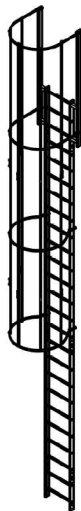


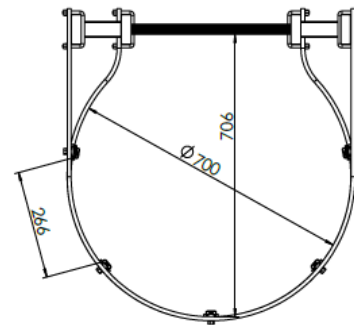
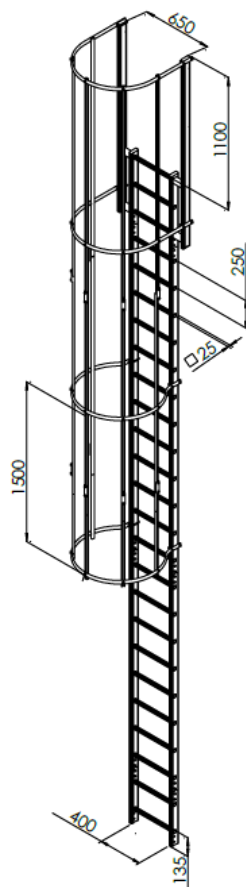
Prüfbericht-Nr.: Test Report No.:	17707907 001	Auftrags-Nr.: Order No.:	178157366	Seite 1 von 5 Page 1 of 5			
Kunden-Referenz-Nr.: Client Reference No.:	2281573	Auftragsdatum: Order date:	24.09.2021				
Auftraggeber: Client:	Qingdao Longdyes Technology Co.,Ltd. Baolulai Road, Liuting Street, Chengyang District, Qingdao, Shandong, P.R. China						
Prüfgegenstand: Test item:	Ladder (Aluminum Caged Ladder)						
Bezeichnung / Typ-Nr.: Identification / Type No.:	LP-STL-2545						
Auftrags-Inhalt: Order content:	Issue Certificate of Conformity						
Prüfgrundlage: Test specification:	EN ISO 14122-4:2016 Safety of machinery - Permanent means of access to machinery – Part 4: Fixed ladders						
Wareneingangsdatum: Date of receipt:							
Prüfmuster-Nr.: Test sample No.:					LP-STL-2545-2021092901		
Prüfzeitraum: Testing period:					29.09.2021		
Ort der Prüfung: Place of testing:					As Client		
Prüflaboratorium: Testing laboratory:					TUV Rheinland/CCIC (Qingdao) Co., Ltd.		
Prüfergebnis*: Test result*:					Pass		
geprüft von / tested by:		kontrolliert von / reviewed by:					
29.09.2021	Rocky Li/ PE	11.10.2021	Vincent Sun/Reviewer				
Datum Date	Name / Stellung Name / Position	Unterschrift Signature	Datum Date	Name / Stellung Name / Position			
Sonstiges / Other:							
This test report is for the test specimen complying to Cl.6.2 of EN ISO 14122-4:2016.							
Zustand des Prüfgegenstandes bei Anlieferung: Condition of the test item at delivery:							
-							
* Legende: 1 = sehr gut 2 = gut 3 = befriedigend 4 = ausreichend 5 = mangelhaft P(ass) = entspricht o.g. Prüfgrundlage(n) F(ail) = entspricht nicht o.g. Prüfgrundlage(n) N/A = nicht anwendbar N/T = nicht getestet Legend: 1 = very good 2 = good 3 = satisfactory 4 = sufficient 5 = poor P(ass) = passed a.m. test specification(s) F(ail) = failed a.m. test specification(s) N/A = not applicable N/T = not tested							
Dieser Prüfbericht bezieht sich nur auf das o.g. Prüfmuster und darf ohne Genehmigung der Prüfstelle nicht auszugsweise vervielfältigt werden. Dieser Bericht berechtigt nicht zur Verwendung eines Prüfzeichens. This test report only relates to the a. m. test sample. Without permission of the test center this test report is not permitted to be duplicated in extracts. This test report does not entitle to carry any test mark.							

V04

Produktbeschreibung
Product description

Aluminum Caged Ladder is used as a permanent means of access to the roof tops, platforms. It consists of two stiles, rungs, safety cage.

Refer to below figure for detailed dimensions.



Scrap view
1 : 10

Dimensions for LP-STL-2545

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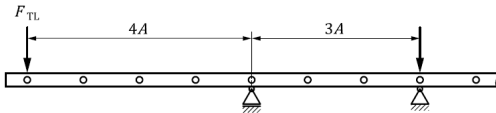
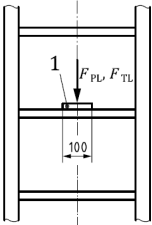
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Liste der verwendeten Prüfmittel
List of used test equipment

Prüfmittel <i>Test equipment</i>	Prüfmittel-Nr. / ID-Nr. <i>Equipment No. / ID-No.</i>	Nächste Kalibrierung <i>Next calibration</i>
Load sensor	GC-QD-002844	2022.08.01
Tape ruler	G1828660	2021.12.08
Vernier caliper	G1810637	2022.05.29

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Test Report No.: 17707907 001

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Absatz Clause	Anforderungen - Prüfungen Requirements - Tests	Messergebnisse - Bemerkungen Measuring results - Remarks	Bewertung Evaluation
6.2	Tests of fixed ladders with two stiles	See below	P
6.2.1	Strength and bending of a ladder element	See below	P
6.2.1.1	Test on stiles For verification of required stability, the bending test of the stiles of the ladder element may be carried out by a simulated system in Figure 22. The test is carried out without a preload in accordance with Figure 22 on at least eight rungs. The test load (F_{TL}) shall be 700 N. A residual deflection of the stiles related to the length of the loaded part of the ladder ($4 \times$ spacing of the rung) shall be not more than 0,3 %.  Key F_{TL} test load A spacing of rungs Figure 22 — Ladder with two stiles — Bending test	Residual deflection: $0.7 \text{ mm} < 3 \text{ mm}$ ($0.3\% \times 4 \times 250 \text{ mm}$)	P
6.2.1.2	Test for rungs A centred preload (F_{PL}) of 200 N is applied for verification of adequate strength. The position of the rung after removing the preload is taken into account as a reference position for test load F_{TL} of 2 600 N (see Figure 23) carried out in similar way. The loads are perpendicular and may, in accordance with Figure 23, be considered as equally distributed on a length of 100 mm. The underlayment shall be rigid and shall have no sharp edges. A residual deflection of the rungs related to the length of the rung shall be not more than 0,3 %.  Key 1 underlayment F_{PL} preload F_{TL} test load Figure 23 — Ladder with two stiles — Test of rungs	Residual deflection: $0.9 \text{ mm} < 1.2 \text{ mm}$ ($0.3\% \times 400 \text{ mm}$)	P

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Absatz	Anforderungen - Prüfungen	Messergebnisse - Bemerkungen	Bewertung
Clause	Requirements - Tests	Measuring results - Remarks	Evaluation

6.2.2

Test for safety cage

The test is carried out on a safety cage section with three hoops and five uprights which are fitted to the ladder element. The test shall be carried out in accordance with Figure 24. A preload (F_{PL}) of 200 N is applied perpendicular at the most unfavourable point of the lower hoop. The position of the hoop after removing the preload is taken into account as a reference position for the test to be carried out with a test load (F_{TL}) of 1 000 N. The permissible permanent deflection measured at the point of application of the load shall be no more than 50 mm.

Tests were performed in compliance with the requirement.

Permanent deflection:
25 mm < 50 mm

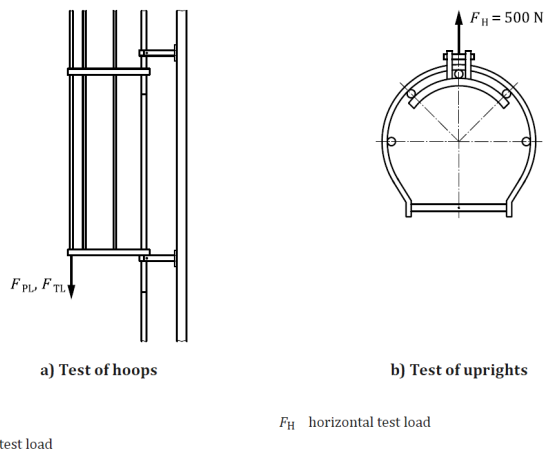


Figure 24 — Test of safety cage

For uprights, a load (F_H) of 500 N shall be horizontally applied at the most unfavourable point between two consecutive hoops. F_H may be distributed over three uprights. The permissible permanent deflection measured at the point of application of the load is 10 mm maximum. The test is carried out under the same conditions as those likely to exist at the place where it could be used.

Permanent deflection:
2 mm < 10 mm

P

END OF TEST REPORT 17707907 001