



**格致汽车科技股份有限公司**  
GZ Tooling Group Co.,Ltd.

**MARCH 2023**



**GZ Tooling Group**

AUTOMOTIVE STAMPING DIE MANUFACTURER

# ABOUT US

## GZ Tooling Group

GZ Tooling Group is specialized in designing and manufacturing Automotive Stamping Dies, the products include Hot Stamping Dies, Hydroforming Dies, Tandem dies, Transfer dies, Progressive dies, Checking Fixtures, widely applied to Auto Skin Pannels, Upperbody parts, Underbody parts, Beams, A/B pillars, Chassis and Seating, etc.

GZ Tooling Group has become one of the largest die shop in China with the in-house capacity of Simulation, Process, Die design, Pattern, Castings, Steels manching, Castings machining, Assembly, Try-out, Spotting, Quality Loops, Scanning, CMM, Packaging, Logistics, etc., these allow the customers track all activities without going to 3rd companies and have better control on Timing and Quality.

**We provide Toolings for all Auto Stamping Parts**

## Company Datas

Established:	June 2004
Ownership:	100% Privately owned
Headquarter location:	Liaoyuan City, Jilin Province
Employees:	700
Annual Capacity:	400 Cold stamping dies ( 1 die set = 30 Tons) 120 Hot stamping dies 15 Hydroforming dies



# OUR ADVANTAGES

- 19-years dedication in Automotive Stamping Die Manufacturing, rich experience with both Metal and Aluminum Materials, widely applied to Skin Panel, BIW, Chassis, Battery Box etc.
- Capability of manufacturing large progressive dies, transfer dies, tandem dies, hot stamping dies and hydroforming dies
- Majority work completed in house (only steels and standard components coming from suppliers), less risk with supplier chain
- Complete large package management of over 20 dies as single order
- 12-years experience in working with customers from 16 countries overcoming time difference, language and culture barriers
- Subsidiary foundry shop helps to control leading time and contribute to cost savings
- Strong engineering capability in parts stamping feasibility study to support customers job before ordering the dies
- Quick feedback with ECRs (within 48 days for normal change request, up to 5 days for major die modifications)
- Quick feedback with homeline demand - we send tool makers overboard for every single program and also we cooperate with local tool makers for urgent jobs
- Vision to contribute to our customers' success by delivering our best performance with quality, timing, cost, service

## PLANT 1 (FROM 2004)



Plant 1 was the first we built in 2004, it has been expanded to today's 3 work shops and 1 engineering center from the initial small machining shop.

In Plant 1 we focus on Cold stamping dies design and manufacturing, such as process, simulation, machining programming, casting components machining, assembly, tryout, laser cut, CMM and packaging.

Meanwhile, the majority of employees including the HR, Finance, Sales, Management, etc. is working here as well.

## PLANT 2 (FROM 2015)



Plant 2 was built in 2015, there are 4 major activities here:

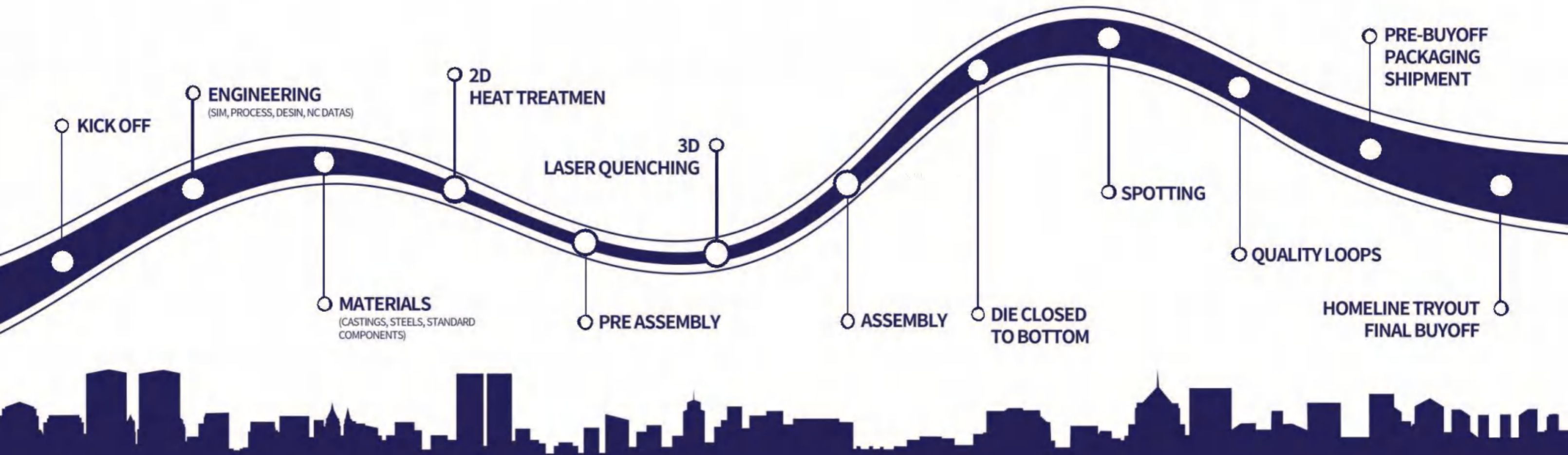
1. Steel blocks manufacturing for both cold and hot stamping dies
2. Hot stamping dies Assembly and Tryout
3. Check Fixtures individual shop with complete services like design, machining, assembly, tryout and certificate
4. Cold and Hot Stamping lines for local OEMs and Tier 1s

## PLANT 3 (FROM 2020)



Plant 3 was built in 2020, it is the individual Foundry shop, where we make the patterns, castings and some machining work (both 2D & 3D).

The foundry project was planned since 2014, before it came to the reality, our directors and specialists have visited many worldwide casting shops in Germany, Spain, Japan and South Korea for their support to make the plant as perfect as possible. Our process is more similar to European casting shops, where we pour the iron or steel liquid into the black painted patterns inside the sand boxes, so the castings will be taken out completely after cooling.



## PROGRAM MANAGEMENT

We have 23 program managers, 9 of them speak fluent English. Besides, we have 7 sales managers for overseas business with rich program management background. Customers' satisfaction the key of the successful business. We 30 person are closely surrounded by the customers.

Our program managers track the die status every day and summarize the weekly report to the customers, as if they were the customers' second hand in the factory.

### PROGRAM MANAGERS: 23

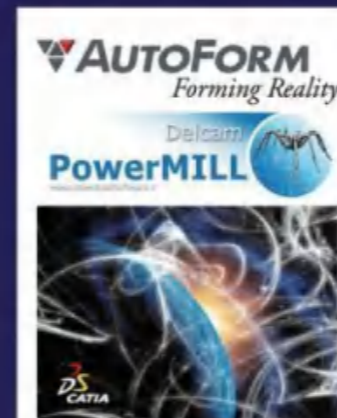
ENGLISH  
9+7(SALES)

GERMAN  
2 (SALES)

FRENCH  
1 (SALES)

SPANISH  
1+2(SALES)

## ENGINEERING



We have 34 process/simulation engineers and 80 die designers in total for both cold stamping dies and hot stamping dies.

Our strong engineering capability enables us to support the customers to develop the CAD datas, we offer the ECR proposals quickly and freely.

We also support the customers for necessary reverse engineering work.

# MACHINING

We are capable to machine die components 100% in house for having the essential machining equipments and the machinists' rich experience.

36 - Large CNC (up to 6000\*2200)

27 - Small CNC (for die details machining)

12 - Gun drilling machines

12 - Lower speed wire cut machines

20 - Medium speed wire cut machines

6 - Grinding machines

7 - Milling machines

4 - Sawing machines



# OTHER EQUIPMENTS

We understand how important the full hardening process is for the steel details' service life and performance, in order to have better control with quality and leading time, from 2017 we heat treat all steels in house, the customers can review the hardening process and HRC reports for every single steel block.

We also own a laser quenching machine for casting items hardening.

We have 4 laser cut machines, 2 for cold stamping dies and 2 for hot stamping dies, they are good for both 2D blanks cut and 3D sample parts cut.



Full Hardening Treatment Line Capacity: 3 days / 800KG



Laser cut machine (both 2D and 3D)



Laser Quenching machine

vacuumovenX1	
Brand	Ipsen
Model	MetaPros-12bar
Loadweight	800KG
Effectivevolume	610*910*610
Temperature	500-1320°C
Lowvacuumpressure	10-1mbar
Highvacuumpressure	<10-4mbar
Max.coolantpressure	12bar
TemperingfurnaceX2	
Brand	ULVAC
Model	Horizontal&Single
Uniformzonesize	600*600*900mm
Max.temperature	800°C
TempAccuracy	≤±1°C
Power	75Kw
Control	SiemensPLC
Max.coolantpressure	12bar

# QUALITY CONTROL

Tooling Manufacturing quality control has been such an important process for us, as you may observe, we have one fixed ATOS and one handy ATOS, they are often used to scan the complete dies. The fixed ATOS is also used to scan the first parts after spotting, so it is easy to tell if big compensation work is required.

Meanwhile, we have 4 CMMs they are used for steel blocks manufacturing certificate, Gauge certificate and parts quality check during quality loops & buyoff.



CMM for Steels

Machine	Bed size	Qty.	Manufacturer	System
CMM 1	4000*2000	1	Italy	Metrolog XG
CMM 2	3000*1500	1	Hexagon	PC-Dmis
CMM 3	1000*800	1	Hexagon	PC-Dmis
CMM 4	4000*2000	1	Leader	RationalDMI
Blue light scanne	2000*1500	1	Germany	



ATOS scanning for both dies and parts



Handy ATOS to scan die 3D cut quality in CNC



CMM for Gauges



CMM for Large parts



CMM for medium parts

# TRY-OUT

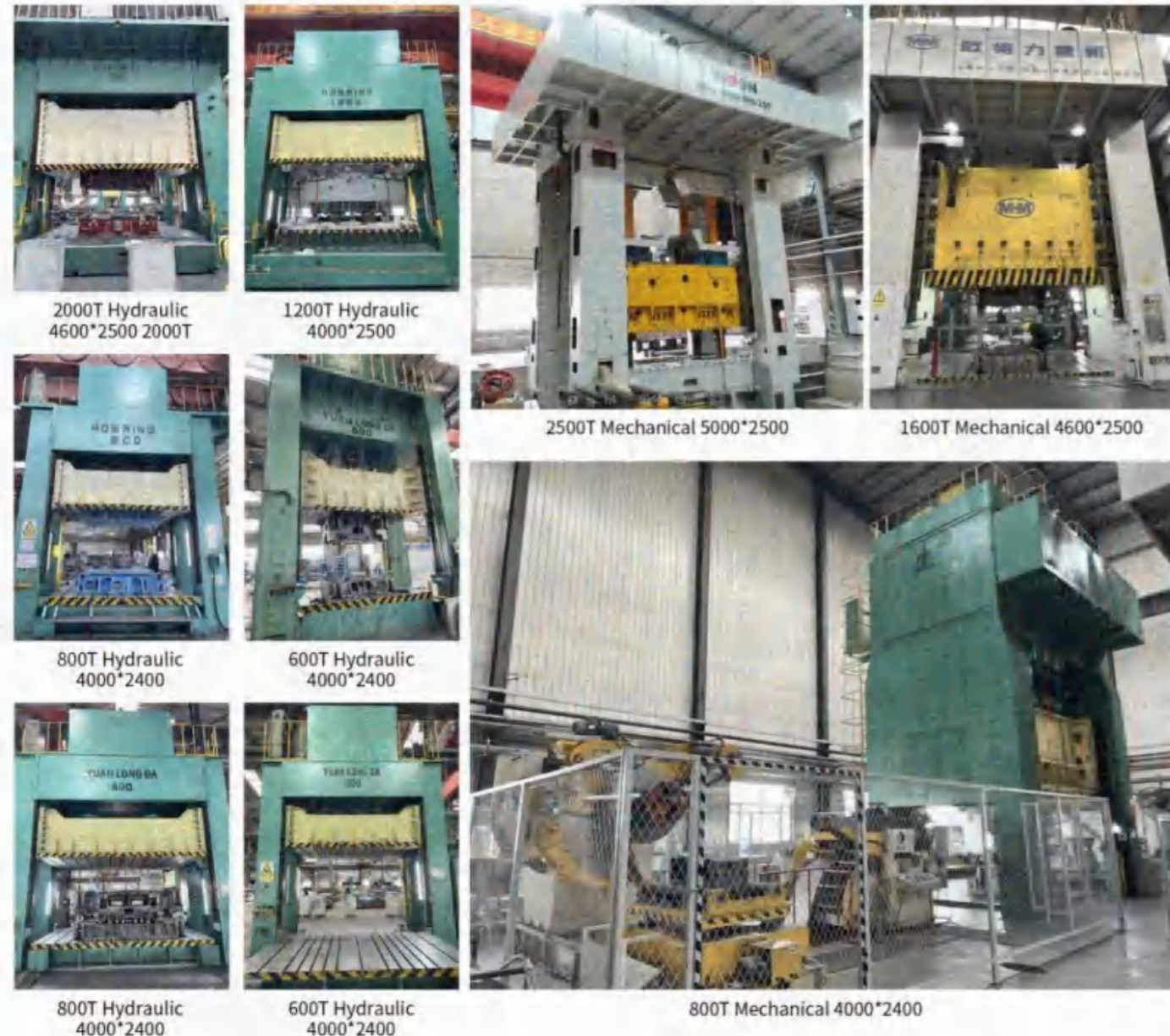
The reliable presses are the key for die build, weekly our presses will take one shift rest and they also receive regular careful maintenances.

- 3 - Mechanical presses (up to 2500Tons, bolster size 5000\*2500)
- 9 - Hydraulic presses (up to 2000Tons, bolster size 4600\*2500)
- 2 - Hot stamping die try-out presses
- 2 - Hot stamping die production presses
- 3 - Hydroforming die try-out and production presses

These two presses are equipped with Robert and Heating oven, they are 100% used for Hot stamping dies try-out, samples and buyoff run.



These are two hot stamping lines for serial production and low volume production, sometimes we book their capacity for buy-off runs on the dies as well.



These are 3 hydroforming lines in our plant in Zhejiang Province, we work for the customers on both hydroforming die manufacturing and hydroforming tubes production.



# FOUNDRY SHOP

- ◆ Wholly-owned subsidiary of GZ Tooling Group
- ◆ Production kicked off August 2021
- ◆ Over 160 Employees
- ◆ Annual capacity: 3,000 Ton Cast Steel & 30,000 Ton Cast Iron
- ◆ Max. Sand box size: 5700mm \* 3300mm
- ◆ Max. Casting size: 5000mm \* 2800mm
- ◆ Max. Casting weight: 25 Ton Grey Iron, 20 Ton Ductile Iron, 5 Ton Cast Steel
- ◆ Solution: Loss Foam Casting
- ◆ 8 CNC, 5000mm table length



# FOUNDRY SHOP

Our foundry shop runs the workshop as if they are supplier to our tooling team, so they sell the capacity to both internal die shop as well as to the external customers, the services include patterns, castings, machining if required and transportation.





# FOUNDRY SHOP

We strictly follow the environmental requirement from the government since the day we decided to invest the foundry shop.



# FOUNDRY SHOP

Our foundry shop adds the value to decrease die manufacturing leading time, especially when there is high demand in general for tooling business in China. We usually get the castings delivered in 3-4 weeks while the external casting shop requires 5-8 weeks.



**Quality Management System Certificate**

Registration No.: TB002210148005

This is to certify that  
**CHENG DING Foundry CO.,Ltd.**  
Unified: 912204223106664381  
Registered Address: Dongliao Economic Development Zone 136600  
Business Address: Dongliao Economic Development Zone 136600

Has been audited to conform to the following Quality Management System standard  
**GB/T 19001-2016/ISO 9001:2015**  
This Quality Management System is valid for the  
Casting manufacturing (excluding ground bar steel), die processing and production (automobile sheet metal stamping die), foam model processing and production (excluding products prohibited and restricted by the state)

Issue Date: 2021-11-03  
Term of Validity: 2024-11-02

12 months from the date of issuance, the accredited organization should receive regular supervision. The certificate will continue to be valid after the examination is qualified. This certificate information can be found in the official website of China National Certification and Accreditation Commission ([www.cnca.gov.cn](http://www.cnca.gov.cn)). Can also be inquired at the company's official website ([www.kjibuc.com](http://www.kjibuc.com)). This certificate is valid in the period of validity of the administrative license prescribed by the state.

Issued by:    
**Beijing Tong Biao United Certification Co., Ltd**  
Address: 38, 47, Building 1, No. 11, Chaoyangmen West Street, Chaoyang District, Beijing  
Tel: 010-84088221 <http://www.kjibuc.com>

**质量证明书**  
Quality Certificate

产品名称 Product Name	规格型号 Specification	生产数量 Production Quantity	生产日期 Production Date
1000T 1000T1000101	1000-1000-1000-1000-1000-1000	1000	2023-11-03

力学性能 Mechanical Properties			化学成分 Chemical Composition		
项目 Item	标准 Standard	结果 Result	项目 Item	标准 Standard	结果 Result
屈服强度 Yield Strength	≥400MPa	590	碳含量 Carbon Content	≤0.25%	0.22%
抗拉强度 Tensile Strength	≥500MPa	600	硅含量 Silicon Content	≤0.03%	0.02%
伸长率 Elongation	≥18%	18	锰含量 Manganese Content	≤0.03%	0.02%
断面收缩率 Reduction of Area	≥40%	40	磷含量 Phosphorus Content	≤0.012%	0.010%
冲击功 Impact Energy	≥10J	10	硫含量 Sulfur Content	≤0.010%	0.008%

检验员: 刘鹏博  
审核: 王林  
批准: 李海坤  
日期: 2023.11.03

北京通标联合认证有限公司  
Beijing Tong Biao United Certification Co., Ltd.

We also provide the quality guarantee to the customers for each delivery, each pouring has test samples which will be tested in our labortory and 3rd party.



# COLD STAMPING DIES

Building sheet metal cold stamping dies has been the heart of GZ Tooling Group since we began in 2004, we have gained worldwide recognition for building dies that meet stringent OEM and Tiers' standards.



We have rich experience in building, integrating engineering changes, and repairing tooling for:

- Skin Panels (Hoods, Roofs, Doors, Tail Gates, Fenders)
- Body In White Panels (Wheelhouse, Pillars, Reinforcement parts, Beams, etc.)
- Chassis Parts (Control Arms, Torsion Beams, Spring seats, etc.)
- Battery Box
- Pick Up Frames



With thousands of cast and steel plate stamping dies under GZ Tooling Group, tooling can be built from simple to complicated:

- Tandem dies
- Transfer dies
- Progressive dies
- Blanking dies



# COLD STAMPING DIES

Thanks to the trust of our customers worldwide, in the last two decades we have developed the complete capability for all kinds of cold stamping dies.



As appreciation to our customers, we are always ready to handle complete packages with various types of dies, so the customers can save costs and centralize the attention with only one supplier for each program.



## We care about the details.

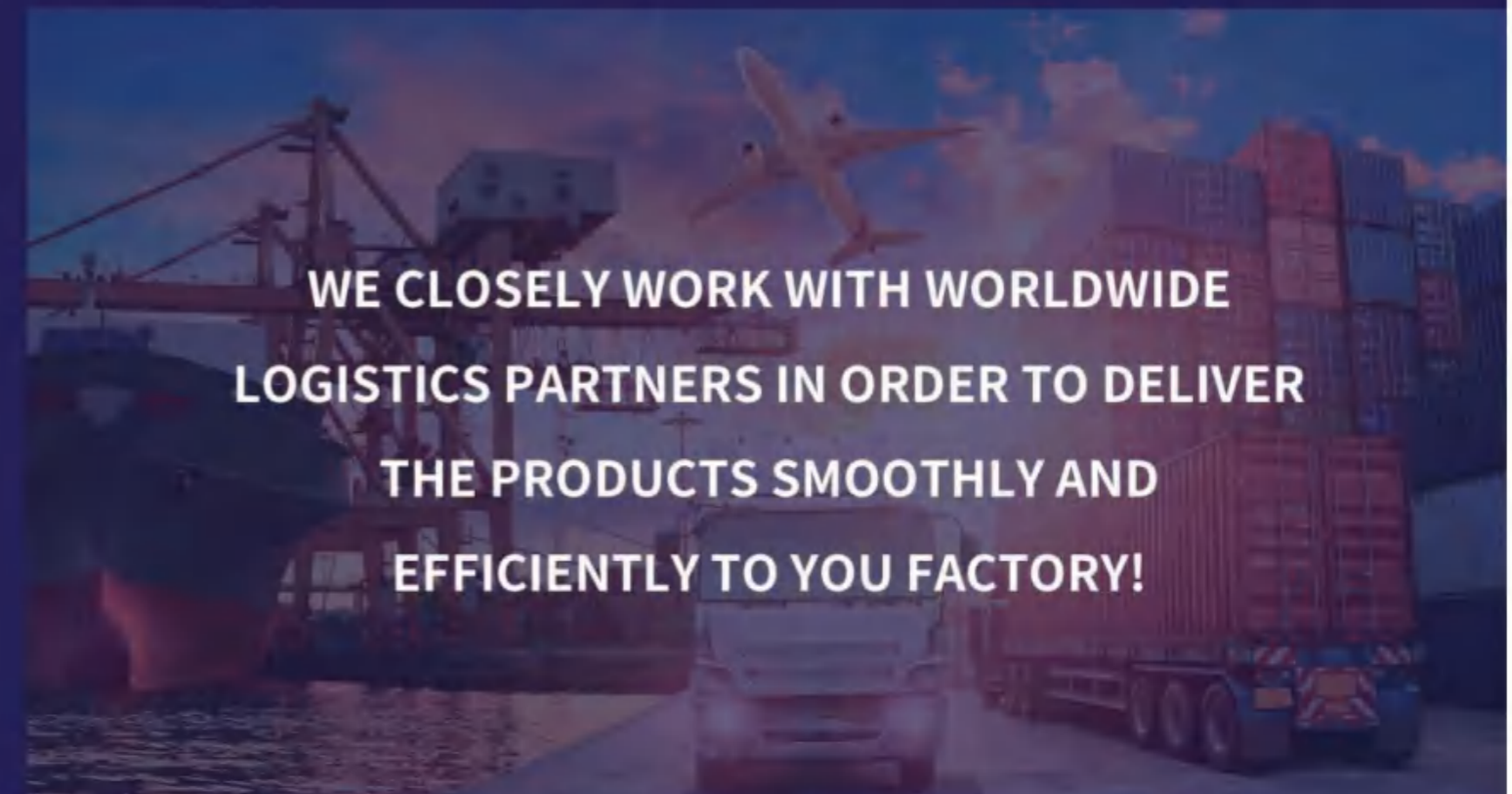
We treat the dies as kids, when they grow up to live anywhere in the world, we hope that they are reliable, kind, easy-going, professional.

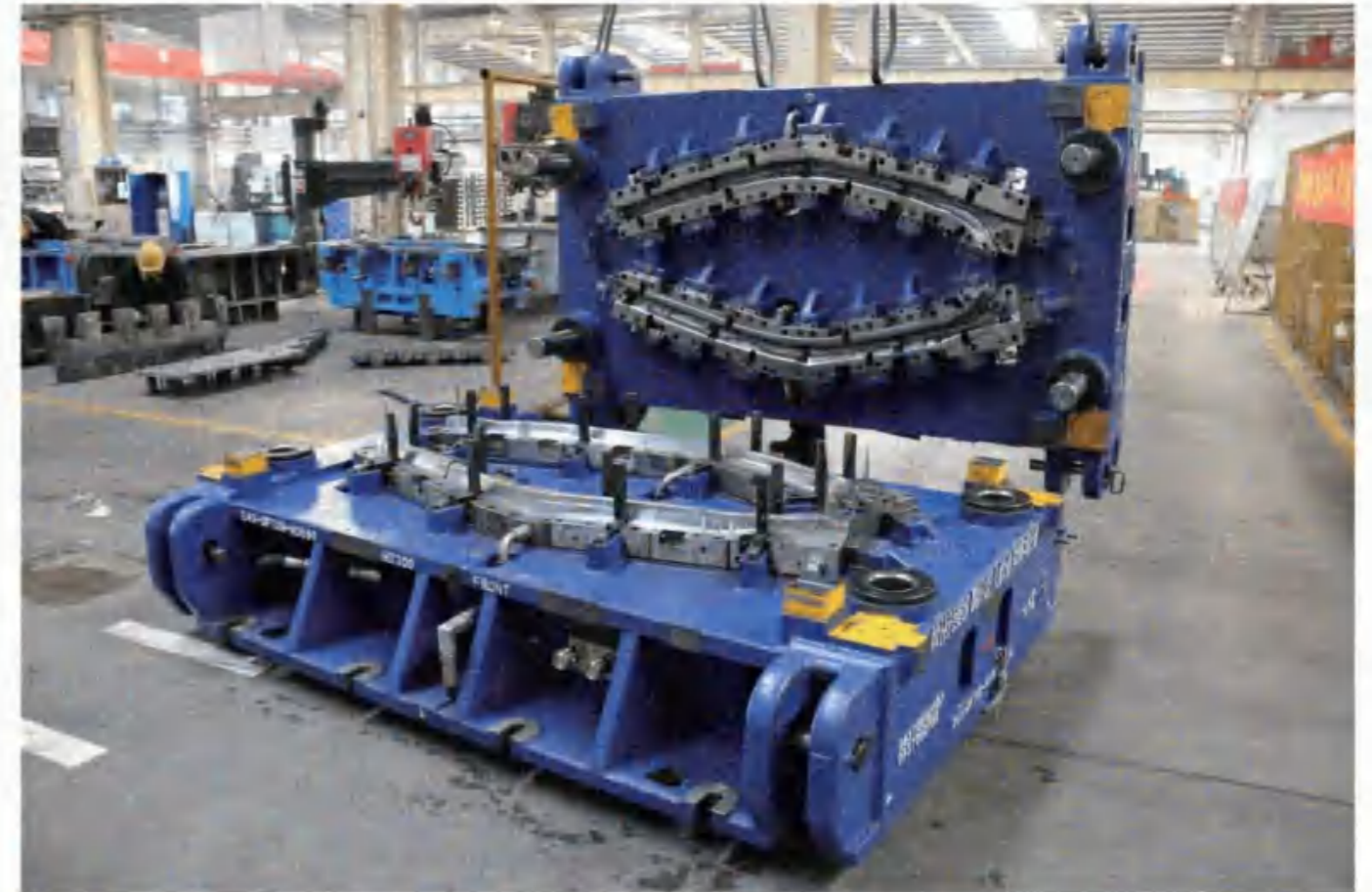


## So as the dies!

It's not only about good designs, but also the way that you machine, assemble and polishing, etc., they have to be good for production run as well as easy for maintenance.

**WE CLOSELY WORK WITH WORLDWIDE LOGISTICS PARTNERS IN ORDER TO DELIVER THE PRODUCTS SMOOTHLY AND EFFICIENTLY TO YOUR FACTORY!**





## HOT STAMPING DIES

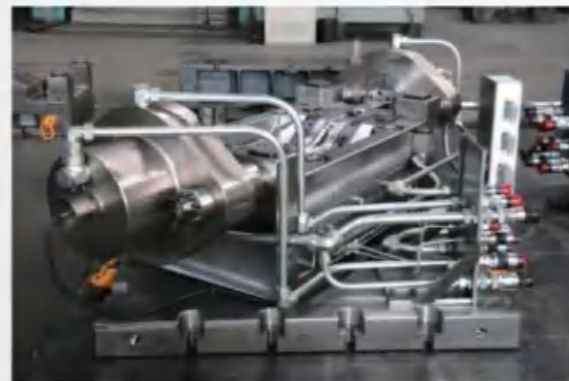
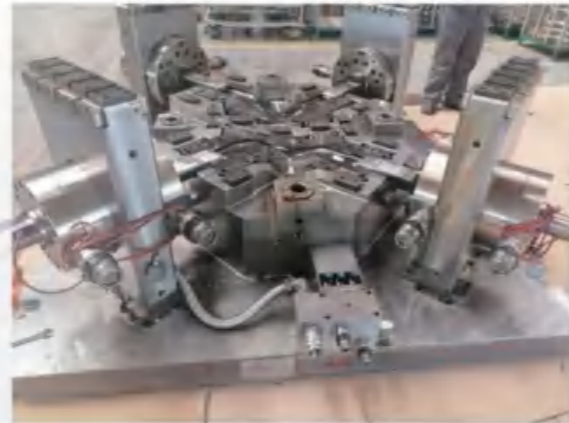
We started to design and manufacture hot stamping dies since 2012, the current capacity is 10 dies per month / 120 dies per year.

We have experience with all parts such as Door ring, TWB, TRB, Patch parts, Soft Zone, etc., and we serve 80% hot stamping lines in China throughout the years. From 2022 we began to export the hot stamping dies worldwide.



# HYDROFORMING DIES

We supply both dies and parts to the customers. The plant is located in Zhejiang Province, with 3000T, 4000T and 5000T presses.



# CHECK FIXTURES

We supply laser fixtures, check fixtures, CMM holders to the customers who source them together with the toolings.

All gauges are built in one of our individual workshop, not out-sourced.



# STAFF & CUSTOMER CARE

We care about how you feel comfortable inside our facility, we offer a lot of free services to our employee family and customers, such as: air port pick up, clean meeting rooms, coffee corner, buffet restaurant, gyp, basketball cort, football cort, table tennis cort, badminton court, etc.



About 5 minutes by car to our company, we own a private club which is a 3-floor building, where we provide you the bar, meals and tea, each time we only provide the service to one group of guests.

In the near future, we will also add guest houses around the club for the customers, the service can be booked either from on-line travel agencies or directly via your contact in the company.

We really care about your feeling comfortable as at home!

