Machine Specifications:

SINTERSTATION 2500CI
DTM Corporation
CO₂ laser

Material:

Material available for printing at the moment includes:

Accuracy and Tolerances:

For Nylon 12, the minimum part extent and feature tolerances achievable are +/- 0.015". The minimum wall thickness achievable is 0.030".

If the design includes moving parts, sharp edges, holes and/or thin profiles, it is recommended to design over these. Generally, it best to consider tolerances larger than 1 mm for moving parts and avoid gaps or profiles smaller than 0.5 mm (~0.02").

Recommendations:

The maximum printing volume is approximately 14" x 12" x 12" but you must consider that a build that large will take several days and a lot of material that might not be available. Also, other part requests will be printed within the same build as your parts, so please do not send files that occupy the majority of the build volume. If your parts are deemed too large, you may be asked to divide your parts into smaller pieces with mechanical fasteners incorporated into the design so that the parts may assembled by the requestor upon build completion.

Avoid thick volumes in geometry (>0.5"). Shrinkage, warpage and peeling effects might be more pronounced on these.

When designing, consider the mechanics of the process and leave space to empty non-sintered powder out of the finished part.

Contact Neil Doll (ndoll@wisc.edu) if you have further questions.