

# LASERFORM™ OVEN

FOR PARTS BUILT WITH LASERFORM METAL MATERIALS

Technology:	Selective Laser Sintering, SLS
Material Class:	Powder; Metal

## Ensure reliable, repeatable results with LaserForm™ metal material parts

The LaserForm oven is the only oven made specifically for sintering and infiltrating parts, prototypes, or tools made with LaserForm metal materials. Its unique combination of features and automation deliver the reliable, repeatable results you need to improve designs, meet deadlines, and shorten production cycles.

**Count on simple, automated, operation.** The LaserForm oven is pre-programmed: just push a button and it automatically adjusts the temperature for each step of the process. Sensors automatically make additional adjustments in each of the three temperature zones, if needed. Nitrogen flow stops when the oven reaches a preset temperature, and the oven powers itself down at the end of the process. A built-in motorized crane makes loading and unloading parts a one-person job.

**Get the control you need for the results you want.** The LaserForm oven's controller automatically records critical run data, which you can use to verify consistent operation and results. Sensors monitor each cycle; process deviation alarms notify you of problems, and the controller automatically shuts down if the temperature cannot be maintained within 100°C of your target.

**Choose from a full line of accessories.** LaserForm oven accessories include:

Crucibles — graphite containers for holding parts and bronze during the infiltration process

Metal cart with a hydraulic lift surface, for lifting parts from the SLS system, setting up crucibles for the oven, and transporting hot crucibles from the oven

Consumables, including bronze ingots for infiltrating "green" LaserForm ST-100 material parts and alumina powder for covering and supporting parts in the oven.



## Benefits

- One-button automated operation
- Temperature sensors, controls and alarms
- Built-in crane for loading and unloading parts
- Automatic recording of run data

# LaserForm Oven Specifications

## Specifications

Temperature	Up to 1070°C
Electrical	Supply Voltage: 240 VAC, 3 phase, 50/60 Hz
Power	18.9 kVA peak; 11.3 kVA average
Inner Size	61 cm diameter x 46 cm high (24 in diameter x 18 in high)
Footprint	1.3 m x 1.52 m (54 in x 60 in)
Footprint with Clearance	3.35 m x 3.05 m (132 in x 120 in)
Crane Lift Capacity	136 kg (300lb)
Nitrogen Requirements	99.998% purity, 30 lpm (64 scfh)
Facility Cooling and Exhaust Requirements	Remove heat at rate of 63 megajoule/hour (60,000 Btu/hour) as well as smoke removal

Warranty/Disclaimer: The performance characteristics of these products may vary according to product application, operating conditions, material combined with, or with end use. 3D Systems makes no warranties of any type, express or implied, including, but not limited to, the warranties of merchantability or fitness for a particular use.



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