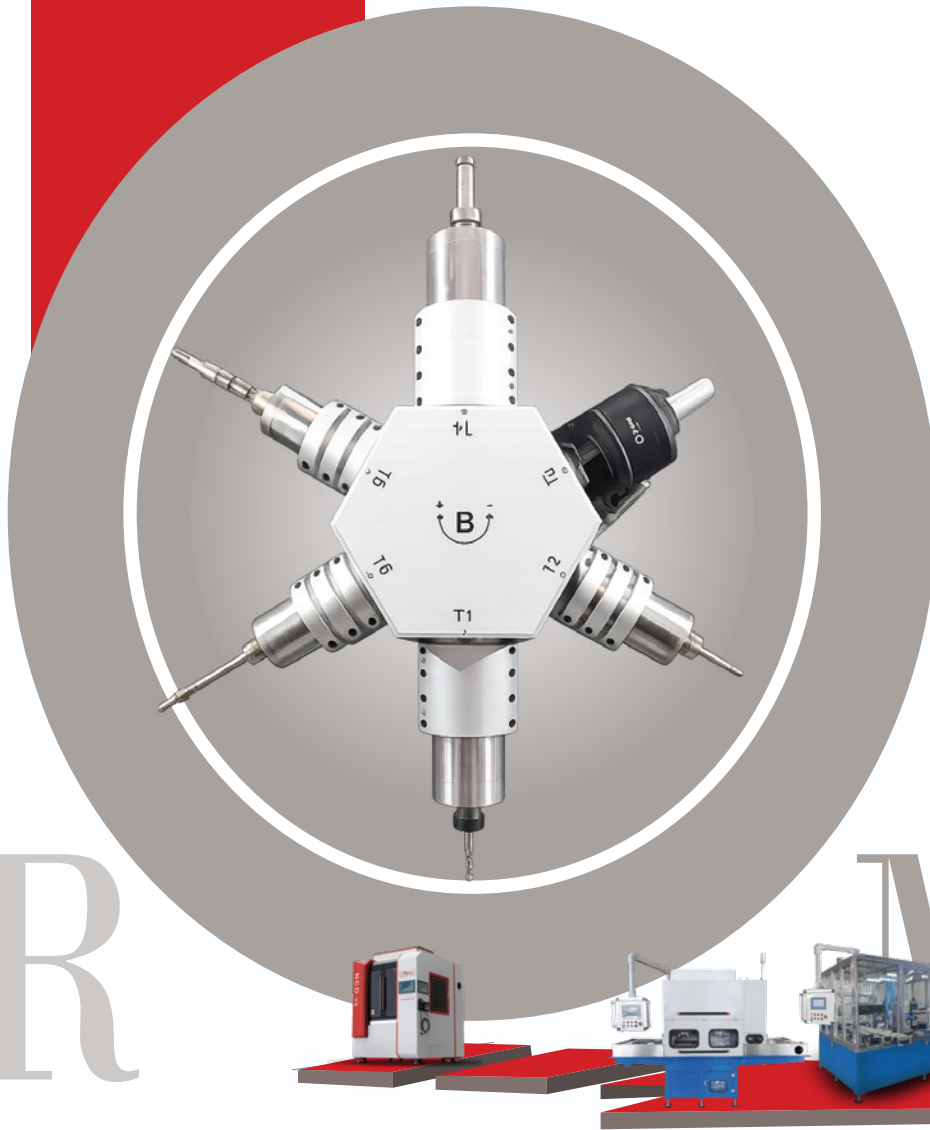




PR

MAX

PROMAX

Precision Deburring Solutions for Modern **Manufacturing**

High-performance deburring and surface finishing solutions for **automotive**, **EV**, **aerospace**, **die-casting**, and **precision manufacturing** industries.



Built for **Precision.**
Designed for Production.



COMPANY OVERVIEW

PROMAX specializes in advanced deburring, surface finishing, and automation solutions for precision manufacturing industries.

We provide efficient and reliable processing systems for automotive components, EV system, aluminum die castings, hydraulic parts, and complex machined components.

Combining engineering expertise with practical manufacturing experience, PROMAX develops customized solutions designed to improve product quality, process stability, and production efficiency.

Our solutions include:

- Six-axis deburring systems
- Flow processing technology
- Surface finishing equipment
- Automation integration solutions

Today, PROMAX supports manufacturers worldwide with professional engineering service, technical support, and long-term industrial cooperation.



Mission

To deliver reliable and efficient deburring solutions that improve product quality, manufacturing efficiency, and production consistency.

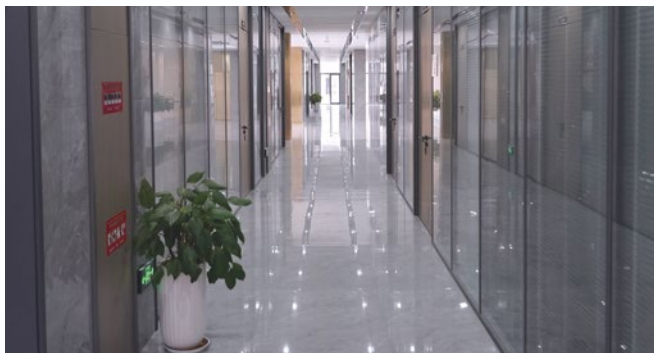
Vision

To become a globally trusted partner in automated deburring and surface finishing technology.

Values

Precision Engineering
Technical Integrity
Continuous Improvement
Long-Term Partnership
Responsive Support

Manufacturing & Facility



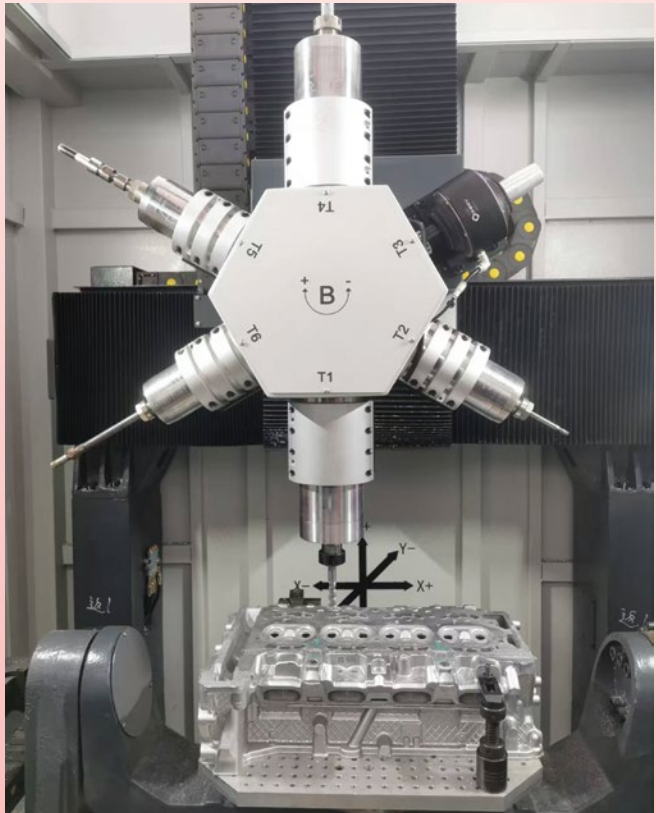
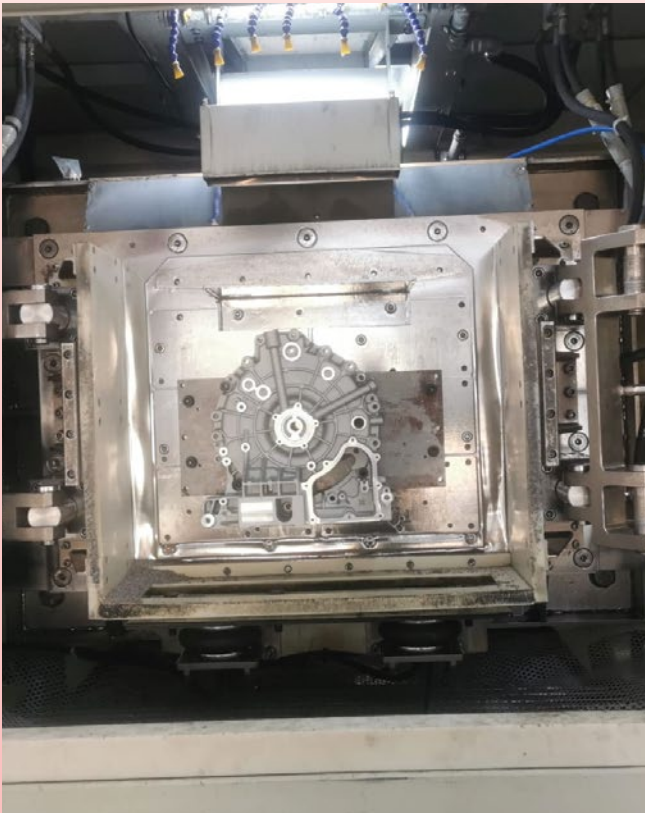
Manufacturing Demands Are Evolving

Modern manufacturers face increasing pressure to improve

- Production efficiency**
- Quality consistency**
- Automation capability**
- Labor cost control**
- Precision finishing standards**

Traditional manual deburring methods often struggle to meet modern production requirements, especially for complex castings and high-precision components.

PROMAX develops intelligent deburring and finishing solutions designed to support modern automated manufacturing environments.



Automated deburring

Why Manufacturer Chose PROMAX

Engineering Experience

Strong understanding of deburring processes and industrial applications.



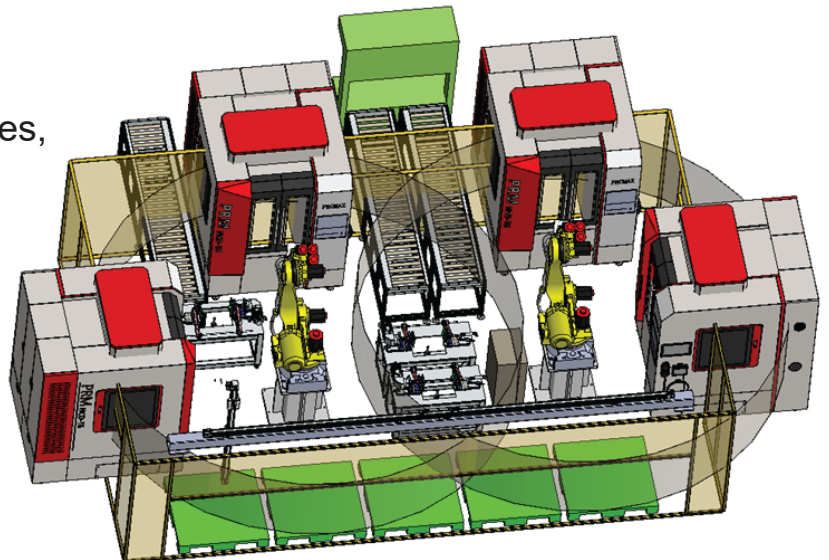
Customized Solutions

Equipment designed according to customer production requirements.



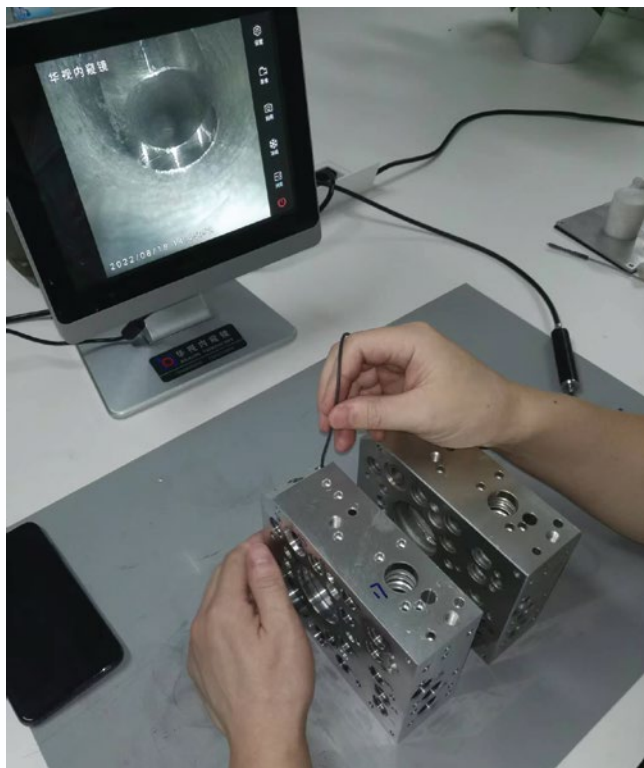
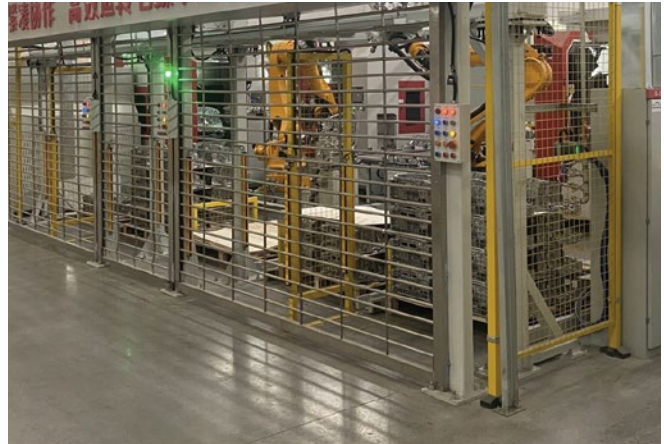
Automation Integration

Support for robots, conveyors, fixtures, and automated production lines.



Stable Processing Quality

Reliable machine performance for consistent production results.



Technical Support

Sample testing, commissioning, training, and after-sales service.

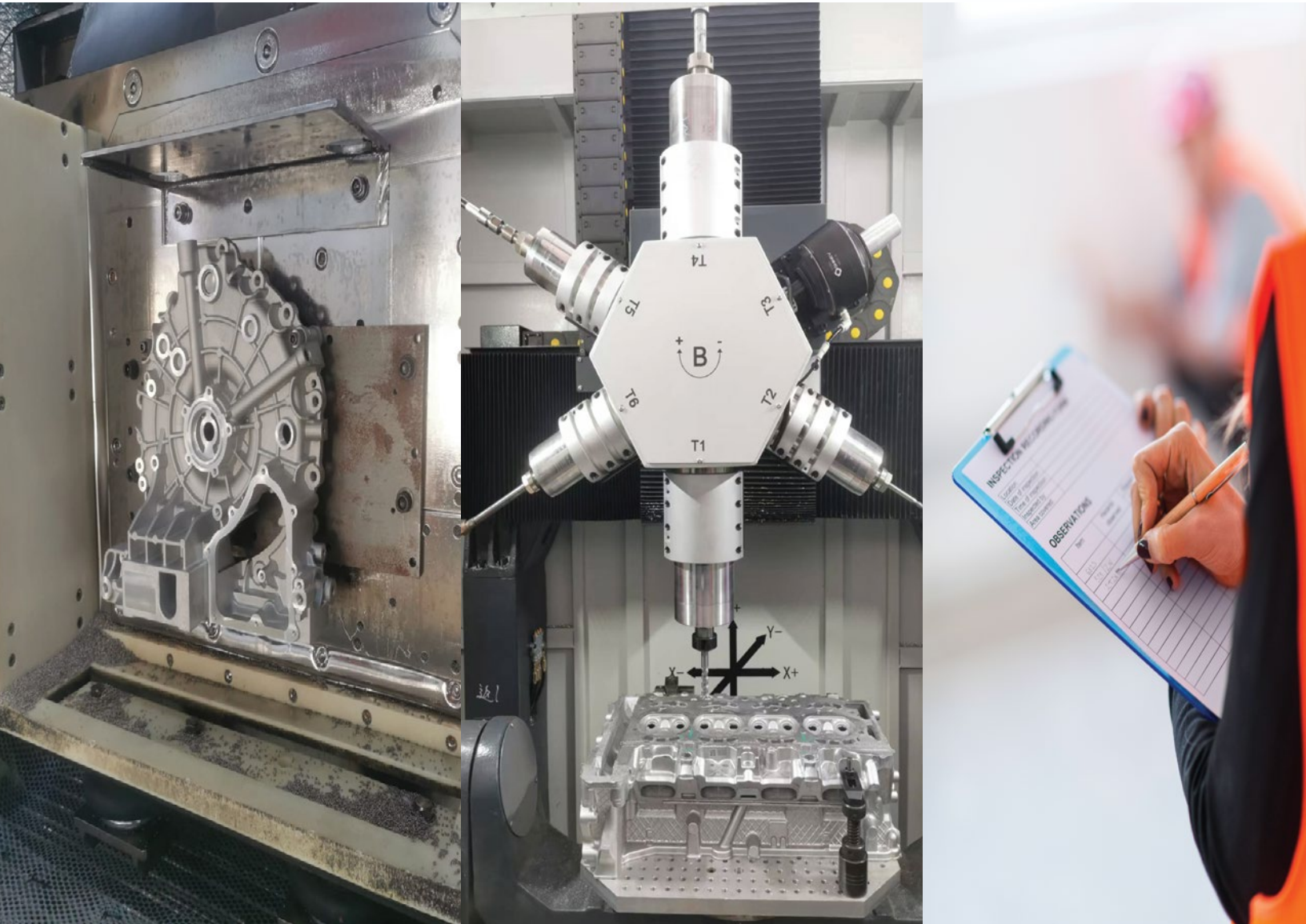
Global Cooperation

Support for robots, conveyors, fixtures, and automated production lines.



Integrated Finishing Process Solutions

PROMAX provides standalone equipment and fully integrated automation solutions designed to optimize industrial finishing processes.



From casting preparation to final finishing, PROMAX supports the complete production workflow.

PROMAX Product Overview

Since 2006, PROMAX has specialized in deburring, surface finishing, and industrial automation solutions for precision manufacturing industries.

Through continuous process development and application engineering, PROMAX has established a comprehensive product portfolio covering robotic deburring, flow processing, surface finishing, polishing, and customized automation systems.

Our solutions are widely used in automotive, EV, aluminum die casting, hydraulic, and precision machining industries worldwide.

Designed for modern manufacturing environments, PROMAX systems help improve quality consistency, production efficiency, and process reliability.

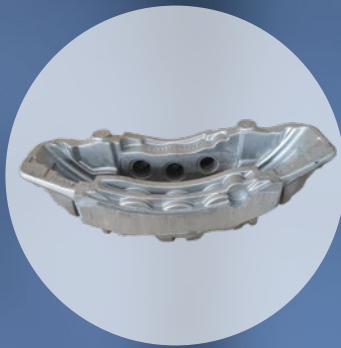


6 Axis Deburring Machine

Built for demanding industrial applications, the PROMAX 6-axis deburring system delivers flexible and efficient processing for complex metal components.

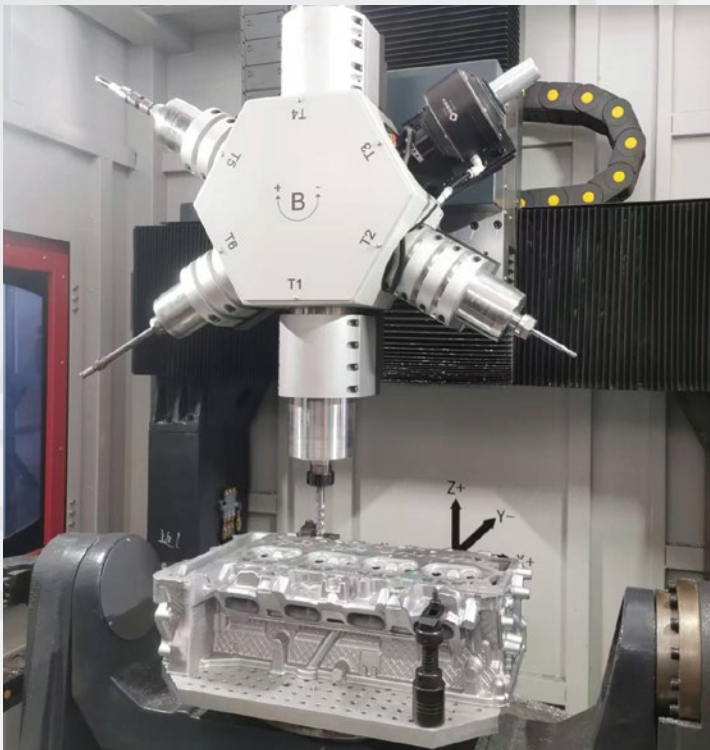
Combining advanced motion control with professional deburring technology, the system is designed to improve accessibility, finishing consistency, and production efficiency across automotive, EV, and precision manufacturing industries.

Whether processing structural aluminum castings, transmission housings, brake components, or precision machined parts, PROMAX solutions help manufacturers achieve stable and repeatable finishing performance in modern automated production environments.



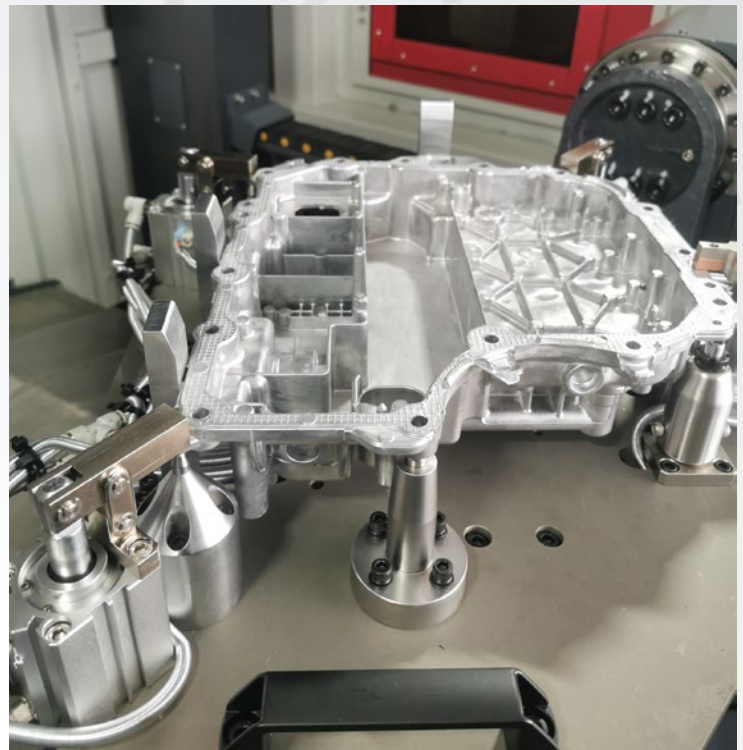
Flexible Multi-Axis Processing

Efficient accessibility for complex geometries and difficult processing areas.



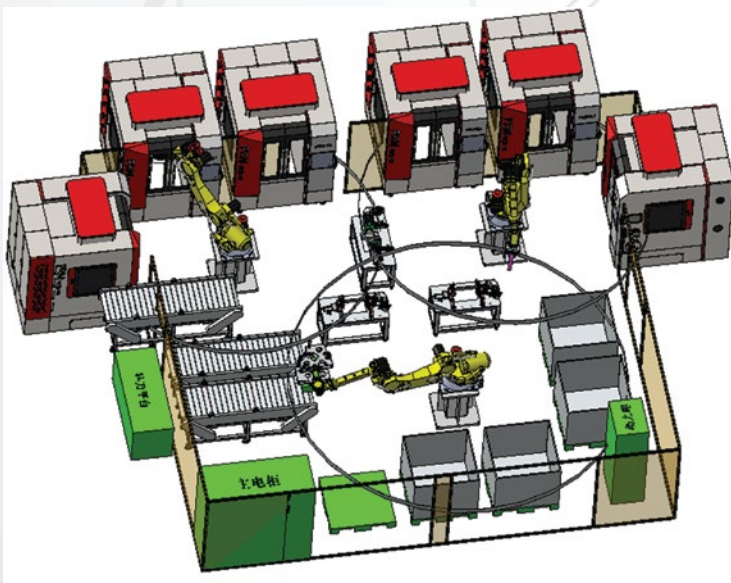
Stable & Consistent Finishing

Designed to improve production consistency and reduce manual variation.



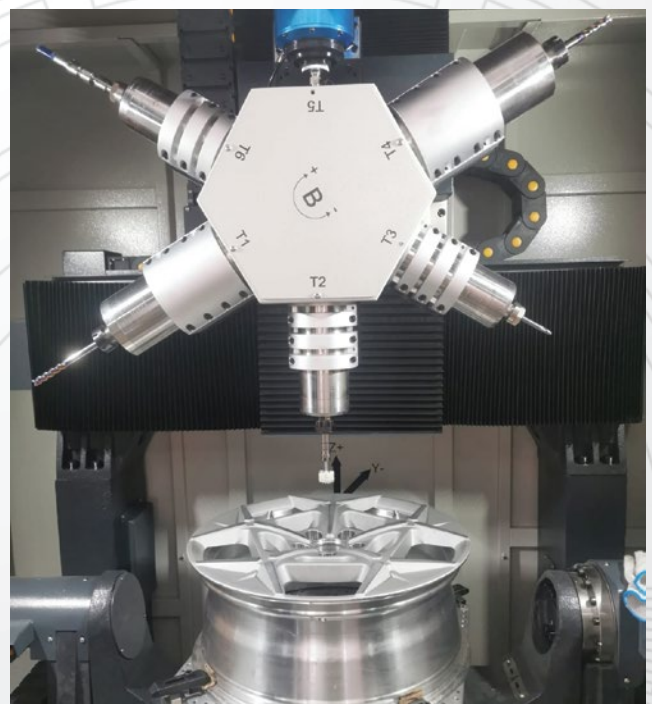
Ready for Automation Integration

Supports automated production environments with flexible system configuration.



Flexible Tool Compatibility

Supports multiple tooling configurations for different finishing requirements.



Technical specification

Parameter Item	NCD-T6-75	NCD-T6-86	NCD-T6-97
Number of Axes	6	6	6
Number of Tools Configured	6	6	6
X Axis Travel	700 mm	800 mm	900 mm
Y Axis Travel	500 mm	600 mm	700 mm
Z Axis Travel	420 mm	500 mm	600 mm
A Axis Rotation Range	±190°	±190°	±190°
B Axis Rotation Range	±190°	±190°	±190°
C Axis Rotation Range	±360°	±360°	±360°
C Axis Rotation Diameter	Φ700 mm	Φ800 mm	Φ900 mm
X/Y/Z Axis Repeatability	0.02/0.03 mm	0.02/0.03 mm	0.02/0.03 mm
A/B/C Axis Repeatability	Arc-sec ≤20 / Arc-min ≤ 1 (Harmonic/RV)	Arc-sec ≤20 / Arc-min ≤ 1 (Harmonic/RV)	Arc-sec ≤20 / Arc-min ≤ 1 (Harmonic/RV)
Max. Traverse Speed (X/Y/Z)	36–48 m/min	36–48 m/min	36–48 m/min
Linear Guide & Ball Screw	NSK / HIWIN / THK	NSK / HIWIN / THK	NSK / HIWIN / THK
Control System & Teach Pendant	Syntec / PROMAX	Syntec / PROMAX	Syntec / PROMAX
Servo System (Motor/Drive/Inverter)	Yaskawa / Veichi / Inovance	Yaskawa / Veichi / Inovance	Yaskawa / Veichi / Inovance
Max Payload (with pallet)	70 kg	70 kg	100 kg

Technical specification

Parameter Item	NCD-T6-1212	NCD-T6-1608	NCD-T6-1612	NCD-T6-1816
Number of Axes	6	6	6	6
Number of Tools Configured	6	6	6	6
X Axis Travel	1200 mm	1600 mm	1600 mm	1800 mm
Y Axis Travel	1200 mm	800 mm	1200 mm	1600 mm
Z Axis Travel	860 mm	650 mm	650 mm	650 mm
A Axis Rotation Range	±190°	±190°	±190°	±190°
B Axis Rotation Range	±190°	±190°	±190°	±190°
C Axis Rotation Range	±360°	±360°	±360°	±360°
C Axis Rotation Diameter	Φ1200 mm	Φ1600 mm	Φ1600 mm	Φ1800 mm
X/Y/Z Axis Repeatability	0.02/0.03 mm	0.02/0.03 mm	0.02/0.03 mm	0.02/0.03 mm
A/B/C Axis Repeatability	≤20 arc-sec (Harmonic/RV)	≤60 arc-sec (Harmonic/RV)	≤60 arc-sec (Harmonic/RV)	≤60 arc-sec (Harmonic/RV)
Max. Traverse Speed(X/Y/Z)	30 m/min	30 m/min	30–60 m/min	30–60 m/min
Linear Guide & Ball Screw	NSK / HIWIN / THK	NSK / HIWIN / THK	NSK / HIWIN / THK	NSK / HIWIN / THK
Control System & Teach Pendant	Syntec / PROMAX	Syntec / PROMAX	Syntec / PROMAX	Syntec / PROMAX
Servo System (Motor/Drive/Inverter)	Yaskawa / Veichi / Inovance	Yaskawa / Veichi / Inovance	Yaskawa / Veichi / Inovance	Yaskawa / Veichi / Inovance
Max Payload (with pallet)	120 kg	200 kg	200 kg	300 kg

Applications

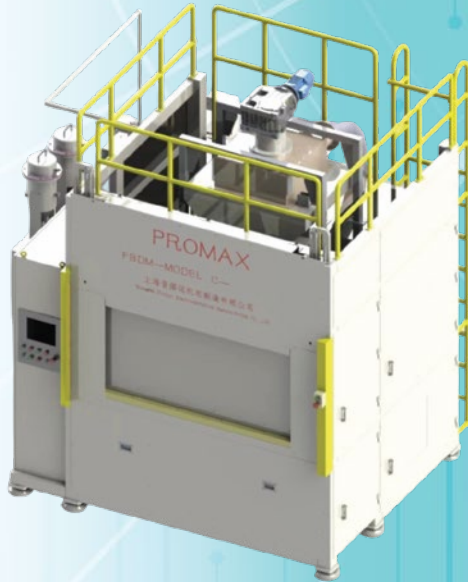


Flow Bead Deburring Machine

PROMAX Flow Bead Deburring Systems are designed for precision internal deburring, surface finishing, and cleaning of complex components with difficult-to-access internal structures.

Using controlled abrasive media flow technology, the system effectively removes internal burrs, machining residue, and sharp edges from cross holes, internal channels, and precision flow passages while maintaining dimensional accuracy and surface integrity.

Widely used in automotive, EV, hydraulic, aerospace, and precision manufacturing industries, PROMAX solutions help manufacturers achieve stable internal finishing quality and improved production consistency for high-precision applications.



Internal Burr Removal

Efficient processing for hidden and difficult-to-access internal areas.

Cross-Hole Finishing

Designed for complex internal intersections and flow channels.

Precision Surface Control

Stable processing while maintaining dimensional accuracy.



Process Stability

Reliable and repeatable finishing performance for mass production.

Precision Cleaning Capability

Designed for complex internal intersections and flow channels.

Complex Geometry Processing

Suitable for intricate internal structures and precision components.

Flow Bead Deburring Machine Type A

The PROMAX Type A Flow Bead Deburring Machine features a separated structure design with an independent screening system and lifting unit, providing stable and efficient processing performance for complex industrial components.

During operation, flowing steel beads act as the processing medium, fully covering both internal and external surfaces of the workpiece. Driven by the integrated vibration system, the steel beads generate a strong and consistent polishing action throughout internal cavities, holes, curved channels, and complex geometries that are difficult to access using conventional tools.

The technology is especially effective for deburring, cleaning, and surface finishing applications involving complex housings, valve bodies, fine-blanking components, flow channels, air passages, and water cavity structures.

Designed for stable industrial production environments, the system helps improve part cleanliness, remove sharp edges, and enhance overall finishing consistency for precision manufacturing applications.



Technical specification

Item	FBDM-180	FBDM-280	FBDM-350	FBDM-450
Fixture Type	Manual	Manual	Manual / Automatic	Manual / Automatic
Auto Loading / Unloading	No	No	Yes	Yes
Fluid Processing Type	Standard/Non-ferrous	Standard/Non-ferrous	Standard/Non-ferrous	Standard/Non-ferrous
Worktable Size	700×450 mm	850×550 mm	1000×650 mm	1000×650 mm
Max Cavity Size	500×400×180 mm	550×450×200 mm	650×500×200 mm	700×550×200 mm
Max Vibrating Force	23×2 kN	40×2 kN	40×2 kN	50×2 kN
Max Load	180 kg	280 kg	350 kg	450 kg
Max Part Weight	50 kg	60 kg	70 kg	80 kg
Max Acceleration	12 g	12 g	12 g	12 g
Vibration Amplitude	2~8 mm	2~8 mm	2~8 mm	2~8 mm
Power	16 kW	16 kW	18 kW	20 kW
Dimension	2.2×4.0×3.6 m	3.0×5.0×3.6 m	3.2×5.0×4.0 m	3.5×5.5×4.3 m
Total Weight	6 tons	6 tons	8 tons	8 tons

Item	FBDM-550	FBDM-650	FBDM-1000
Fixture Type	Manual / Automatic	Manual / Automatic	Automatic
Auto Loading / Unloading	Yes	Yes	Yes
Fluid Processing Type	Standard/Non-ferrous	Standard/Non-ferrous	Standard/Non-ferrous
Worktable Size	1200×750 mm	1200×850 mm	1600×1200 mm
Max Cavity Size	750×600×200 mm	750×650×250 mm	1200×1100×350 mm
Max Vibrating Force	65×2 kN	65×2 kN	90×2 kN
Max Load	550 kg	650 kg	1000 kg
Max Part Weight	100 kg	120 kg	200 kg
Max Acceleration	12 g	12 g	12 g
Vibration Amplitude	2~8 mm	2~8 mm	2~8 mm
Power	25 kW	25 kW	35 kW
Dimension	3.5×5.5×4.3 m	3.5×5.5×4.3 m	4.2×5.8×4.7 m
Total Weight	9 tons	10 tons	12 tons

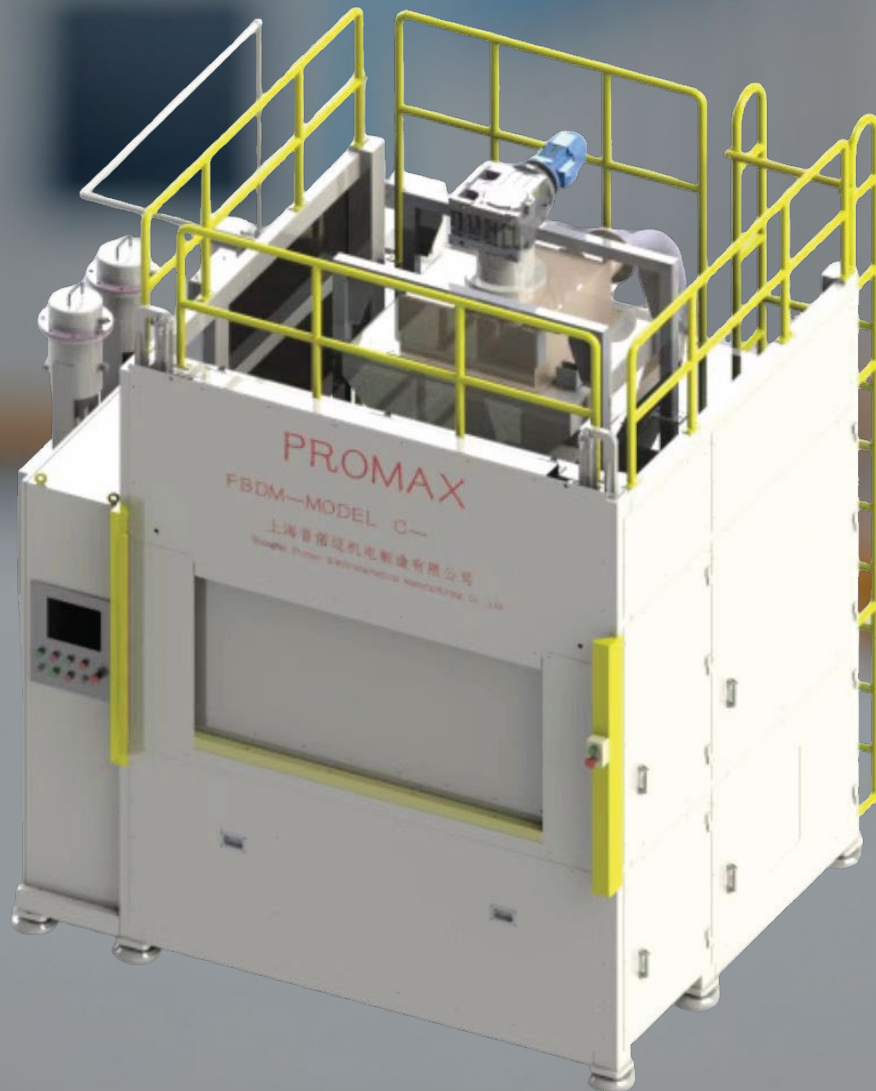
Flow Bead Deburring Machine Type C

The PROMAX Type C Flow Bead Deburring Machine integrates the bead collection and lifting system into a compact all-in-one structure, providing efficient and space-saving processing capability for modern manufacturing environments.

Using flowing steel beads as the processing medium, the system performs internal and external cleaning, deburring, and polishing through a controlled vibration-driven process. The technology enables stable finishing performance even for components with complex internal geometries and precision flow passages.

Designed for continuous industrial production, the Type C series provides safe, efficient, and reliable processing performance for automotive, EV, hydraulic, and precision manufacturing applications.

The system is especially suitable for complex housings, valve bodies, fine-blanking components, flow channels, air passages, and water cavity structures requiring stable internal finishing quality and improved cleanliness.



Technical specification

Item	FBDM-350	FBDM-450	FBDM-550
Fixture Type	Manual / Automatic	Manual / Automatic	Manual / Automatic
Auto Loading / Unloading	Yes	Yes	Yes
Fluid Processing Type	Standard/Non-ferrous	Standard/Non-ferrous	Standard/Non-ferrous
Worktable Size	1000×650 mm	1000×650 mm	1200×750 mm
Max Cavity Size	650×500×200 mm	700×550×200 mm	750×600×200 mm
Max Vibrating Force	40×2 kN	50×2 kN	65×2 kN
Max Load	350 kg	450 kg	550 kg
Max Part Weight	70 kg	80 kg	100 kg
Max Acceleration	12 g	12 g	12 g
Vibration Amplitude	2~8 mm	2~8 mm	2~8 mm
Power	18 kW	20 kW	25 kW
Dimension	3.2×4.0×4.0 m	3.2×4.0×4.0 m	3.5×4.5×4.3 m
Total Weight	7 tons	7.5 tons	8.5 tons

Item	FBDM-650	FBDM-1000
Fixture Type	Manual / Automatic	Automatic
Auto Loading / Unloading	Yes	Yes
Fluid Processing Type	Standard/Non-ferrous	Standard/Non-ferrous
Worktable Size	1200×850 mm	1600×1200 mm
Max Cavity Size	750×650×250 mm	1200×1100×350 mm
Max Vibrating Force	65×2 kN	90×2 kN
Max Load	650 kg	1000 kg
Max Part Weight	120 kg	200 kg
Max Acceleration	12 g	12 g
Vibration Amplitude	2~8 mm	2~8 mm
Power	25 kW	35 kW
Dimension	3.5×4.5×4.5 m	4.2×4.8×4.7 m
Total Weight	9.5 tons	12 tons

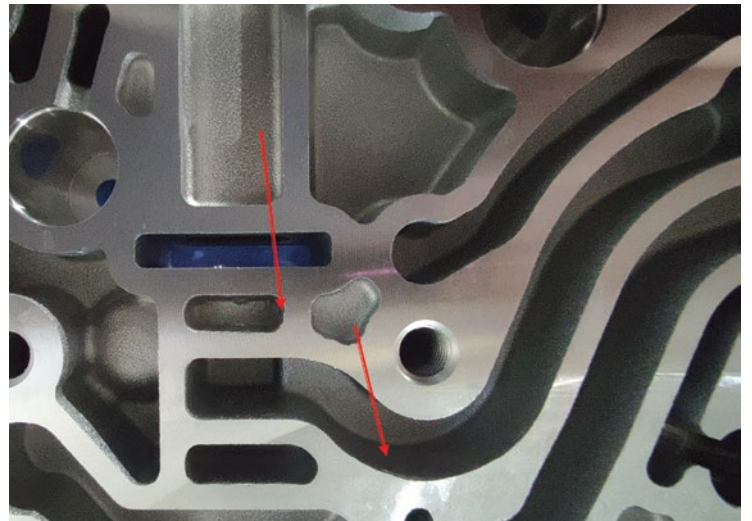
Separated Structure Design

Independent screening and lifting systems support stable continuous processing.



Strong Internal Processing Capability

Efficient finishing performance for internal cavities and complex flow channels.



Complex Geometry Accessibility

Suitable for curved channels and difficult to reach processing areas.



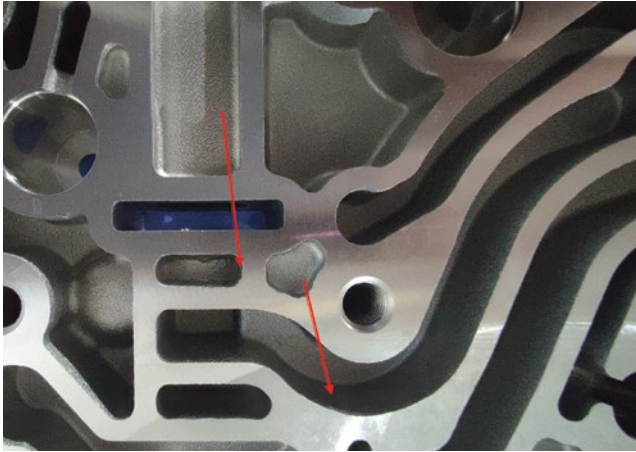
Stable Industrial Performance

Designed for reliable operation in demanding production environments.

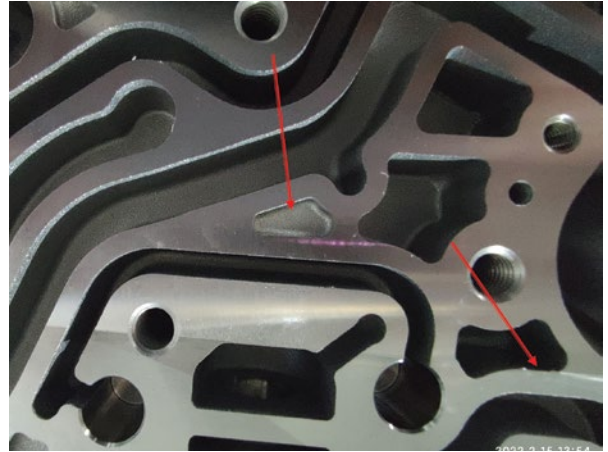


Processing Results

Internal Flow Channel Processing

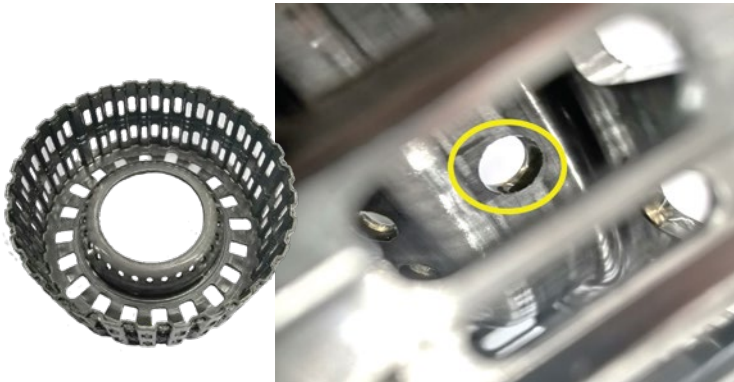


Before



After

Complex Cavity Surface Cleaning



Before



After

Cross-Hole Burr Removal

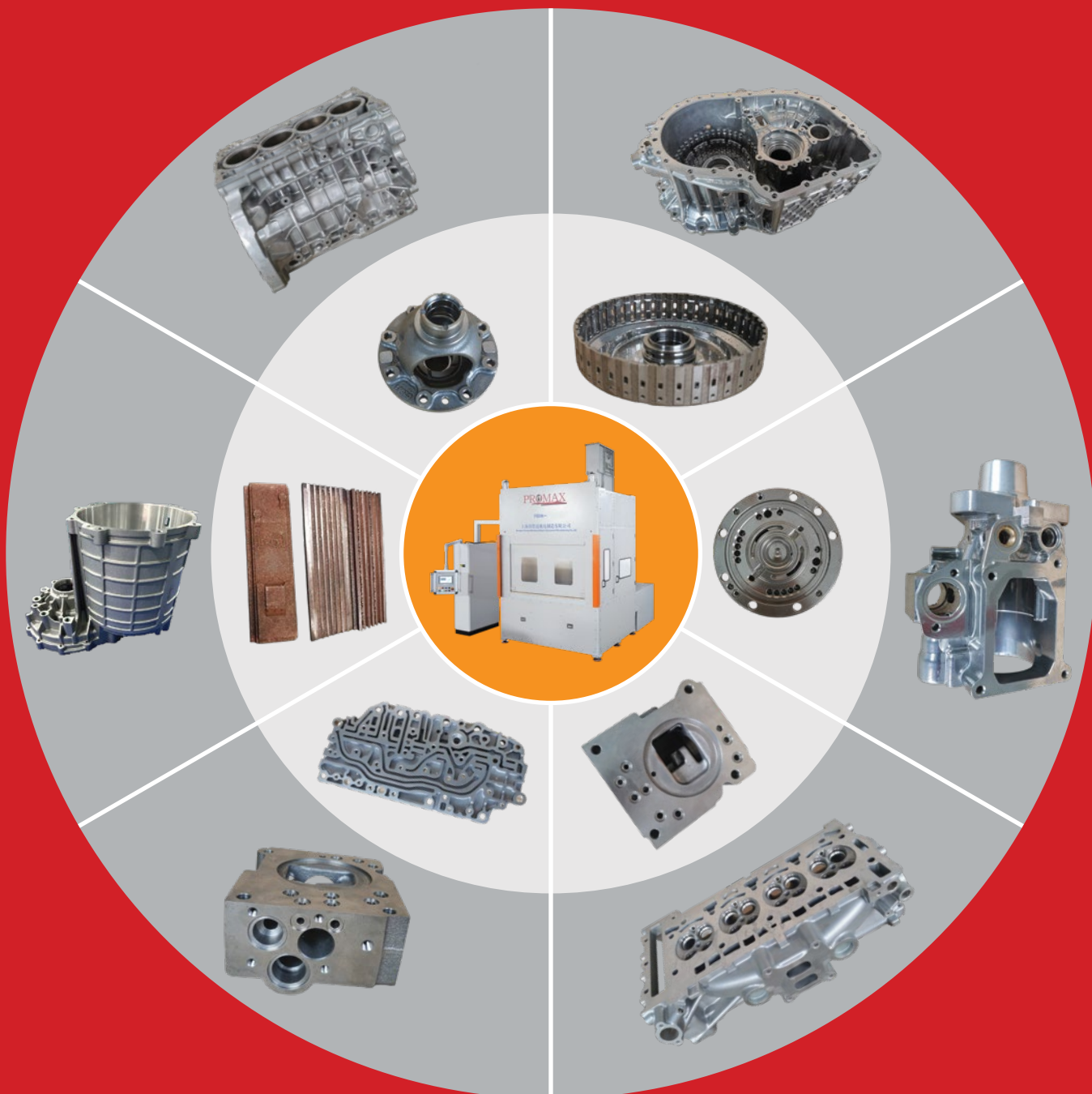


Before



After

Applications

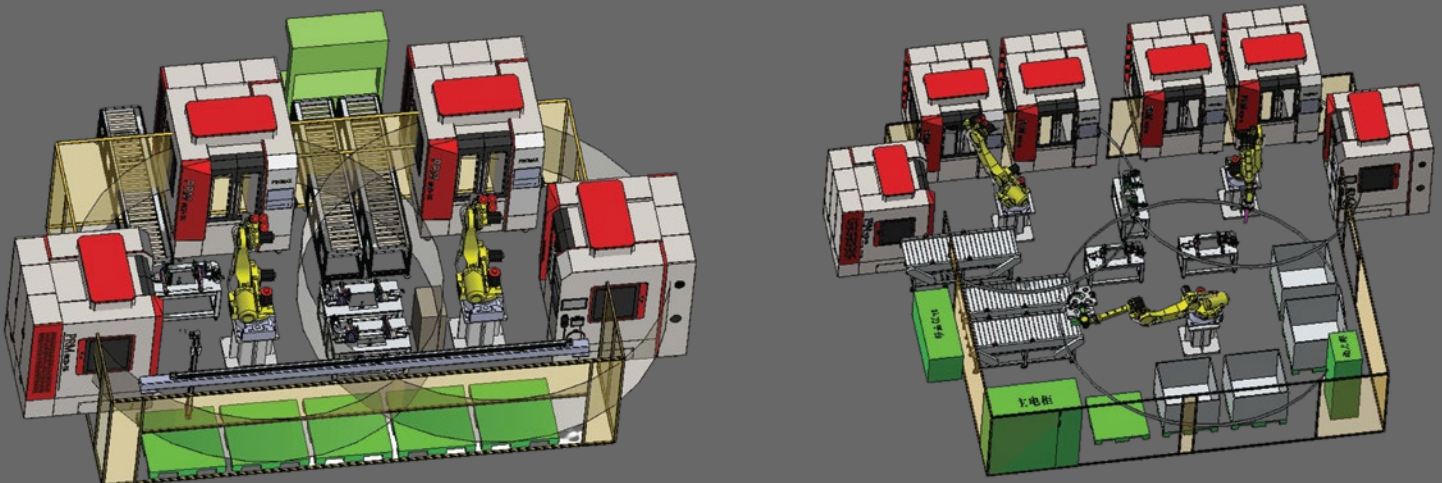


Automation Integration Solutions

PROMAX provides customized automation solutions designed for modern manufacturing environments.

By integrating robotic handling, automated loading systems, conveyors, fixtures, and intelligent process control, PROMAX helps manufacturers improve production efficiency, process stability, and operational consistency.

From standalone automation cells to fully integrated production lines, our solutions are developed according to specific customer applications and manufacturing requirements.



Industries We Serve

PROMAX solutions are widely used in industries requiring stable deburring, precision finishing, and automated manufacturing processes.

Automotive Components

Deburring and finishing solutions for brake systems, transmission housings, engine components, and structural parts.



EV Powertrain Systems

Efficient processing for motor housings, battery structures, inverter systems, and cooling components.



Aluminum Die Casting

Stable removal of flash, sharp edges, and machining residue from complex castings.



Hydraulic Components

Valve bodies, hydraulic blocks, precision flow channels.



Precision Manufacturing

High-consistency finishing for complex geometries and precision industrial parts.



GLOBAL TECHNICAL SUPPORT

PROMAX provides professional engineering support and technical service for customers worldwide.

From process evaluation to installation and long-term technical assistance, our team supports customers throughout the entire project process.

Our services include:

- ✓ Sample testing
- ✓ Process evaluation
- ✓ Installation & commissioning
- ✓ Operator training
- ✓ Remote technical support
- ✓ Spare parts service

PROMAX is committed to providing reliable support for stable and efficient manufacturing operations



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