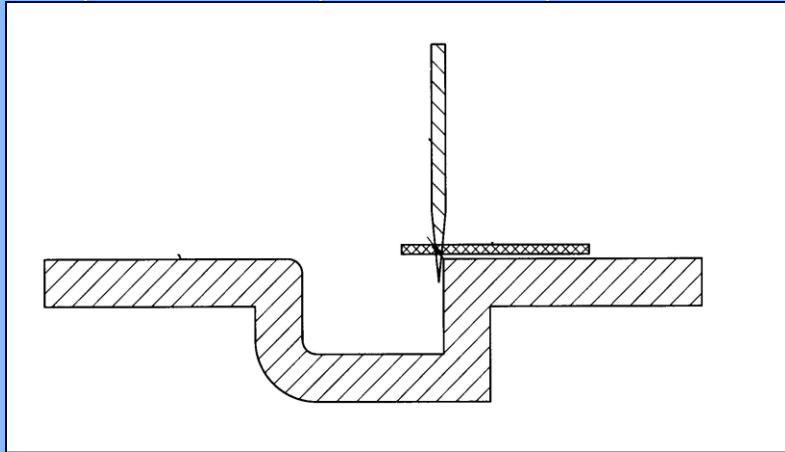
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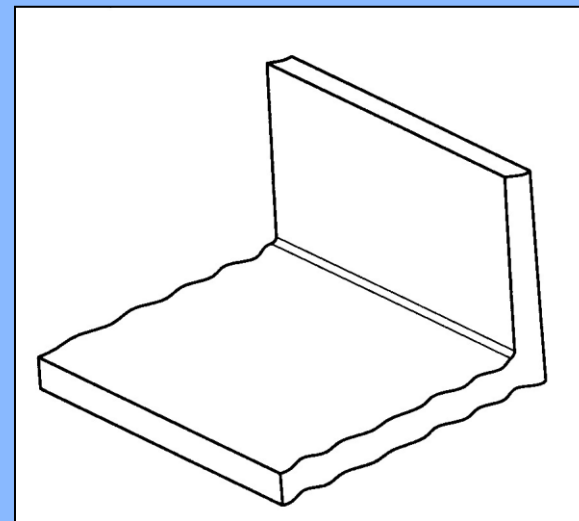
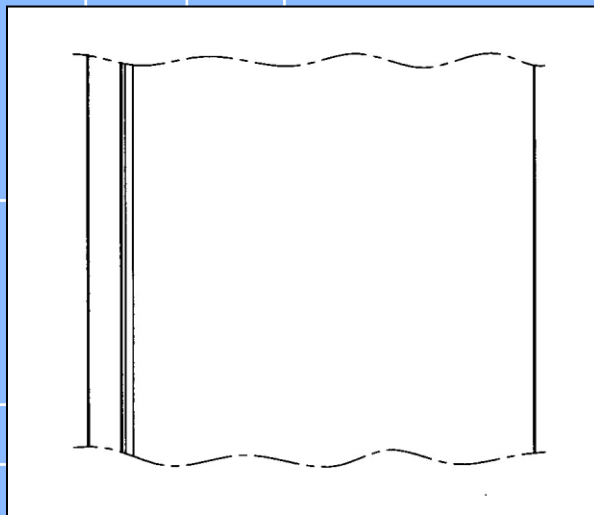
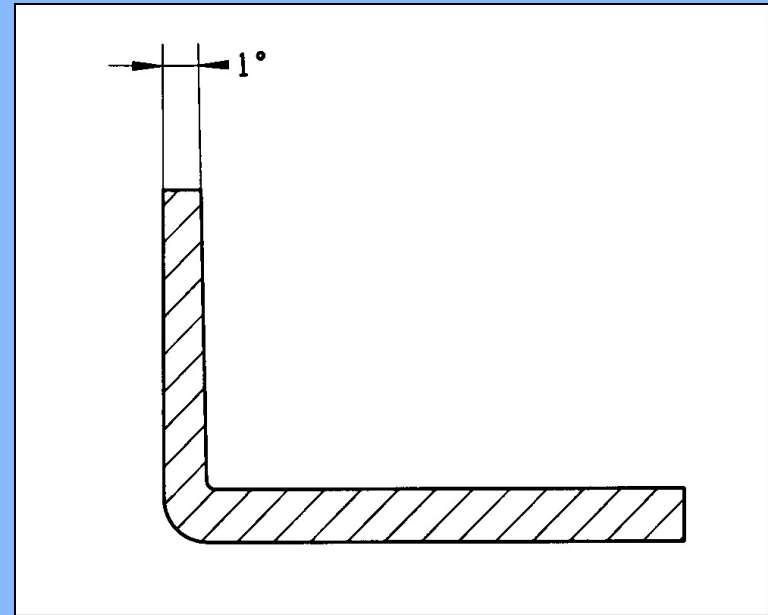
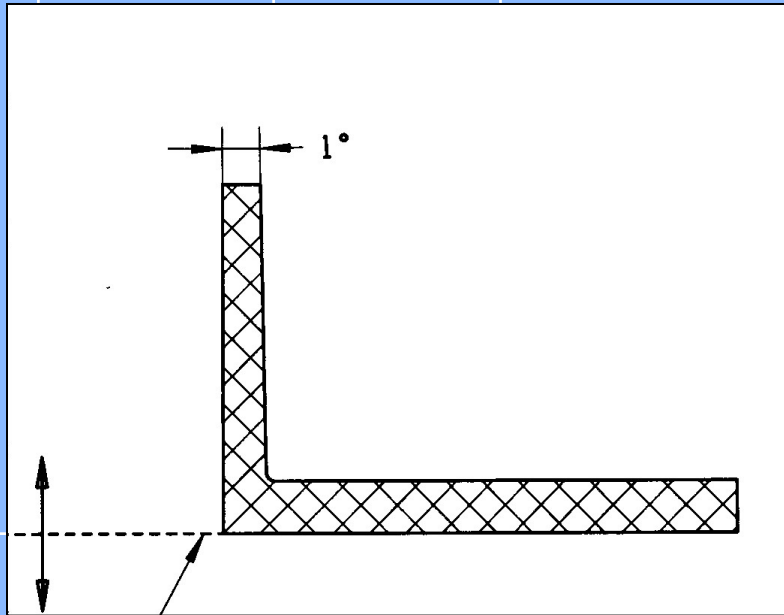




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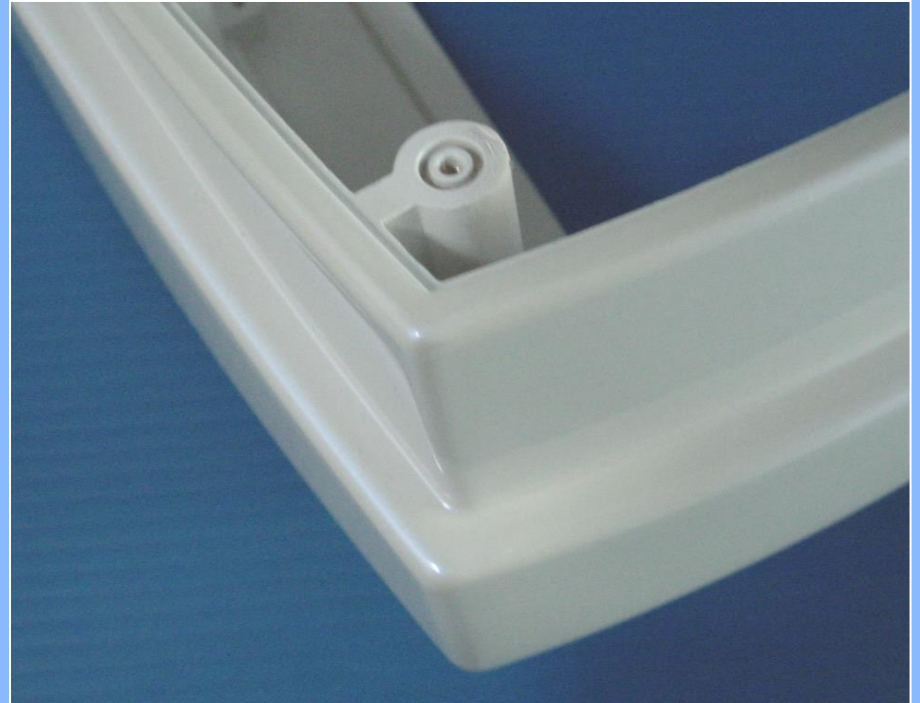
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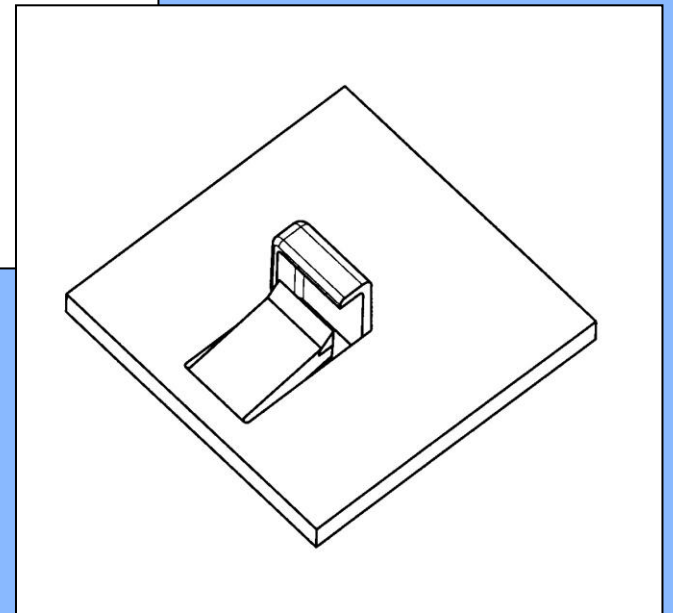
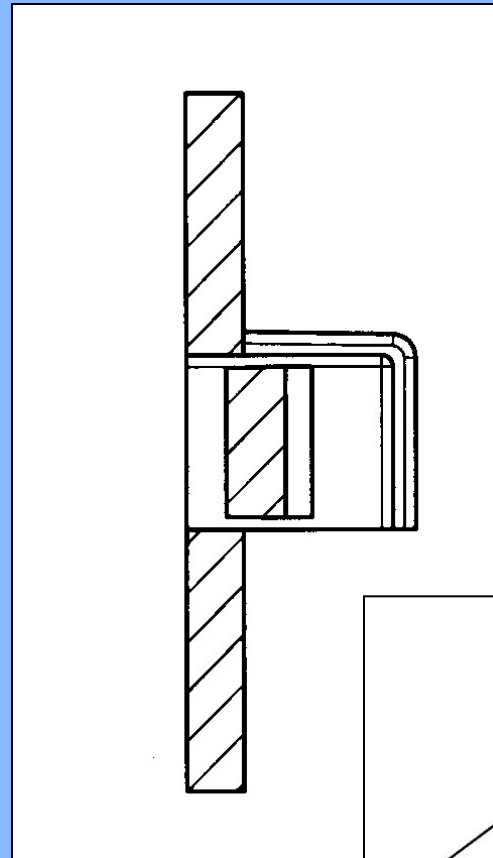
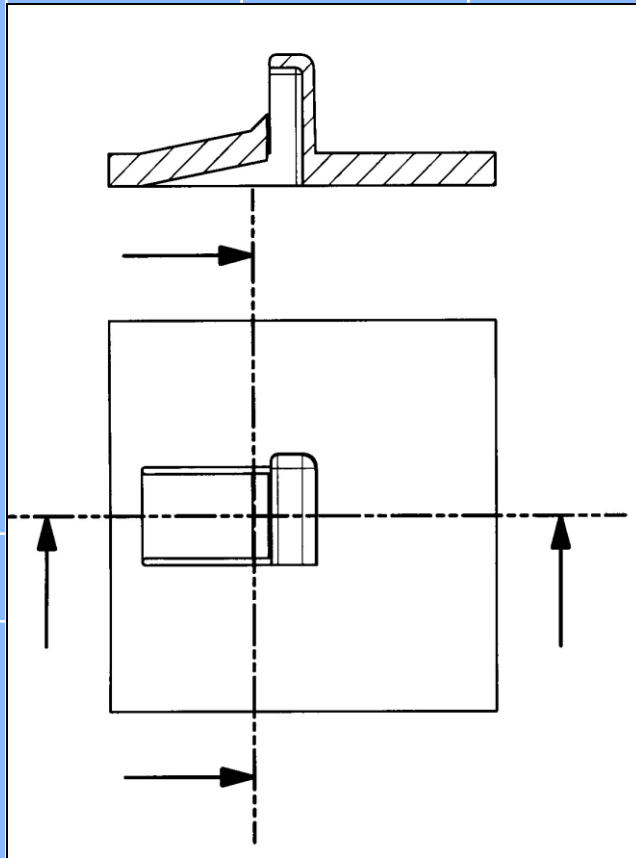




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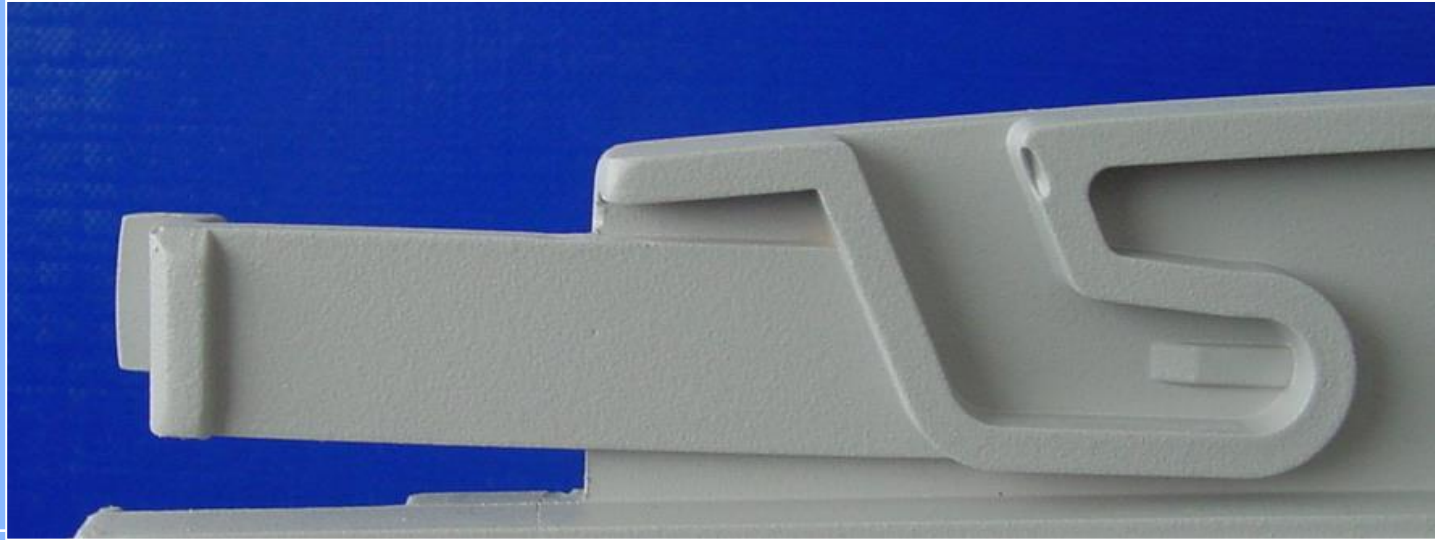
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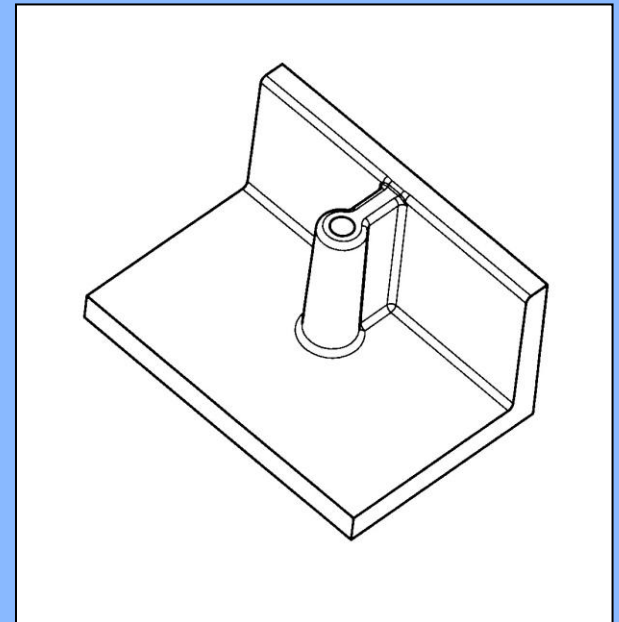
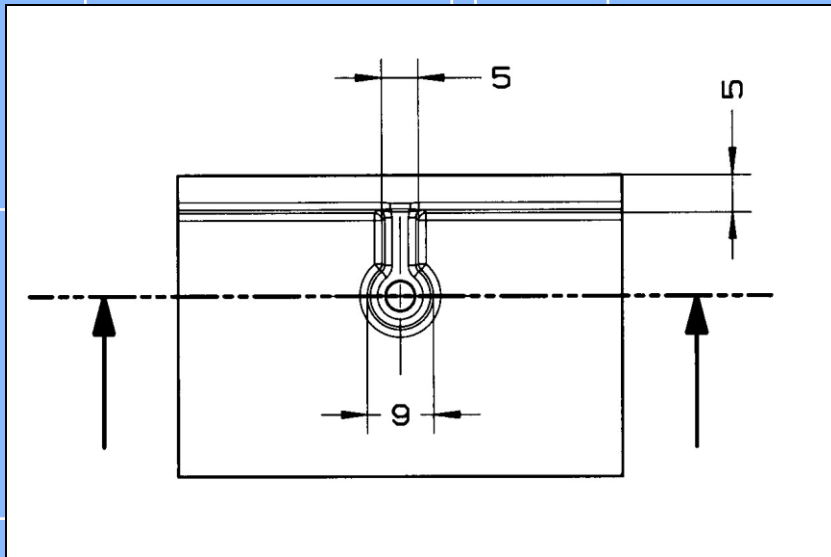
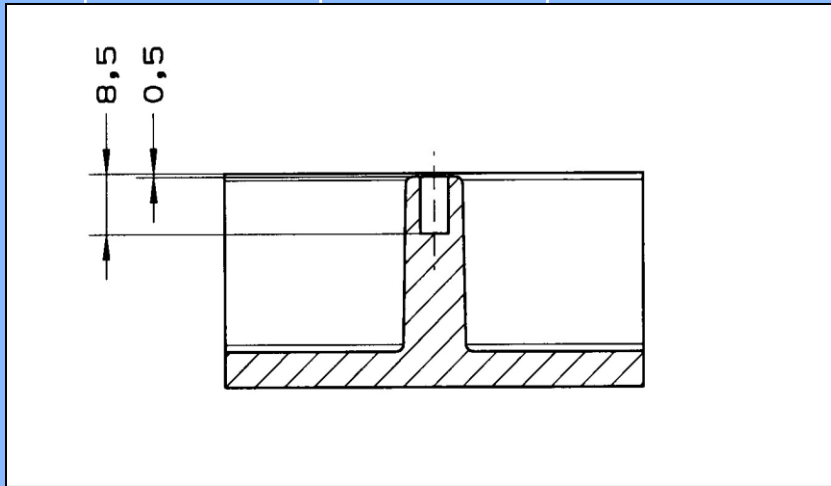
# Design and technical construction

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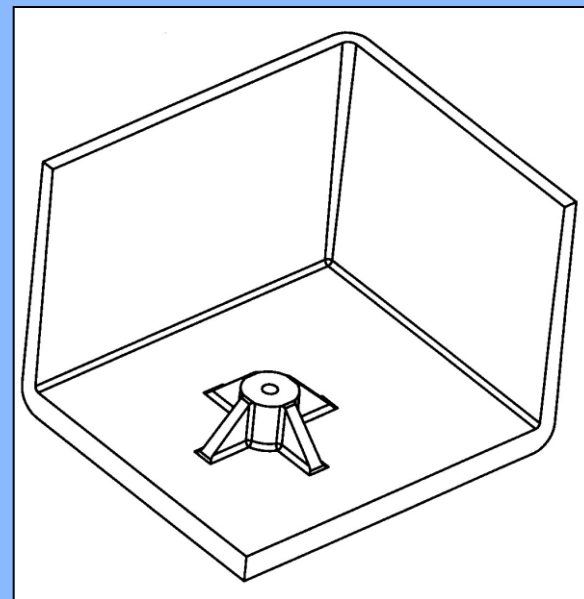
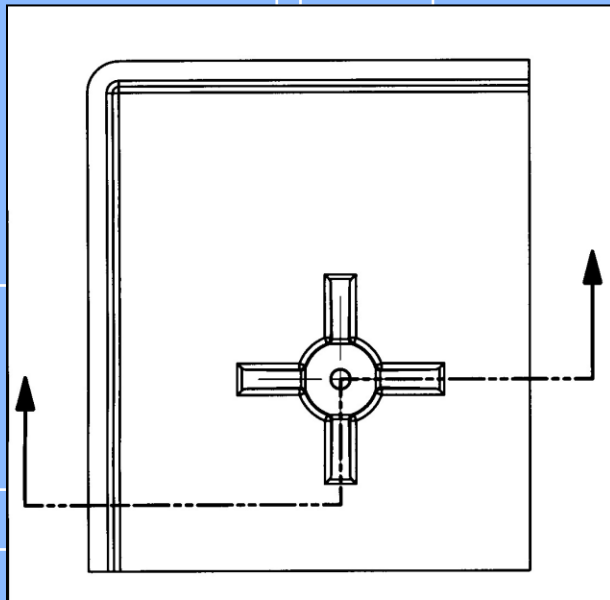
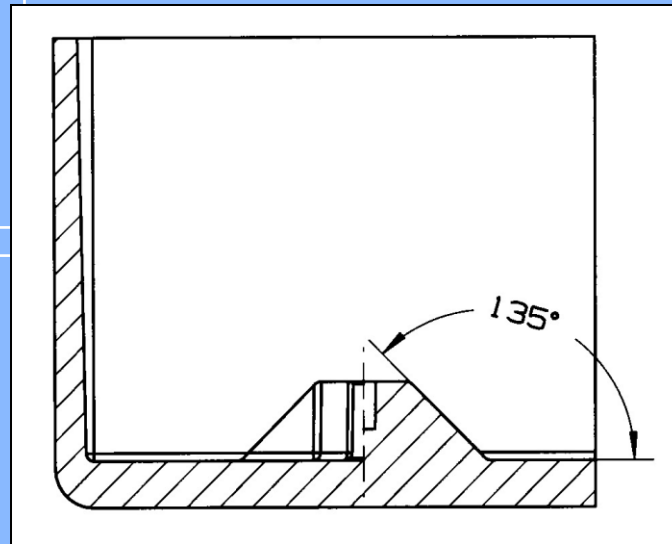
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# Design and technical construction

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# Design and technical construction

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## Typical Applications



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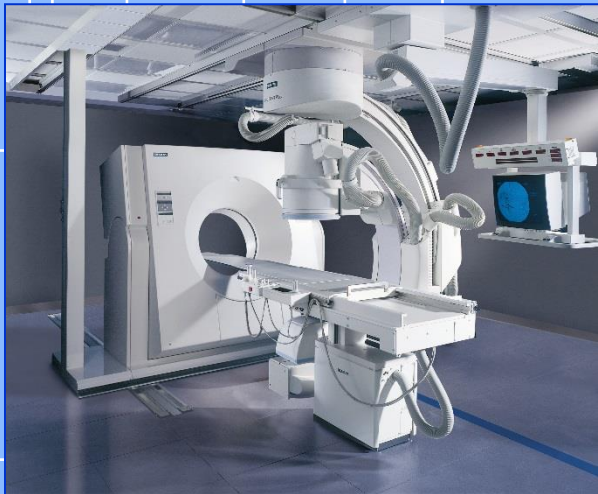
## Medical equipment



X-ray unit,  
Philips



Dentist's chair,  
Ultradent



Computertomograph,  
Siemens



# Application Examples

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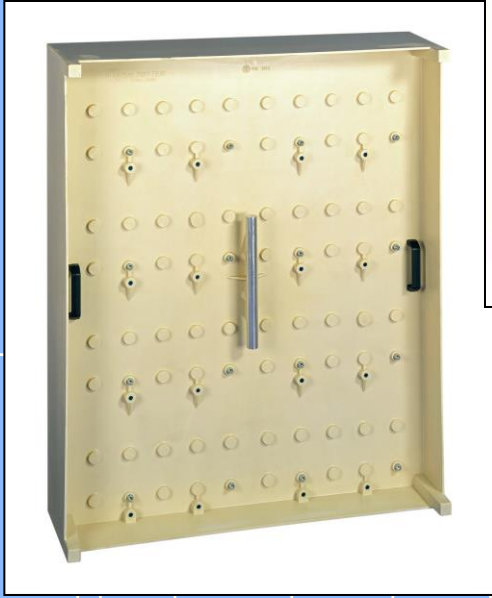
Coffee machine, Ego



Beer dispensing unit,  
Kronenbourg,

# Work Piece Carriers

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# Application Examples

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## Commercial vehicles



Control panels for  
forklift - Jungheinrich



Control panels for forklift  
- Still Wagner

# Application Examples

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## Passenger Trains



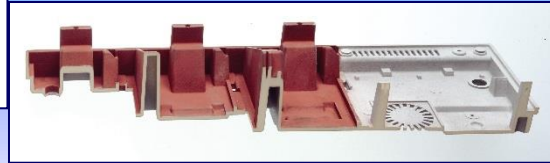
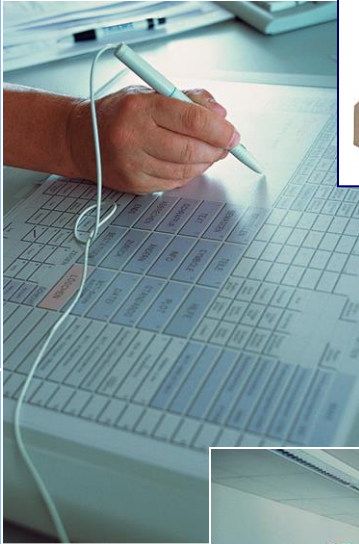
Control and interior  
panels - ICE



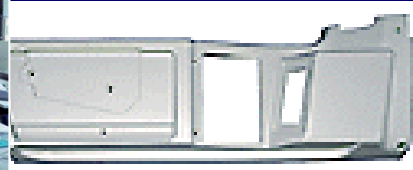
# Application Examples

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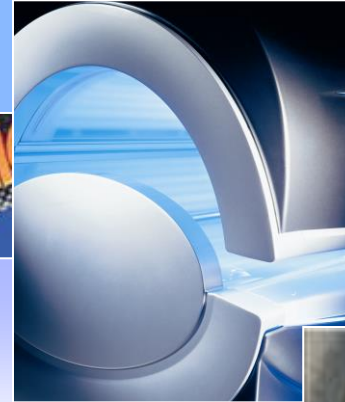




**You can rely on THIEME from early  
in the project development...**



**Let THIEME take the complete  
process from design through to  
sub-assembly**



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**Thank you very much**

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**Screen Printing Systems**

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