



HighTemp Material Co., Ltd.

Industrial High Temperature
Material Converter

CONVERSION & MANUFACTURING GUIDE

From Raw Materials to Precision Components

Custom Converting Services for High Temperature
Films, Insulation Materials & Engineering Plastics



DIE CUTTING



SLITTING



LAMINATING



ADHESIVE
COATING



CNC
CUTTING



OEM
FABRICATION



SLITTING
MACHINE



CONVERSION &
MANUFACTURING
GUIDE



DIE CUTTING
MACHINE



CNC
MACHINE



LAMINATING
MACHINE



PRECISE
MANUFACTURING



TIGHT
TOLERANCE



QUALITY
ASSURANCE



FAST
TURNAROUND



ENGINEERING
SUPPORT

HighTemp Material Co., Ltd.

Industrial High Temperature Material Converter



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OUR MANUFACTURING CAPABILITIES

Precision Converting Solutions for High Performance Industrial Materials

High Precision • Tight Tolerance • Custom Solutions • Reliable Quality



CONVERSION &
MANUFACTURING
GUIDE

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From raw materials to finished parts, we provide one-stop converting and manufacturing services with advanced equipment, skilled engineers and strict quality control.



DIE CUTTING

High precision die cutting for gaskets, washers, labels and custom parts.



Typical Applications

- Gaskets & Seals
- Insulation Washers
- Protective Pads
- Custom Shapes



SLITTING

Precision slitting for films, foils, tapes and sheets with clean edges.



Typical Applications

- Width Conversion
- Edge Trimming
- Roll-to-Roll Slitting
- Narrow Tape Slitting



LAMINATING

Multi-layer laminating with various adhesives and composite materials.



Typical Applications

- Film Lamination
- Adhesive Bonding
- Multi-layer Composites
- Functional Coatings



ADHESIVE COATING

Single or double-sided adhesive coating with accurate thickness control.



Typical Applications

- PSA Tape
- Double-sided Adhesive
- Shielding Tape
- Mounting Solutions



CNC CUTTING

High precision CNC cutting for complex shapes and close tolerances.



Typical Applications

- Precision Parts
- Insulation Components
- Machined Plates
- Prototypes & Samples



PRECISION CONVERTING & OEM SOLUTIONS

Complete converting solutions from material to finished components.



Typical Applications

- Custom OEM Parts
- Complete Assemblies
- Turnkey Solutions
- Private Label Packaging

TYPICAL MATERIALS WE PROCESS



PTFE



PI (POLYIMIDE)



PET



PPS



PEN



SILICONE



MICA



CERAMIC FIBER



AEROGEL

TYPICAL FINISHED PRODUCTS



Gaskets



Washers



Thermal Pads



Insulation Parts



Spacers



Shields



Protective Films



Custom Components



HIGH PRECISION
Advanced equipment ensures tight tolerance and consistent quality.



WIDE MATERIAL RANGE
Process a broad range of high performance materials.



CUSTOM SOLUTIONS
Tailored converting solutions to meet your unique requirements.



FAST TURNAROUND
Efficient production process for quick lead time.



QUALITY ASSURANCE
Strict quality control at every step of manufacturing.



ENGINEERING SUPPORT
Professional engineering team provides technical support.



We combine advanced machinery, skilled craftsmanship and strict quality control to deliver precision-converted parts that perform in the most demanding environments.



YOUR TRUSTED PARTNER FOR HIGH PERFORMANCE MATERIAL CONVERTING



MATERIAL PROCESSING CAPABILITY MATRIX

MATERIAL	DIE CUTTING Precision Die Cutting	SLITTING Roll to Roll Slitting	LAMINATING Multi-layer Laminating	ADHESIVE Adhesive Coating	CNC CUTTING Precision CNC Machining	NOTES
PTFE	✓	✓	✓	✓	✓	Excellent chemical resistance Wide temperature range
PI (POLYIMIDE)	✓	✓	✓	✓	✓	High temperature stability Excellent electrical insulation
PET	✓	✓	✓	✓	✓	Good dimensional stability Cost effective
PPS	✓	✓	✓	✓	✓	High temperature performance Excellent chemical resistance
PEN	✓	✓	✓	✓	✓	High strength & rigidity Good electrical properties
SILICONE	✓	✓	✓	✓	✓	Excellent flexibility Wide temperature range
MICA	✓	✗	✓	✓	✓	Electrical insulation High temperature resistance
CERAMIC FIBER	✓	✗	✓	✗	✓	Excellent thermal insulation Low thermal conductivity
AEROGEL	✓	✗	✓	✓	✓	Ultra-low thermal conductivity Lightweight & high performance

✓ Available | ✗ Limited / Not Recommended (Depends on thickness & application)

* More materials available upon request.

TYPICAL FINISHED PARTS



Insulation Washers



Gaskets



Die Cut Parts



Thermal Pads



Spacers



Seals



Insulation Parts



EMI Shields



Protective Films



Adhesive Tapes



Custom Shapes



Laminated Parts

TYPICAL PROCESSING TOLERANCE

Capability	Typical Tolerance
Slitting Width	±0.20 mm
Die Cutting	±0.10 mm
CNC Cutting	±0.05 mm
Laminating Alignment	±0.30 mm
Thickness Control	±0.02 mm



Tolerance values shown are typical references and can vary depending on material type, thickness, part geometry, and manufacturing process. Final tolerances are confirmed during project evaluation.

OUR ADVANTAGES



HIGH PRECISION
Advanced equipment ensures tight tolerance and accuracy.



WIDE MATERIAL CAPABILITY
Process a wide range of high performance materials.



CUSTOM SOLUTIONS
Tailored converting solutions to meet your unique requirements.



FAST SAMPLING
Quick sample turnaround to support your development.



RELIABLE QUALITY
Strict quality control throughout the entire production process.



ENGINEERING SUPPORT
Professional technical team provides full support.



From concept to finished part, we deliver precision-converted solutions that help your products perform better, last longer, and create more value.



YOUR CONVERSION PARTNER FOR HIGH PERFORMANCE MATERIALS



HighTemp Material Co., Ltd.

Industrial High Temperature
Material Converter

MANUFACTURING WORKFLOW

From Raw Materials to Precision Components

Strict process control ensures consistent quality and reliable performance.



CONVERSION &
MANUFACTURING
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MANUFACTURING WORKFLOW



QUALITY CONTROL SYSTEM

We implement comprehensive quality control at every step of the manufacturing process to ensure consistent quality and customer satisfaction.



THICKNESS INSPECTION



Precise thickness measurement with high accuracy.



SURFACE INSPECTION



Critical dimensions checked under drawing requirements.



ADHESION TEST



Adhesion strength tested to ensure bonding reliability.



FLATNESS TEST



Flatness checked to ensure smooth processing.



TOLERANCE CONTROL



Strict tolerance control to ensure part interchangeability.



VISUAL INSPECTION



Final visual check to ensure zero defects.

TYPICAL PROCESSING TOLERANCE (REFERENCE)

Capability	Typical Tolerance	Notes
Slitting Width	±0.20 mm	Depending on material type and thickness
Die Cutting	±0.10 mm	Small parts may vary
CNC Cutting / Milling	±0.05 mm	Depends on part shape and complexity
Laminating Alignment	±0.30 mm	Multi-layer lamination
Thickness Control	±0.02 mm	Based on material and process

* Tolerance values shown are typical references and can vary depending on material type, thickness, part geometry, and manufacturing process. Final tolerances are confirmed during project evaluation.

OEM & CUSTOM DEVELOPMENT PROCESS



Quality First, Customer Focus

We are committed to providing high precision, high quality and reliable converting solutions for your success.



STRICT PROCESS
CONTROL



ADVANCED
EQUIPMENT



SKILLED
ENGINEERS



CONSISTENT
QUALITY



ON-TIME
DELIVERY



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WHY CHOOSE HIGHTEMP MATERIAL



PRECISION MANUFACTURING

Advanced equipment and experienced engineers ensure high precision and consistent quality.



HIGH QUALITY MATERIALS

We use premium raw materials from reliable global suppliers with full traceability.



CUSTOM OEM SOLUTIONS

From material selection to finished parts, we provide tailored solutions to meet your unique requirements.



FAST SAMPLING & LEAD TIME

Quick sample turnaround and efficient production planning to support your project schedule.



TIGHT TOLERANCE

Strict process control delivers precise dimensions and excellent repeatability within tight tolerances.



ENGINEERING SUPPORT

Professional technical team provides application support and helps solve your technical challenges.

INDUSTRIES WE SERVE



PCB Lamination



SMT Assembly



Semiconductor



Solar PV



Battery Pack



Energy Storage



Electric Vehicle



Industrial Furnace



Other Industrial Applications



QUALITY COMMITMENT

We are committed to providing high precision, high quality and reliable converting solutions that help our customers improve performance, reduce cost and accelerate innovation.



CONTACT US

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LET'S BUILD YOUR NEXT SOLUTION TOGETHER

From concept to finished part, we deliver precision-converted solutions that perform in the most demanding environments.



HIGH QUALITY



ON-TIME
DELIVERY



LONG-TERM
PARTNERSHIP



GLOBAL
SUPPORT

