Manufacturing Analysis

Need Help?

pump-fob-v2-shell-bottom.iges

Revisions Required

We found issues we can't work around in our analysis of pump-fob-v2-shell-bottom.iges for Injection Molding with ABS. Items marked CAD Revision Required must be changed in order for us to manufacture the part. All other items are optional or informational.

What we need from you:

⚠ Upload revision or remove part from quote

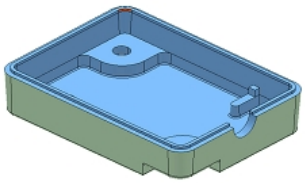
1 Minimum Thickness Required Change

Highlighted features do not meet minimum thickness requirements.

⚠ This is a required change

Your part has thin features that need to be increased in thickness to the minimum indicated by the color code:

■ 0.66 mm



2 Draft and Thickness Required Change

We require draft and thickness to improve milling and ejection of this part.

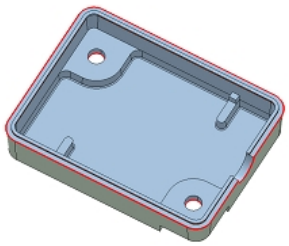
⚠ This is a required change

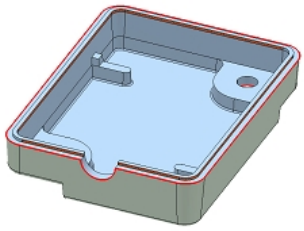
0.5° minimum draft is required on faces with arrows. Arrows indicate the pull direction for faces in the mold

■ 0.66 mm

› View Area 1

View Area 2





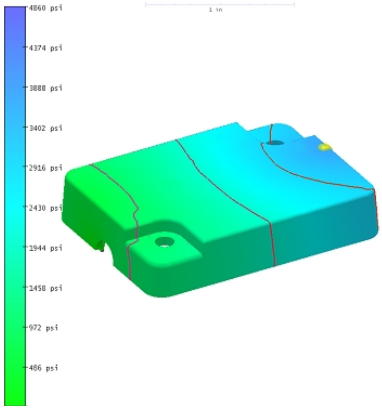
3 Fill Analysis

Fill pressure:

4000 psi.

Number of gates: 1.

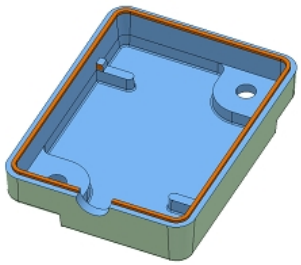
This animation shows our virtual mold flow analysis for your part with the material ABS - Cycolac MG47 (MFR=18). The various colors represent the pressure field as indicated on the scale.



4 Unpolishable Areas

ORANGE color coding indicates areas on the part we are unable to adequately polish.

These areas are either too deep or too small, restricting our abilities to fully accommodate high polish requests.



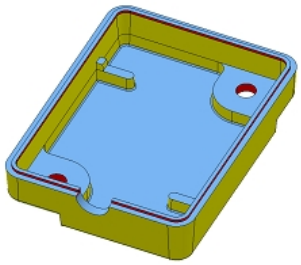
5 Texture

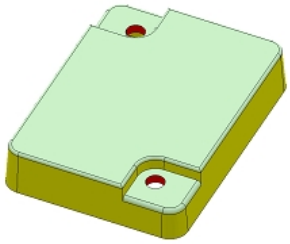
Insufficient draft may cause issues during ejection leading to part distortion and cosmetic flaws, as well as mold damage.

If you choose a textured finish on your part: PM-T1 requires at least 3° of draft, and PM-T2 requires at least 5° of draft. Faces colored YELLOW have a draft of 3-5°, and faces colored RED have a draft of less than 3°.

› View Area 1

View Area 2





6 Radius

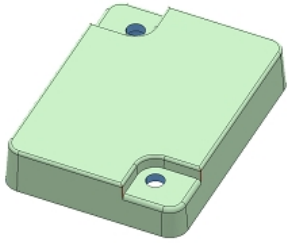
Sharp corners in your geometry will be rounded due to the mold machining process.

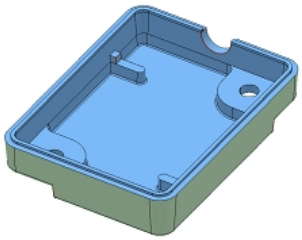
Corners that will have a radius due to the milling process are color coded as follows:

- 0.28 mm

› View Area 1

View Area 2





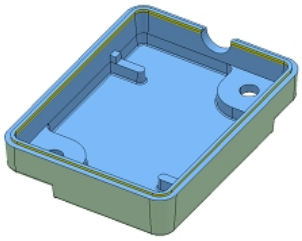
7 Thin Area

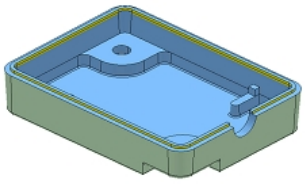
YELLOW color coding indicates areas where part thickness is significantly less than nominal.

These areas may have unformed areas, weak knit lines, or significant texture variations.

> View Area 1

View Area 2

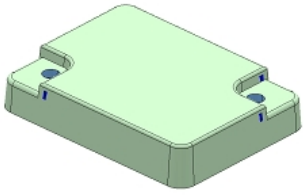




8 Thick Area

DARK BLUE color coding indicates areas where part thickness is significantly greater than nominal.

Sink marks, internal voids, excessive shrink, warp, and dimensional inaccuracies are likely.



9 Tunnel Gate

Injection point shown in YELLOW.

Your part is gated using a tunnel gate shown in YELLOW, which will leave a small elliptical vestige, typically within +/- 0.005 in. (0.13mm) of the surface.