ABS 1400 LW Filament

Recommended Print Settings

Print Temperature

The optimal printing range is 275 – 295°C

Bed Temperature

The hotter the better, up to 110°C

Printing Speed

Base printing speed of 60 mm/s
Infill speed of 45 mm/s
Wall speed of 40 mm/s
Initial layer speed of 20 mm/s

Cooling

For best results, use a cooling fan speed of 5%.
Some printers will run best with no cooling fan.
Make sure to have the fan off for the first layer.

Bed Adhesion

Suitable adhesion can be obtained with PVA-based glue stick on a glass bed. A brim should be used. If the printer being used is unable to maintain the recommended bed temperature, an ABS/acetone slurry or a PEI sheet may be used to help adhesion.

Other Tips

- If there are burn marks on the parts while printing, reduce the temperature by 5°C and make sure to clean off the nozzle. Turn off combing settings if using Cura.
- For strong parts, print at the higher end of the recommended temperature range. It may also help to reduce the print speed, turn the fan completely off, reduce the layer height, or increase the infill/ skin overlap.

If using Ultimaker Cura, enable the Jabil ABS 1400 LW material profile available in the Marketplace or manually type in the settings from the information above.

Disclaimer: Due to the large variety of printers and part geometries, the given process parameters are a guideline.

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ABS 1400 LW Filament

ABS 1400 LW is an easy-to-print material and delivers more durable and heat resistant parts than PLA while also minimizing warping. Parts have excellent surface appearance and support multiple post-process options such as vapor smoothing.

Applications

- Applications where properties of ABS are wanted, but low warp is required
- Prototypes and parts that require enhanced durability
- Automotive
- Aerospace
- General manufacturing

Examples include:

- Brackets
- Housings
- Jig, fixtures, and tooling to aid in manufacturing

Advantages

- Good layer-to-layer adhesion
- More durable and heat resistant than PLA
- Stiffer than most ABS filament
- Reduced CLTE (linear thermal expansion)
- Improved dimensional stability
- Stands up to finishing processes such as vapor polish, sanding, dyeing, painting, and adding a gloss finish
- Good chemical resistance to most fluids

Prints on open platforms including Ultimaker S5, UM 3, Raise3D, Method X and Taz® Pro Platforms

Diameters

1.75mm and 2.85mm