

CNC machining

design guidelines

weerg v1.02 - 190730

FILE FORMATS

.STEP .STP – Only files with SINGLE parts are accepted

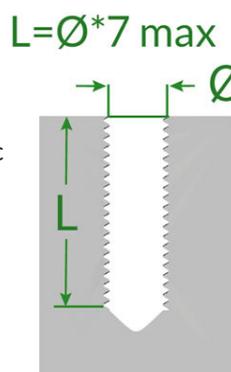
MIN and MAX OVERALL DIMENSIONS

minimum size at least 10 mm (0.39 in) on every side, with minimum total volume of 3 cm³

max size 460x460x400mm (18x18x15.7 in) but may vary with materials; please check on Weerg.com the specific data for your material.

THREADS

FREE. Threadable holes are automatically identified by the online estimator. External or internal metric threads M and MF from M2 to M16 and GAS 1/4, 1/8, 1/2, 3/4. Just draw pre-hole holes in your CAD with the ISO diameter of the desired thread, such as 4.2 mm for an M5. Blind hole threads are applied at a maximum of 3/4 of the hole. External holes can be done until 2 mm to the end of the cylinder, if you need to close it all, please design a 2 mm groove on the bottom.



TOLERANCES

3 tolerance levels: ±0.05mm, ±0.07mm, ±0.10mm.
Moneysaver: most convenient tolerance: ±0.10mm

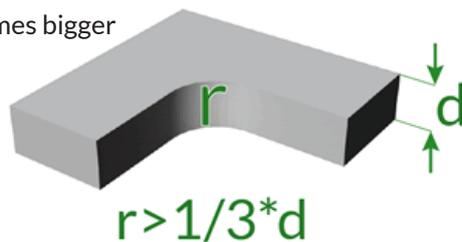
MIN. CONVEX CORNERS

minimum radius: 1mm
Moneysaver: a convex radius of 1mm is about 6 times more expensive than a 3mm one.

GORGES, POCKETS and RADII

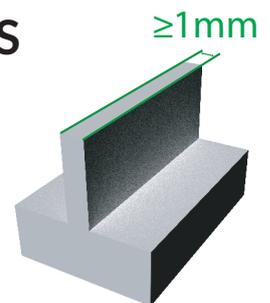
1mm minimum, 3 times bigger than the height.

Moneysaver: 4mm are roughly 7 times less expensive than 1mm.



MIN. THICKNESS

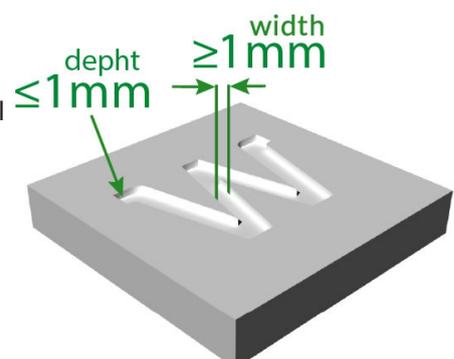
Nominal thickness of your workpiece must be greater than 1 mm. Watch out for details that are less than 1 mm because they usually won't survive the working process.



TYPE ENGRAVING AND LOGOS

Minimum rod width of 1mm and max depth of 1mm: by clicking here you will find a list of specifically created characters for the CNC, including some free ones. We suggest to use Sans Serif fonts >20 points and >5mm high.

Moneysaver: Sans Serif fonts are much less expensive than Serif fonts • Engraved features are much less expensive than embossed because less material is removed .



Following these simple rules will make it easier for you to get great results. If in doubt, do not hesitate to contact us by sending an email to info@weerg.com

Weerg.
Get your parts, very fast!