



中国认可
国际互认
检测
TESTING
CNAS L1061



170908000850



Report No. ETC22F320YZ070

Special Equipment

Type Test Report

(Lifts)

Category of equipment:	Lift safety protection component
Type of equipment:	Safety gear
Name of product:	Progressive safety gear
Model of product:	CYAQ11C
Manufacturer:	ZhenJiang ChaoYang Electromechanical Scientifical Co.,Ltd
Applicant:	ZhenJiang ChaoYang Electromechanical Scientifical Co.,Ltd
Category of type test:	First verification
Test date:	2022-11-09

Shanghai Jiao Tong University Elevator Test Center

NOTICES

- 1、 The report is the result of the type test according to the TSG T7007-2022 *Regulation for Type Test of Lifts*.
- 2、 The report shall be printed by computer and be invalid with any modification.
- 3、 The report will be invalid without the signature of approver、 verifier and tester .It will also be invalid without the approval certificate、 the cross-page official stamp of the type test entity.
- 4、 Type test report is only valid for the sample.
- 5、 It is forbidden to copy the report partly without the permission of the type test organ. The partly copied report will be invalid.
- 6、 Any dissents to the report must be put forward to the type test organ within 15 working days from receiving it. Otherwise, it is considered that the report is accepted.
- 7、 The test samples shall be handled according to relevant regulations except that they are not returned due to legitimate losses.
- 8、 The report is made in quadruplicate, one for the type test organ and three for the applicant.
- 9、 Type test report and certificate should be subject to the Chinese version, while the English version is for reference only.
- 10、 The addresses of Elevator Test Center, Shanghai Jiaotong University are as follows:

(1) Dongchuan Road Laboratory

Room B210, School of Mechanical Engineering, Shanghai Jiaotong University

No.800, Dongchuan Road, Minhang District, Shanghai, P.R. China

Tel: +86-21-34207035/34207036

Fax: +86-21-34207035/34207036-814

Zip code: 200240

(2) Jindu Road Laboratory

Room 1001, Comprehensive Building, South Urban Park

No.123, lane 1165, Jindu Road, Minhang District, Shanghai, P.R. China

Tel : +86-21-61267037

Fax : +86-21-61267037 to 812

Zip code: 201108



Category of equipment	Lift safety protection component	Type of equipment	Safety gear
Name of product	Progressive safety gear	Model of product	CYAQ11C
Serial number of product	1#	Date of manufacture	2022-11-01
Applicable product model(s)	N/A		
Applicant	ZhenJiang ChaoYang Electromechanical Scientifical Co.,Ltd		
Registered address of applicant	No.688, Youfang town, Yangzhong City, Jiangsu Province ,China		
Unified social credit code	91321100608892529A		
Manufacturer	ZhenJiang ChaoYang Electromechanical Scientifical Co.,Ltd		
Registered address of manufacturer	No.688, Youfang town, Yangzhong City, Jiangsu Province ,China		
Unified social credit code	91321100608892529A		
Manufacturing address	No.688, Youfang town, Yangzhong City, Jiangsu Province ,China		
Location of test	No.688, Youfang town, Yangzhong City, Jiangsu Province ,China		
State of sample	No abnormal	Test date	2022-11-09
Test conditions	No abnormal	Category of type test	First verification
Test basis	TSG T7007-2022 <i>Regulation for Type Test of Lifts</i> , GB/T 7588.1-2020, GB/T 7588.2-2020, ISO 8100-1:2019, ISO 8100-2:2019, EN 81-20:2014(EN 81-20:2020), EN 81-50:2014(EN 81-50: 2020)		
Test Conclusion	Certificated.		
Tested by:	Date:2022-11-21	Approval certificate of type test organ: TS7610022-2025 Shanghai Jiao Tong University Elevator Test Center 2022-11-21	
Verified by:	Date:2022-11-21		
Approved by:	Date:2022-11-21		

**1、 Technical parameters and configuration of sample**

Type of safety gear	Progressive	Type of elastic elements	“π” spring
Permissible mass	3200kg	Rated speed of lifts	≤2.5m/s
Tripping speed of the overspeed governor	≤3.55m/s	Applicable material of guide rail	Q235
Type of gripping (braking) elements	Groove shape	Material of gripping (braking) elements	Fixed wedge: ZG50CrMo Sliding wedge: QSn6.5-0.1
Quantity of gripping (braking) elements	(Unilateral clamp body) Fixed wedge:1 Sliding wedge:1	Dimensions of gripping (braking) friction surface	Fixed wedge: 25mm×110mm Sliding wedge: 22mm×100mm
Applicable hardness of guide surface of guide rail	110~143(HBW)	Applicable width of guide surface of guide rail	16mm
Applicable processing method of guide surface of guide rail	Planed	Applicable lubrication of guide surface of guide rail	Dry
Anti-mechanical spark measures	N/A		
Note: The selection of guide rail shall also be determined according to the design and calculation results of the applied lift system.			

2、 Check and test of the sample

No.	Items No.	Check and test items	Check and test results	Conclusion
1	M6.3.1	Determination of the braking force of the safety gear	See Appendix 1 for test results. No crack or obvious plastic deformation after test	Pass
2	M6.4	Requirements for safety gear of service lifts	N/A	N/A
3	M6.5	Nameplate	Comply with requirements	Pass



Appendix

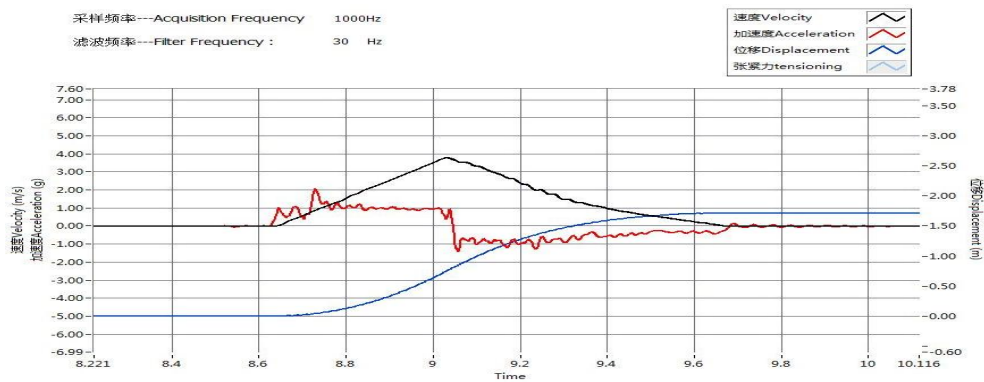
1. Test results

Table 1:

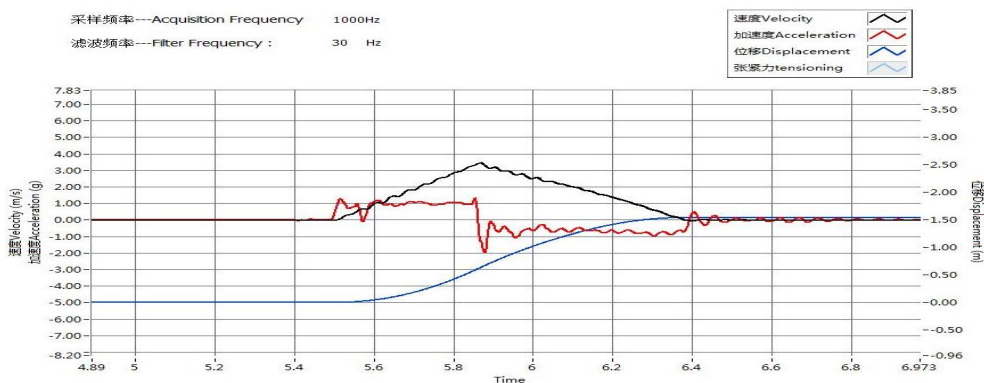
Check and test items		Number of tests	
		1	2
Total test mass (kg)		3200	
Model, surface hardness (HBW) and lubrication of test guide rail		T90/B、131HBW、Dry	
Tripping speed of the overspeed governor(m/s)		3.55	
Height of the free fall(mm)		642	
Deformation of elastic elements (mm)	Left	2.1	2.1
	Right	2.1	2.1
Braking distance(mm)		899	901
Average deceleration (g _n)		0.61	0.69
Maximum deceleration(g _n)		1.43	1.96
Average braking force(N)		50541	53052
Greatest instantaneous braking force(N)		76283	92920

2. Curves of test

Test curves of the 1st free fall



Test curves of the 2nd free fall



3. Photo of the sample



4. Other information

- (1) This type test is the verification of conformance with the performance of sample in the first test and the parameters and configuration in the Type Test Certificate according to the TSG T7007-2022 *Regulation for Type Test of Lifts*.
- (2) At the request of the applicant, in order to improve the test efficiency, this component test is conducted in the test site of the applicant.
- (3) This English report is a translated version of the Chinese report and is issued on the same date as the Chinese report.

5. Revision (s) of the type test report

None.