

CATALYTIC DEBIND OVEN



Elnik's Catalytic Debind Oven is designed exclusively for Polyacetal or POM based feedstocks used in the Metal Injection Molding and Metal AM industries

Enhanced Features

- All Stainless Steel Construction
- Simple Excel Based recipe builder
- Heated Acid Tray
- Automated process control
- Acid Flow Monitoring

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Technical Details

Below are the technical specifications of the CD3045-HT-CE Oven

Equipment Details

- **Material of construction:** Brushed 304 Stainless Steel Housing, 316 Stainless Steel Hotzone and Retort
- **Door Seal:** Viton
- **Heating:** 12 Individual heaters
- **Outside dimensions:** 28.25" W x 58" D x 102" H (718 x 1,473 x 2,591 mm)
- **Chamber Volume:** 177 Liters
- **Retort Rack:** 16 .78" W x 17.88" H x 24" D (426 x 454 x 610 mm)
- **Shelf Size:** 8.125" W x 12" D (206 x 305 mm)
- **Shelf Spacing:** 1.5" (38 mm)
- **# of Shelves:** 44
- **Temperature Range:** 20 -150 °C
- **Temperature Accuracy:** +/- 2 °C
- **Burner:** Natural Gas or Propane



Technical Innovations

Retort Gas Plenum

- High efficiency binder removal
- Superior gas distribution and nitrogen/acid mixing

Acid Delivery System

- Variable speed metering pump
- Active flow monitoring

Circulation System

- Squirrel Cage fan
- Teflon seal with N2 shaft purge

Heated Acid Tray

- Ensures binder vaporization and rapid transfer to Nitrogen gas flow

Gas Fired Burner

- 99.5+ % breakdown of process atmosphere

Automated Cycle Control

- Burner temperature monitoring to aid in process management

Front Door Exhaust Hood

- Helps to eliminate potential remnant vapor upon door opening

Easy Recipe Builder

- MS Excel based recipe builder for simple recipe development

Retort Rack Integration

- Shelf rack matches Elnik MIM/AM furnaces. Less contact with parts.