

# **Company Profile**

## **2024**

# Milestone

- New Establishment
- Certification & Awards
- Application expansion

## 1993~2000

- 1993** ■ **GuangTai Established**
- **GuangTai Plant 1 Automotive Sealed Beam**
- 1996** ■ **GuangTai Plant 3 Glass Plant**
- 2000** ■ **Aviation and Specially Plant 1**

## 2001~2008

- 2001** ■ **GuangTai Plant 2 Automotive Halogen**
- 2003** ■ **HID Xenon Business Plant 2**
- 2005** ■ **Locomotive Business Plant 1**
- **ISO9001 Certification**
- 2007** ■ **OSRAM Specially Supply Started**
- 2008** ■ **R&D Center Established Plant 2**
- **Academe Established GuangTai - Fudan University Plant 2**

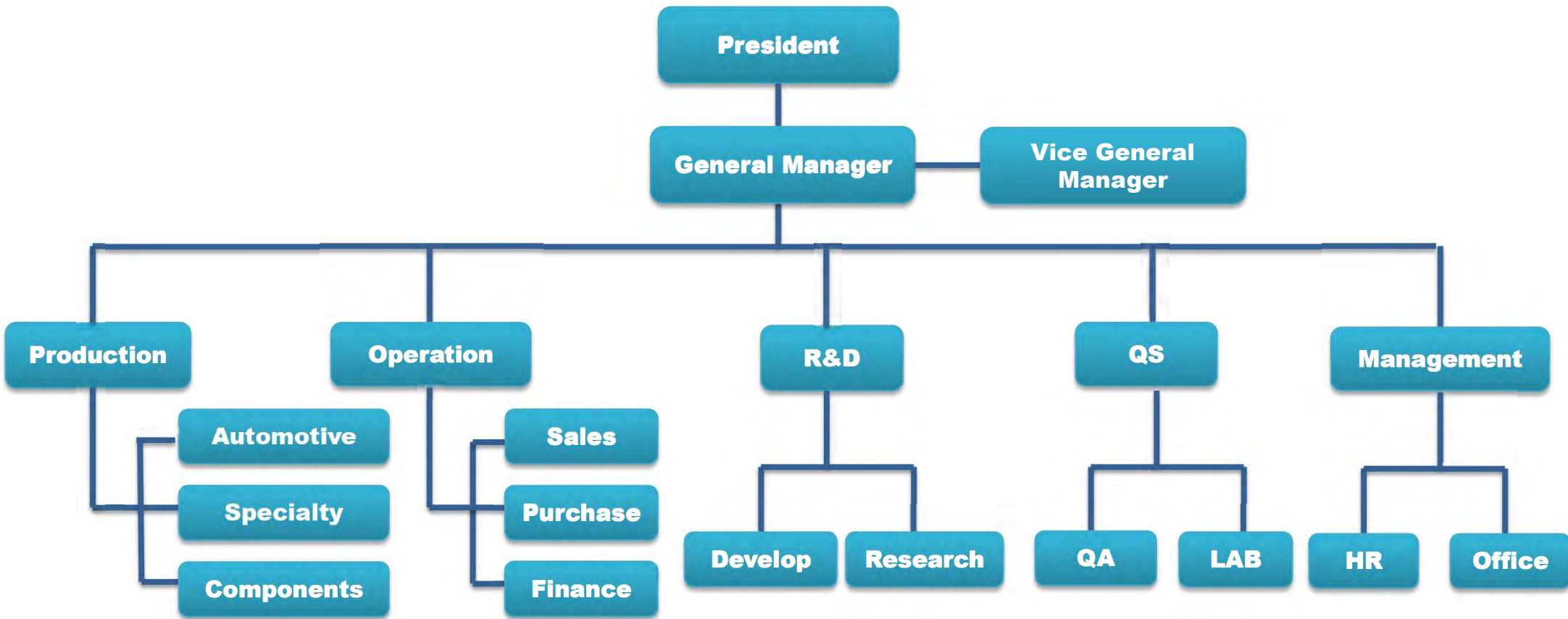
## 2009~2016

- 2009** ■ **North America AM Automotive**
- **Sylvania Automotive Supply Started**
- 2012** ■ **LED Business Automotive Plant 1**
- **Philips Automotive Supply Started**
- 2014** ■ **Oversea Service Start TN North America**
- 2015** ■ **SMT production Started LED module**
- 2016** ■ **Headquarter Moves To Plant - 2**
- **R&D Center Established Xi'an China- LED**

## 2017 +

- 2017** ■ **Halogen Upgrading Plant 2**
- **OME Business Automotive**
- 2018** ■ **LED Aviation Civil Aircraft (N.A)**
- **IATF16949 Certification (TUV Nord)**
- **GE Supply Started (Automotive, Specially Aviation, LEDs)**
- 2019** ■ **ISO14001 Certification**
- **Laboratory Certify Kick off**
- **DFG OEM Supply (Halogen/LED module)**
- 2020** ■ **Laser Technique Study**
- **Top 1 global share (Sealed Beam)**
- 2021** ■ **GuangTai New Plant (LED module / lamps)**
- 2022** ■ **OSRAM Sylvania Supplier Award**

# Organization



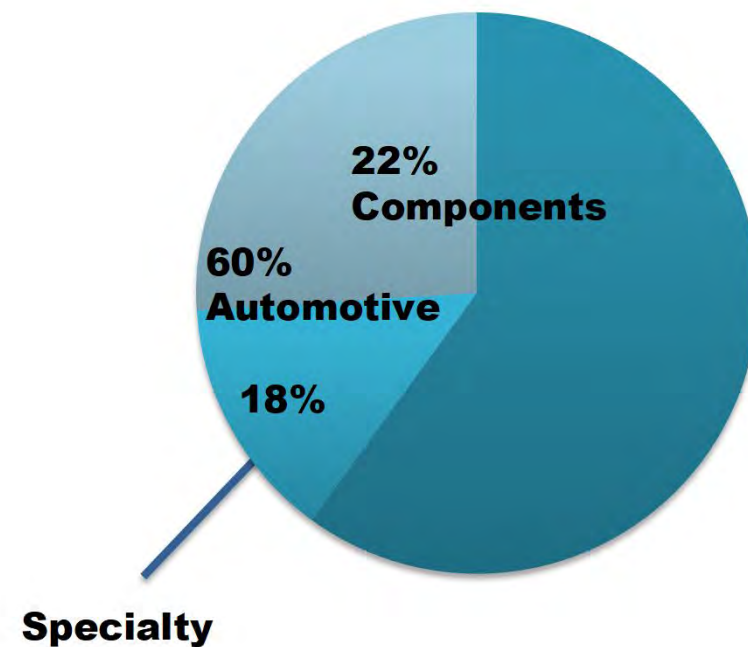
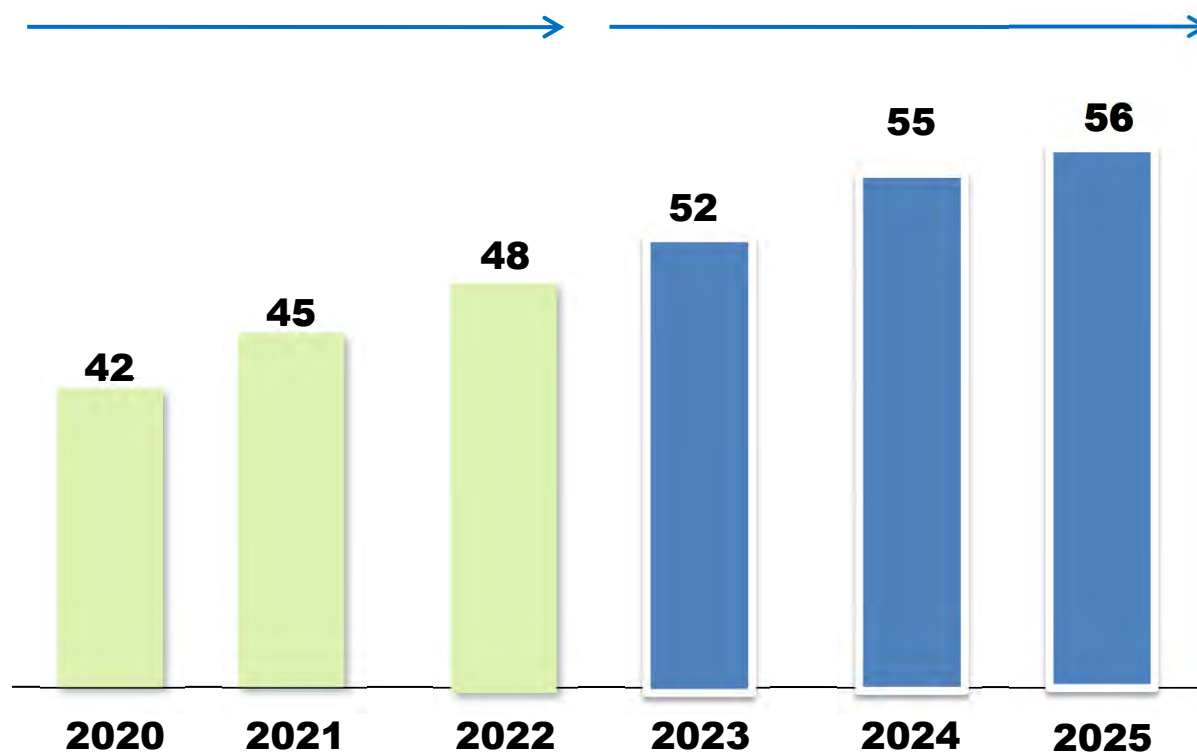
# Revenue

**Year 2020 – 2025**

**USD million**

**Actual**

**Plan**



# Main Customers



# Manufacturing Sites



## Plant 1 - 183,000 Square Ft

- LED Automotive
- LED Aviation And Specialty
- Specialty Sealed Beam
- Metal Component



## Plant 2 - 172,000 Square Ft

- Halogen Automotive
- HID Automotive
- Automotive Sealed Beam
- General Lighting



## Plant 3 - 355,000 Square Ft

- Glass Components
- Coating

Organization	Description	Staffs
Production	Plant 1	168
	Plant 2	138
	Plant 3	236
Office		52
Quality		36
R&D		22
Totally		652



# Portfolio – Auto Halogen

## Double Filament



**H4/9003**



**HS1 Motorcycle**



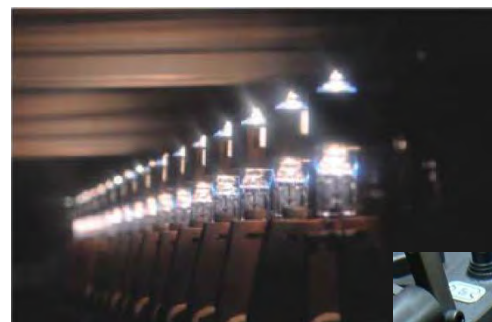
**HB1/9004**



**HB5/9007**



**H13**



# Portfolio – Auto Halogen

## Single Filament



H1

H3

H7

H8

H9

H11

H16



9005

9006

9005XS

9006XS

HIR1/9011

HIR1/9012

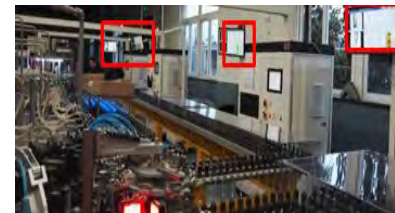
880 – Series  
H27W



**Professional Team**  
(Engr. Quality. Production)



**Excellent Lines**  
(3.2M Monthly Capacity)














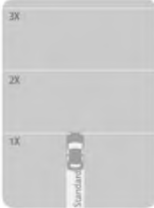












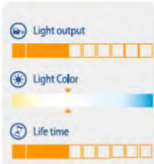




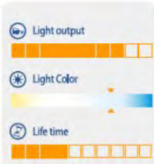






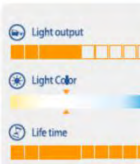


**High Level Quality Control**  
(100% Online Automatic Check)



# Portfolio – Auto Halogen

## Aftermarket Innovation Based on STD Portfolio

STD	Long Life	Rally	Dream Vision	Dream Vision Plus	Dream Vision Shine	Dream Vision Excellent	Xenon White	Xenon Crystal	Xenon Yellow	Heavy Duty	Two Wheeler	Heavy Duty longlife
Standard	Up to 2 times the Life	Maximum performance	Up to 50% more light	Up to 80% more light	Up to 110% more light	Up to 130% more light	Xenon white light	Xenon crystal light	Xenon yellow light	For truck use	For motor use	For truck use longlife
												
												
												

# Portfolio – Auto Halogen

## OEM Vehicle Application

### Headlamp



### Fog Lamp



## Product Certification



**DOT Certified**  
**(Single and Dual Filament)**



**E1**  
**E-Mark Certified**  
**(KBA Germany)**



# Portfolio – Auto HID

## D Series Original replacement

Meal Base



**D1S**

**D1R**

**D3S**

**D3R**



**D5S**

**D8S**



**D2S**

**D2R**

**D4S**

**D4R**

## HID Retrofit Aftermarket off-road



**H1**

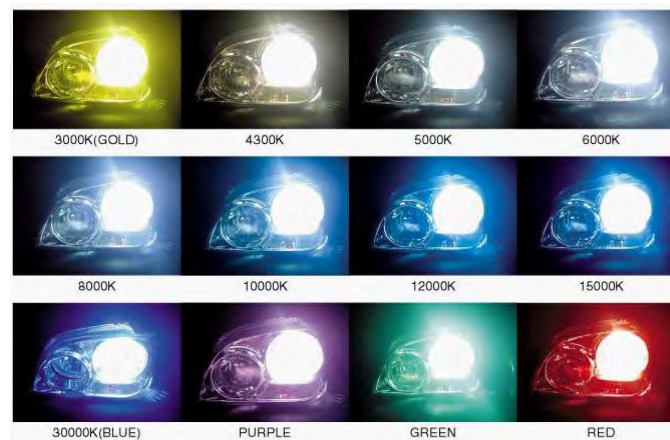


**H4**



**H7**

## Aftermarket Innovation





# Portfolio – Auto HID



## Guangtai glove box – Braun Germany

- Automatic Control of the XENON Flow
- High Precision of the dimension control
- Dust Free and Constant Temp. Environment



## Guangtai assembling and final control

- Automatic control of the glass shell
- 100% Pass the dimension testing and 3hrs aging

## Product Certification



**DOT Certified**



**E-Mark Certified  
(RDW Netherlands)**



# Portfolio – Auto LED

## Guangtai LED Capability



### Strong R&D Capability

- Optical Design
- Electronic Design
- Structural Design

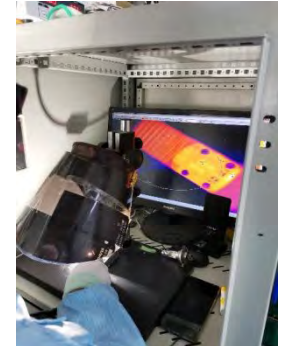


### Production Capability

- Static Free Cleanroom
- High Speed SMT In-house
- Flexible Assembling Line



### Constant Temp. Environment Storage



### Quality Control

- Online AOI (Automatic Optical Inspection)
- X-Ray For the SMT Void Ratio
- 100% Temp. Check



# Portfolio – Auto LED

## LED Module OEM Supply



### Front Lamp

Turn

Day Running Light

Signal / Position



### Internal Light

Reading

Dome Lamp

Door and Trunk Light

# Portfolio – Auto LED

## LED Headlights



**2B1 5" x 7"**  
**Hi/Low Beam**



**2D1 7"**  
**Hi/Low Beam**



**2E1 4" x 6"**  
**Hi/Low Beam**



**1A1 4" x 6"**  
**High Beam**



**2A1 4" x 6"**  
**Low Beam**



**DOT Certified**

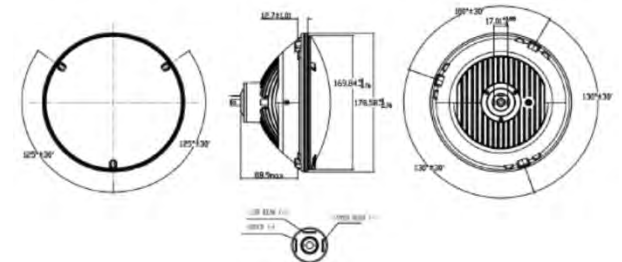


**PAR36 4411**

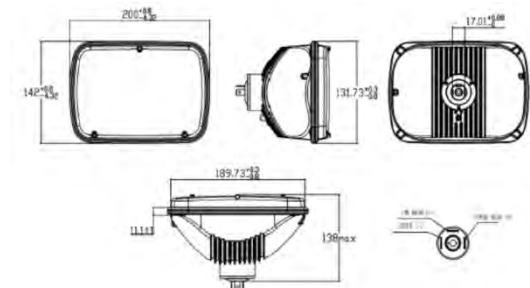


**PAR36 4515**

**NEW**



**NEW**



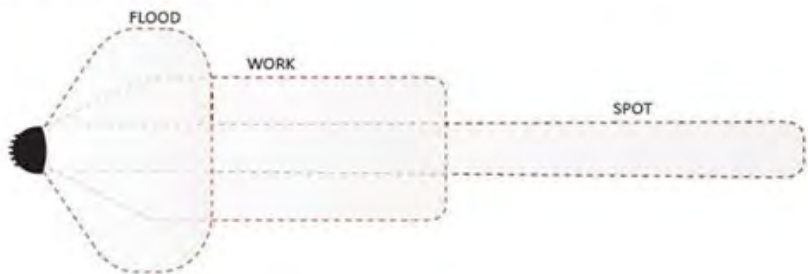
- .Glass Lens and Aluminum Housing**
- .DRL Lights Integrated**
- .Socket Plug-In**

# Portfolio – Auto LED

## LED Work and Driving lights



### Auxiliary Patterns



- .Multifunctional Application
- .Aluminum Housing and PC Lens
- .Excellent Lumen Output



NEW



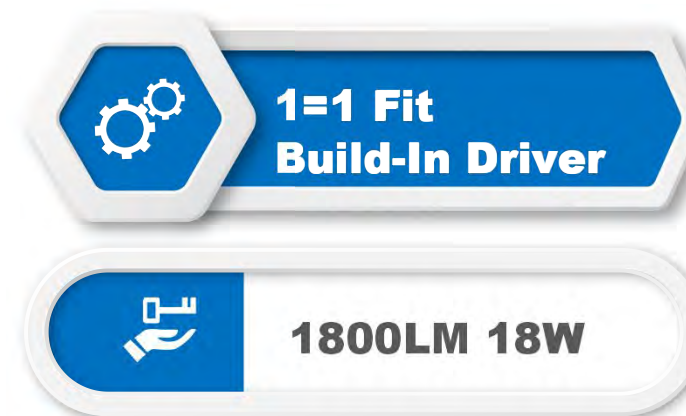
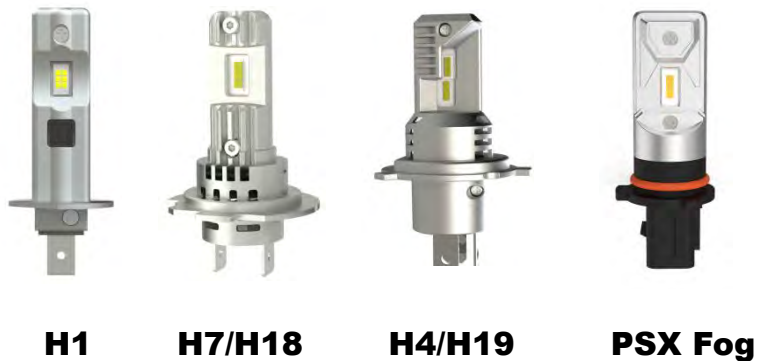
# Portfolio – Auto LED

## LED Retrofit – Fog Lights

### Classical Version T1



### Socket Approach T2





# Portfolio – Auto LED

## LED Retrofit – Fog Lights

### Premium Version W1



9003

H7

9006

H11



**With Fan  
External Driver**



**2800LM 28W**

### Premium Version Two Wheels



HS1

S2

T19/M5

H4



**Socket Approach  
Build-In Driver**



**AC/DC 650LM**



# Portfolio – Auto LED

## LED Retrofit

### Premium Version Miniature



### Premium Plus Miniature



- . Rhomb Design
- . Optical Lens on the top
- . Super Brighter

# Portfolio – Auto Sealed Beam

## Traditional

### Headlights



**2B1**



**2D1**



**2A1**



**1A1**



**2C1**



**2E1**

### FOG lights



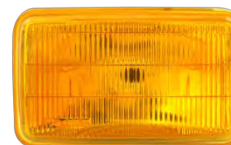
**H4703**



**H5360**



**H9411**



**H9415A**



**H9421**



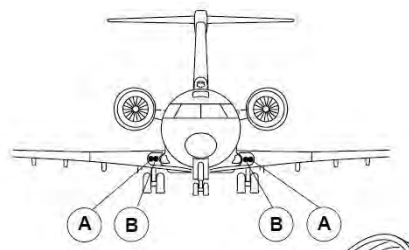
**H9405**



# Portfolio – Specialty

## Traditional

### Aviation

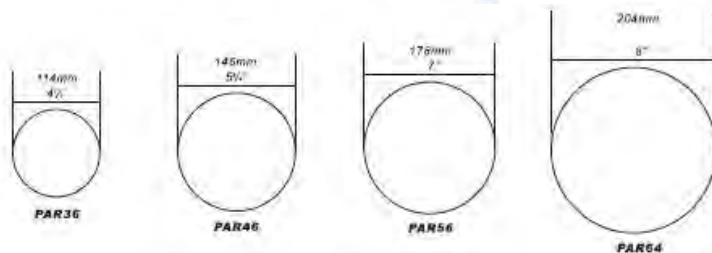


## External Lighting

- Landing Lamp
- Taxiing Lamp
- Aircraft Navigation
- Aircraft / Helicopter Flood



### Stage Studio





# Portfolio – Specialty

## LED Aviation

NEW



## Related Application



High Speed Train



Military

## LED Locomotive Headlights

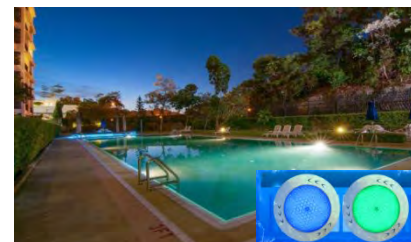
NEW



NEW



Fishing



Underwater



Helicopter



Machine shop

# Portfolio – Glassware

## Production Capability



- **Three furnaces with 9 automatic lines**
- **Borosilicate glass with 36T Daily Capacity**
- **Product covers from 20g to 1500g**
- **All tooling design In-house**

- **Nine automatic drilling/cleaning lines**
- **Eleven Alu. And Semi-Hard Coating lines**
- **Flexible Production**



# Portfolio – Glassware

## Products

### Lamp Glass



## Commercial Lighting



### Special Use Glass



## Household Electrical Application



# Quality Assurance

## Incoming



## Chemical Analysis For Row Material.



Diode Test



Mos Test



DC brushless fan tachometer



LCR Meter



Driver Test



Multimeter

## Electronic Components



# Quality Assurance

## Process



**Filament Welding**



**Laser Welding**



**Deflection Test**



**Tubing Firmness**



**Axiality Test**



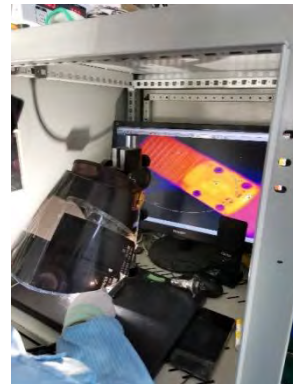
**Projector**



**AQI Online Check**



**X-Ray Online Check**



**Temp. Testing**



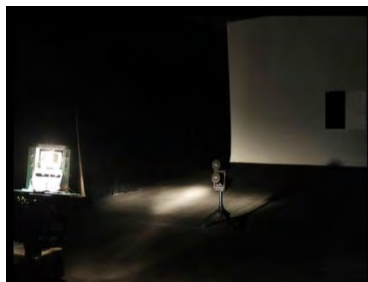
**Online Physical Check**



**Automatic Pressure Control**

# Quality Assurance

## Final



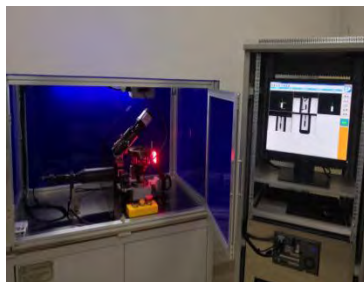
### Photometry LMT Berlin

- Luminous Flux
- Color Coordinates
- Candlepower
- Beam Pattern



### Vibration Test

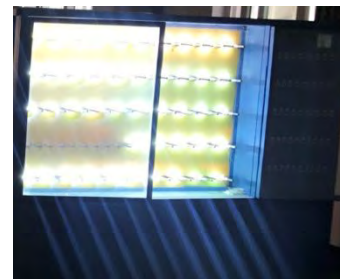
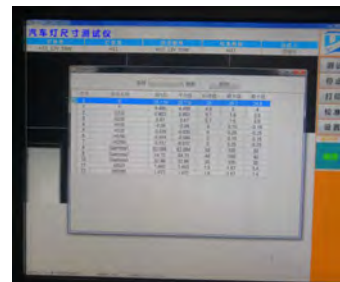
- MIL-STD-214 / 205G
- SAE J575
- IEC 60810
- GB15766.2-2000



### Bulb Physical Test

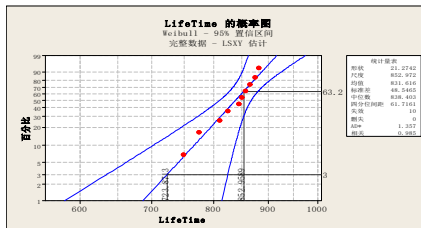


### Automatic Record CPK Analysis



### Life Testing

- Testing Range From 6V to 240V
- Over 1200 Testing Positions
- Automatic Record and Tc/B3 Life Analysis



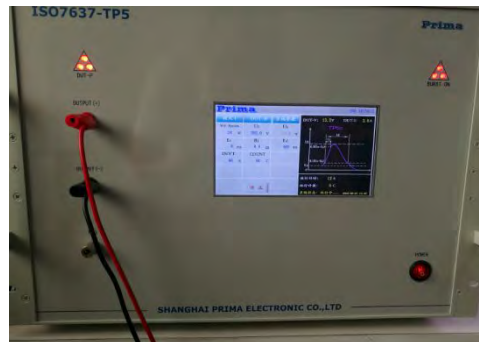


# Quality Assurance

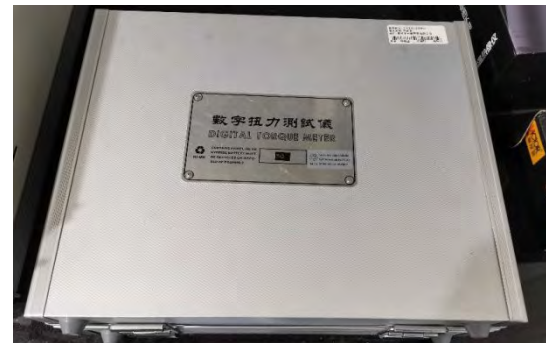
**Final**



**Thermal Shock And PTC**



**Surge Testing**



**Torque Testing**



**Stress Testing**



**Water Pressure Testing**



**Water Spraying Testing**



**Salt Testing**



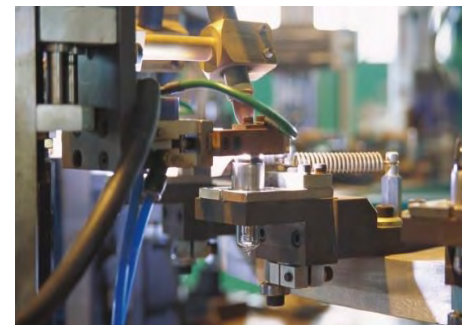
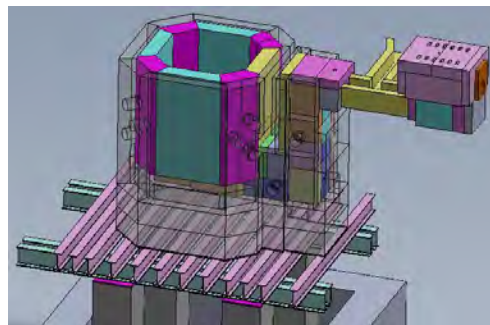
**Expansion Coefficient**

# GuangTai R&D Center



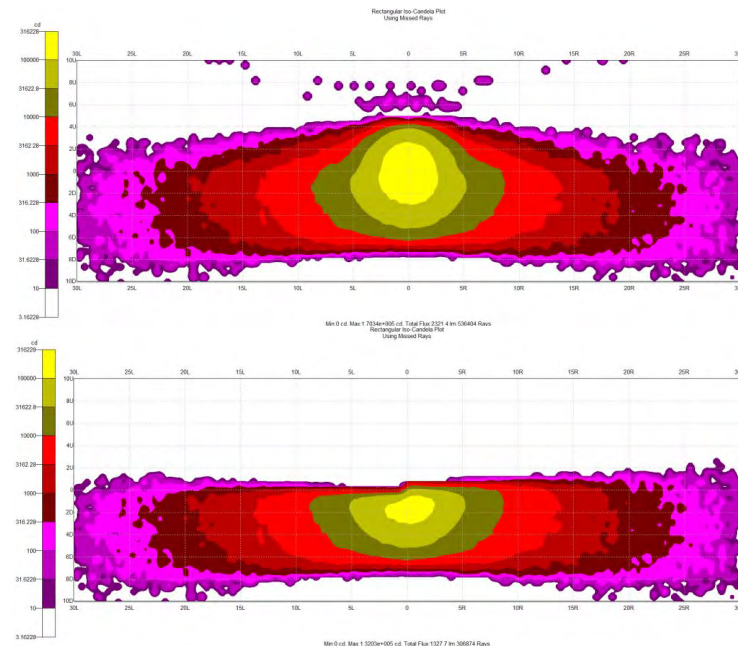
## JiaXing R&D Center

- New Product Development
- Process Improvement
- Automatic Manufacturing
- Machinery Development



## Xi'an LED R&D Team

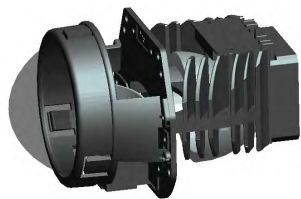
- Design Team
- Electrical Engineering
- Optical Engineering
- Thermal Analysis Engineering



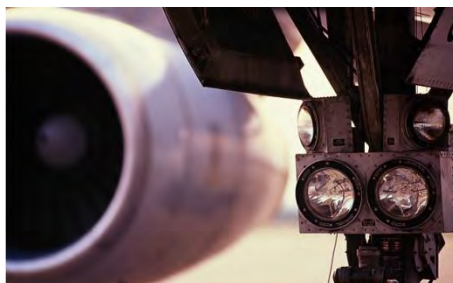


# Future Application Concept

## Automotive Lighting – LED, Laser



## Specialty



# GuangTai New Plant



**560,000 Square Ft land location with 920,000 Square Ft of production workshop**

2024



**Thank You For Your Attention**



# **Lighting The Future Innovation Change Life**



[www.gt-light.com](http://www.gt-light.com)