



Qingdao Zhengrong Precision Machinery Limited Company

Professional precision CNC machining parts manufacturer



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Established in February 2007, Qingdao Zhengrong Precision Machinery Co., Ltd. is headquartered in Chengyang District, Qingdao City, Shandong Province, China. With over 50 employees, including 5 technical personnel, the company boasts a comprehensive range of departments, encompassing CNC machining, milling, grinding, EDM, quality inspection, and foreign trade. Since its inception, the company has adhered to stringent ISO9000 quality management standards in both production and quality control. Zhengrong's products are exported globally, establishing long-term and stable cooperative relationships with customers in the United States, Japan, Spain, Australia, and numerous other countries.

Material Expertise: We are proficient in machining parts of various materials, including various metals, stainless steel, special steel, aluminum, copper, alloys, plastics, etc.

Process Expertise: We are skilled in a wide range of machining processes, including CNC machining, milling, centerless grinding, flat grinding, OD grinding, drilling, laser cutting, wire cutting, EDM and more.

Part Expertise: We specialize in machining various parts, such as brackets, adapters, housings, flanges, timing pulleys, blocks, bushings, dowel pins, gear shafts, rollers, spur gears, connectors, plates, pipe fittings, bases, baffles, gaskets/washers, rings, insulating wheels, guide rods, etc.

Industry Expertise: Our machined parts are widely used in various industries, including semiconductor test equipment, medical devices, aerospace, hydrogen energy engines, automotive assembly lines, steel belt packaging machines, CCD sorting machines, ships, EMU, cameras, mobile phones and more.

Welcome to the World of Zhengrong Precision

We invite you to explore the world of precision engineering with Qingdao Zhengrong. Our CNC machining stands ready to assist you in transforming your ideas into tangible components that drive innovation and success. Contact us today to discover how our expertise can elevate your manufacturing capabilities.

**Unleashing Precision:** Our CNC Machining Expertise

At Qingdao Zhengrong, our state-of-the-art CNC machining department stands as a testament to our unwavering commitment to precision and quality. Our team of skilled technicians and engineers harnesses the power of cutting-edge CNC technology to transform raw materials into intricate components that meet the exacting demands of diverse industries.

Unparalleled Expertise: A Symphony of Precision

Our CNC machining division boasts comprehensive capabilities that empower us to tackle the most demanding projects with unwavering confidence.

Superior Machining Precision: CNC machines deliver exceptional precision, achieving tolerances of up to 0.005 mm, catering to the exacting requirements of high-precision components.

Enhanced Machining Efficiency: CNC machines operate continuously and can automatically change tools, significantly boosting machining efficiency.

Greater Machining Versatility: CNC machines can be programmed to execute a wide range of intricate machining operations, enabling the fabrication of complex and high-precision parts.

Reduced Machining Costs: CNC machines enhance machining efficiency and lower labor costs, ultimately reducing overall production expenses.

Unparalleled Expertise in Your Service

Our team of highly skilled CNC machinists and engineers possesses in-depth knowledge and extensive experience across a diverse spectrum of materials and applications. We meticulously analyze each project's unique requirements, employing our expertise to optimize machining processes, ensuring exceptional quality, and exceeding your expectations.

Qingdao Zhengrong Grinding Department - Your Key to Precision Grinding!

Unveiling the Essence of Precision Grinding

Grinding, a machining technique that utilizes a rapidly rotating abrasive wheel to meticulously remove material from a workpiece's surface, stands as a cornerstone of modern manufacturing. This versatile process offers a multitude of advantages, including minimal material removal, exceptional precision, superior surface finish, and a broad spectrum of compatible workpiece materials.

The Hallmarks of Our Expertise

- **Minimal Material Removal:** Our meticulous grinding process ensures minimal material removal, minimizing thermal distortion and preserving the integrity of your workpieces.
- **Exceptional Precision:** We consistently achieve grinding precision at the micrometric and even nanometric levels, catering to the most demanding applications.
- **Superior Surface Finish:** Our expertise enables us to achieve exceptional surface finishes, with Ra values as low as 0.1 μm , ensuring impeccable aesthetics and functional performance.
- **Unparalleled Versatility:** Our comprehensive capabilities encompass a wide range of materials, including hardened steel, hard alloys, and ceramics, meeting the diverse requirements of various industries.
- **State-of-the-Art Equipment:** Our well-equipped workshop boasts an array of high-precision grinding machines, enabling us to tackle complex shapes, including arcs, steps, and grooves.

A Comprehensive Spectrum of Grinding Services

We cater to a diverse range of grinding needs, encompassing:

- Flat Grinding
- Cylindrical Grinding
- Internal Grinding
- External Grinding
- Centerless Grinding
- Tool Grinding
- Optical Component Grinding

At Qingdao Zhengrong Grinding Department, we are unwavering in our commitment to providing our clients with superior grinding services that exceed expectations. ensures that your grinding needs are met with the utmost precision, efficiency, and quality.



Qingdao Zhengrong Milling Department- Shaping Precision, Driving Efficiency

Welcome to the Milling Department!

We are your one-stop shop for all your precision machining needs. Our department utilizes state-of-the-art milling machines to create a wide variety of complex shapes on metal parts.

• Milling Services:

- **Planar Milling:** Creating flat surfaces with exceptional accuracy.
- **Contour Milling:** Shaping curved surfaces with smooth, precise contours.
- **Pocket Milling:** Excavating cavities and pockets to precise depths and dimensions.
- **Grooving Milling:** Forming grooves and channels for various purposes.
- **Gear Milling:** Manufacturing gears with intricate tooth profiles.
- **Thread Milling:** Cutting threads for fastening and power transmission applications.
- **Drilling:** Creating precise holes.
- **Tapping:** Creating threaded holes for screws and fasteners.
- **Boring:** Enlarging existing holes to precise diameters.
- **Reaming:** Smoothing and improving the accuracy of existing holes.
- **Broaching:** Creating internal keyways, slots, and other shapes.

Quality Control:

- We employ rigorous quality control measures to ensure every component meets the highest standards of precision, dimensional accuracy, and surface finish.

Benefits of Choosing Our Milling Department:

- **Precision and Accuracy:** We deliver high-quality parts with tolerances as tight as 0.01mm.
- **Versatility:** We can handle a wide range of materials and complex geometries.
- **Efficiency:** Our advanced equipment and experienced operators ensure fast turnaround times.
- **Quality Assurance:** We guarantee consistent quality through strict inspection procedures.





Qingdao Zhengrong EDM & WEDM DEPARTMENT-The spark of precision machining

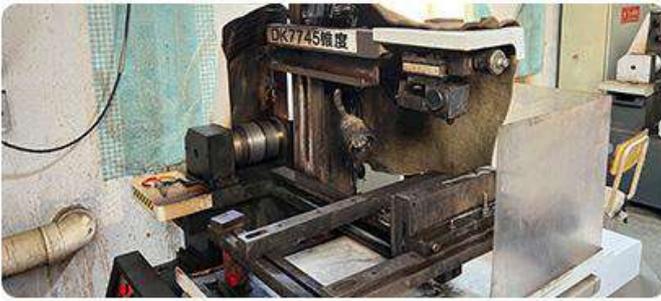
Electrical Discharge Machining (EDM) and Wire Electrical Discharge Machining (WEDM) are two non-traditional machining processes that utilize electrical sparks to erode material and create intricate shapes. Both methods are particularly well-suited for machining hard, brittle, and difficult-to-cut materials.

Choosing between EDM and WEDM

The choice between EDM and WEDM depends on the specific part requirements and desired characteristics. Consider the following factors:

- **Part Complexity:** For complex shapes and intricate features, WEDM is often the preferred choice.
- **Material Hardness:** EDM is well-suited for machining hard and brittle materials, while WEDM can handle a wider range of materials.
- **Part Thickness:** WEDM is ideal for thin-walled parts, while EDM can handle thicker workpieces.
- **Precision Requirements:** Both EDM and WEDM can achieve high precision, but EDM may be more efficient for lower production volumes, while WEDM can be more efficient for higher volumes.

Feature	EDM (Electrical Discharge Machining)	WEDM (Wire Electrical Discharge Machining)
Electrode	Shaped electrode made of conductive material (copper, graphite, brass)	Thin conductive wire (typically brass or copper)
Cutting Path	Follows the shape of the electrode	Creates intricate paths along the wire
Material Removal	Localized erosion of material	Erosion of material along the wire path
Advantages	<ul style="list-style-type: none"> * High precision and intricate details * Can machine hard and brittle materials * Can create complex shapes, including cavities, undercuts, and fine holes 	<ul style="list-style-type: none"> * Ideal for machining intricate and complex shapes with tight tolerances * Can produce extremely fine holes with high precision * Well-suited for machining thin-walled parts without distortion or heat damage





Safeguarding Quality: Your Gateway to Reliable Machined Parts Welcome to Our Quality Inspection Department

At Qingdao Zhengrong, our quality inspection department is committed to ensuring the highest standards of quality and reliability for your products. We employ a comprehensive inspection process, utilizing cutting-edge technology and expertise to identify and eliminate any defects or non-conformities. With our unwavering dedication to quality, we empower you to deliver products that meet customer expectations and exceed industry standards.

Unveiling the Pillars of Quality Inspection

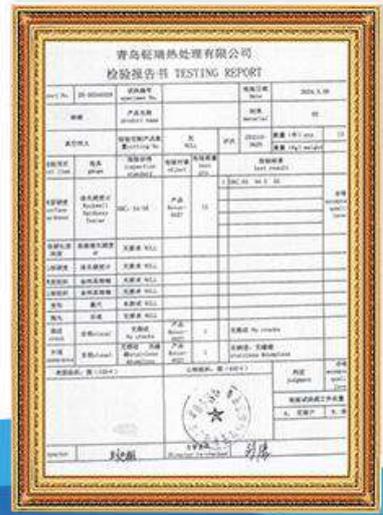
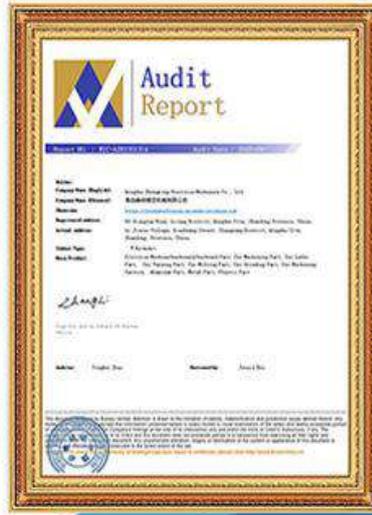
Our machined parts quality inspection department operates on a foundation of meticulous processes and unwavering attention to detail:

- **Visual Inspection:** Our experienced inspectors conduct thorough visual examinations to detect surface defects, dimensional discrepancies, and non-compliance with design specifications.
- **Dimensional Measurement:** We employ a variety of measuring instruments, including calipers, micrometers, and coordinate measuring machines (CMMs), to precisely measure part dimensions and ensure adherence to tolerances.
- **Non-Destructive Testing (NDT):** We utilize NDT methods, such as ultrasonic testing, radiographic testing, and liquid penetrant testing, to identify internal flaws or imperfections in parts that may not be visible to the naked eye.
- **Data-Driven Quality Control:** We maintain comprehensive inspection records, including detailed reports, checklists, and non-conformance reports, to track inspection activities, identify trends, and continuously improve our processes.

Our Commitment to Excellence

We believe that quality is not a mere goal, but a fundamental principle that drives our operations. partner with us to safeguard the quality of your machined parts and elevate your products to new heights of excellence. Contact our machined parts quality inspection department today to discuss your requirements and experience the difference that our unwavering commitment to quality can make.







CNC machining is an efficient and accurate machining method, often using precision machining techniques such as lathes, milling, grinding, laser drilling, etc. To improve the accuracy and surface quality of parts, we can meet the specific application requirements according to your drawing requirements



CNC machining



CNC turning



CNC milling



Drilling



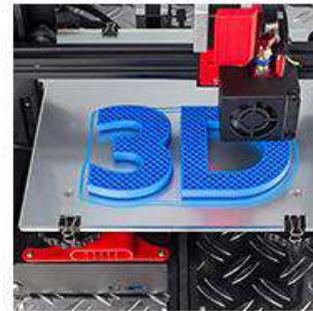
CNC lathe



Wire Cutting



EDM



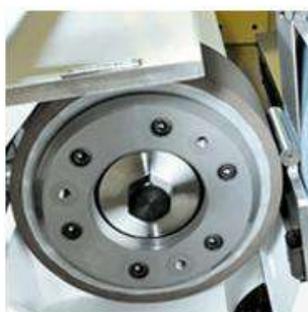
3D Printing



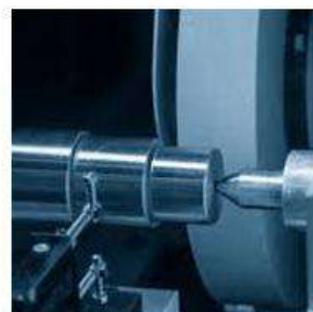
Laser cutting



Surface grinding



Cylindrical grinding



Centreless grinding

The surface treatment of precision machining mechanical parts is an important process to improve the performance, appearance, and corrosion resistance of the parts. When selecting surface treatment technology, factors such as the material, usage environment, performance requirements, and cost of the parts should be comprehensively considered. We can provide you with multiple surface treatment methods based on the material



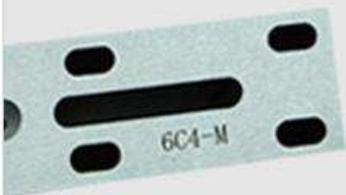
Sandblasting



Mirror polishing



Anodized



Laser engraving



Powder coating



Electroplating



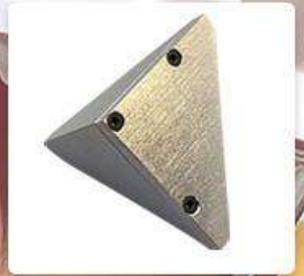
Knurling



Spray paint



Blackening





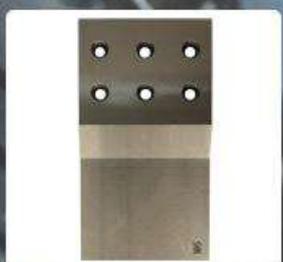
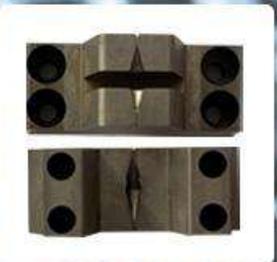
3.3

CNC Machining S45C Parts



3.4

CNC Machining Special Steel CR12 Parts



3.5

CNC Machining Stainless Steel 304 Parts



3.6

CNC Machining Steel Parts



3.7

CNC Machining Copper Parts



3.8

CNC Machining Plastic Parts



POM



PMMA



MC501CDR6



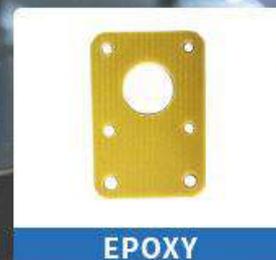
MC501CDR9



PPS



PEEK



EPOXY



RESIN



BAKELITE



NYLON



POLYURETHANE



ABS



Bracket



Base



Block



Plate





Pin Shaft



Insulated Roller



Flange



Wheel





propeller



handle



fixed base



cardan joint



fixture



housing



rubber roller



adapter



pipe Joint



gasket



container



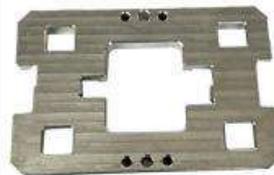
separator



slideway



wheel base



substrate



shaft sleeve



resin gasket



gripper jaw



baffle



guide pillar



❑ cavity block ❑



❑ segmented dies ❑



❑ clamp shell ❑



❑ tee ❑



❑ shaft head ❑



❑ connecting rod ❑



❑ connector ❑



❑ limiting column ❑



❑ expanding arbor ❑



❑ slope block ❑



❑ plate ❑



❑ holder ❑



❑ control box ❑



❑ joint column ❑



❑ mold cavity ❑



❑ coupling ❑



❑ separation plate ❑



❑ pressure head ❑



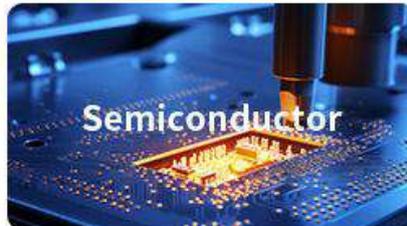
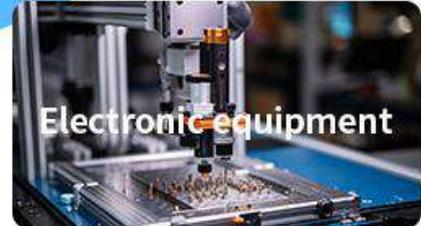
❑ damping ring ❑



❑ plug ❑

5.1

Application Area





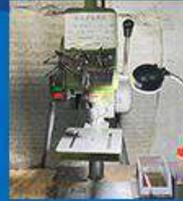
Device name	Grinding machine
Model	YSG-618
Quantity	2
Origin brand	Taiwan Yuqing
Precision	Within 2 μ



Device name	Grinding machine
Model	YSG-614
Quantity	1
Origin brand	Taiwan Yuqing
Precision	Within 2 μ



Device name	Milling machine
Model	3K-4H
Quantity	3
Origin brand	Taiwan Yongyuchang
Precision	Within 0.02mm



Device name	Tapping machine
Model	
Quantity	4
Origin brand	Taiwan Liangli
Precision	Guarantee verticality



Device name	WEDM-Medium Speed
Model	W500
Quantity	3
Origin brand	Taiwan jingyu
Precision	Within 0.02mm



Device name	WEDM-Fast Speed
Model	CD-6140
Quantity	2
Origin brand	Jiangsu suzhou
Precision	Within 0.02mm



Device name	CNC engraving milling machine
Model	1200*1000
Quantity	6
Origin brand	Nanjing Tiangong
Precision	0.02



Device name	EDM
Model	EMD-500
Quantity	1
Origin brand	Taiwan KING SPARK
Precision	0.01



Device name	CNC
Model	800*500
Quantity	4
Origin brand	Nantong Guosheng
Precision	0.01



Device name	Grinding machine
Model	614
Quantity	4
Origin brand	Wang pan
Precision	Within 2 μ



Device name	Precision engraving machine Cnc
Model	450-500
Quantity	3
Origin brand	Nantong Guosheng
Precision	0.01mm



Device name	CNC lathe
Model	Inclined rail
Quantity	2
Origin brand	Nantong Guosheng
Precision	0.002



Device name	CNC
Model	T5
Quantity	6
Origin brand	Taiwan Taiqun
Precision	0.01



Device name	Surface grinder
Model	7140
Quantity	2
Origin brand	Gullin
Precision	0.02

6.2

Inspection instrument

	Device name	DTM
	Model	Microscope
	Quantity	1
	Origin brand	NIKON
	Precision	0.001mm

	Device name	CO
	Model	Projector
	Quantity	2
	Origin brand	Taiwan Wanhao
	Precision	0.002

	Device name	Height gauge
	Model	
	Quantity	3
	Origin brand	Mitutoyo
	Precision	0.001mm

	Device name	Ticrometer
	Model	
	Quantity	6
	Origin brand	China
	Precision	0.001mm

	Device name	Inside micrometer
	Model	SHAHE
	Quantity	3
	Origin brand	china
	Precision	0.001mm

	Device name	Digital caliper
	Model	
	Quantity	5
	Origin brand	Leidun
	Precision	0.01mm

	Device name	Height indicator
	Model	TESA
	Quantity	1
	Origin brand	Switzerland
	Precision	0.001mm

	Device name	Coordinate Measuring Instrument
	Model	10850
	Quantity	1
	Origin brand	Leidun
	Precision	0.0001mm

	Device name	Hardmeter
	Model	HUAYIN
	Quantity	1
	Origin brand	china
	Precision	0.1mm

	Device name	Demagnetization instrument
	Model	
	Quantity	1
	Origin brand	South Korea
	Precision	

7.1

Contact us



Qingdao Zhengrong Precision Machinery Limited Company



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