

AP Max Size: 3000x1200x850mm

Advantages

High speed
 High dimensional accuracy
 Great surface finish
 Wide material selection
 Suitable for high volume or one off prototypes

Drawbacks

It can be expensive for complex parts and for larger parts.

Tips & Tricks

Radius internal corners
 Loosen tolerances where possible
 Keep all features perpendicular to 6 sides
 Reduce the number of setups
 Keep it simple

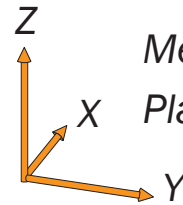
Surface Finishes

Polishing
 Sand blasting
 Painting
 Plating & more

Popular Materials

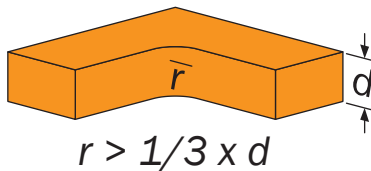
Plastic: ABS, PC, Acrylic
 Metal: SS304, 316
 Aluminium 6061, 7075
 Plus many more

Tolerances - tolerances according to ISO 2768-1. The tightest tolerances as standard are +/- 0.05mm for metals or +/- 0.2mm for plastics, otherwise discussed per project.



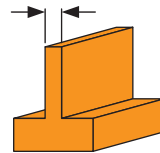
Metal = +/- 0.05mm
 Plastic = +/- 0.2mm

Cavities & Pockets - will always have an internal radius.

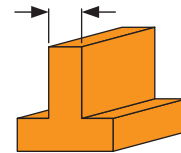


Walls - thin walls risk warping and affecting the accuracy of the part. HLH recommends:

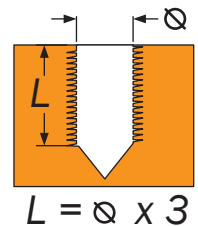
Metal > 0.8mm



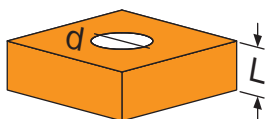
Plastic > 1.5mm



Threads - HLH can accommodate and cut metric threads, imperial UNC and UNF, pipe threads among others. All threads should be clearly marked on your 2D drawings. Thread length of 3x the hole diameter is recommended.

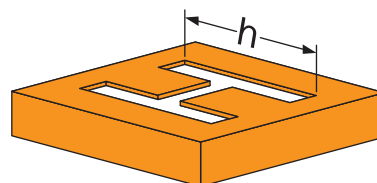


Holes - all holes < 20mm diameter should accommodate standard drill bit sizes, metric if possible. Depth of the hole should be ≤ 10x diameter.



Suggested: $L < d \times 10$
 Preferred: $L < d \times 5$

Text & Logos - engraved text is better than embossed because less material is removed. Text ≥ 5mm high and ≥ 0.8mm deep with ≥ 0.5mm clearance between letters.



Sans Serif
 20 Point
 $h \geq 5\text{mm}$