TÜV NORD (Hangzhou) Co., Ltd.
Member of TÜV NORD Group

TÜV NORD

Technical Report

Testing Labortary

Product Safety

Test Report No.	TRHZP0912038/01
Applicant:	Lifetime Trading Ltd. Room 4604, CITIC Plaza, 233 Tianhe North Road 510613 Guangzhou China
Test Item:	Caster
Type Designation	1181-200
Incoming No.:	N/A. **Date of receipt : 18.01.2010**
Testing Location	TÜV Nord Shanghai
Test Standard:	DIN EN 1004:2005 cl. 7.5.2, and cl.7.5.3
Test Result:	Refer to the following pages

Shirlly Xue	Signature:		Date: 21.01.2010
Linda Yang	Signature:		Date: 21.01.2010

Remark notes:

Abbreviations: OK/P = passed, Fail/F = Failed, N/A/ N = Not Applicable, N/T=Not tested

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Product picture

Type: 1181-200

Overall dimension: 635x290x105 (mm)

Diameter of wheel: Ø200 mm

Net weight: 6.0 kg

DIN EN1004:2005-03			
Clause	Requirement – Test	Result – Remark	Verdict
7.5.2	**Brakes**	See below.	**P**
	All castors shall have wheel brakes. They shall have swivel brakes unless by their design they are not eccentric when locked. The brake mechanism shall be designed in such a way that it can only be unlocked by a deliberate action. The brake mechanism shall effectively prevent any rotation of the wheel when a horizontal force of 0,30 kN is applied through the vertical swivel axis of the castor as close as possible above the castor housing and in the rolling direction of the castor. The full value of the specified service load per castor wheel is to be applied when testing the castor brakes. A minimum of five control tests shall be carried out.	Service load per castor wheel: 5kN Test was carried out as requested. Under horizontal force of 0.3kN, the wheel did not rotate.	**P**
7.5.3	**Test loads**	See below.	**P**
	The vertical service load per wheel given by the manufacturer of the MAT (Mobile Access Tower) shall be verified by a minimum of 5 tests. The test load shall be three times the service load per castor wheel derived from the most unfavourable load combination from Table 4. When the brakes are locked, an initial vertical load of 0,50 kN shall be applied. The plate of the fork shall be taken as the origin for measurements of vertical displacement d_c and the residual deformation d_r. The load shall be increased to the maximum test load, maintained for one minute and the vertical deformation dc shall be measured. The load shall be returned to 0,50 kN. After 30 min. the residual deformation d_r shall be measured. The test shall meet both of the following requirements: -residual deformation d_r after 30 min shall not be more than 1,5 mm; -total deformation d_c shall not be more than 15mm The service load is verified if all five tests meet the test requirements.	Service load of 5kN was verified no failure. Test load: 15kN Test results as follows: Sample 1: d_r = 0.3 mm **< 1.5 mm** d_c = 1.4 mm **< 15 mm** Sample 2: d_r = 0.9 mm **< 1.5 mm** d_c = 1.9 mm **< 15 mm**	**P**

DIN EN1004:2005-03			
Clause	Requirement – Test	Result – Remark	Verdict

Table 4 — Service loads on the whole structure

Group	Line	Kind of load	Value of loads	Subclause
1		Self-weight including ballast if applicable	as given	8.2.1.1
2		Vertical service load on the topmost platform		
	2.1	Uniformly distributed load		8.2.1.2
	2.1.1	for class 2	1,5 kN/m²	
	2.1.2	for class 3	2,0 kN/m²	
	2.2	minimum service load on structure	5,0 kN/4 legs	8.2.1.4
3		Horizontal service load on the topmost platform		8.2.2.1
	3.1	$L \leq 4{,}0$ m [a]	0,3 kN	
	3.2	$L > 4{,}0$ m [a]	2 x 0,3 kN	
4		Horizontal design loads to simulate wind		8.2.2.2
5		Loads resulting from an inclined position of 1 %		8.2.1.3

[a] L = length of the platform.

END OF REPORT