ELNIK SYSTEMS

GRAPHMIM2000
DEBIND & SINTER FURNACE

A versatile tool in the metal injection mold part making process.

Graphite Hotzone & Retort -
27 - 339L process volume -
N2, Ar, Vacuum Atmosphere -
Up to 1500°C -
Functional & Flexible User Experience -

QUALITY FIRST. INNOVATION. EXCELLENCE.

ELNIK SYSTEMS

The most advanced Debind & Sinter furnace

Based on a graphite hotzone and retort design, this furnace allows users to thermally remove backbone or 2nd stage binder and sinter metal parts to the highest density and mechanical properties. Elnik's technical innovations make this equipment a valuable tool in producing MIM parts

Processed Alloys

- Stainless Steel 400 series & 17-4 (reduced properties)
- Tool Steel
- Low Alloy Steel
- Tungsten Based Alloys
- Precious Metals

Furnace Options

- CFC graphite trays
- 0.25" (6.3mm) Micromass ZTA alumina plates
- Gas Fired Venturi Burner
- Air Conditioner for Electrical Cabinet
- Flexible Survey Thermocouples
- Rigid TUS/SAT Thermocouples
- Mobile Part Cart
- Personalizing Color Options

Technical Innovations

Gas Plenum Retort

- High efficiency binder removal
- Superior gas distribution
- Pre-heated gas for low temperature convection

Intelligent Process Control

- Ensures all parts see required temperature, regardless of load size
- Process safety deviation monitoring

AccuTemp® + Offset Manager

- Proprietary Thermocouple program providing tight temperature control
- Offset manager to tune furnace temperature

Coldfinger® Debind Trap

- Forced flow enhanced binder trap

Service Management

- Component specific time and usage management software

Process Control Reports

- Supplemental or replacement for in house documentation

Ease of Use

- MS Excel recipe builder
- Easy to use HMI with enhanced visual management
- Data recording and detailed process trend review

Contact Us

+1.973.239.6066 www.elnik.com

Technical Details

Below are the technical specifications of all the GraphMIM 2000 series furnaces

GraphMIM 2000 Series Debind & Sinter Furnaces

Model	GraphMIM2001L	GraphMIM2015	GraphMIM2025	GraphMIM2045	GraphMIM2675	GraphMIM2009
Max Temperature	up to 1500°C					
Atmosphere	Ar,N2, Vacuum					
Temperature Uniformity	+/- 2-3°C (vacuum) / +/- 5-10°C (N2,Ar)					
Heating zones	2	2	6	6	6	6
Retort Volume	18 L	41 L	68 L	117 L	175 L	234 L
Retort Shelves	12	14	28	40	60	80
Outside Dimensions	108 x 80 x 100 (inches)	179 x 102 x 100 (inches)				
	2743 x 1905 x 2172 (mm)	4547 x 2591 x 2540 (mm)				
Voltage	380/400V, 415V, 460/480V, 575V / 3Phase / 50,60 Hz					

Applications

- Metal Injection Molding
- Sinter Based Metal Additive Manufacturing
- Annealing
- Brazing
- Aging
- Tempering

Industries Served

- Medical
- Aerospace
- Firearms/Defense
- Fashion/Lifestyle
- Electronics
- Industrial Tools
- Automotive
- And More...

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ELNIK SYSTEMS

MORE THAN A FURNACE COMPANY

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