





COMPANY PROFILE

A Large-scale Professional Investment Casting Foundry with Powerful Machining Capabilities

Longxing Casting

is a leading and globally recognized brand for complex and high-tech castings in the area of automobile, rail, construction equipment, material handling equipment and agricultural machinery.

Steadfast devoting to the field of precision casting and machining for 30 years and with strong engineering capabilities, complete quality assurance system and advanced management system, and deep industry expertise, our world class foundry provides these global industry leaders and medium-to-high end western customers with the highest quality products, services and solutions.







FOUNDRY 1 OVERVIEW





Huawei Foundry

Established in 2005

26,600 m² under roof

245+ employees

Annual capacity 20,000 tons

Utilize advanced lost wax, lost foam, shell moulding casting processes.

Equipped with modern energy saving and eco-friendly production lines.

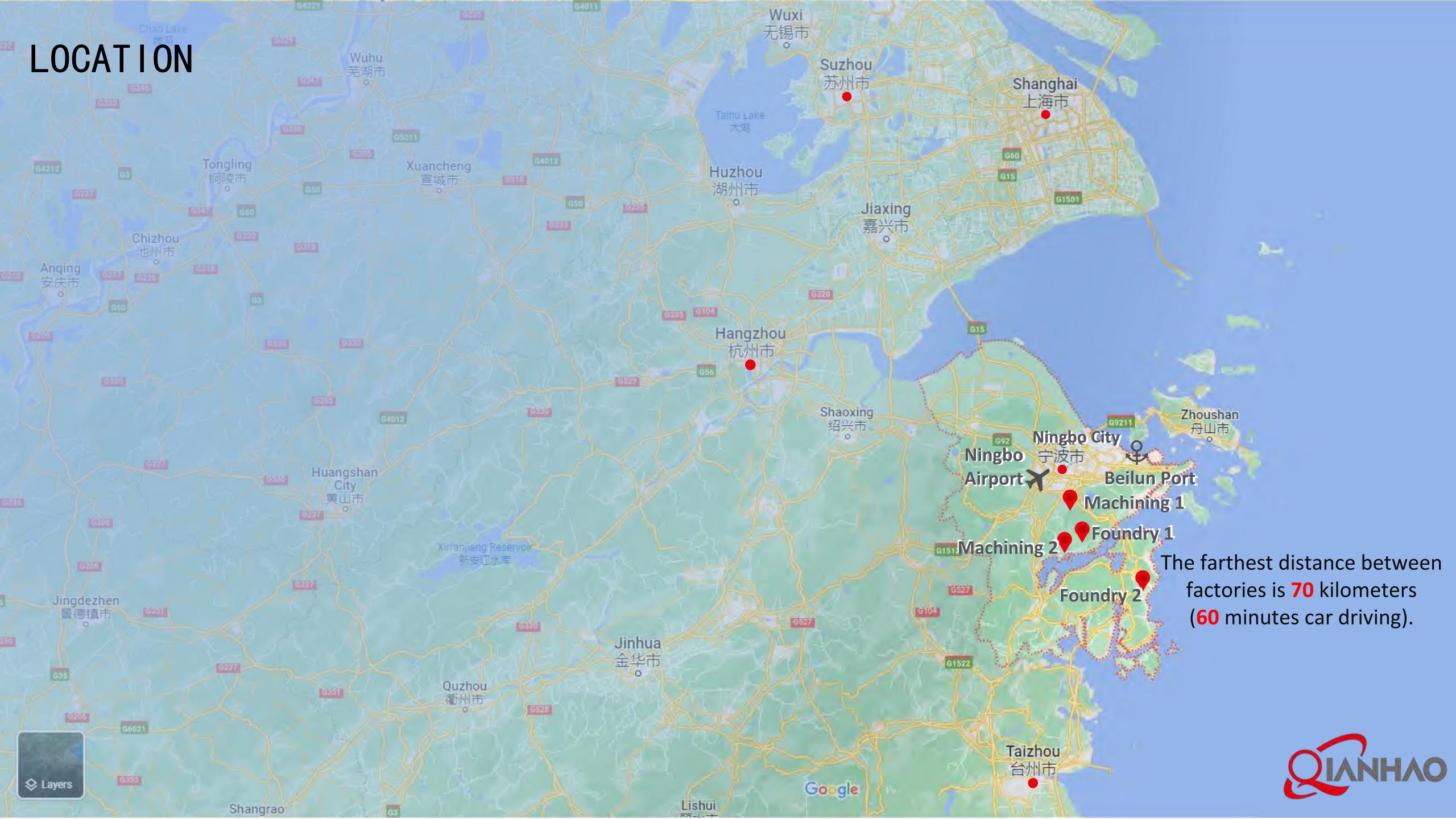
Automatic and semi-automatic wax and shell making, pouring, heat treating equipment.











PICTORIAL - FACILITIES





Reception-Headquarters



Export Department



Meeting Room 1



Meeting Room 2



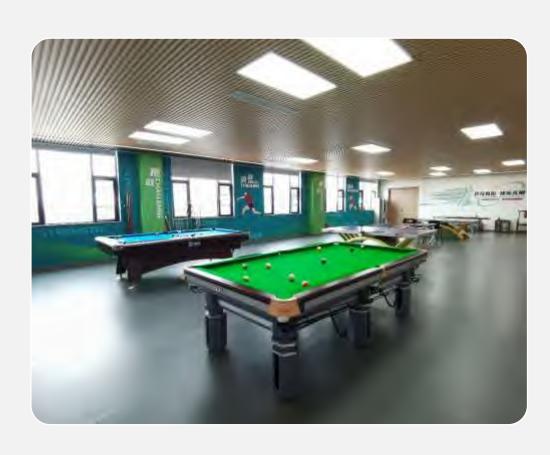
Meeting Room 3



Exhibition Hall



Training Room



Recreation Center

VISION & MISSION

VISION

Create superior value for our customers, partners, employees.

To become the most respected and successful metal forming and processing company in the world.

MISSION

We are committed to becoming the leader in casting industry and the top supplier of global OEM customers in multiple industries by offering value and services that beyond expectation.

Stay focused on continuous improvement, operational growth, leadership and sustainability.



STRATEGY & VALUES



Expanding our offerings to enable customer success through integrated and differentiated solutions.

Honesty and Practicality



Persevering Unremittingly



Teamwork Spirit



Achieving Greatness





VALUES



ESG

IMPLEMENT ESG CONCEPT

Promote green and low-carbon transformation of enterprises, build a sustainable corporate development ecosystem and achieve high-quality corporate development.

ESG performance highlights for Qianhao Metal Product Co., Ltd



Environment

Greenhouse gas emissions decreased by 54.28% compared to last year.

Green electricity accounts for 72% of total electricity usage.

Comprehensive utilization rate of solid waste resources is 100%.

Water resource usage decreased by 52% compared to last year.

Water recirculation rate reaches 87.71%.



Social

Employee satisfaction is 90.2%.

Training coverage rate is 100%.

Occupational health physical examination coverage rate is 100%.

Labor protection supplies distribution rate is 100%.

Charitable donations exceed US\$0.32 million.

R&D investment exceeds US\$1.7 million.

R&D personnel account for more than 13%.

Customer complaint resolution satisfaction rate is 100%.



Governance

Revenue increased by 11.39% compared to last year.

"Benefit per Mu of Land Comprehensive Evaluation" Grade A.

Credit rating Grade A.

First establishment of dual-carbon goals.



HISTORY

casting production capacity **5,000**

tons.

abroad.



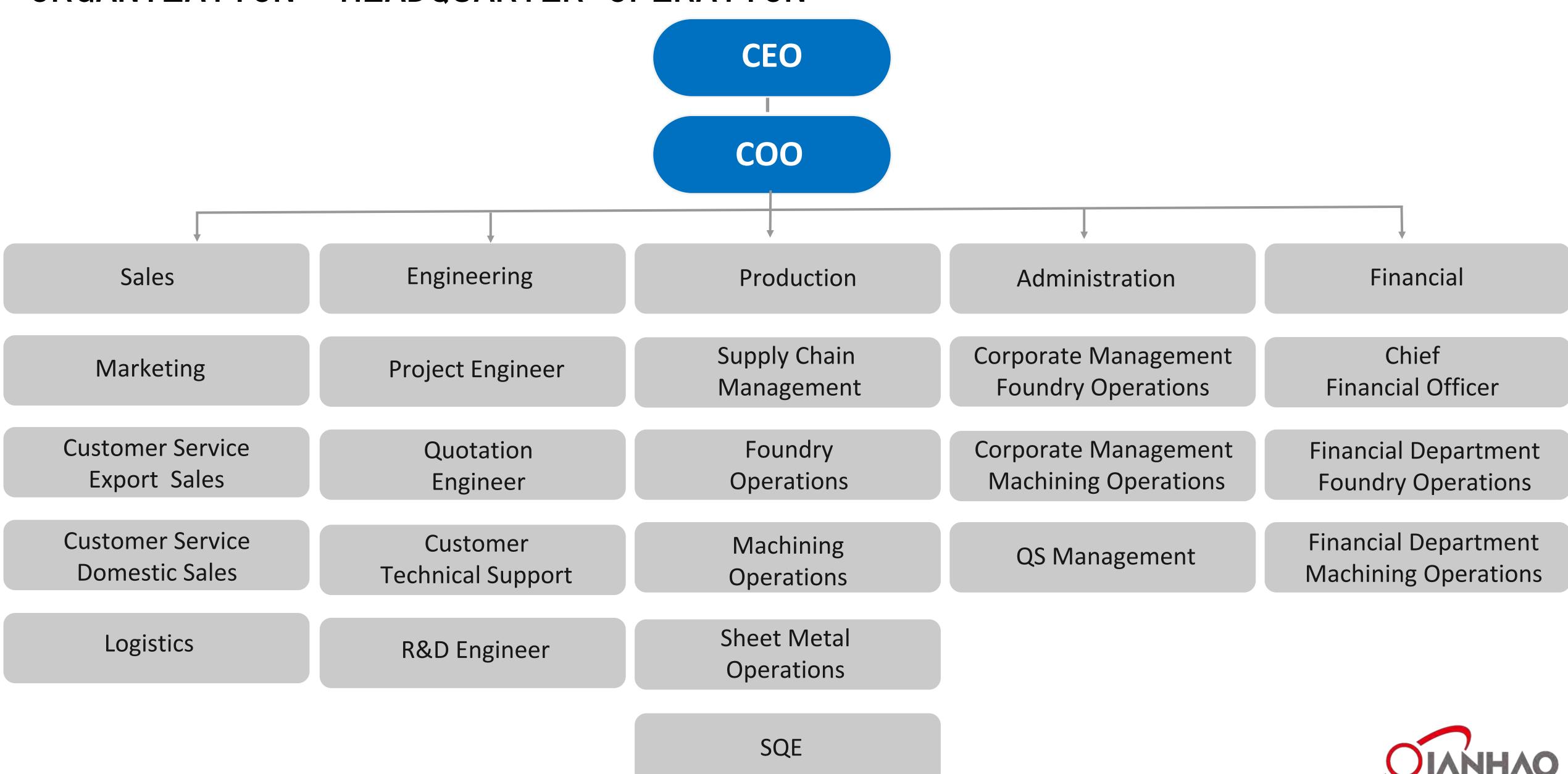
Ningbo Yinzhou Longxing Installed **automatic** and semi-automatic Ningbo Fenghua **Huawei** Obtained Machinery Manufacturing Factory wax and shell making lines, pouring lines TS16949:2009&ISO14001:200 Investment Casting Co., Ltd was was established. Mainly engaged in and more advanced environmental 4 certificate. established. machining. protection devices. Moved casting production line to Increased production Obtained Huawei with capacity **15,000 tons**. **Qianhao Machinery** capacity to 20,000 ISO9001:2000 Cooperated with **Hyundai** North started operation. certificate. tons. America, the first automobile OEM customer abroad. 2025 2007 2009 2014 2020 2012 1999 2003 2011 2013 2015-2018 2008 2022 2001 1993 2005 **Qianhao New Material** Ningbo Qianhao Metal Product Established **ERP** Products began Foundry and Qianhao Co., Ltd was established for production management **Industry** Company machining and import & export system and 5S to export. started operation. business. management system. Cooperated with **Doosan** in Renovated investment casting Cooperated with **Bombardier**, **Qianhao Metal Yunlong Facility** South Korea, the first production lines with precision the first railway OEM customer

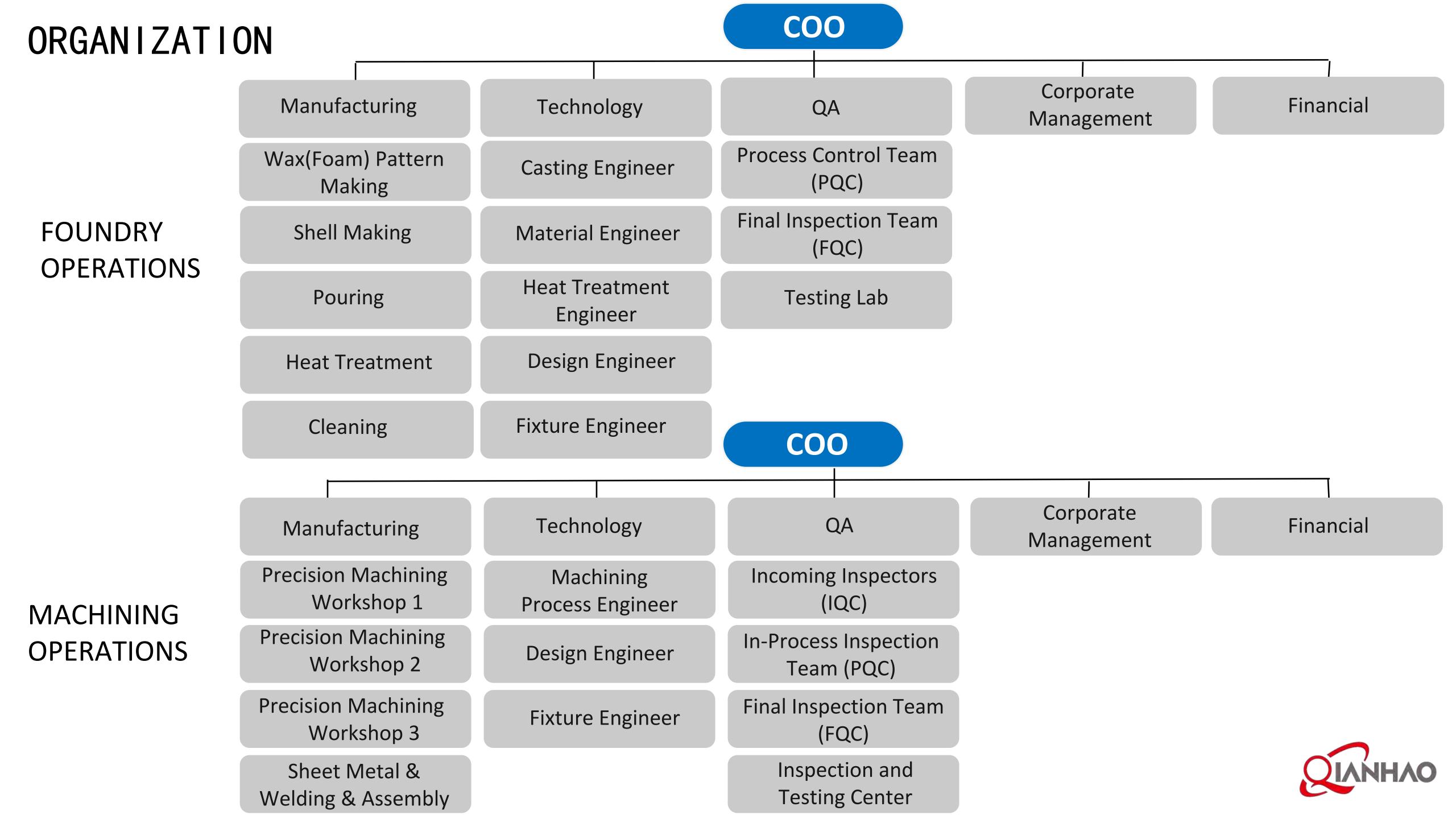
construction equipment OEM

customer abroad.

started operation.

ORGANIZATION - HEADQUARTER OPERATION

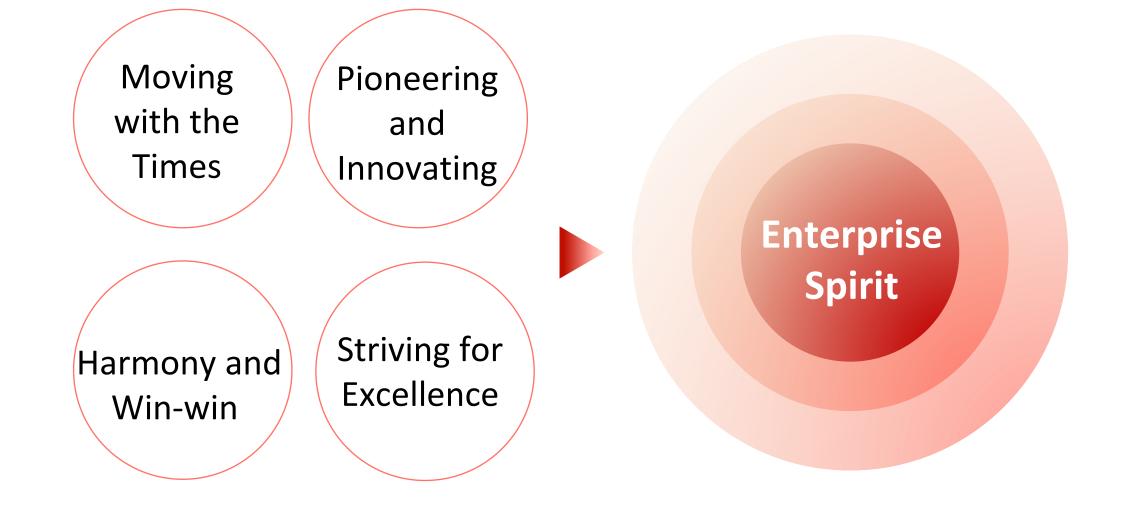


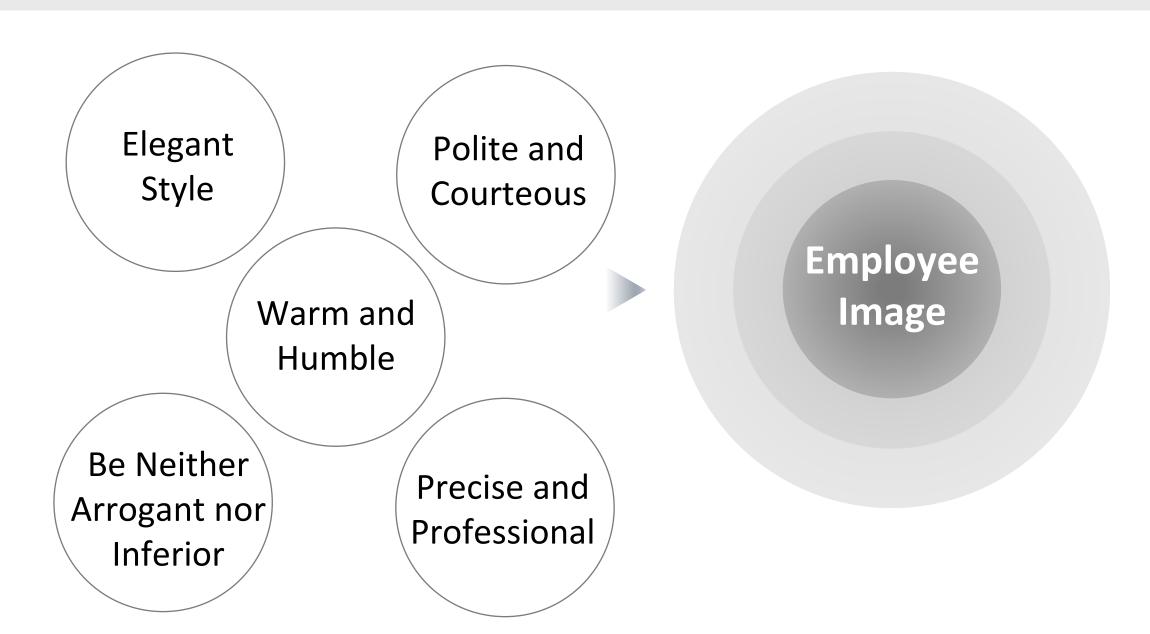


STAFFING

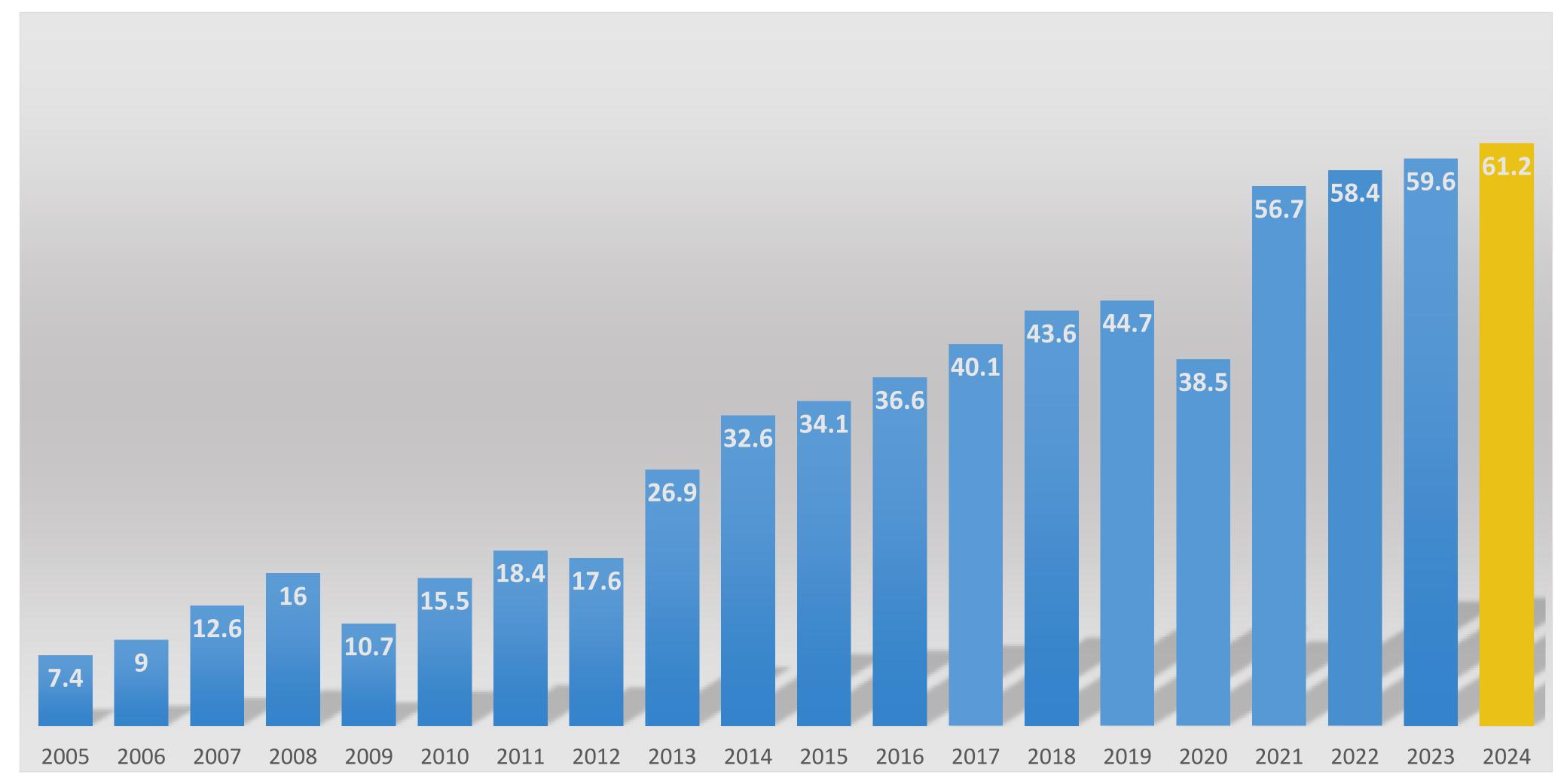


Casting Engineer	3	Production Management	19
Material Engineer	2	Supply Chain Management	7
Heat Treatment Engineer	1	Management and Supervision	42
Machining Engineer	5	Sales & Customer Service Staff	16
Sheet Metal & Welding Engineer	3	(Languages - English 8, Japanese 1, Korean	1)
Project Engineer	5	Direct Labor	297
Professional Technician	11	Total	460
QA	49		



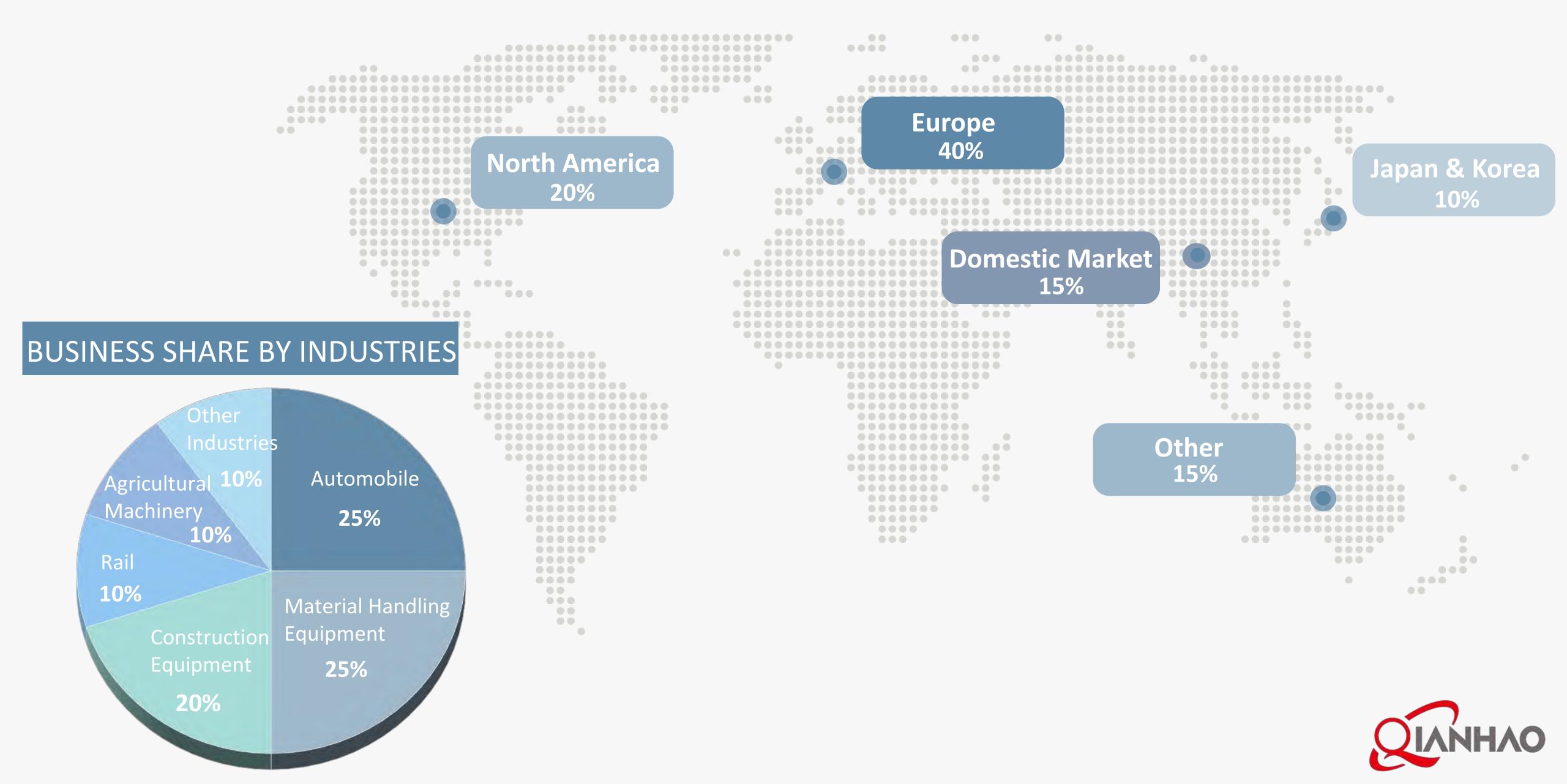


ANNUAL TURNOVER US \$ (MILLION)





GLOBAL MARKET SHARE





is able to meet customer's wide range of needs for castings of different grades and qualities.

Covering Different Grades of



Casting Precision: CT6 – CT8



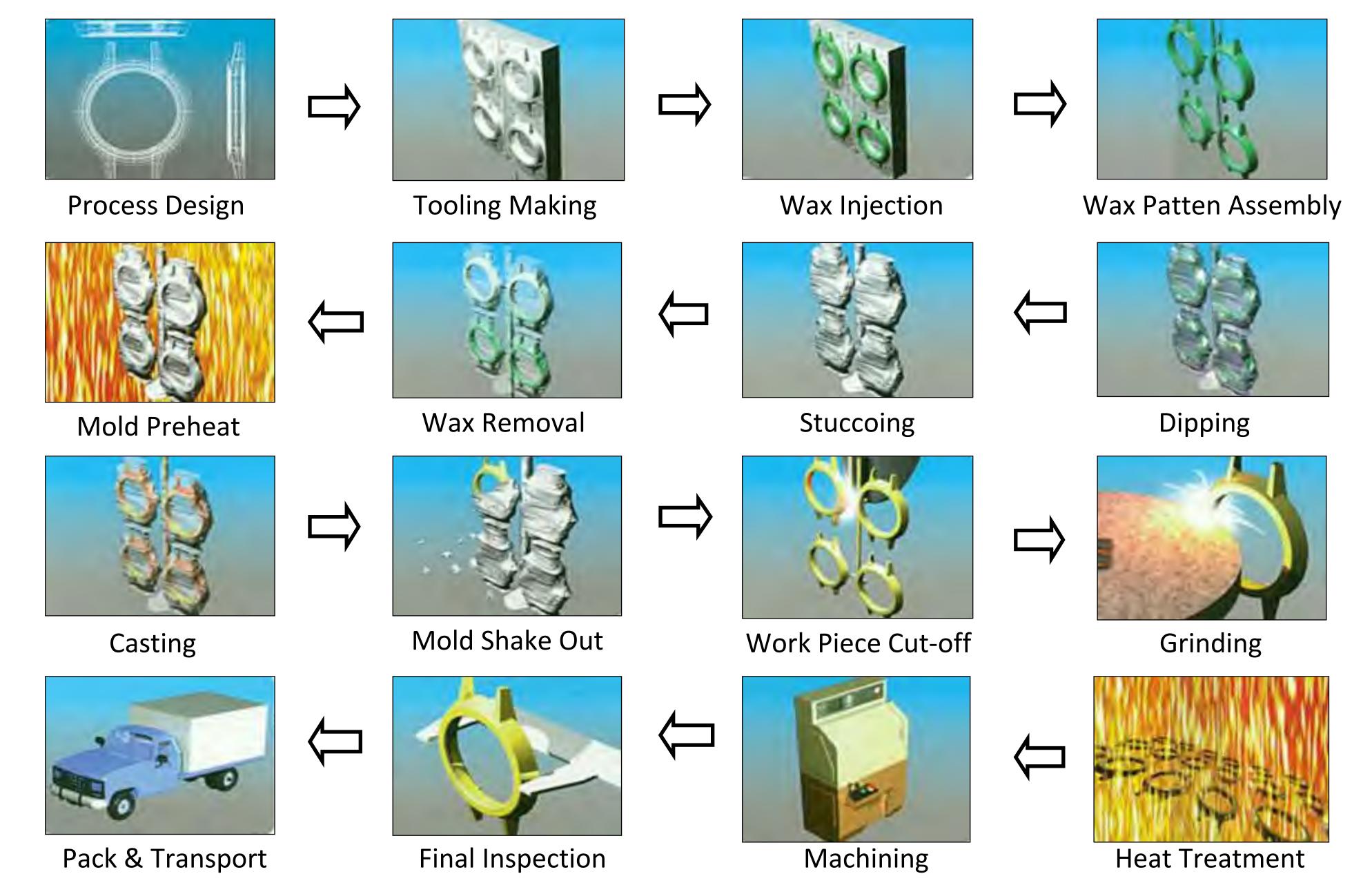
Surface Roughness: Ra6.4 - Ra25 um



Weight Range: 0.1 - 500 kg



LOST WAX CASTING PROCESS - ILLUSTRATION DIAGRAM





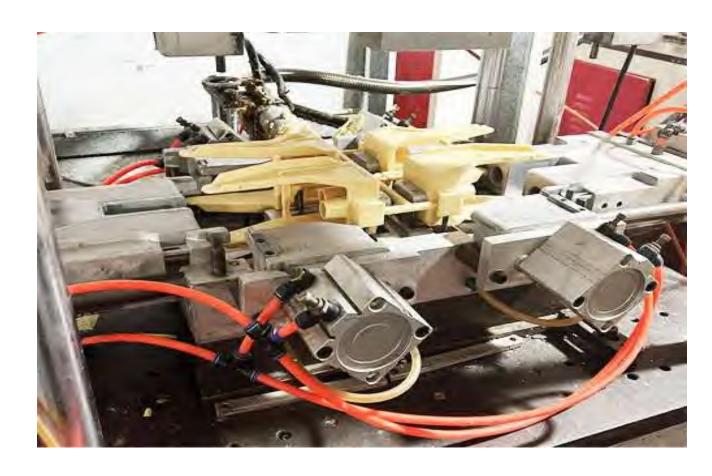
LOST WAX CASTING - MANUFACTURING PROCESS



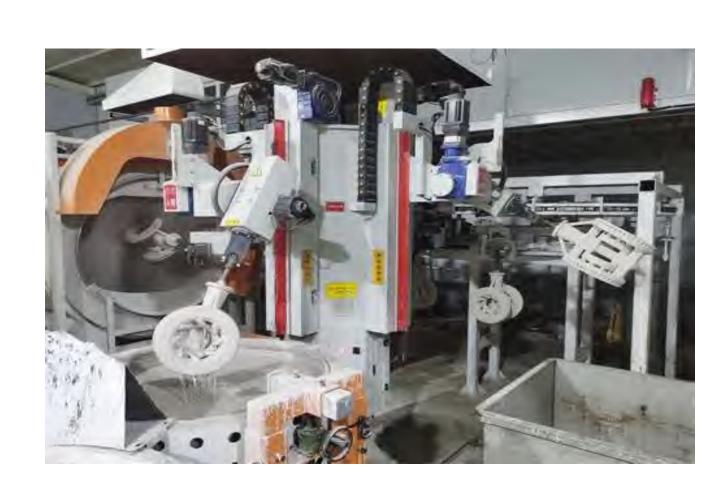
Tooling



Dewaxing



Wax Pattern Making



Automated Shell Making



Wax Pattern Weld Assembly



Wax Tree



LOST WAX CASTING - MANUFACTURING PROCESS



Shell Roasting



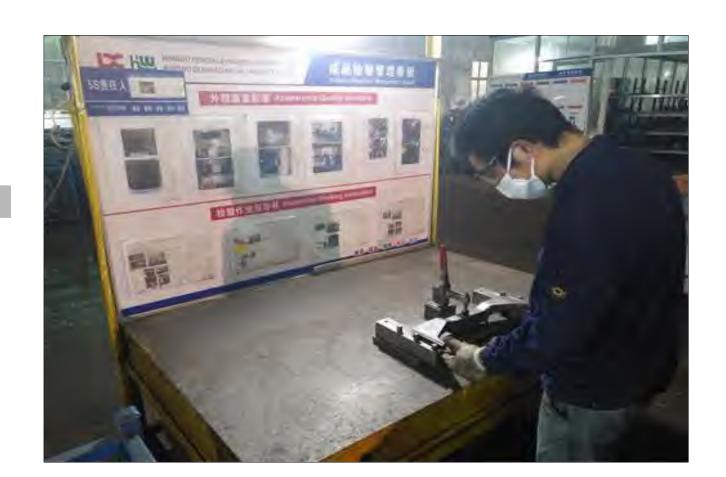
Pouring



Heat Treatment



Warehousing



Inspection



Shot Blast



KEY CASTING EQUIPMENT



PLC Wax Pattern Machine



Automated Shell Making Production Line (Silica Sol) A



Automated Shell Making Production Line (Water Glass) A



Automated Shell Making Production Line (Silica Sol) B





Automated Shell Making Production Line (Water Glass) B



Roasting Furnace

KEY CASTING EQUIPMENT





Semi-automatic Pouring



Mesh Belt HT Furnace



Coreless Medium Free Induction Furnace



Chamber HT Furnace



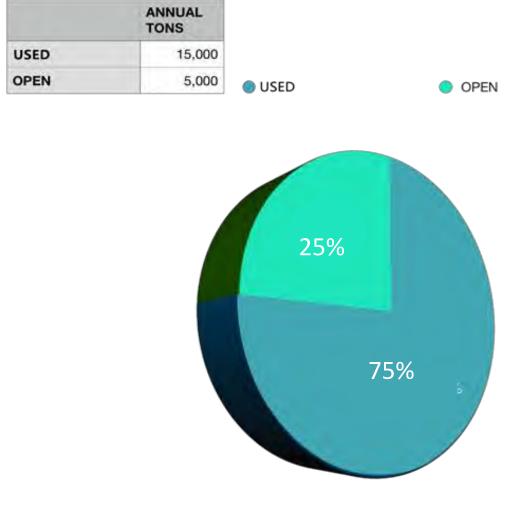
Shot Blast - Sand Cleaning



Hydraulic Press



Automated Shot Blast



Capacity Structure - Lost Wax Investment Casting

LOST WAX CASTING PROCESS TECHNOLOGY OVERVIEW



Casting Process: Lost Wax Casting (Investment Casting)

Material Range: Carbon Steel, Alloy Steel, Stainless Steel

Material Standard: GB, ASTM, AISI, DIN, BS, JIS, EN, AS, AAR

Max Linear Size: 1000 mm; Max Diameter Size: 600 mm

Min Thickness: 3 mm

Casting Weight Range: 0.1 - 80 kg

Casting Dimension Tolerance: CT6 - CT8

Casting Surface Roughness: Ra6.4 - Ra12.5 um

Industry Experience: Rail, Automobile & Truck, Construction & Mining Equipment, Forklift, Agricultural Machinery, Shipbuilding

& Marine, Petroleum Industry, Construction, Valve and Pumps, Electric Motors, Hardware, Power Equipment

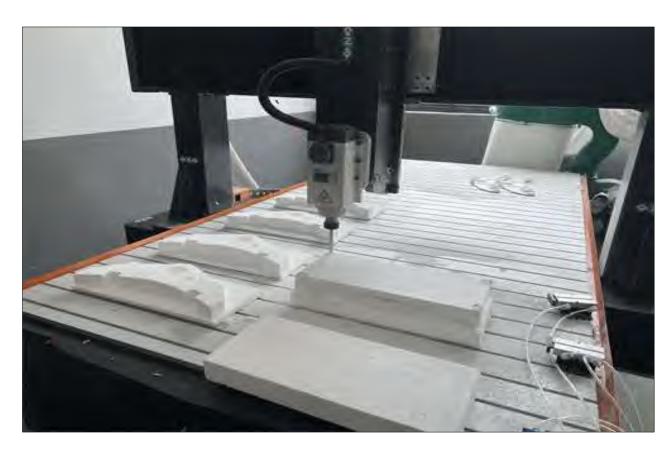
LOST FOAM CASTING



Foam Making



Coating



Foam Pattern Engraving (Prototype Only)



Gating System Gluing



Foam Pattern Making (For Serial Production)

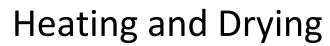


Foam Pattern Smoothing



LOST FOAM CASTING







Foam Pattern Liquefying



Baking



Negative Pressure Casting



Sand Circulation Casting System



Sand Filling



Shell



LOST FOAM CASTING

LOST FOAM CASTING TECHNOLOGY OVERVIEW

Material Range

Carbon Steel, Alloy Steel, Stainless Steel Max linear Size (W x C x H)

1500 mm x 800 mm x 750 mm

Min thickness

6 mm

Casting Weight Range

1 - 500 kg

Casting Dimension Tolerance

CT6 - CT8

Casting Surface Roughness

Ra12.5 um





SHELL MOULDING









Automatic Sand Shooting Machine



Sand Shooting



Thin Wall Shell



Cooling



Casting Production Line



Baking





Shell Shell Assembly

SHELL MOULDING

SHELL MOULDING CASTING TECHNOLOGY OVERVIEW



Carbon Steel, Alloy Steel

Max Linear Size (W x C x H)

1200 mm x 800 mm x 650 mm

Min. Thickness

6 mm



0.5 - 100 kg

Casting Dimension Tolerance

CT8

Casting Surface Roughness

Ra12.5 - Ra25 um





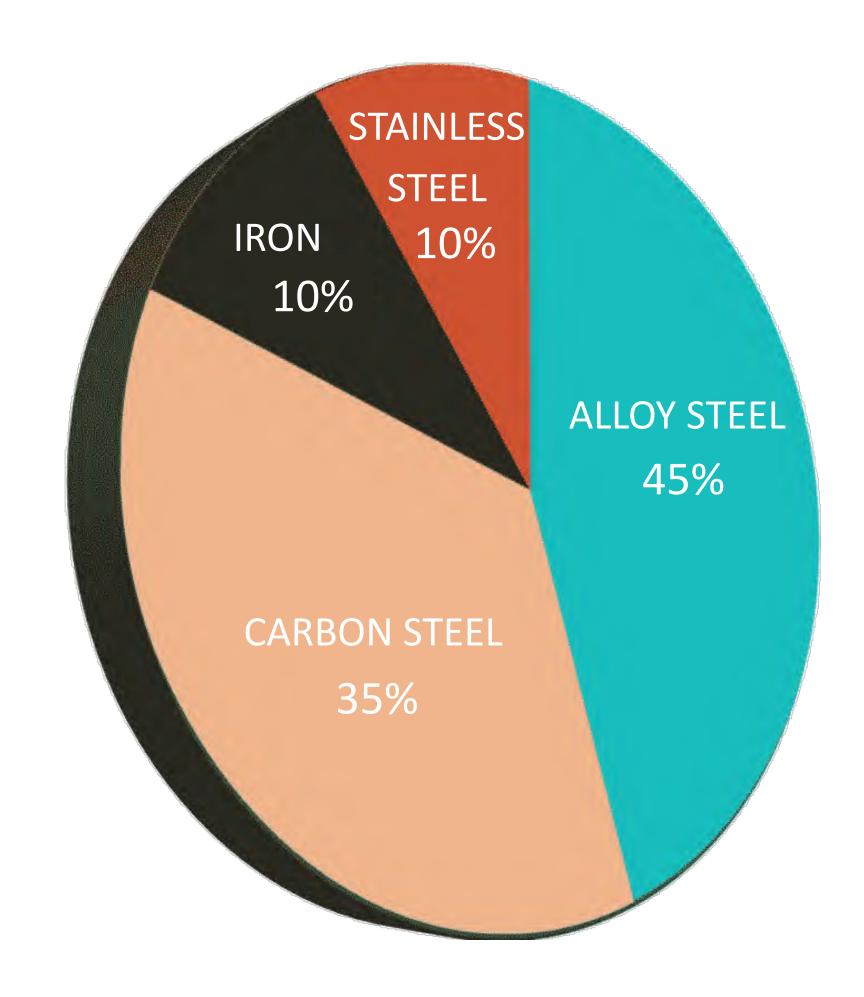




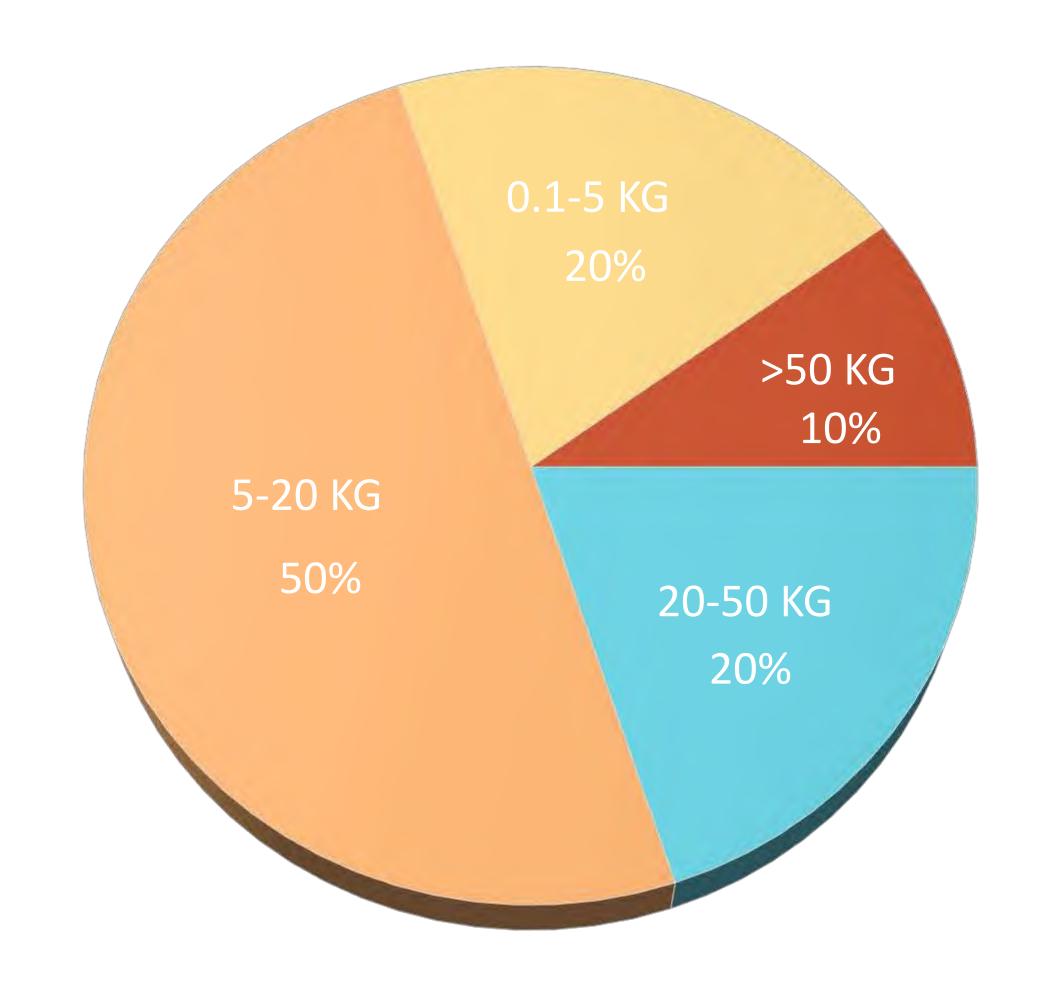




CASTING PROFILE

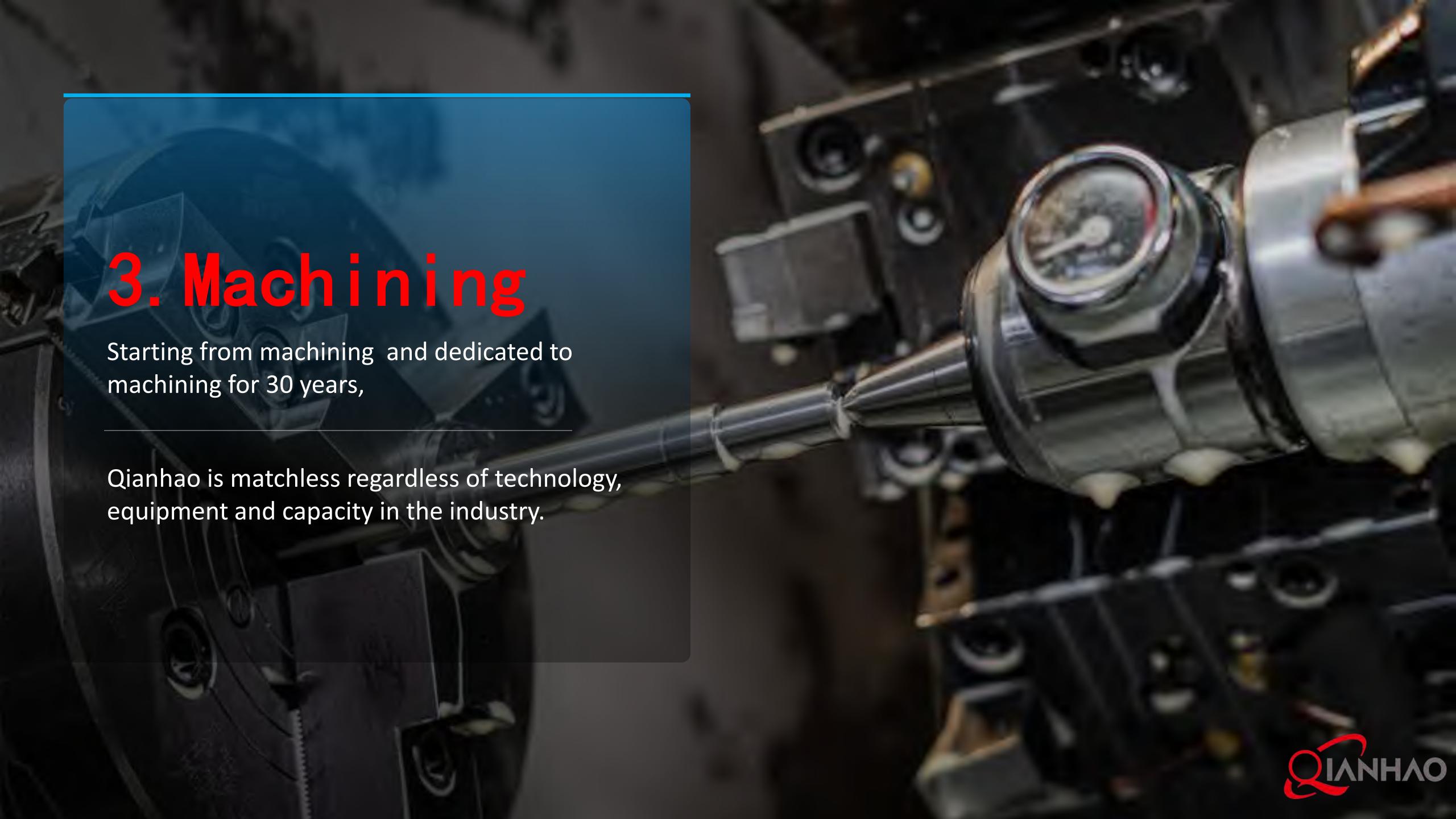


CASTING MATERIAL PROFILE



CASTING WEIGHT PROFILE





MACHINING SHOP PROCESS OVERVIEW



Machining Centers (A)



Machining Centers (C)



Machining Centers (B)



Machining Centers (D)



MACHINING SHOP PROCESS OVERVIEW



CNC Machines (A)



CNC Machines (D)



CNC Machines (B)



CNC Milling (A)



CNC Machines (C)



CNC Milling (B)



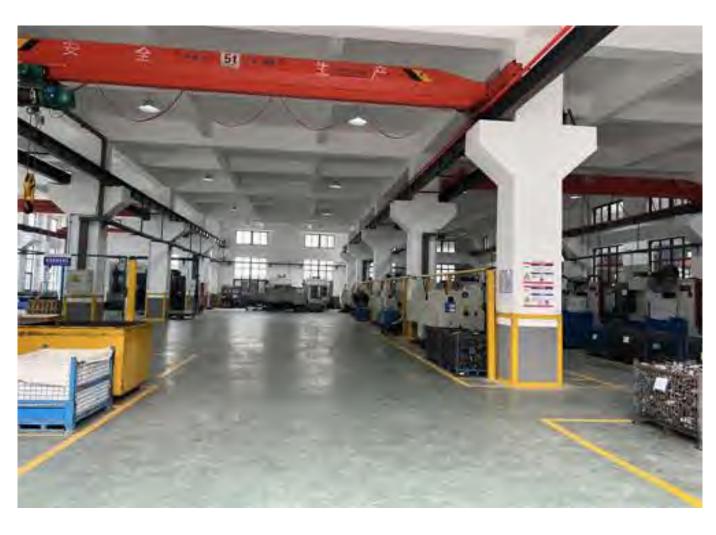
MACHINING SHOP PROCESS OVERVIEW



CNC Drilling



Final Quality Inspection (B)



Multi-Machining



Final Quality Inspection (C)



Final Quality Inspection (A)



Finished Parts Storage





Turning Center (PUMA 3050M)



CNC Vertical Lathe (VT1000)



Robot Manipulator



Horizontal Machine Center (OKUMA MAR-630H-e)



Horizontal Machine Center (DOOSAN HM 635 Ⅱ)



Horizontal Machine Center (DOOSAN HM 805 Ⅱ)



Horizontal Machine Center (HTK HS63)



Machine Center (DNM5706)





Machine Center (VMC-188BL)



Machining Center (VMC168GL)



Machine Center (V12)



Machine Center (MVL-1400)



Machine Center (MVL-1200)



Machine Center (MVL-1020)



Machine Center (VEP-40A)



Machining Center (VMP-45A)





Vertical CNC Milling (XKA5032)



CNC Milling (XK5032)



Oblique Guide CNC Lathe (JH-CKX6450)



CNC Lathe (CAK63135N)



CNC Lathe (CK6180)



Special Lathe (Six-axis)



CNC Drilling Machine (ZHK35S)



Four-station Deep Hole Drilling Machine (VDH4-300)





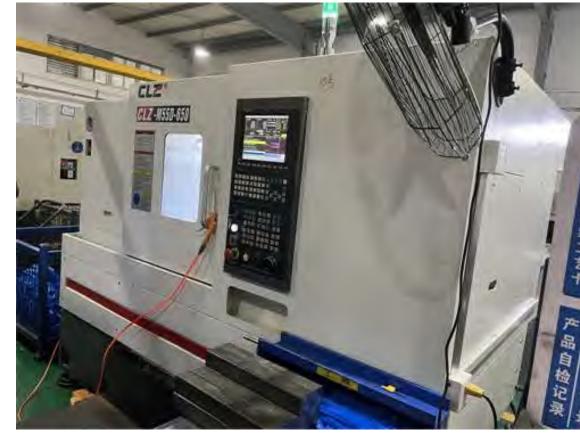
Turning Milling Center (CXF520-G)



Turning Milling Center (CXF650-DY)



Turning Milling Center (CLZ-F36K)



Turning Milling Center (CLZ-M55D-650)



Drilling and Tapping Center (TH550)



Drilling and Tapping Center (TH640)



Drilling and Tapping Center (HS350Y)



Ultrasonic Cleaning Drying Machine (PR-8-180TG)

KEY MACHINING EQUPIMENT/MACHINE LIST

Horizontal Machining Center (4 Axis): 11

Vertical Machining Center (4 Axis): 56

Gantry Machining Center: 1

Turn Center: 1

CNC Lathe: 35

Turning Milling Center: 21

CNC Milling Machine: 10

CNC Drilling Machine: 5

Drilling and Tapping Center: 7

Milling Machine: 6

Drilling Machine: 5

Total 200+ Various Machining Equipment



MACHINING SPECIFICATION











Machining Material Range: Carbon steel, Alloy steel, Stainless steel, Cast Iron, Aluminum Alloy, Copper Alloy

Main Machines: Four-axis Horizontal Machining Center, Four-axis Vertical Machining Center, CNC Milling Machine, CNC Lathe,

Turning and Milling Center, Drilling and Tapping Center, CNC Drilling Machine, Multi-station Special Machine

Machine Accuracy: Positioning Accuracy \pm 0.004 mm, Repeatability \pm 0.003 mm

Maximum Cutting Diameter: φ1000 mm

Maximum Machining Length: 1800 mm

Maximum Travel (X,Y,Z Axis): 1800 x 850 x 700 mm

Maximum Spindle Speed: 12000 r/min

Maximum Workpiece Weight: 2500 kg

Machining Surface Roughness Range: Ra0.8 - Ra6.3 um

ADVANCED MACHINING TECHNOLOGY



























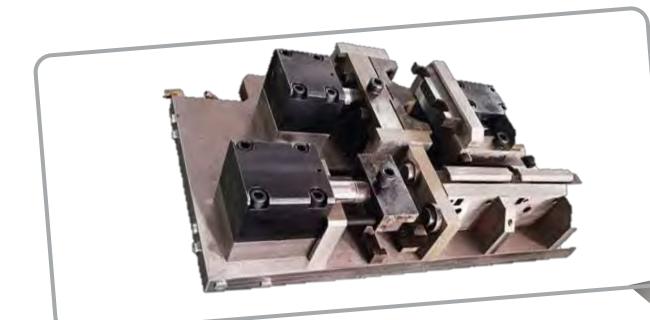
FIXTURES



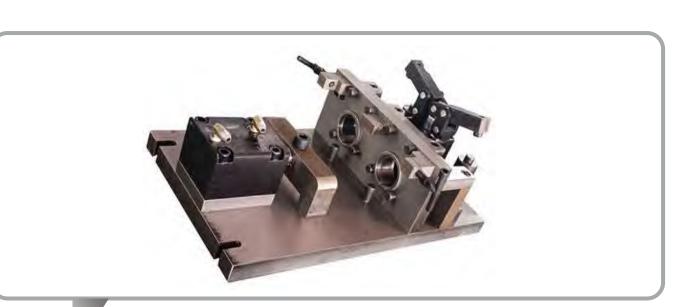




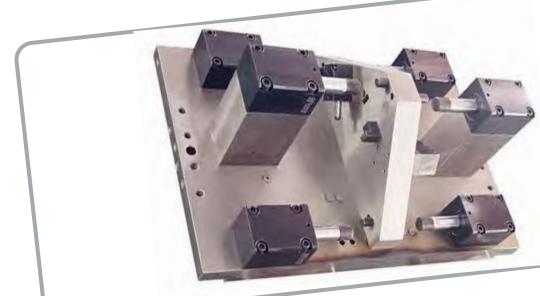


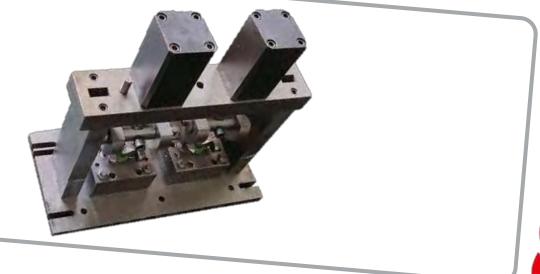














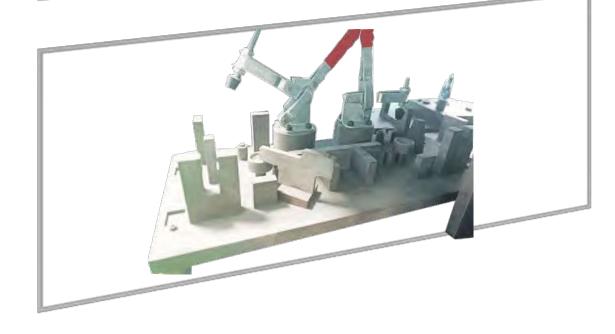
GAGES





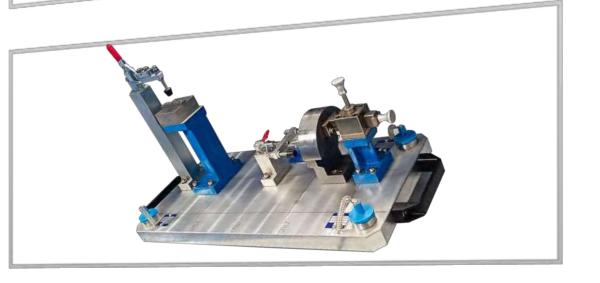




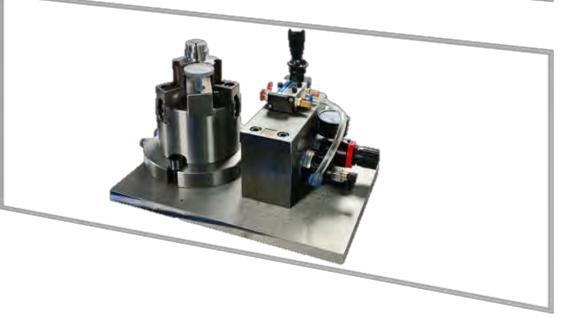








































INDUSTRY COMPONENTS - AUTO & TRUCK

INDUSTRY COMPONENTS - CONSTRUCTION & MINING EQUIPMENT DOOSAN



INDUSTRY COMPONENTS - AGRICULTURAL MACHINERY























More than 200 raw materials and 10,000 kinds of different products have been developed and produced by us!

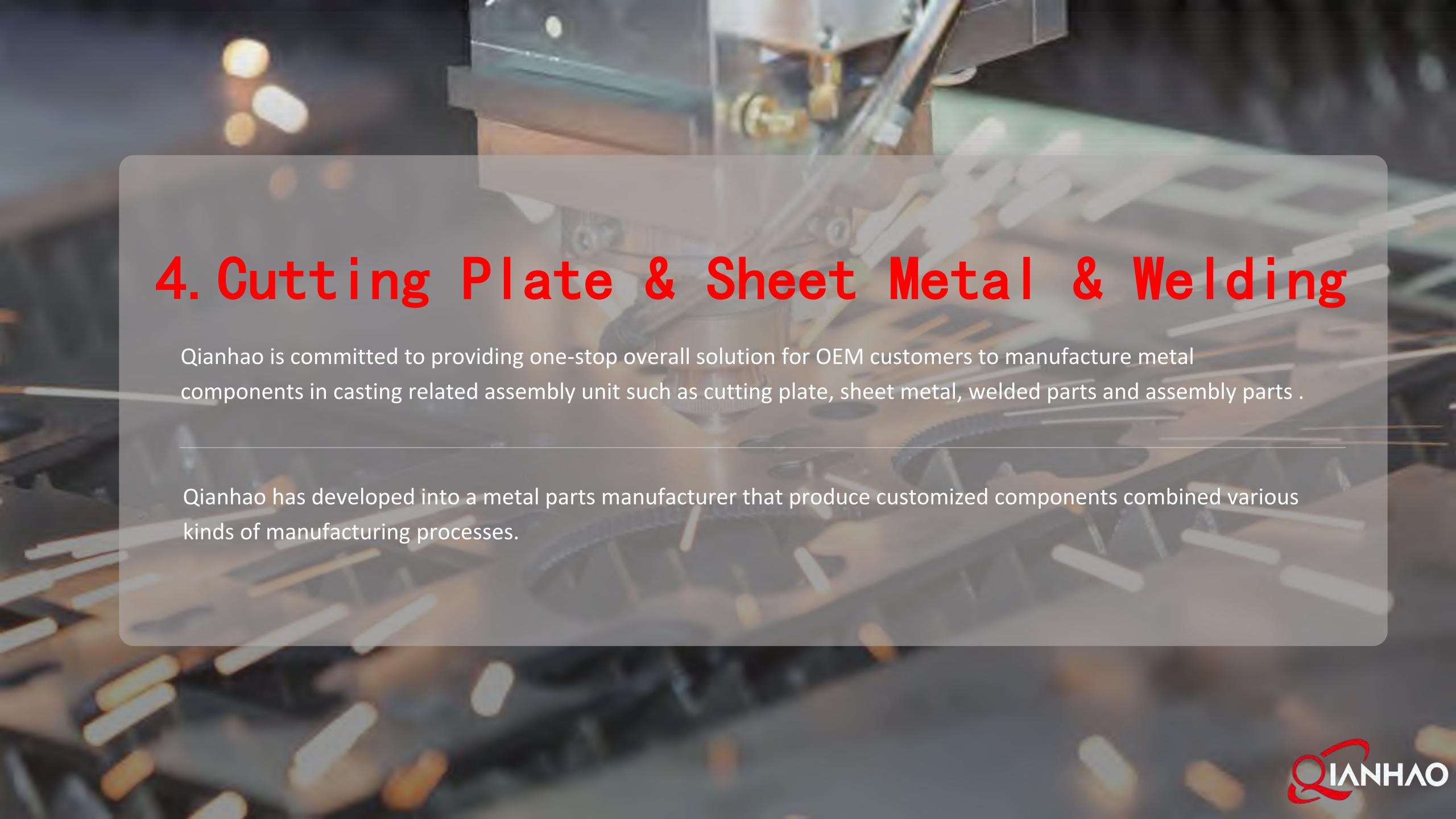


PROFILE MACHINED PARTS





Independent Profile Machining Workshop



CUTTING PLATE & SHEET METAL







Workshop A

Workshop B

Workshop C





Workshop D

Workshop E

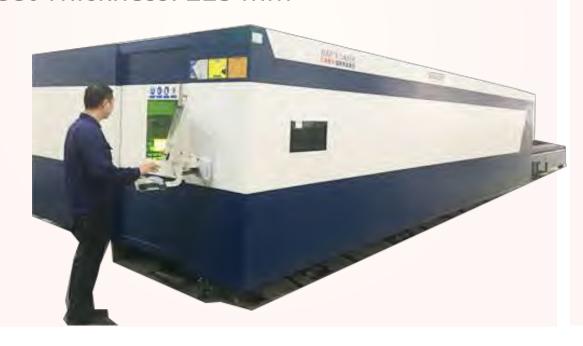


CUTTING PLATE & SHEET METAL



Laser Cutting Machine (Han's 8000W)

Sheet Size (Length X Width): 6500 X 2500 mm Sheet Thickness: ≤25 mm



Laser Cutting Machine (Han's 20000W, 40000W)

Sheet Size (Length X Width): 13000 X 3000 mm

20000W: Sheet Thickness: ≤40 mm 40000W: Sheet Thickness: ≤70 mm



CNC Plasma Cutting Machine

Sheet Size (Length X Width): 9500 X 4200 mm

Sheet Thickness: ≤150 mm



CNC Flame Cutting Machine

Sheet Size (Length X Width): 9500 X 4200 mm

Sheet Thickness: ≤250 mm



Automated Shot Blast Machine

Sheet Size (Length X Width): 4000 X 1200 mm



CNC Bending Machine

Work Scope: ≤3200 mm Sheet Thickness: ≤12 mm



Four Column Hydraulic Press Machine (YN32-650)

Work Scope: ≤820 X 800 mm

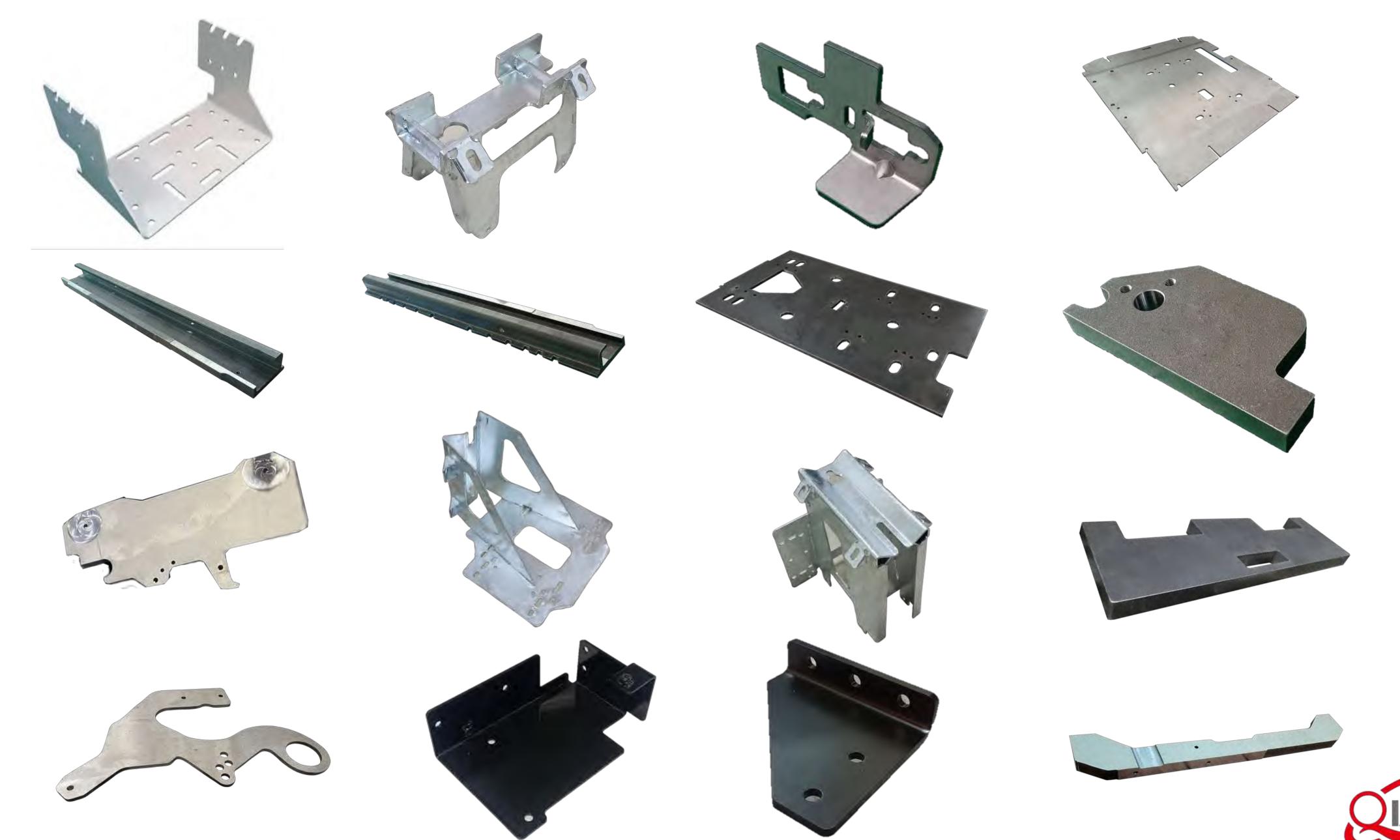
Sheet Thickness: ≤35 mm



Crawler Deburring Machine



CUTTING PLATE & SHEET METAL PARTS



WELDING & ASSEMBLY





















WELDED PARTS & ASSEMBLY PARTS













Welded

Parts

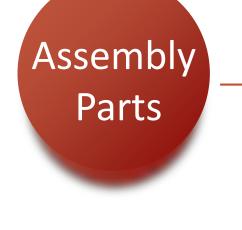




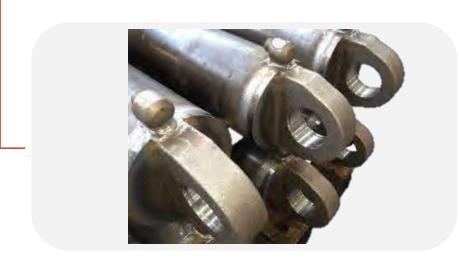


















5. Quality Control

Quality is central to everything we do.

It is our level of commitment to deliver a high quality product, ensured by a tight process control, that means we are able to repeatedly exceed our customers' expectations.

Every employee at Qianhao is responsible for vigilantly watching over every step of our input and output processes.

Our products go through strict quality checks at every workstation to achieve maximum quality control for each manufacturing process.



QUALITY CONTROL - CREDENTIALS

Certificate IATF 0469176 Certificate CN23/00000604

Co., Ltd.

IATF 16949:2016

Ningbo Qianhao Metal Product

Qianhao

SGS



ISO 9001



ISO 45001

O1 IATF 16949



EN-ISO-3834-2



ISO 14001



EN 15085-2

Huawei



ISO 9001



CERTIFICATE OF REGISTRATION NCR | SSI. The centres that the Quality Management System of Ningbo Fenghua Huawei Investment Casting Co., Ltd. 1924, Cranshan Jasi, Cas Village, Churun Town, Fenghue District, Mingley City, Zhejlang Prevince, China, 216131 MATE LIST NO. YESLANK too been audited in accordance with iutomotive Certification Scheme for IATF 16949 Rules for Athleving and Maintaining (ATF Recognition, 5th Edition and found to be in confirmance to the following standard IATF16949:2016 1st Edition Scope of Registration Manufacturing of Precision Casting Parts Permitted Exclusions: Product Design Expression Date: Oct 24, 2027 mount Lin /i Chara Justiny Agrametive Supplier Certification Co., Like

IATF 16949

ISO 14001



QUALITY CONTROL - VISUAL AIDS





Four-color Safety Risks Map



Safety Management Warning Board



Occupational Health Hazards and Prevention Notice Board



Morning Conference Management Board



Morning Conference Action Board



Wax Making Workshop Management Board



Fully Automatic Shell Making Line
Temperature and Humidity
Monitoring System



NC Workshop Management Board

QUALITY CONTROL - VISUAL AIDS





Machining Center Workshop
Management Board



Sheet Metal Workshop Resource Board



Production Management Video Display System



Lean Production

Management Board



Lean Management Improvement Board



5S Management Board



5S Management Continuous Improvement Board-Foundry



5S Management Continuous Improvement Board-Machining

QUALITY CONTROL - VISUAL AIDS



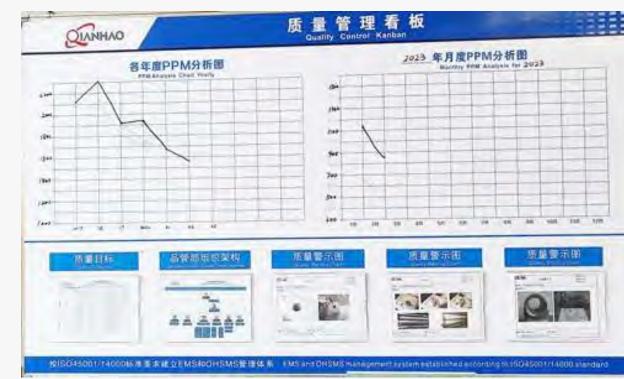


Incoming Inspection Process

Management Board



Product Quality Standard
Board

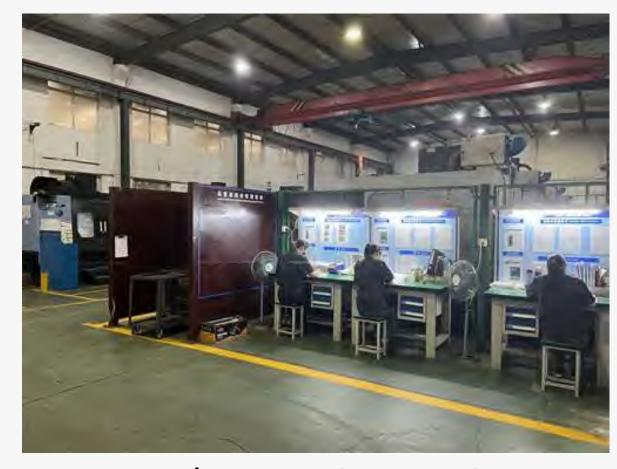


Quality Management Board



Finished Product Inspection

Management Board



Patrol Inspection Station



Final Inspection Station



Nonconforming Products Area



QC Video Display System

TEST FACILITIES CAPABILITIES





Chemical Analysis

Metallography

Tensile Strength

Yield Strength

Elongation Rate

Shrinkage Rate

Impact Test

Hardness Test



Dye Penetrant

Radiography (RT)

Magnetic Particle (MT)

Ultra-Sonic (UT)



Surface Roughness Test

Microscopic Measurement

3D Scanning

CMM

Total 60+ Various Inspection Equipment

INSPECTION AND TESTING CENTER









Test Room A Test Room B Test Room C





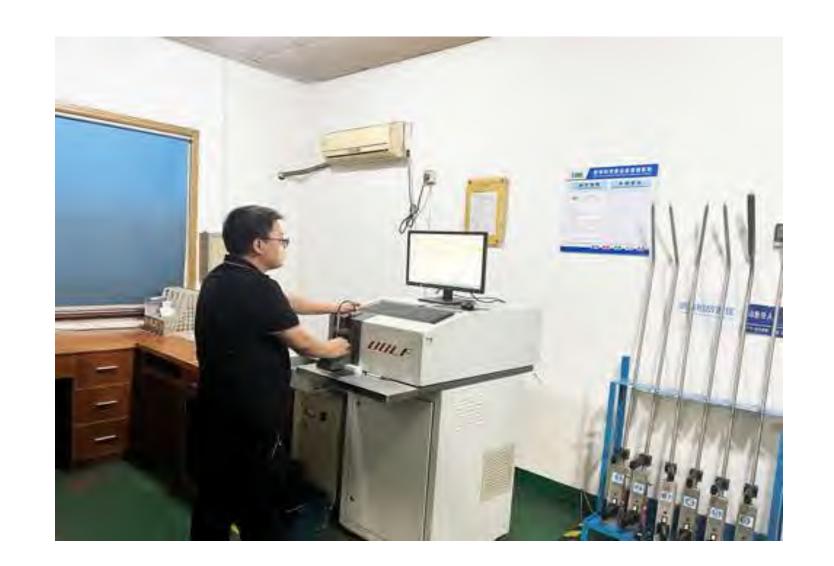




Test Room D Test Room E Test Room F Test Room G

KEY TEST FACILITIES





Direct-reading Spectrometer (A)



Metallographic Microscope



Direct-reading Spectrometer (B)



Tension Tester



Non-contact Infrared Thermometer



Low Temperature Chamber for Impact Specimen

KEY TEST FACILITIES





Impact Test Machine



Magnetic Particle Testing
Machine (A)



Magnetic Particle Testing
Machine (B)



Magnetic Particle Testing
Machine (C)



Ultrasonic Testing Machine (A)



Ultrasonic Testing Machine (B)



X-ray Tester



Microhardness Tester

KEY TEST FACILITIES





Surface Roughness Tester



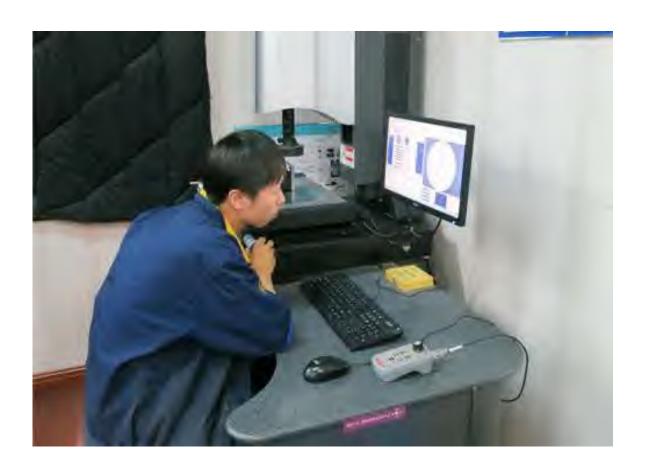
Coating Thickness Meter



Salt Spray Testing Machine



Deep Penetration Microscope



Video Measurement Machine



3D Scanner



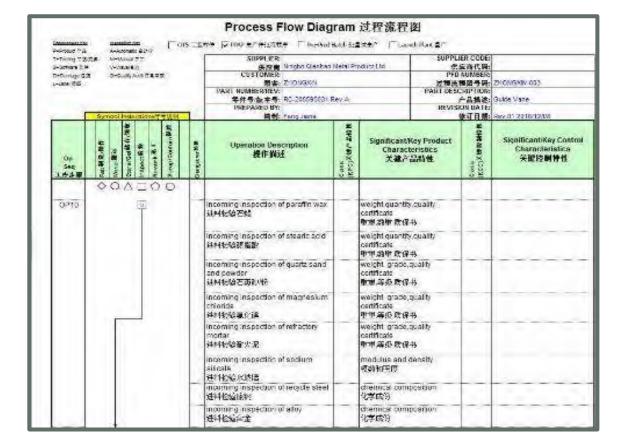
Coordinate Measuring Machine (A)



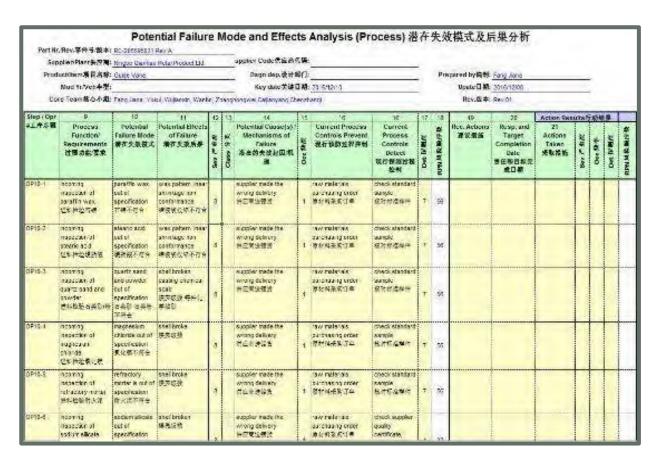
Coordinate Measuring Machine (B)

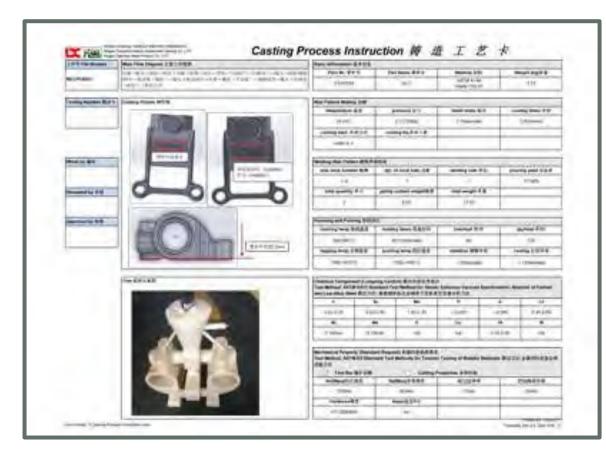
APQP - CASTING









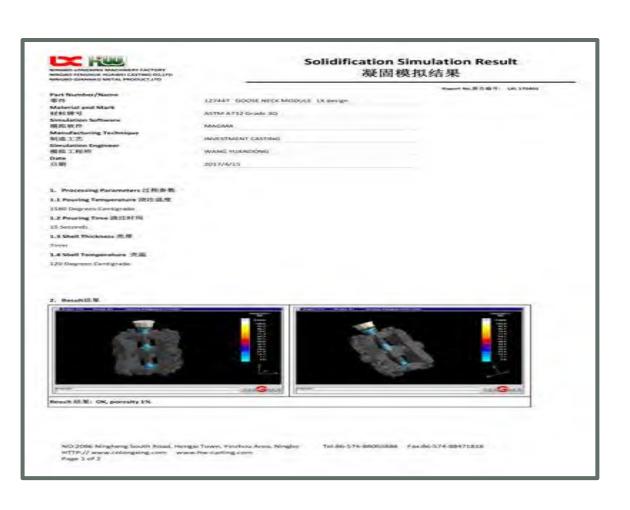


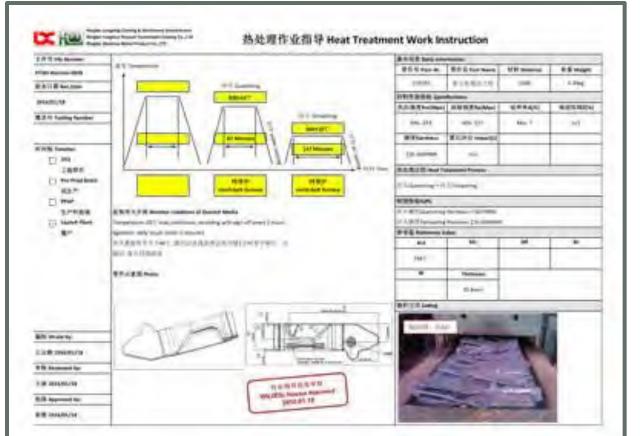
Process Flow Diagrams

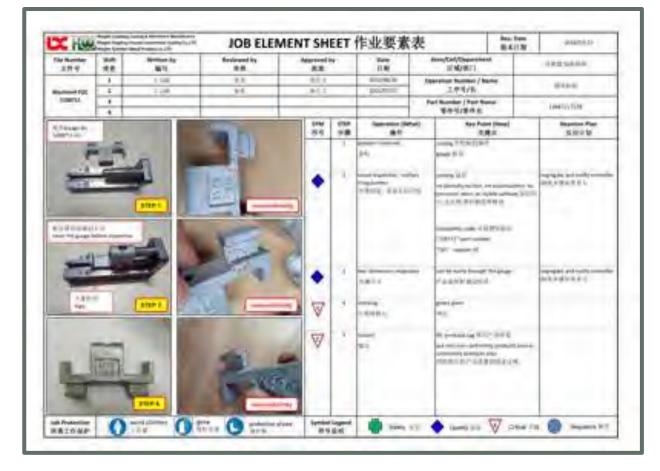
Control Plan

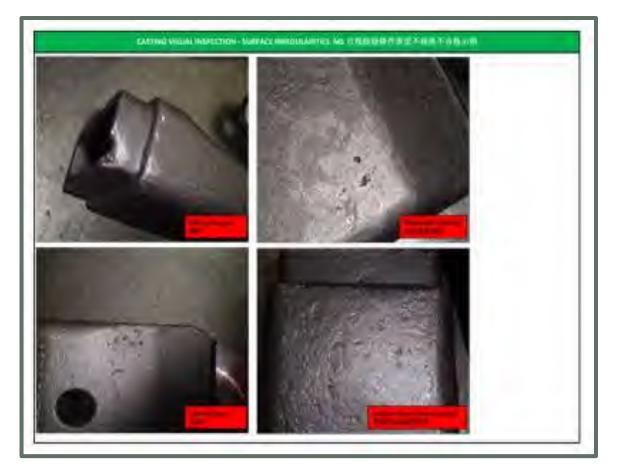
Process FMEA

Casting Process Instruction









Solidification Simulation

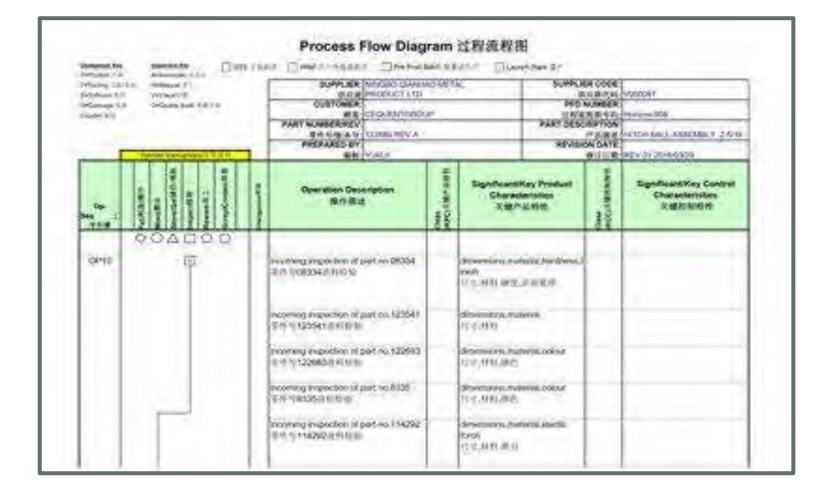
Heat Treat Work Instruction

Casting Final Quality Control WI

Visual Inspection VI for Surface Irregularities

APQP - MACHINING





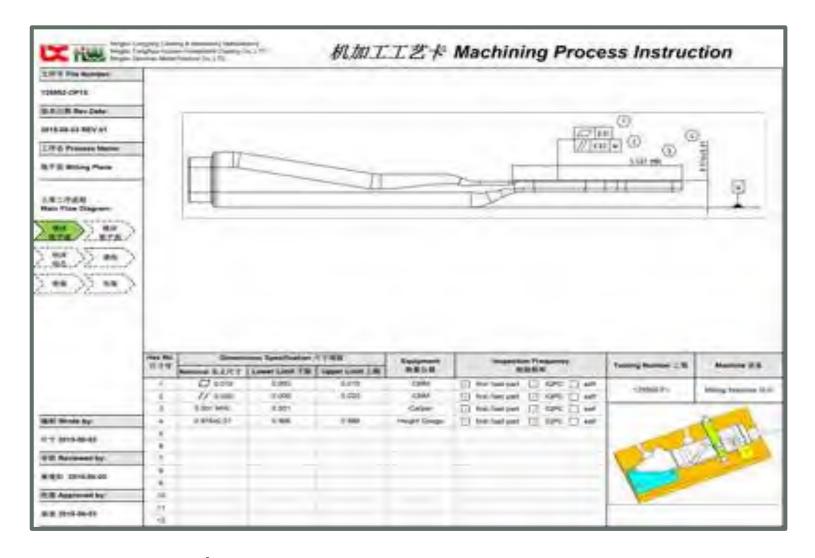
CONTROL PLAN 2015 | September | September

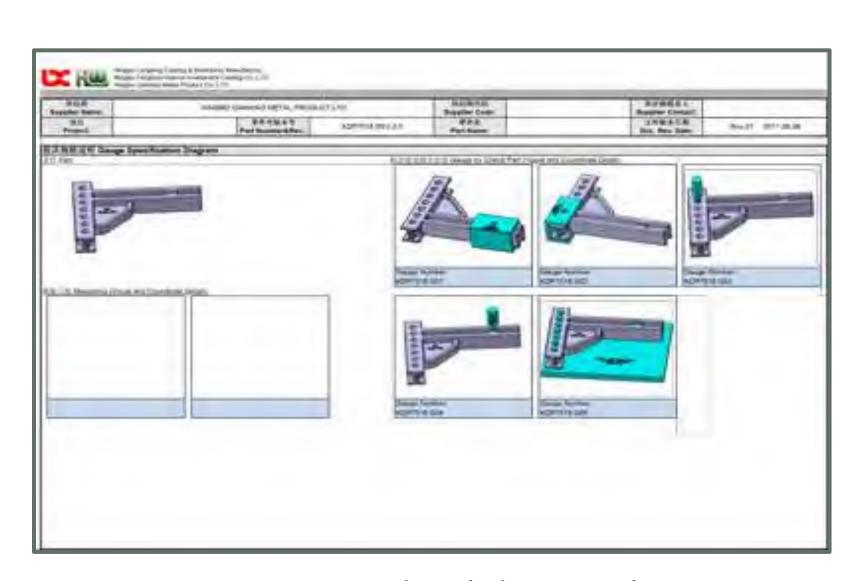


Process Flow Diagrams

Control Plan

Process FMEA





JOB ELEMENT SHEET 作业要素表 Anaplial/Inspersor Z 9 9/6 Tel Sunter / Fat Sunt B 0 12/10 0 15 STATE OF THE REAL PROPERTY. Ray Paint (Print) NAMES OF TAXABLE PARTY. mid-echos) 17 1000 OF REAL processing of the latest W with the control of AND THE REAL PROPERTY. Separat Separa O metamen O mere O metamen

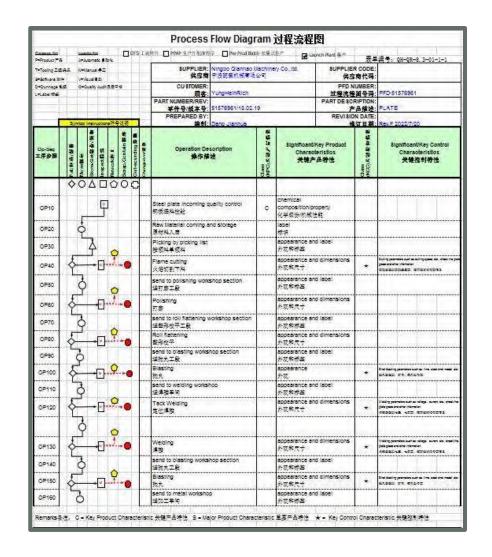
Machining Process Instruction

Gauge List and Validation Plan

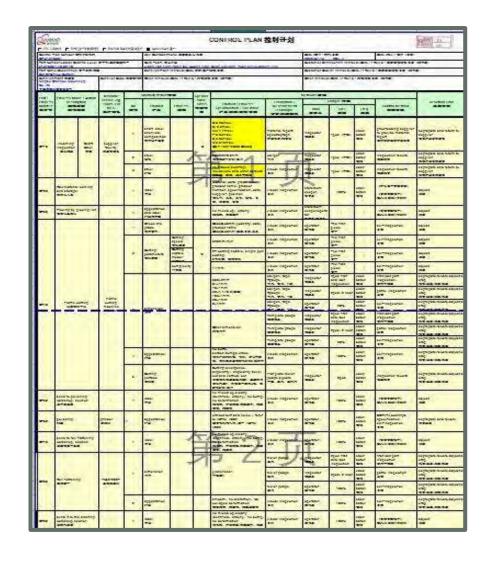
Final Quality Control Work Instruction

SHEET METAL WELDING QUALITY MANAGEMENT DOCUMENTS

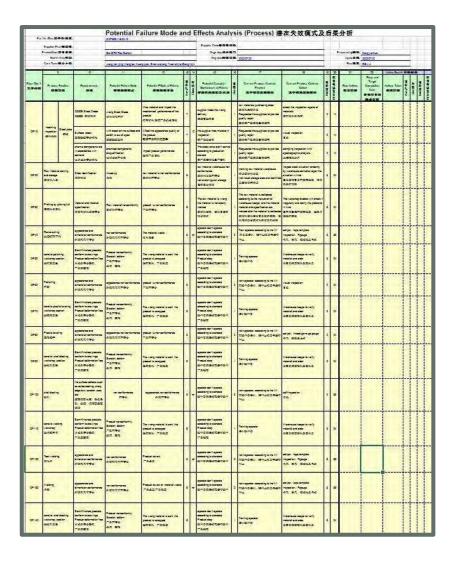




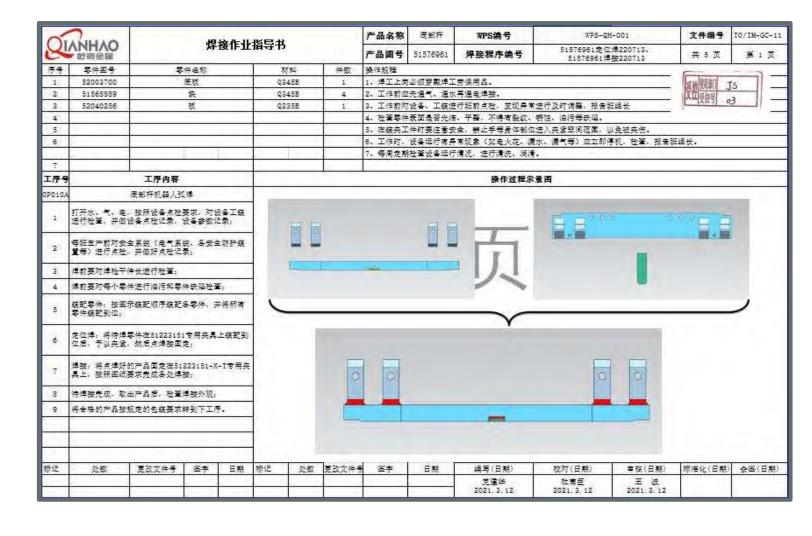
Process Flow Diagrams



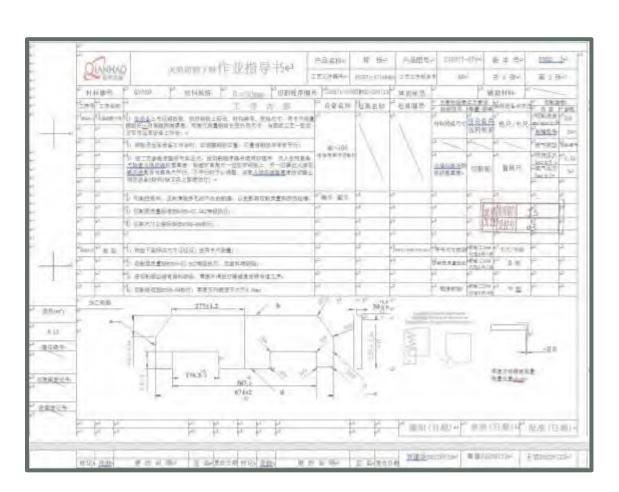
Control Plan



Process FMEA



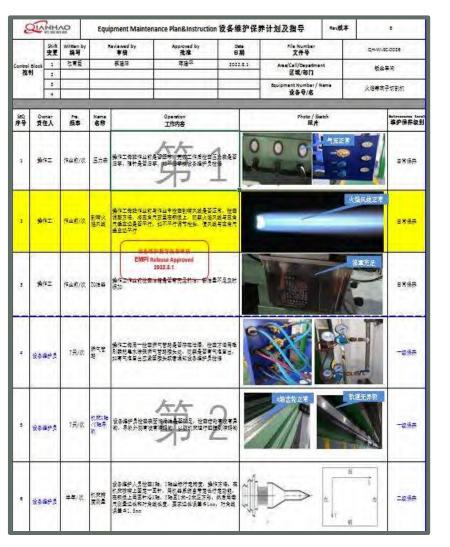
Operation Instruction for Welding



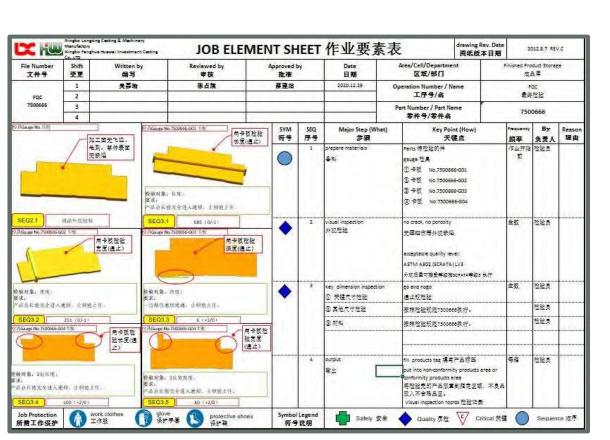
Operation Instruction for Cutting



Welding Penetration Report



Equipment Maintenance
Plan and Guidance



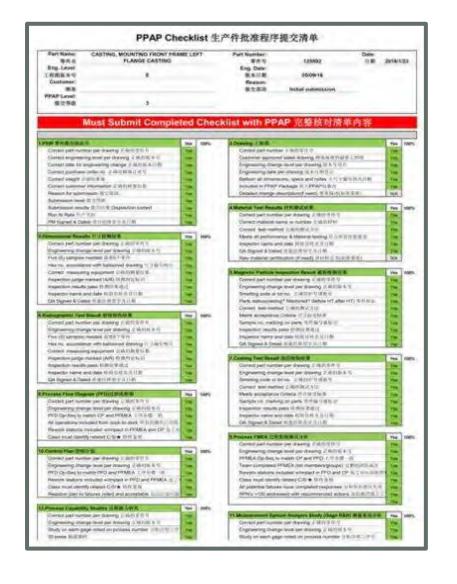
Final Quality Control Work Instruction for Sheet Metal

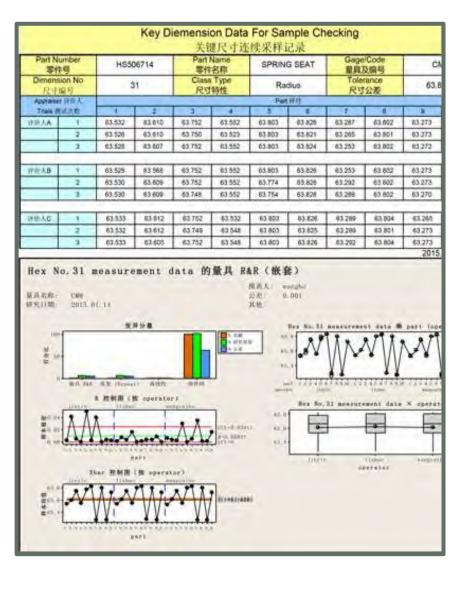


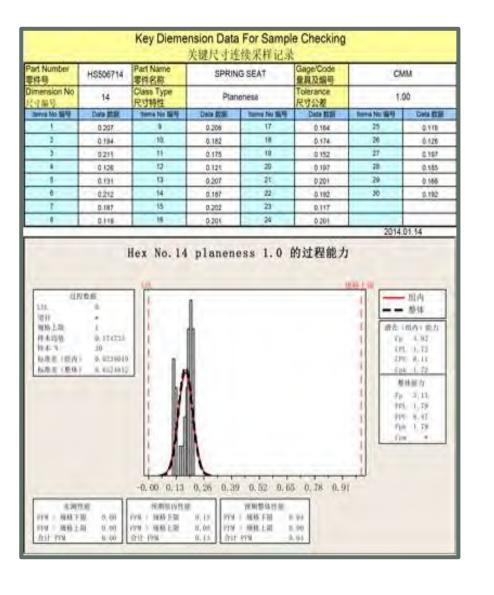
Final Quality Control Work Instruction for Welding

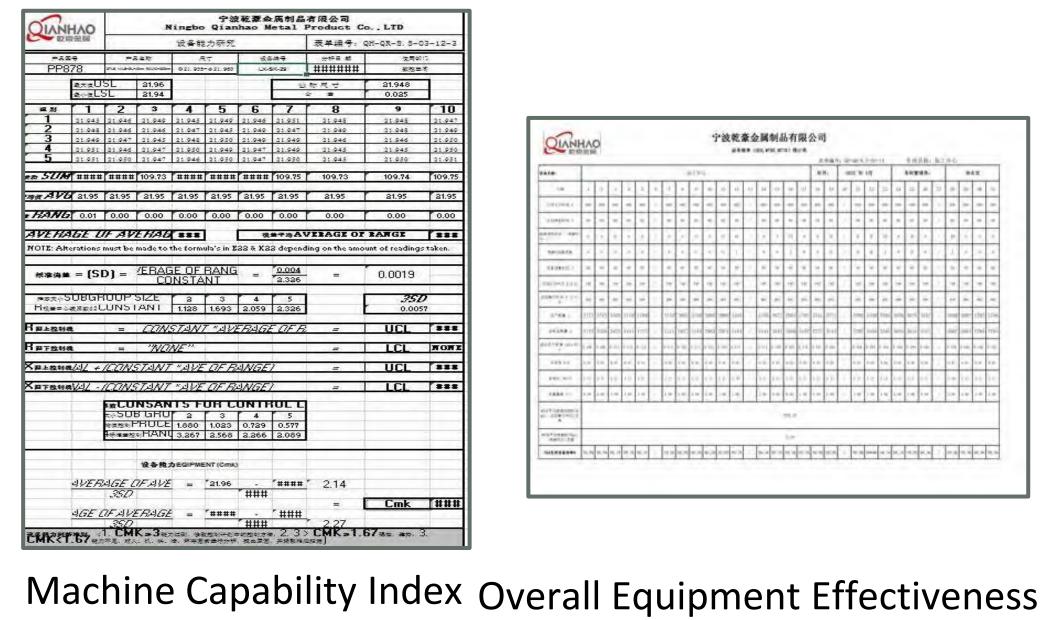
OTHER QUALITY DOCUMENTS

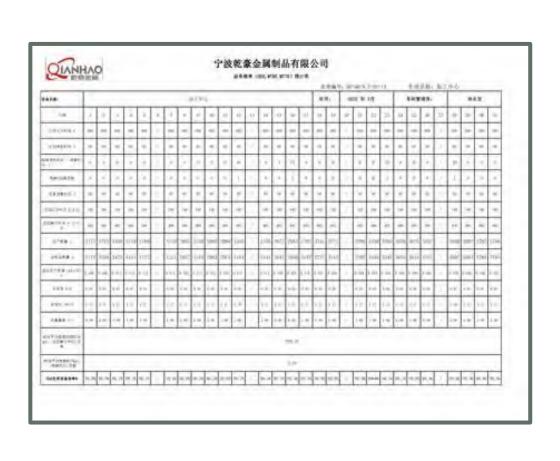












PPAP Checklist



Corrective Action Report (8D)

Measurement System **Analysis Study**

改进措施。

先进先出与自视化管理

增训与制度的形式強化要求

组织小组应对,查得补统

勢订結合安隊的佯無与抵理。

医域标识级的制定 ~

QIANHAO EMBE

质量管理体系和扼控的整改。

字同和仓库 51 管理的推行与改管

体系内章资料缺失

來料检验依據不足

重点供方的质重提升

辛间和仓库 58 管理的推行与改管

Process Capability Studies

表单编号: QH-QR-10.2-002+ · 完成,極个部门进行程 序细化商讨定稿○ 三先成,胸铁器,所有区 城标识线规化" 按计划进行中4 接计划进行中心 按计划进行中 接针划进行中 **被计划进行中 被计划进行中** 按计划进行中心

Continuous Improvement Implementation Plan

持续改进实施计划中

建立切合实际的质盘管理 体系

产品入框并标识, 区载明确 重线标识

盘蛋重新最入 ERP 系统

被工序要求罗察劳保用品

达到先进先出管理

达到产品储存要求

100%执行

能顺利应对体系内审

來料检验文件觀整

建点供方件系碳差

新有物件放權入架, 标识报 放, 中

宁波乾豪金属制品有限公司。

计划完成时间-

采购、生产

生产部仓库

仓库。

技术部

生产、全军

2023年1月

2023年06月

2023年7月

2023年12月

QIANHAO 財務金属		宁波乾豪金属制品有限公司↔ Ningbo Qianhao Metal Product Co.,LTD↔					
		2021 年现场管理、精益生产持续改进计划。		文件编号: QH/QP-03	文件编号: QH/QP-03-05 文件版次: A/14		
			一、现场管	理 58 方面			
序号印	现场可	文誉内容₽	原有情況₽	目前效果₽	预计完成时间中	实际完成时间中	备注:
1₽	新生产场所区域的划分				2021. 3₽	2021. 3. 30	_a 2
2₽	氧气瓶存放区标识,满瓶 和空瓶的区分,氧气瓶和 丙烷瓶距离整理。				2021. 3	2021. 3. 22-	4
3₽	供应商管理相关数据的更 新和分享。 4				2021. 4	2021. 4. 12	ę.
40	钣金车间、打磨区,防护 现场明示,员工的防护。↔			900	2021. 6⊕	2021. 6. 5 ⊌	4

Lean Manufacturing Continuous Improvement Plan



Packaging Instruction

INSPECTION REPORT





Material Test Report



Magnetic Particle **Inspection Report**



Ultrasonic Examination Report

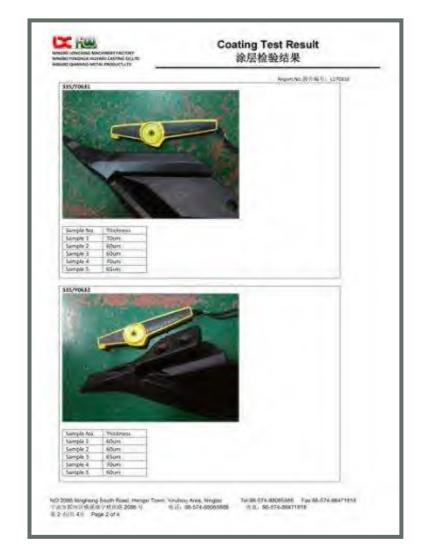


Radiographic Test Report

Armadura exterior External metal part



Destructive Test Report



Coating Test Report

Visual Inspection Result 外观目视检验结果

Visual Inspection

Report



Casting Inspection Report



SECCION B-B



CMM Report





1. High Engineering and Technical Capability

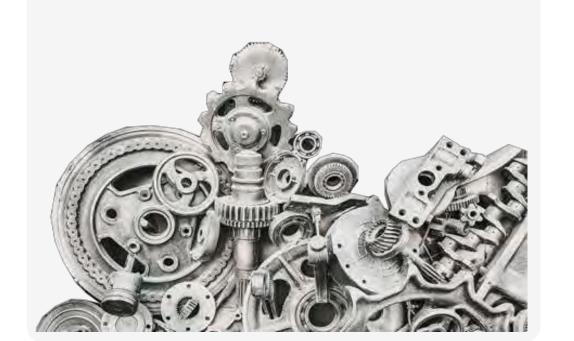
Our industry top
engineering technical team
is with special skills and rich
experience in product
design, casting, heat
treating and
machining fields.



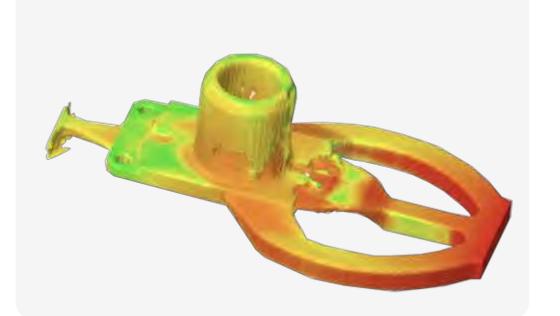
Based on customer needs, from the beginning of product development we offer casting solution to optimize product design, reduce costs and create best value for customers.



Special techniques enable us to be competent with key processes at *Wax Injection & Shell Making*when manufacturing parts with sophisticated inner structure.



Use casting simulation analysis system software to ensure 100% one-time success of PPAP sample.





2. Advanced Inspection Equipment, Processes & Strong Quality Assurance Capability

Our full range testing equipment is leading in the industry to guarantee we continually provide only high-quality products for our customers.

Always follow ISO9001 and IATF16949 quality management system, implement 5S and Kanban site management to guarantee quality.

IQC, IPQC and FQC quality management team to control all production processes effectively to prevent occurrence of nonconforming product.

Our casting PPM ≤6000 Machining PPM ≤50

We stick to the quality management philosophy:

Starting from the customer needs and ending with their satisfaction and focusing on customer demands and exceeding their expectation.



3. Great Customer Service



Our staffs are with abundant commercial experience, good language ability, and rich foundry and mechanical background to provide customers with superior service. We are committed to providing customers with accurate, careful and speedy service.



Provide fast and effective feedback within 48 hours for *Quotation*, *Quality Complaints and Emails*.



Information-based management system is established and is driven by ERP and PMC system to ensure 95% on time delivery rate and aim for 99.9%.





We have transformed and upgraded to a process focused manufacturer with expanded manufacturing capabilities and is committed to being a one stop solution provider for top-end markets.



The machining facilities and foundries have independent management teams to maximize focus and skill sets.

4. Powerful deep-processing capability is core competitive advantage that makes us different from others in the industry.



High technical expertise of precision machining castings and related cutting plate, sheet metal, welding and assembly capabilities is the best choice for you.

7. Strategic Manufacturing Partners

Being a one-stop supply-chain solution for various kinds of castings and forgings, Qianhao group has maintained solid strategic partnership with different foundries and forging factories to meet all our customer requirements under one roof.

Silica Sol - 1 Iron Casting - 2 Steel Forging - 4

With more than 20 years cooperation experience and practice of advanced western management mode, we have deep understanding of the needs and culture of European and USA customer and have implemented the same in these factories.

Our powerful machining capabilities and whole-chain quality control abilities is the backbone you can bank on for machined cast steel, cast iron and forging finished parts.



QIANHAO JOINT VENTURE COMPANY - SILICA SOL PROCESS

ISO 9001 IATF 16949



Ningbo QS

Ningbo City

Silica Sol Lost Wax Process

Founded 2002

Factory 12,000 m²

150 Employees

Annual Capacity 4,800 tons

High Temp Nickel Alloy, Stainless Steel, Carbon Steel, Alloy Steel

Max Linear Size: 1000 mm, Diameter: 600 mm

Weight Range: 0.01 - 100 kg

Tolerance: CT5 - CT6

Surface Roughness: Ra3.2 - Ra6.3 um



SILICA SOL PROCESS - MANUFACTURING PROCESS





SILICA SOL PROCESS - PRODUCTS



STRATEGIC COOPERATION COMPANY A - IRON SAND CASTING

ISO 9001 IATF 16949











Ningbo JM.

Ningbo City

Clay Sand Molding, Shell Mold Casting

Founded 1993

Factory 20,000 m²

200 Employees

Annual Capacity 30,000 tons

Nodular Cast Iron, Grey Iron

Max Size: 610 mm Linear x 510 mm Diameter

Weight Range: 0.2 - 100 kg

Tolerance: CT8 - CT12

Surface Roughness: Ra12.5 - Ra25 um



STRATEGIC COOPERATION COMPANY B - IRON SAND CASTING

IATF 16949



Anhui HL.

Anhui Province

Static Pressure Green Sand Casting, Vacuum Casting, Resin

Sand Casting, Lost Foam Casting, DISA Vertical Mold Casting

Founded 1958

Factory 580,000 m²

1,300 Employees

Annual Capacity 500,000 tons

Nodular Cast Iron, ADI, Grey Iron

Max Size: 1100 x 600 mm Linear x 800 mm Diameter

Weight Range: 1 - 10000 kg

Tolerance: CT8 - CT12

Surface Roughness: Ra25 um



CASTING EQUIPMENT B



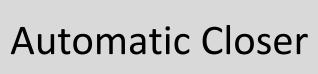






Resin Sand Casting Line







Lost Foam Casting Line



Automatic Online Pouring Machine



DISA Vertical Molding Line

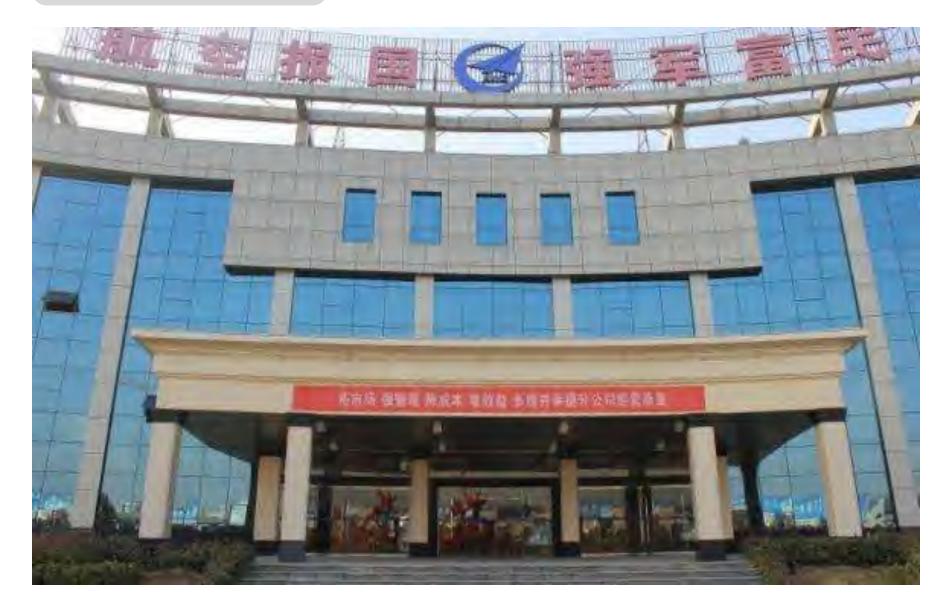


IRON CASTINGS



STRATEGIC COOPERATION COMPANY C - FORGING

IATF 16949









Jiangxi JH.

Jiangxi Province

Hot Forging

Founded 1970

Factory 680,000 m²

Twelve Lines (1t - 1, 3t - 1, 5t - 1, 10t - 1, 2000t - 3,

2500t - 2, 3150t - 1, 6300t - 2)

980 Employees

Annual Capacity 170,000 tons

Carbon Steel, Alloy Steel

Max Size: 1200 mm Linear x 1200 mm Diameter

Weight Range: 0.5 - 800 kg

Tolerance: CT7 - CT10

Surface Roughness: Ra6.3 - Ra12.5 um



FORGING EQUIPMENT C



6300t Hot Die Forging



2500t Hot Die Forging



Medium Frequency HT Furnace



6300t Hot Die Forging Machine







Controlled Quench



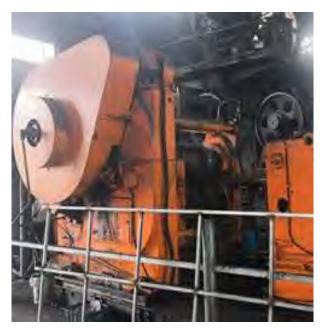
Magnetic Particle Testing



STRATEGIC COOPERATION COMPANY D - FORGING

IATF 16949









Zhejiang YL.

Zhejiang Province

Hot Forging

Founded 1986

Factory 38,000 m²

Six Lines (300t, 400t, 630t, 1000t, 1600t, 4000t)

100 Employees

Annual Capacity 25,000 tons

Carbon Steel, Alloy Steel

Max Size: 1200 mm Linear x 230 mm Diameter

Weight Range: 0.1 - 300 kg

Tolerance: CT7 - CT10

Surface Roughness: Ra6.3 - Ra12.5 um



STRATEGIC COOPERATION COMPANY E - FORGING

IATF 16949











Zhejiang JX.

Zhejiang Province

Hot Forging

Founded 1995

Factory 50,000 m²

Eight Lines (300t, 400t, 630t, 1000t, 2000t, 2500t)

200 Employees

Annual Capacity 20,000 tons

Carbon Steel, Alloy Steel

Max Size: 800 mm Linear x 150 mm Diameter

Weight Range: 0.1 - 50 kg

Tolerance: CT7 - CT10

Surface Roughness: Ra6.3 - Ra12.5 um



STRATEGIC COOPERATION COMPANY F - FORGING

ISO 9001 IATF 16949



Jiangsu CT.

Jiangsu Province

Hot Forging, Warm Forging

Founded 2018

Factory 50,000 m²

Eleven Lines (650t, 1600t, 2500t, 8000t, 10000t)

150 Employees

Annual Capacity 50,000 tons

Carbon Steel, Alloy Steel

Max Size: 1500 mm Linear x 500mm Diameter

Weight Range: 0.1 - 400 kg

Tolerance: CT7 - CT10

Surface Roughness: Ra3.2 - Ra12.5 um



FORGING EQUIPMENT F



Forging Line



650t Hot Forging Press Production Line



1600t - 1000t Forging Press



2500t Electric Screw Press
Production Line



8000t Hot Forging Press



10000t Electric Screw Press
Production Line



Normalizing Furnace



Q&T Furnace



FORGING PARTS





