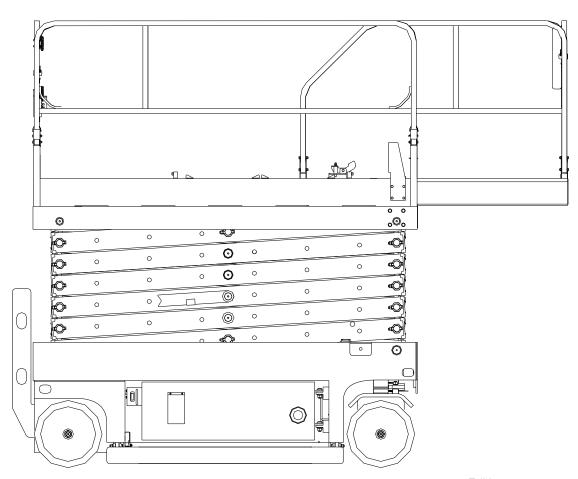


Hunan Sinoboom Heavy Industry Co., Ltd.

Technical Offer GTJZ1212



Edition: 2016.09.09

SINOBOOM Self-propelled Scissor Lift (GTJZ1212)

Detailed Technical Offer

Content

l.	Company Profile	3
	Technical Parameters	
	Technical Configuration	
IV.	Product Feature	8
	Inspection	
	Warranty policy	
	SINOBOOM Honors and Certificates	
	SINOBOOM PHOTOS	





I. Company Profile

Founded on 28th Feb, 2008, Hunan SINOBOOM Heavy Industry Co., Ltd. is situated in Changsha, Hunan Province, China, known as the capital of engineering machinery in this country. This company is specialized in research, development, manufacturing, sale and service of aerial work equipment. There are four series of aerial work platforms, including self-propelled articulated boom lift /telescopic boom lift /scissor lift and spider lift, with working height from 6-44m. So far, the products have sold well all over China and the overseas market, e.g. Southeast Asia, Australia, Middle East, South America and Europe.

As a pioneer of aerial work platforms of China, the company owns the proprietary core technology and 30 items of intellectual property. Also sinoboom has come to be a member of IPAF (International Powered Access Federation) and China Engineering Machinery Association. In 2010, SINOBOOM was listed as one of key enterprises under four RMB100-billion industrial clusters (for equipment manufacturing) supported by the government. Meanwhile, SINOBOOM has passed the Australian ADR, European CE and Russian GOST.

Our products are widely used for ship building and repairing construction, civil engineering, electric power, communications, gardening, advertising, venues and stadiums, airport, harbor and various large factories and mines. It can satisfy the requirements of different customers in vary of industries.

Covering 200,000 m², Ninxiang County Jinzhou Industrial Park is an important carrier for sinoboom to develop further. The total investment in this program is approximately RMB 500,000,000. The area of Phase 1 is 66,667 m². The total building area is approximately 41,000 m², including 25,000 m² premises, e.g. Assembly Shop, Structure Shop, Coating Shop, Product Test Laboratory, Electric Laboratory, Hydraulic Laboratory, Office Building, Dormitory, etc. Phase 1 had been put into operation in April 2013. The production capacity will exceed RMB 500 million in value.

Vision decides height, height determines strength. With "Integrity brings business, Science makes progress", we are looking forward to cooperate with friends over the world.







II. Technical Parameters

Technical Parameters

Model	GTJZ1212	
Productivity		
Max. Platform height	11.9M	
Max. Working height	13.9M	
Extension outreach	0.9M	
Turning radius (outside)	2.35M	
Turning radius (inside)	OM	
Rising/Falling speed (Without loading)	63~68s/45~50s	
Grade ability	25%	
Load capacity (Platform)	320kg	
Driving Speed(stowed)	0~3.2km/h	
Driving Speed (raised)	0~0.8km/h	
Max allowable wind speed	12.5m/s	
Max allowable slope (front/back)	3°	
Max allowable slope (side/side)	1.5°	
Max. Platform Occupants(Indoor)	2	
Max. Platform Occupants(Outdoor)	1	
Max. Allowable Side Force(Indoor)	400N	
Max. Allowable Side Force(Outdoor)	200N	
Dimensions		
Overall length(stowed)	2.39M	
Overall width(stowed)	1.15M	
Overall height (stowed, Guardrail folded)	1.98M	
Overall height (stowed, Guardrail unfolded)	2.6M	
Ground clearance	0.1M	
Wheelbase	1.85M	
Platform Size (L*W*H)	2.25*1.15*1.1M	
Overall weight(for indoor and outdoor use)	2900kg	
Overall weight(indoor use only)	2615kg	
Overall weight(indoor use only) Tire	2615kg 380*125 MM/solid	
Tire	380*125 MM/solid	
Tire Hydraulic oil tank vol.	380*125 MM/solid 14L	
Tire Hydraulic oil tank vol. Hydraulic system vol.	380*125 MM/solid 14L 22L	
Tire Hydraulic oil tank vol. Hydraulic system vol. Battery	380*125 MM/solid 14L 22L 6V*4/260AH	
Tire Hydraulic oil tank vol. Hydraulic system vol. Battery Control Voltage	380*125 MM/solid 14L 22L 6V*4/260AH 24VDC	
Tire Hydraulic oil tank vol. Hydraulic system vol. Battery Control Voltage Power Unit	380*125 MM/solid 14L 22L 6V*4/260AH 24VDC 24VDC, 3KW	
Tire Hydraulic oil tank vol. Hydraulic system vol. Battery Control Voltage Power Unit Drive & steer model	380*125 MM/solid 14L 22L 6V*4/260AH 24VDC 24VDC, 3KW 2WD, front wheel	



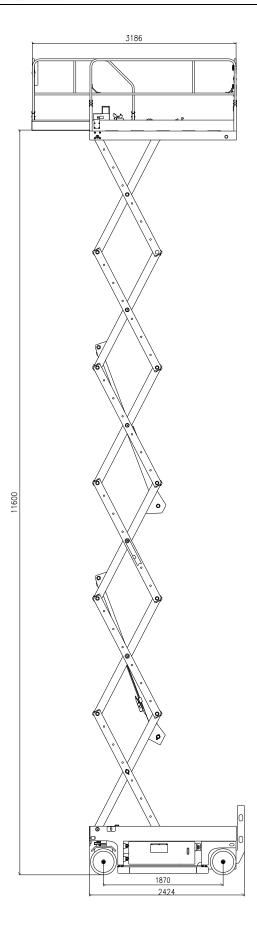


Brake 2 rear wheel

Drawings of product design











III. Technical Configuration

Standard Configurations

NO.	Items	Producer
1	Driving Motor	WHITE from USA
2	Brake	WHITE from USA
3	Hydraulic Valve	HydraForce from USA
4	Power Unit	China
5	Battery	Trojan from USA
6	Scissor assembly	SINOBOOM
7	Work Platform	SINOBOOM
8	Under frame	SINOBOOM
9	Paint	SINOBOOM
10	Electric System	SINOBOOM/ DELTATECH
11	Hydraulic System	SINOBOOM
12	Controller	SINOBOOM
13	Pressure Sensor	Huba from Swiss
14	Others	SINOBOOM

Optional configurations and devices:

- 1. The imported power unit;
- 2. The imported operation control system
- 3. Platform AC power outlets;
- 4. Compressed air line on the platform;
- 5. Folding guardrail of the platform;
- 6. 260Ah batteries of Trojan;
- 7. Yellow flashing warning lights;
- 8. Chassis conduction band;
- 9. Charging cable apply to socket standards from different countries.

Remark: For the items which will cost extra, please refer to the commercial quotation related.





IV. Product Feature

General Introduction

Hunan Sinoboom Heavy Industry is always for better access solutions.

Among its equipment families, the self-propelling scissor lift is powered by battery, with the operator driving it by the full proportional hydraulic control system like driving a car. With the compact design, some models can pass any narrow gate or door way.

Featured with high stress steel, compact size, big load and good stability, the Sinoboom electrical scissor lift can be driven forward, backward, turning, with the safety alarm indicating when necessary, sending people into the air for working to 13.6m and with 320kg payload.

The CE certificate (applicable for EU area) and Australia Design Registration (for Australia) also verify Sinoboom machines in some terms.

Performance Features

Motion System

Imported from Trojan of United State, the capacity of foursome serial batteries can reach to 225Ah (optional 260Ah), and it can be used about 5~7 hours under general conditions.

There is a battery charger adaptive voltage 220v inside the machine and a charging indicator outside. The charging indicator will give a signal when full charge finished.

With the battery meter the user could easily notice the battery volume and the working hour remaining.

Imported electrical motor and electrical motor controller could avoid the current surge and make the entire machine stable and reliable.

The machine could work while be charging. With various advanced technologies, the machine is energy saving and consumption reducing.

Hydraulic System

An open type hydraulic system has applied with explosion prevention strobe and emergency drop switch.

Electrical Appliance System

Controlled by PLC, the machine could perform more accurate for lifting, moving and turning actions. The protection grades reach to IP65 for the enclosed type charger and other major electrical components. Using special materials for the platform control cables (7 core), spiral cables for the control box, it is more convenient to operate and remove.

Moving and Turning

The machine is self-propelled with turning function, 2 wheel drive and 2 wheel steering.





The hydraulic oil passes over the controlling strobe cube in order to providing the lifting and turning functions.

Non-marking tire help to prevent the damage to the floor and stuck by the impurities.

Controlling System

Both ground control and platform control panel can work.

The ground control provides the lifting feature and the platform control panel provides all functions include lifting, turning, walking and so on.

The one handed proportional joystick made in USA provides flexibility, and can be satisfactory for the operators in many different situations.

By optimizing the control mode and control procedures, the machine operation is more user-friendly on the premise of the assurance of safety and reliability. The operation procedure is simplified and workable for both indoor and outdoor environment. The machine can work on heeling condition with maximum gradient of longitudinal 3 degrees, lateral 1.5 degrees. The machine could keep moving in high speed. When the pit protection board is not fully open, the moving function of machine is limited, while the platform may continue to rise with sound and light alarm, it is more efficient for working.

Platform and platform Loading Capacity

Big platform area with extra skid proof patterned platform baseplate, tool box option.

The loading capacity of the platform is up to 320kg.

Platform can be horizontally extended and the extension platform carrying up to 120kg, it is highly expands the working area.

Safety Performance

Equipped with imported level switch, weight sensor and travel switch, controlled by advanced control procedures, the machine is more safety for equipment and workers.

A safety bar has attached on the prong part of the machine, to guarantee the safety of the serviceman while they repairing the machine.

Others

- 1 Equipped with forklift slots and hoisting hole;
- 2 The main components of machine using electrophoretic coating process, it prevents both the internal and external parts from rust;
- 3 The imported special bearings jointing the scissor parts by shaft sleeve are with good lubrication performance and free of maintenance.
- 4 The working platform is made from pattern-steel plate which improves the antiskid effect. The drain hole on the platform prevents ponding.
 - 5 Cartridge guardrail is standard-equipped, and folding guardrail is optional.





V. Inspection

- Sinoboom will conduct the inspection as per EN280 standard or special configurations if any;
- Clients can perform the receiving test as per below guide table:

Inspection Item	Status	Result			
1.Overall inspection					
Surface inspection					
Bolts state inspection					
Labels inspection					
Instrumentation inspection					
2、Ground control					
Key switch					
Emergency stop switch					
Re-start delay					
3、Platform control					
Emergency stop switch					
Re-start delay					
Platform extension					
Scissors raised					
Scissors lowed					
High-speed travel					
Low-speed travel					
4、Safety					
Loading test					
Control panel					
Gradeability					
Lock function for scissor raise					





VI. Warranty policy

1. General Condition

Under normal operating conditions, Sinoboom provides the following warranty service based on that the machines are operated and maintained correctly as per instruction in the Operation and Maintenance Manual.

2. Warranty range

- Warranty service and parts including: Structure parts, most of the hydraulic parts, most of the electric parts or related system failure which are under correct operation and regular maintenance following the Operation & Maintenance manual.
- Warranty parts excluding: All wearing parts (Engine filter elements including air/engine oil/diesel oil, hydraulic system filters, cylinder sealing elements, all the fuses, relays, etc.), failures caused by hydraulic system cleansing.

3. Warranty contents

- The machine cannot start or use normally by any reasons such as parts problem, design problem or manufacture problem;
- Any operation failure caused by welding defect;
- Joystick failure or hydraulic oil leak caused by the manufacturer assembly process;
- Engine and motors' warranty will follow the parts manufacturers' warranty manual;
- Any difference which cannot reach an agreements will follow the third party's inspection reports;

4. Other related service

- Free remote guidance about installation and adjustment for new delivery machine;
- Periodically inspect the machines condition and instruct maintenance and repair,
 free within the warranty period and at cost when out of warranty;
- Free parts replacements for quality claims within the warranty period, and at cost when out of warranty;
- Long time technical service, maintenance services and training services after warranty period, parts and labor will be at cost;

5. "5+2+1" Warranty period

- The big structure parts including chassis, turntable, booms, outriggers, telescopic shafts, engine bracket, will be guaranteed five years or operation time add up to 6000 hours, whichever comes first;
- The complete appliance will be guaranteed one year or operation time add up to 2000 hours, whichever comes first;





- Detailed guarantees classification and timetable please refer to the list in the sinoboom warranty manual;
- Warranty period will be calculated starting from the machines arrival at buyers' stock yard;
- After the warranty period, Sinoboom still offers life-long maintenance, spare parts supply and technical support services with cost charged.

6. Conditions not applied to this Warranty Policy

- Not following the manuals to operate the machines, nor to maintain the machines periodically;
- Rebuilt, parts replace or personally repair without Sinoboom aforehand confirmation from Sinoboom;
- Parts normal wear under daily usage;
- Usage of parts which are not sinoboom original parts without aforehand confirmation from Sinoboom;
- Machines are wrongly installed or used, or machines are used under abnormal conditions, or machines are treated with improper parts like fuel oil, engine oil or lubricating oil; event under accident or fire or other force majure.
- Continuous operations on the machines even spotted some problems or failures without timely quality claim, which results further damages.

7. Our service promises

- Our service team is 24 hours available online to receive your quality claims;
- We will reply your phone call or emails within 2 hours by receiving;
- For better, faster and exact service, you will have to fill and report your claims under our sheets and related requirements;
- If any claims about our service, we will quickly react and give you a reasonable response accordingly;
- Sinoboom reserves the right of final explanation about the above warranty policy;





VII. SINOBOOM Honors and Certificates

IPAF certificate of membership



ISO9001-2000 certificate









SINOBOOM CE Certificates - For European market













SINOBOOM ADR Certificates- For Australia & New Zealand market







SINOBOOM GOST-TR3 Certificates - For Russia

РОССИЙСКАЯ ФЕДЕРАЦИЯ СЕРТИФИКАТ СООТВЕТСТВИЯ (обязательная сертификация) C-CN.AF75.B.21950 1664341 No TP (номер сертификата соответствия) 3ASBUTE/Ib Hunan SINOBOOM Heavy Industry Co., Ltd. Appec: 27# Nan'er Rd, Economic & Technical Development Zone, Changsha, Hunan, China 410100, Китай. Телефон 0086 731 87116500, факс 0086 731 87116516. ИЗГОТОВИТЕЛЬ Hunan SINOBOOM Heavy Industry Co., Ltd. Адрес: 27# Nan'er Rd, Economic & Technical Development Zone, Changsha, Hunan, China 410100, Китай. ОРГАН ПО СЕРТИФИКАЦИИ ООО «ПродМашТест». 127015, Москва, Бумажный пр., 14, стр. 1 Телефон/факс: (495) 7634799/(495) 7634799. ОГРН: 1117746593557 жавием серифика рег. № РОСС RU.0001.11АГ75 выдан 28.10.2011г. Федеральным агентством по техническому регулированию и метрологии. ПОДТВЕРЖДАЕТ, ЧТО Подъемники с рабочими платформами самоходные, пролукция моделей: GTJZ06, GTJZ08, GTJZ10, GTJZ12, GTJZ16, GTZZ14E, GTZZ15, GTZZ15J, GTZZ18, GTZZ25, GTBZ20, GTBZ22, GTBZ25, GTBZ26, GTBZ27, GTBZ28, GTBZ30, GTBZ32, GTBZ36, код ОК 005 (ОКП) GTBZ38, GTBZ40, GTBZ42. Серийный выпуск. 48 3700 СООТВЕТСТВУЕТ ТРЕБОВАНИЯМ Технический регламент о безопасности код ЕКПС ТЕХНИЧЕСКОГО РЕГЛАМЕНТА машин и оборудования (Постановление (ТЕХНИЧЕСКИХ РЕГЛАМЕНТОВ) Правительства РФ от 15.09.2009 N 753) код ТН ВЭД России ламентов), на соответствие требоваг торых) проведилась сертификация) 8428 90 909 0 проведенные исследования протокол исследований № 66918-48 от 13.02.2013 г. Испытательная (ИСПЫТАНИЯ) И ИЗМЕРЕНИЯ лаборатория ООО «ПродМашТест», рег. № РОСС RU.0001.21AB79 от 28.10.2011, адрес: 127015, Москва, Бумажный пр., 14, стр.1 ПРЕДСТАВЛЕННЫЕ ДОКУМЕНТЫ СРОК ДЕЙСТВИЯ СЕРТИФИКАТА СООТВЕТСТВИЯ с 14.02.2013 13.02.2016 (заместитель руководителя) органа по сертификации Мыльцев В.В. Эксперт (эксперты) Чугунов А.А.





VIII. SINOBOOM PHOTOS

Assemble workshop glance



GTJZ0408S/0608S-GTJZ0608/0808-GTJZ1012/Z1212 group show







GTJZ1012E for shopping mall external cleansing



GTJZ0608 for facility maintenance



GTJZ0808 for construction jobsite







GTJZ12 In warehouse for goods sorting



GTJZ10 for outdoor advertisement



GTJZ10 being used in Ukraine Airport







GTJZ0808 working for store decoration



GTJZ1012 / GTJZ1212 working for FAW-Volkswagen Automobile new facility

