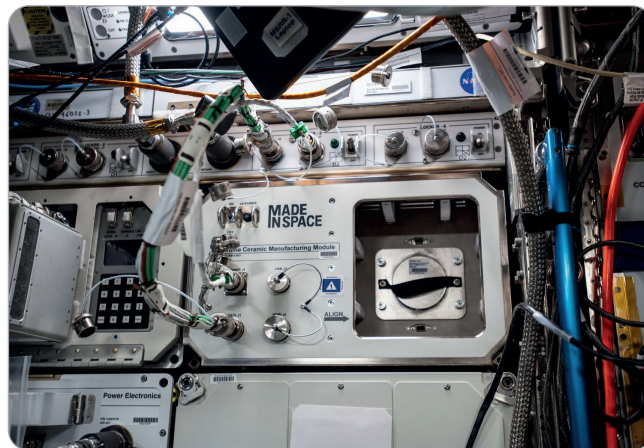


SPACE COMMERCIALIZATION

CERAMICS MANUFACTURING MODULE (CMM)

PRODUCT DESCRIPTION

Redwire's Ceramics Manufacturing Module (CMM) uses a technique called additive stereolithography (SLA) to cure ceramic resin into solid ceramic parts. The process uses a light source to cure resin in very thin layers. Each new layer adheres to the previous one, stacking up to form a complete ceramic part. Ceramics manufacturing offers a unique capability to our in-space partners, one that can produce hardware with high thermal resistance. Furthermore, it also offers capability to our commercial partners here on Earth.



IMPORTANT SPECIFICATIONS

BUILD VOLUME:

- + CMM makes use of a circular build platform with a diameter of 80 millimeters (3.15 inches). This equates to a cross-sectional build area of 5000 square millimeters (7.8 square inches)
- + Vertically, the build platform can translate 30 millimeters (1.2 inches) allowing CMM to print parts of that height or shorter
- + CMM total build volume is 150,000 cubic millimeters (9.2 cubic inches)
- + The build chamber carries 206 milliliters of ceramic resin for printing

POWER LEVEL:

- + CMM draws approximately 75-80 watts of power during printing operations

RESIN CAPABILITIES:

- + CMM can print using several different resins
- + Tethon 3D's Porcelite® can be SLA printed at 25 micron layer thickness
- + After firing Porcelite® parts in a kiln, they can withstand temperatures greater than 1000 degrees Celsius (1800 degrees Fahrenheit)