

EN.ZHGLORY.COM

Glory Brakes



Zhuhai Glory Friction Material Co., Ltd.

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Doumen District, Zhuhai, Guangdong, 519110 China



GLORY, YOUR RELIABLE
BUSINESS PARTNER.



Established in 1986, with its headquarter locating in Zhuhai, Zhuhai Glory Friction Material Co., Ltd. (hereinafter referred to as “Glory”) is a professional friction material manufacturer integrating R&D, production, sales and service. The main products of Glory are disc brake pads, drum brake shoes, backing plates and related accessories. The application experience includes passenger cars, commercial vehicles, heavy duties, light railways and racing cars. The main sales footprints included China, South-east Asia, Europe, Mid-east, Africa, North America and South America.

Glory attaches great importance to R&D, and has a friction material R&D team led by top domestic and foreign technical experts. Dedicated in the basic material research, formulation development, application analysis, testing, NVH solutions, Glory has successfully become the first Chinese local supplier of brake system giants such as ZF and Continental, and successfully supplied OEM brake pads to high-end vehicles such as Mercedes Benz. Glory also has extensive application experience in different projects with the Great Wall, GAC, CHANGAN, BYD, JMC, Ford, Chery and Geely.

Adhering to the vision of “create value and achieve win-win”, Glory will be always in pursuit of helping our customers in realizing their dreams in friction industry. Starting from the solid foundation, we aim to become a leader in this field.



Glory Frankfurt
· Technical Support



Frankfurt

Glory Shandong
· Backing Plates Manufacturing
· Brake Discs Trading



Shandong



Shanghai

Glory Shanghai
· Sales
· Technical Support



Zhuhai

Glory Zhuhai, Headquarter
· R&D Center
· Mold&Tooling Manufacturing
· Brake Pads Manufacturing
· Brake Shoes Manufacturing
· Backing Plates Manufacturing
· Shims Stamping

MILESTONE



1986

Establishment of Ex Glory CAC



2002

Establishment of Glory



2007

Establishment of ZACCO



2009

Establishment of Mould&Tooling Base



2011

Decision to Invest New Plant



2013

Completion of Glory New Manufacturing Base



2014

First OEM SOP Project with ZF-TRW



2017

First OEM SOP Project with Continental



2019

R90 Certificates Optainment over 2000



2021

First OEM SOP Project with Mercedes Benz



2022

Decision to Invest Brand New Plant



2023

Ongoing

COMPANY CULTURE

Create value, achieve
win-win.

Vision

We are team and we achieve the goal together.
We take the responsibility with enthusiasm.
We seek the opportunities with passion.
We engage in sustainable development.

Core Values


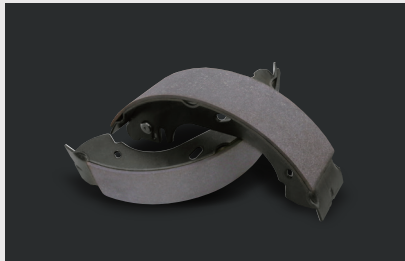
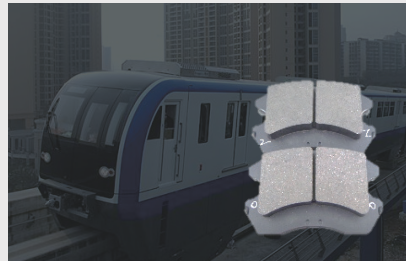

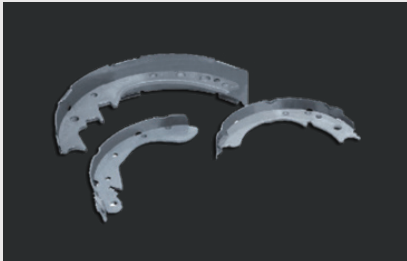



Overall process resource
benefit maximization.

Strategy

Safety • Lean • Perfect • Integrity

Quality Policy

CATEGORY

			
Disc Brake Pad	Drum Brake Shoe	Brake Pad for Light Rail and Subway	Brake Pad for Racing
			
Brake Shoe Steel	Backing Plate	Accessory	CV Pad

3500

P/Ns for brake pads

1500

P/Ns for brake shoes

480

NPI Capacity

2400

P/Ns with R90

OE EXPERIENCE



SOP PROJECTS

SEDAN



SUV



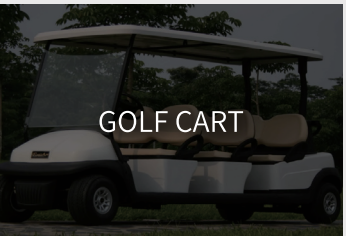
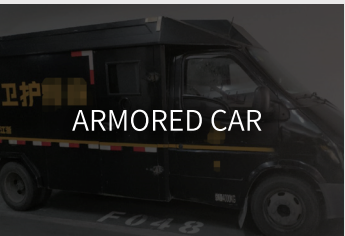
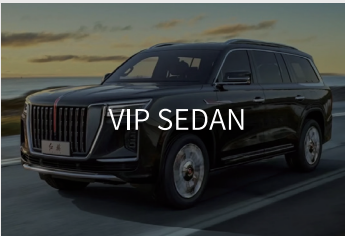
CV



EV



SPECIAL USAGE VEHICLES



WE ARE MORE ENVIRONMENTALLY FRIENDLY

In the pursuit of greener, more sustainable and meaningful development.



CO2 emissions reduced by 5% in 2022

CO2 emissions will be reduced by 8% in 2023

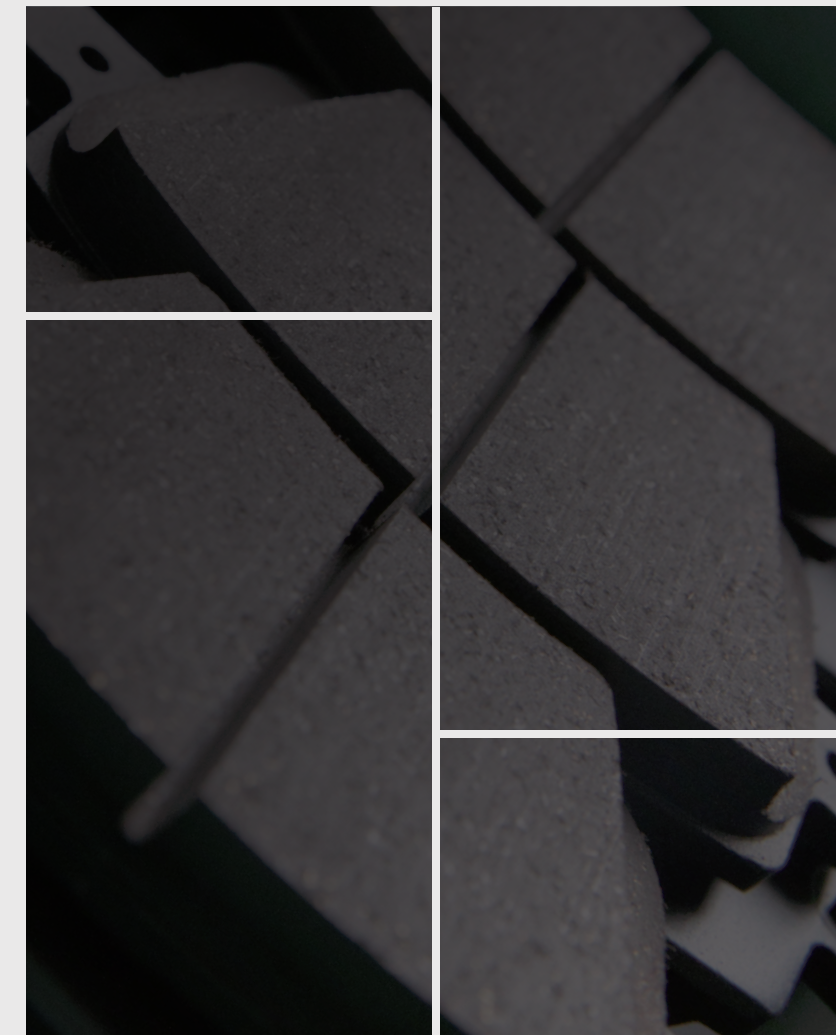
CO2 emissions will be reduced by 30% compared to the basic criterion of 2023 by 2030



As early as 2017, we have achieved copper-free and antimony-free formulations, taking the lead in recommending copper-free and antimony-free high-performance friction material to our customers.



In order to reduce dust emissions, we are developing friction material for the FNC coating, Hard Metal coating and C-SiC brake disc.





WE ATTACH GREAT IMPORTANCE TO R&D

EXPERTS

Senior Consultant of Glory

• Mr. Victor Li

Victor Li, Chinese.
Former chief engineer of Glory. He has more than 50 years of experience in material research, formulation, testing and machine design in friction material industry, and granted Chinese national allowance by state council.

• Mr. Otto Schmitt

Otto Schmitt, German.
Former TRW global friction chief engineer, he has more than 45 years experience in friction material application and brake system research. Joined Glory as consultant since 2015.

• Mr. Laszlo Fecske

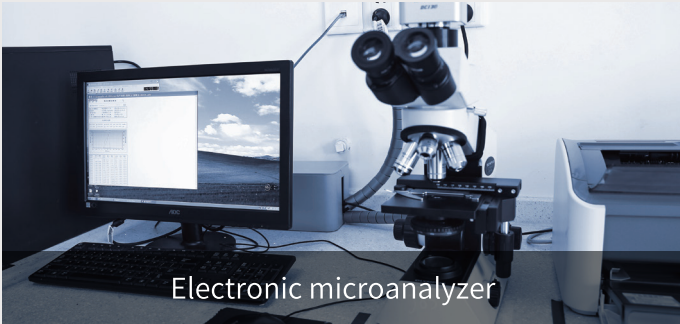
Laszlo Fecske, Hungarian.
Worked for Lucas Automotive (today ZF) in NVH Department for 8 years included 2 years USA assignment to establish and work in the NVH Laboratory and on vehicle testing in Troy Michigan. Worked for BOSCH Braking Systems, MSC Europe, Meneta, ANT/Hühoco as NVH senior engineer. Joined Glory as consultant since 2019.

• Mr. Pietro Buonficio

Pietro Buonficio, Italian.
Former global VP and chief technical adviser of ITT sports technology division, he has more than 40 years of experience in research and development of friction materials, and manufacturing process. Joined Glory as consultant since 2022.

RAW MATERIAL TESTING

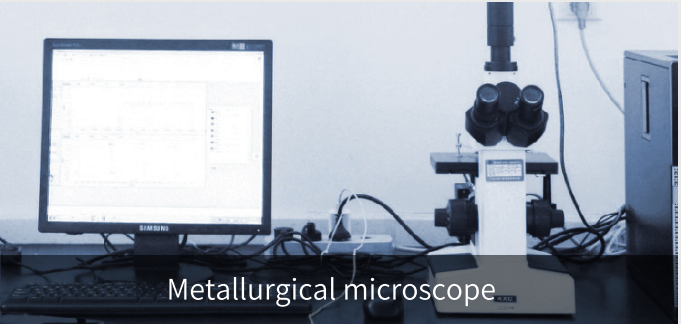
- Shot content
- Sieve analysis
- Water content
- Ash content
- pH value
- Volatile
- Resin angle flow/gel time
- Tap density
- Particle size distribution
- Morphology analysis
- TGA / DSC
- Acetone extration



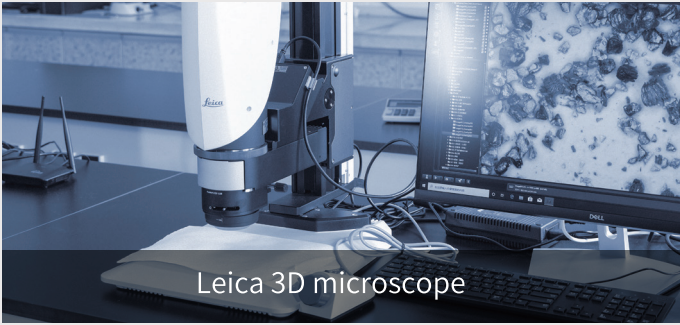
Electronic microanalyzer



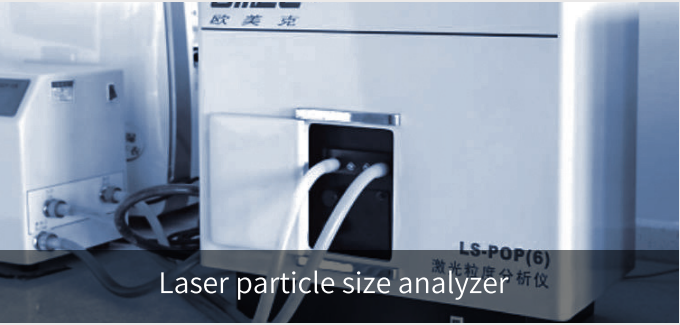
Electron microscope



Metallurgical microscope



Leica 3D microscope



Laser particle size analyzer



Temperature&Humidity Control Box



TGA / DSC



XRD spectrum analyzer



Constant Temperature&Humidity, Salt Spraying Boxes

PHYSICAL&CHEMICAL PROPERTY TESTING

- Density
- Hardness
- Porosity
- pH Value
- Inner Shear Strength
- Impact Strength
- Swell/Thermal Conductivity
- Cold Compressibility
- Metallographic
- Specimen Stiction
- Cross Scribing
- Rust Grade

Glory is not only a manufacturer of friction materials, but also a research and development partner of customers. The research and development cost accounts for 5-6% of the annual sales.

TESTING CAPABILITY

S/N	Type	Inertia (kg·m²)	Climate Control	Testing Projects
G3900	NOISE & PERFORMANCE	250	-20°C~50°C/20%~95%	SAE J2521; AK-Master(SAE2522); SAE 2681; SAE J2707; AMS;USCT; Krauss; Static Mu; QC/T 564/479/237; JASO 406/407; Q/19S 002; DT6C 01 24/29; DCACB027; TL-110; JX14020
G3000	FULL SIZE / PERFORMANCE	250	-40°C~50°C/20%~95%	AK-Master(SAE2522); SAE 2681; SAE J2707; AMS; Krauss; Static Mu; QC/T 564/479/237; JASO 406/407; Q/19S 002; DT6C 01 24/29; DCACB027; TL-110; JX14020
G122	FULL SIZE / PERFORMANCE	250	-	AK-Master(SAE2522); SAE J2707; Krauss; QC/T 564/479/237; JASO 406/407; Q/19S 002; DT6C 01 24/29; DCACB027; TL-110; JX14020
G122B	FULL SIZE / PERFORMANCE	180	-	AK-Master(SAE2522); SAE J2707; Krauss; Static Mu; QC/T 564/479/237; JASO 406/407; Q/19S 002; DT6C 01 24/29; DCACB027; TL-110; JX14020
G122H	FULL SIZE / PERFORMANCE	250	-	AK-Master(SAE2522); SAE J2707; Krauss; Static Mu; QC/T 564/479/237; JASO 406/407; Q/19S 002; DT6C 01 24/29; DCACB027; TL-110; JX14020
G122F	FULL SIZE / PERFORMANCE	300	10°C~50°C/20%~95%	AK-Master(SAE2522); SAE J2707; Krauss; QC/T 564/479/237; JASO 406/407; Q/19S 002; DT6C 01 24/29; DCACB027; TL-110; JX14020
G123	FULL SIZE / PERFORMANCE	2700	10°C~50°C/20%~95%	AK-Master(SAE2522); SAE J2707; Krauss; ISO26865/ISO26866; QC/T 564/479/237; JASO 406/407; TL-110
G120CE	1/5 SCALE DYNO	4	10°C~50°C/20%~95%	AK-Master(SAE2522); SAE J2707; QC/T 564/479/237; JASO 406/407; Q/19S 002; DT6C 01 24/29; DCACB027; TL-110; JX14020
GK	KRAUSS	-	-	Krauss

Glory invented 1:5 scaled dyno test machine with environmental control to conduct core development of formulation, bench tests of different materials, and friction tests for Chinese National standard and CAAM (China Association of Automobile Manufactures) standard of brake pads.



VEHICLE TESTING CAPABILITY

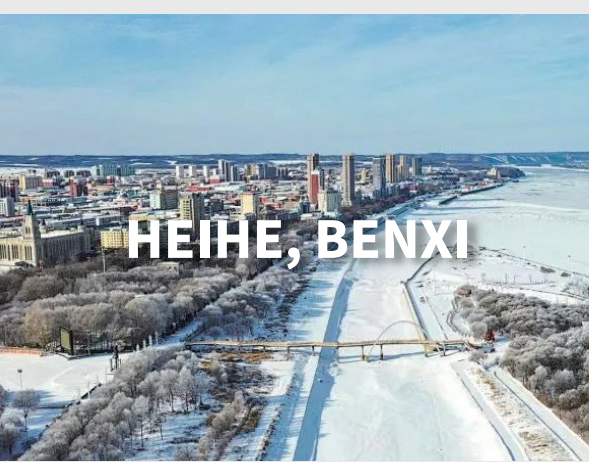
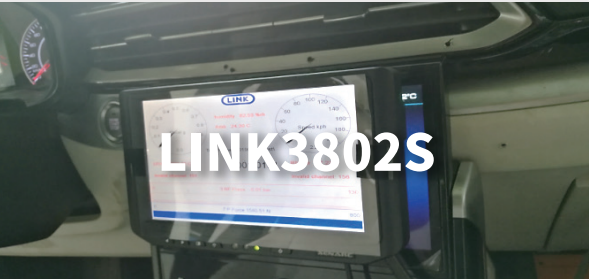
Vehicle Stiction

Hill Hold

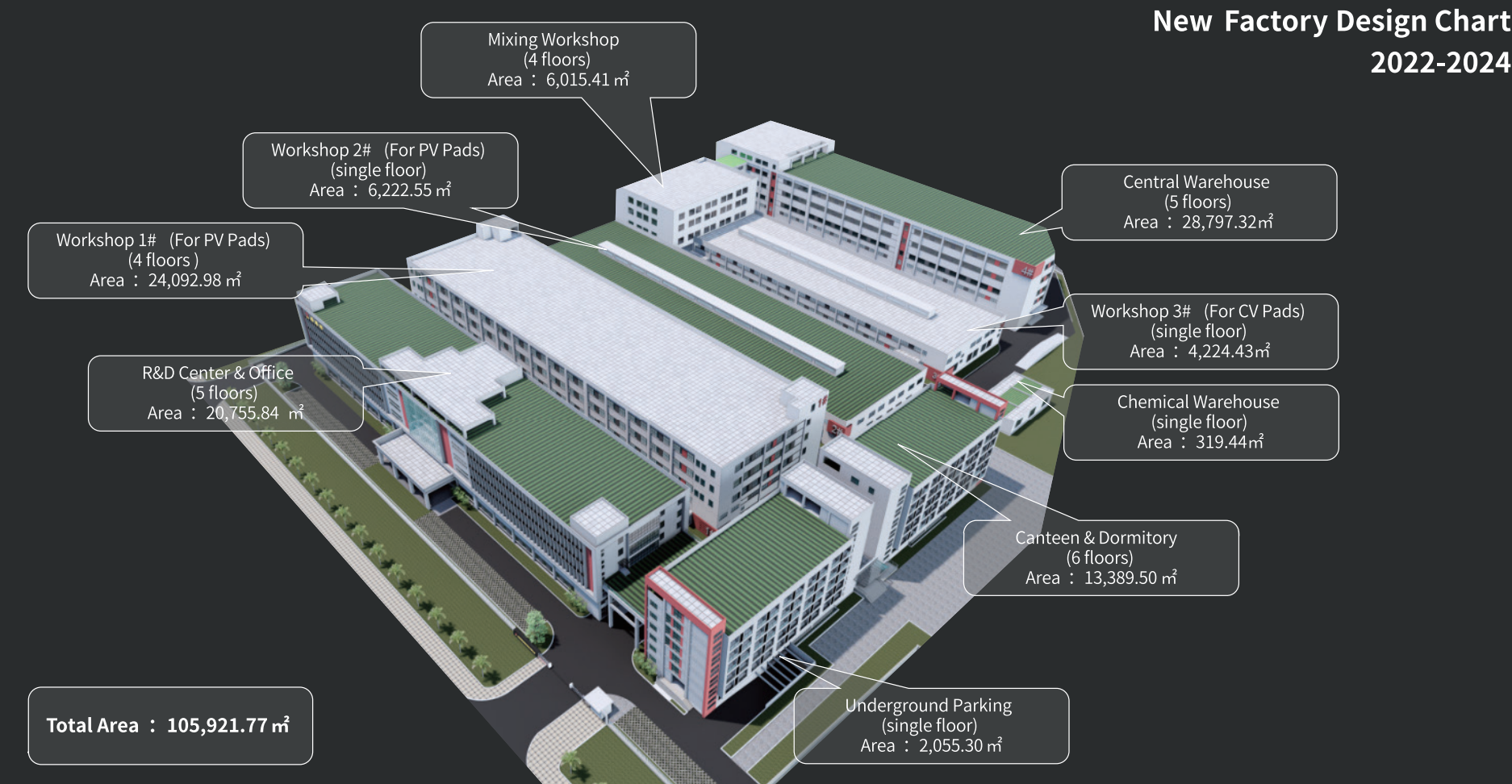
Greep Groan

Road Simulation

Cold Test



WE HAVE AUTOMIZED AND RELIABLE MANUFACTURING PLANTS



OE Brake pad
(Million sets)



AM Brake pad
(Million sets)



Brake shoe
(Million sets)

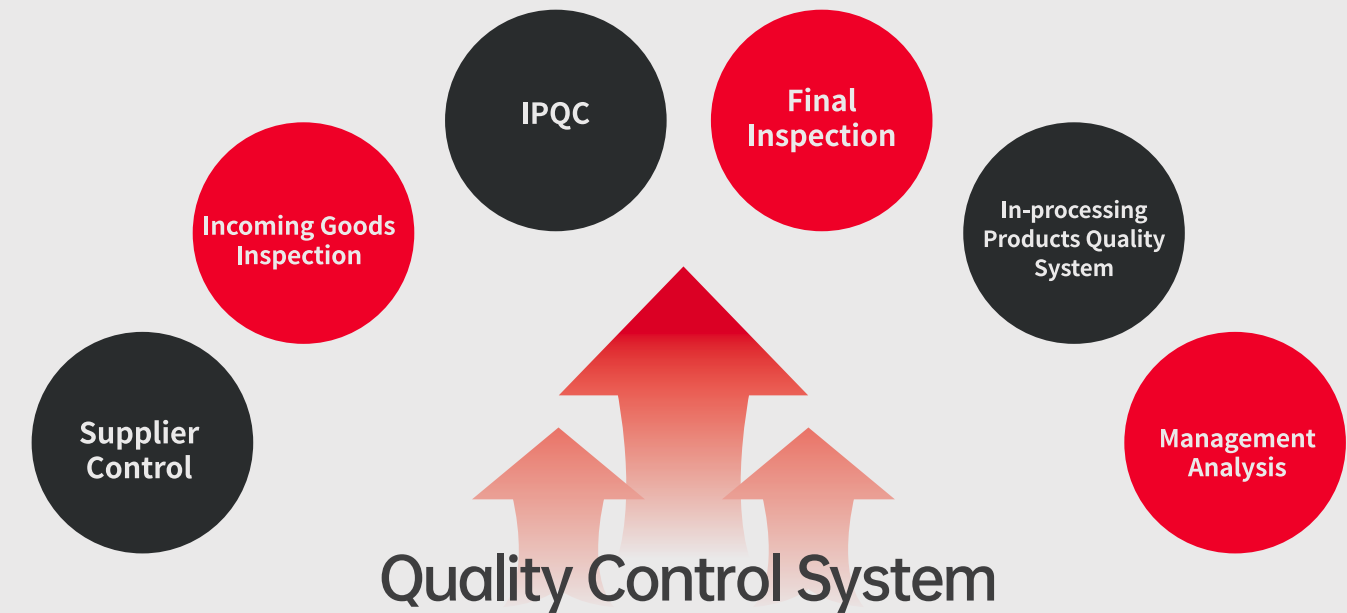


Backing plate
(Million pcs)



Shim
(Million pcs)

WE CONCENTRATE ON PERFORMANCE AND ROBUST



01

JURID Compressibility
Tester

02

Shear Strength
Tester

03

Dimension Inspection

04

SAE J661 Tester

05

Hardness&Density
Tester

06

Salt Spray Tester

07

T-pull Tester

08

Krauss Tester

Quality test



SOCIAL RESPONSIBILITY

Corporate social responsibility is not only a mission in the sustainable operation of enterprises, but also a commitment to the sustainable and harmonious development of the society.

Glory's duty is not only responsible for customers, partners, employees, shareholders and other stakeholders, but also for the sustainable development of society, environment and resources.

Except for the responsibilities with regard to business aspects, Glory is also paying attention to continuous value creation in the future for the harmonious and sustainable development of the planet we are living in.



Safety first

As a manufacturing enterprise of “safety parts”, “safety” has always been the primary goal of fulfilling social responsibility



Environment friendly

Adhere to the green business philosophy and do the best to promote sustainable development



Energy saving

Adhere to the strategy of “maximizing resource benefits in the overall process”



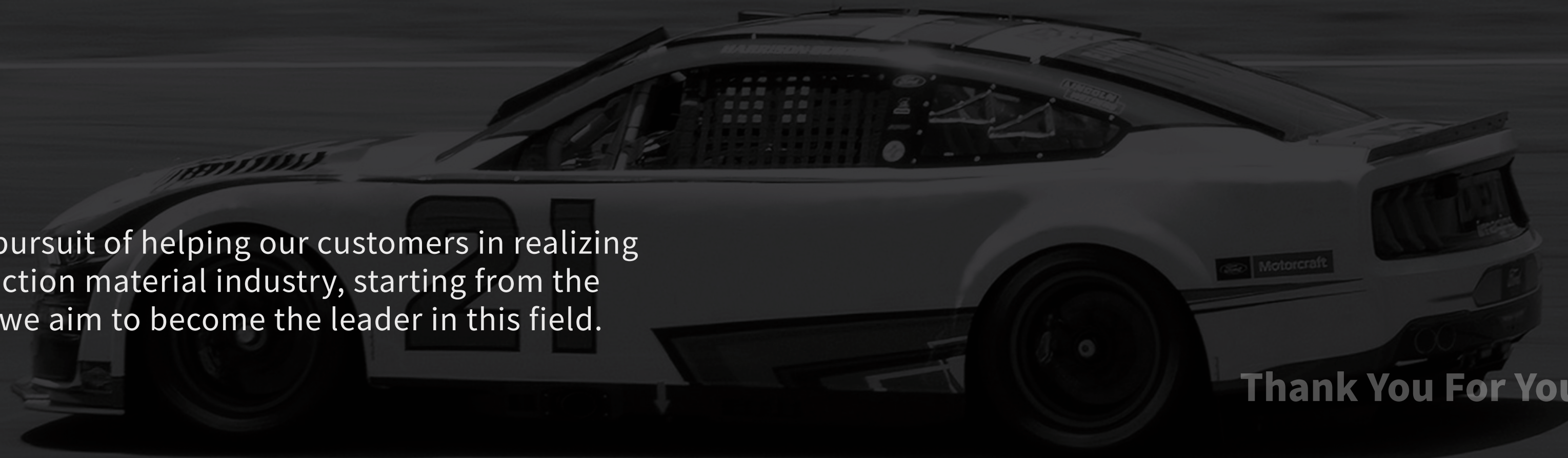
Mutual growth

Promote complementary resources, create shared value and realize common goals



Taking customers as the center, safety as the foundation, people-oriented, Glory has always been engaging in acting as example to advocate the concept of sustainable consumption, and committing to the effective utilization of social resources to contribute to the harmonious development of society.

We are always in pursuit of helping our customers in realizing their dreams in friction material industry, starting from the solid foundation, we aim to become the leader in this field.



Thank You For Your Attention