

ILLUMINATE THE WORLD
SHARE THE BEAUTY

ZIGONG LIGHTS UP THE WORLD

PROFESSIONAL MANUFACTURER OF
LARGE-SCALE LANTERNS

FACTORY TOUR & CAPABILITIES

With more than 30 years of experience,
we specialize in the design, production and
installation of large-scale lanterns,
bringing imagination to light
and creating unforgettable experiences
around the world.

Behind the Scenes at HuilonHall

30+
YEARS
EXPERIENCE

120+
COUNTRIES &
REGIONS

300+
PROFESSIONAL
TEAM

Est. 2012 | Zigong, Sichuan, China | 15,000m² Production Facility



COMPANY OVERVIEW

Founded in 2012 in Zigong, Sichuan — the birthplace of Chinese lantern art

15,000m² modern production facility with integrated design, manufacturing, and testing

300+ professional team members including designers, sculptors, engineers, and artisans

Specializing in festival lanterns, animatronic dinosaurs, animals, and fossil replicas

Exporting to 120+ countries and regions worldwide

ISO 9001, CE, RoHS, UL certified

Chinese National Invention Patent: [ZL 2022 1 0224489.5](#)

12+

YEARS

15,000

m² FACILITY

300+

TEAM

120+

COUNTRIES



15,000m² PRODUCTION FACILITY

Department	Area	Key Capabilities
Design & Engineering	800m ²	3D modeling, clay sculpting, concept art
Steel Frame Workshop	2,500m ²	CNC bending, robotic welding, structural testing
Foam Sculpting	1,800m ²	High-density foam cutting, hand-carving
Silicone Skin Studio	1,200m ²	Mold fabrication, silicone casting, overmolding
Electrical & Animation Lab	1,000m ²	Servo testing, PLC programming, sound calibration
Painting & Finishing	1,500m ²	Spray booths, airbrush, UV curing, color lab
Assembly & Testing Hall	3,000m ²	Full-scale assembly, motion testing, waterproof testing
Packaging & Warehouse	2,700m ²	Custom crates, inventory, loading dock

DESIGN & ENGINEERING PROCESS

01

CONCEPT DESIGN

Client consultation, reference research, concept sketches and 3D mockups

02

3D MODELING

Precise 3D models from fossil data, structural engineering analysis, client approval

03

CLAY SCULPTING

1:1 scale clay masters by senior artisans, iterative refinement, final approval

04

MOLD FABRICATION

High-precision fiberglass molds, multi-part design, surface treatment

05

ENGINEERING INTEGRATION

Steel frame stress analysis, electrical design, waterproofing specs

STEEL FRAME MANUFACTURING

Material: Q235B structural steel tubing (galvanized option for outdoor use)

Process: CNC pipe bending → robotic welding → stress testing → anti-corrosion coating

Safety Factor: 3x for static loads, 2x for dynamic motion

Design: Modular for field disassembly; custom jigs for consistent geometry

KEY EQUIPMENT

- 6-axis CNC pipe benders ($\pm 0.5\text{mm}$)
- Robotic welding (MIG/TIG)
- Universal testing machines (100-ton)
- Sandblasting & powder coating line

FOAM SCULPTING & MUSCLE DEFINITION

Material: High-density polyurethane foam (25–35kg/m³)

Process: CNC hot-wire cutting → hand-carving by master artisans → layered construction

KEY CAPABILITIES

Anatomical Accuracy

Based on fossil reconstructions and scientific papers

Muscle Definition

Layered foam for realistic skin draping

Articulation Zones

Optimized joint ranges for motion systems

Weight Reduction

Internal channels for large models



PATENTED SILICONE SKIN TECHNOLOGY

Patent No.: ZL 2022 1 0224489.5

- ✓ Soft, elastic, realistic touch feel
- ✓ Mold-formed texture: pores, wrinkles, scales visible
- ✓ -60°C to 200°C temperature resistance
- ✓ UV-resistant, ozone-resistant, waterproof
- ✓ 5+ years outdoor durability
- ✓ 40% faster installation vs. traditional

MULTI-LAYER DESIGN

Surface Layer

Low hardness, high elasticity — soft feel

Dorsal Region

Higher hardness — taut back skin

Abdominal Region

Lower hardness — natural suppleness

ELECTRICAL & ANIMATION SYSTEMS

MOTION CONTROL

- High-torque servo motors (up to 80kg·cm)
- PLC-based programmable control
- Infrared remote + timer automation
- Optional: motion sensor, show control

SOUND SYSTEM

- High-fidelity waterproof speakers (IP65)
- MP3 module with customizable audio
- Volume adjustable, museum-mute mode

POWER & SAFETY

- 220V AC input, 24V/12V DC internal
- Emergency stop on all models
- Overload protection on servos
- Low-voltage LED accent (optional)



QUALITY CONTROL & TESTING

INCOMING MATERIAL

- Steel mill certificates
- Silicone batch testing
- Electronic component testing

IN-PROCESS CHECKS

- Weld inspection (visual + ultrasonic)
- Foam density spot checks
- Skin thickness ($\pm 0.5\text{mm}$)

FINAL TESTING

- 72-hour motion cycling
- Waterproof spray test (IP65)
- Sound level measurement
- Electrical safety testing
- Client pre-shipment inspection

CERTIFICATIONS & STANDARDS

- ✓ ISO 9001:2015 Quality Management System
- ✓ CE Marking (EU market compliance)
- ✓ RoHS Compliance (hazardous substance restriction)
- ✓ UL Component Recognition (electrical safety)
- ✓ IP65 Waterproof Rating
- ✓ Chinese National Invention Patent: ZL 2022 1 0224489.5

WARRANTY: 12-month warranty on all mechanical and electrical components | Spare parts inventory for 10-year support

300+ PROFESSIONAL TEAM MEMBERS

25

Design Team

Industrial designers, 3D modelers, concept artists — avg. 8 years experience

18

Artisan Team

0
Master sculptors, foam carvers, silicone techs, painters — avg. 12 years hands-on

15

Quality Assurance

Certified inspectors, testing engineers

40

Engineering Team

Mechanical, electrical, automation specialists — structural & kinematics expertise

20

Project Management

Bilingual PMs (Chinese/English), international shipping & customs specialists

20

R&D Team

New material development, motion algorithm research — 5% of revenue invested annually

VISIT OUR FACTORY

Zigong, Sichuan, China

2.5 hours from Chengdu by high-speed rail | Factory tours by appointment | Sample viewing room with 20+ demo models

Dinohome1327@gmail.com | www.festivelanterns.com

We look forward to welcoming you!