

Type : 10564
 Applicant : Hangzhou Forlong Impex Co., Ltd.

Applicant: Hangzhou Forlong Impex Co., Ltd.
 Room 907 No. 6 Building,
 Yinhu Innovation Center No. 9 Fuxian Rd
 FUYANG, ZHEJIANG 311402, CHINA

Manufacturer name or trade mark:



Test object: Aluminium wheel for Passenger-car trailer

Model: 10564-1455
 Wheel type: 10564
 Wheel size: 14X5.5J
 Kind of centering*: hub centering (Ø 67.1 mm)
 Fixing hole Ø*: Ø 15 mm
 Attachment flange : ca. Ø 140 mm
 Fixing material*: Bolts or Nuts, SR12 spherical or 60 conical
Wheel construction :
 Construction*: Casting wheel
 Material : n.a.
 Heat treatment : n.a.
 Hardness : n.a.

(* data from drawing)

Test Sample No.	received on [date]	Wheel indication	PCD / no. of holes [mm]	Hub hole Ø [mm]	Offset [mm]	Designated wheel load [kg]	Circumference [mm]	Wheel surface treatment
1.1 - 1.6	2021-Nov-19	10564; 60 conical	112/5	67.1	30	950	2032	Machine face
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Remarks and Notes: test sample wheels are 60 conical.

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Test sample pictures:Test sample wheel

side view



front view



back view

**Remarks and Notes:**

The test samples were fully processed. The weight of one test sample was 7.13 kg.

Indication (on test sample)

	Outside	Inside
Customer's code (brand/trademark)	---	FORLONG
Wheel type	---	10564
Wheel size	---	14X5.5J
Offset	---	ET30
P.C.D.	---	---
Manufacturer's indication	---	---
Production date	---	12/20 (month / year)
Manufacturer's country	---	---
Other indications	---	950KG; C 18; JWL; VIA; M ?B4; H;

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Strength Test:

Test Standard: § 30 StVZO (Regulations authorising the use of vehicles for road traffic)
Guidelines for the testing and inspection of custom wheels for motor vehicles and their trailers

UN Regulation No.124
Uniform provisions concerning the approval of wheels for passenger cars and their trailers

Test result of the rotating bending test (bending fatigue test)

- Rotating bending test / bending fatigue test 66.000 cycles at 75% $M_{b_{max}}$
- Rotating bending test / bending fatigue test 690.000 cycles at 50% $M_{b_{max}}$

Test sample No.	Wheel load [kgf]	Test bending moment [Nm]	Number of bending cycles	Tire circumference [mm]	Dynamic tire radius [m]	Bolt / nut fastening torque [Nm]		Result rotating bending test	Sample date [mm/yy]
						before	after		
1.1	950	4,490	66,000	2,032	0.324	180	180	complied	12/20
1.2	950	2,994	690,000	2,032	0.324	180	180	complied	12/20

The wheels concluded the rotating bending test with the testing parameters and results listed in the table.

Test sample No.1.1 pictures:

Front side



Rear side



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Test sample No.1.2 pictures:

Front side



Rear side



Test result of the radial load fatigue test (Rolling test)

- Radial load fatigue test / rim rolling test 2.000 km at factor for safety S = 2,0

Test sample No.	Wheel load [kg]	Radial test load [Nmf]	Test tire size	Tire pressure [bar]	Test speed [km/h]	Test duration [km]	Bolt / nut fastening torque [Nm]		Result radial load fatigue test	Sample date [mm/yy]
							before	after		
1.3	950	18,639	195R14C	4.5	60	2,000	180	180	complied	12/20

The wheel concluded the radial load fatigue test with the testing parameters and results listed in the table.

Tested sample No.1.3 pictures:

Front side



Rear side



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Test result of the impact resistance test

Test Standard: § 30 StVZO (Regulations authorising the use of vehicles for road traffic)
 Guidelines for the testing and inspection of custom wheels for motor vehicles and their trailers

impact test according to ISO 7141:2005
Road vehicles – Light alloy wheels – Impact test
 - Impact resistance test at drop angle 13°

Test setup / preparation:

Wheel load [kgf]	Drop weight [kg]	Test tire size	Tire pressure [bar]	Drop height [mm]	Striker alignment [mm]	Bolt / nut fastening torque [Nm]
950	750	185R14C	2.0	230 ±2	25 ±1	180

Test sample No.	*Impact locations			Compliance status					Bolt / nut fastening torque after test [Nm]	Result impact resistance test	Sample date [mm/yy]
	1	2	3	marked cracks: internal faces	external faces	impact location	separated central rim portion (disc)	loss of all tire pressure within 1 min.			
1.4	OK	---	---	NO	NO	Yes	NO	NO	180	complied	12/20
1.4	---	OK	---	NO	NO	Yes	NO	NO	180	complied	12/20

*Impact locations: 1 = nave connection (spoke)
 2 = between two connections (ventilation opening), taken into account the position of the valve hole
 3 = not applicable here

The wheels concluded the impact resistance test with the testing parameters and results listed in the table.

Tested sample no. 1.4 pictures:

Front side



Rear side



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Impact locations 1:



Impact locations 2:



Material Test:

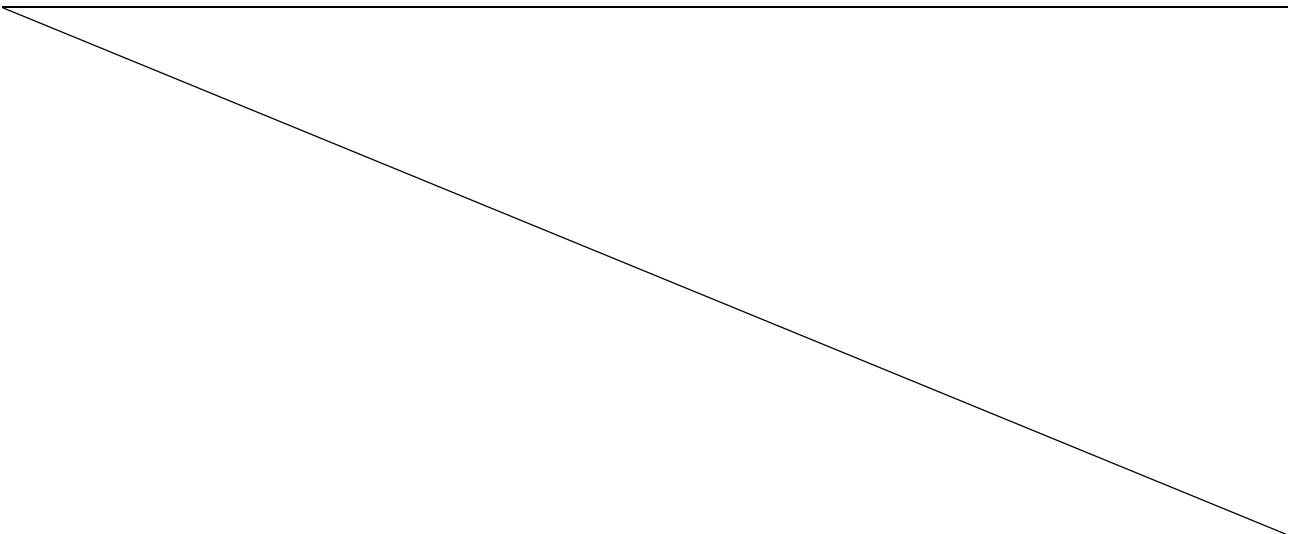
- N/A –

Applicable documents:

- | | |
|----------------------------|---|
| - Wheel drawing no.: | FL-ALU-14.55.5.112..30.60° on 06.11.2019
with revision: n.a. |
| - Accessories drawing no.: | - N/A - |
| - Wheel description: | - N/A – |

Remarks and Notes: n.a.

-N/A-



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Place of testing and date:

The tests of the wheels have been performed at the testing laboratory of Qingdao Product Quality Supervision and Testing Research Center from November 19th, 2021 till November 28th, 2021

The test equipment used is in compliance with the requirements stated in the test standards. Measurement uncertainties are taken into account when evaluating the test conditions and results.

No.	Make	Type	SN	Calibration Date	Expired Date	Specifications
Bending fatigue test machine						
1	Tianjin jiurong	CFT-3	B2016	2021-June-06	2022-June-05	0-12 kN.m; U=0.20% (k=2); Max tolerance 0.5%.
Rim rolling test machine						
2	Tianjin jiurong	LSC-2NG	Y04-785	2021-Aug-23	2022-Aug-22	0-150 kN; U=0.4%(k=2); Max tolerance 0.8% 0-120 km/h; U=0.2%(k=2); Max tolerance 0.8%
Torque wrench						
3	Germany	0503TQ4-200N	442934	2021-Aug-09	2022-Aug-08	40~200 N.m, Level 4. Max tolerance 3.7%, repeatability max 0.7%
Air pressure meter						
4	ANCN	ACD-200	J05-252	2021-Aug-10	2022-Aug-09	0~1 Mpa, Level 0.5.
Impact test machine						
5	Tianjin jiurong	ITM-4	ZX-008	2021-June-06	2022-June-05	Max Mass=1000 kg; U=1.0%(k=2); Displacement 7.32mm U=0.08mm (k=2); Drop height 230mm U=0.08mm (k=2); Max tolerance 1.53%.

Statement of conformity

The test results and observations indicated in this test report refer exclusively to the samples tested. It is not permitted to transfer the results to other systems or configurations.

Publication and/or duplication of this test report in extract is not permitted without permission of the test laboratory. The test laboratory does not assume any liability to any party for any loss, expense or damage occasioned by the use of this report. Any use of the laboratories name or one of its marks for the sale or advertisement of the tested material, product or service must first be approved in writing by the test laboratory.

This report by itself does not imply that the material, product, or service is or has ever been under a TÜV certification program nor does it prove that the manufacturer has a Quality Management System to guarantee constant production quality.

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Special notice:

This test report is not a strength certificate and must not be used for vehicle inspections according to paragraph § 19/21 StVZO of the German Road Traffic Licensing Regulations respectively for the use of these wheels in public traffic.

By the time of the tests technical documentation respectively information about a valid QM Certificate for to issue Teilegutachten and/or ABE/ECE applications were not available.

The Test Report comprises pages 1 to 8.

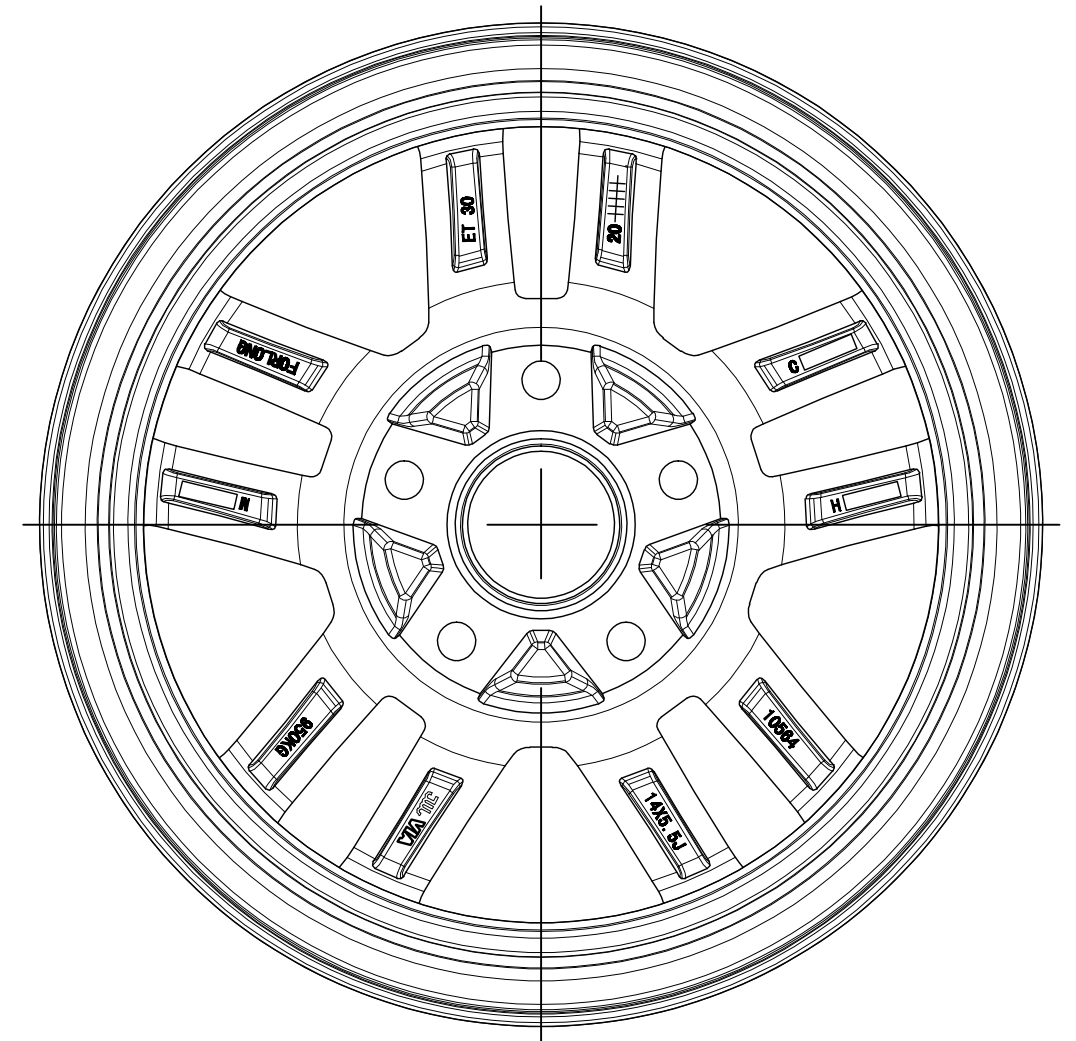
Shanghai, December 01st, 2021

Michael Wang

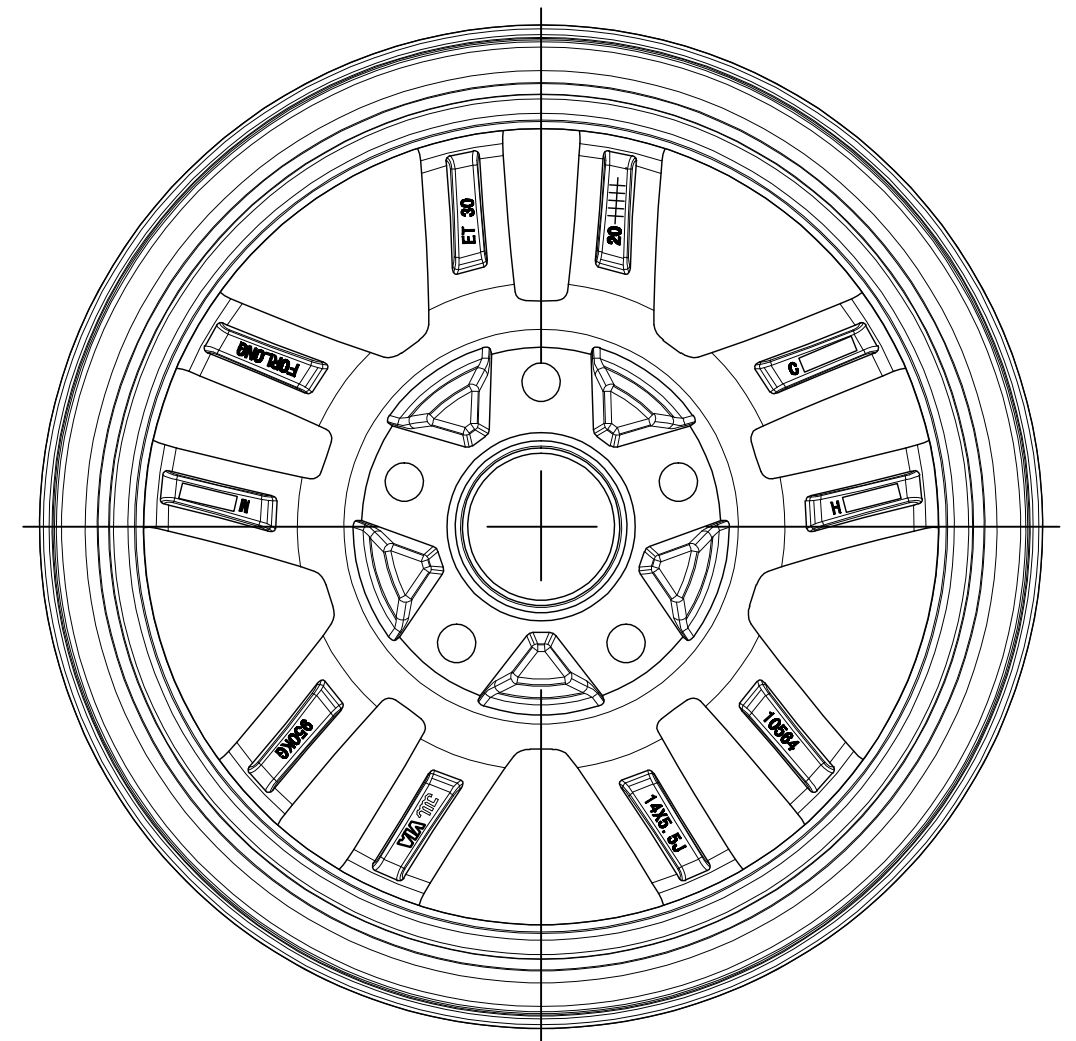
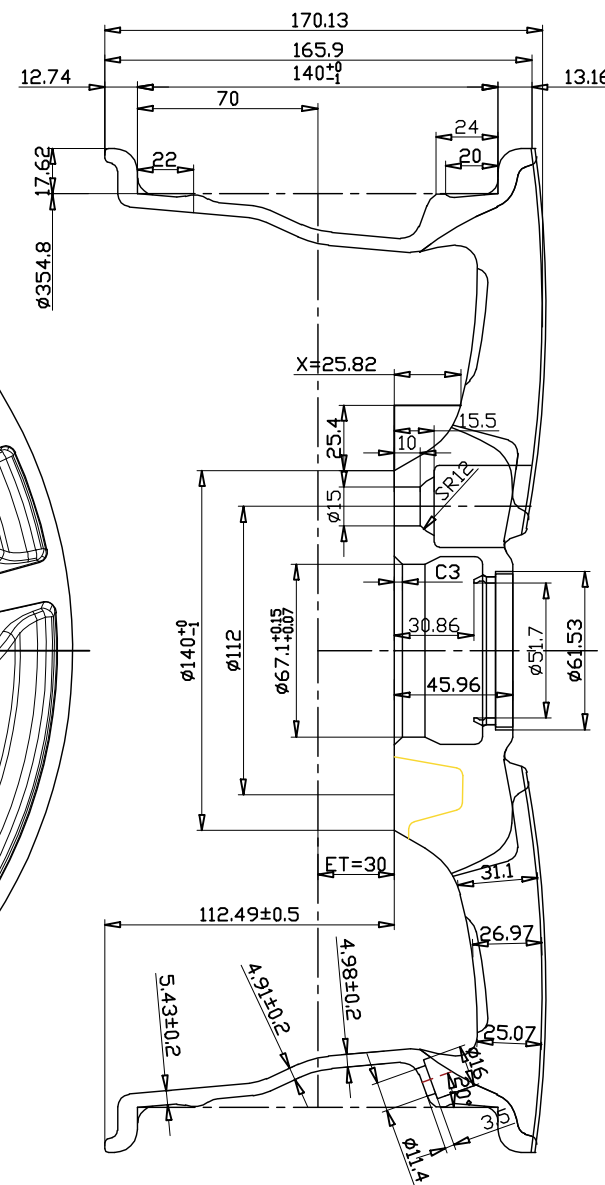
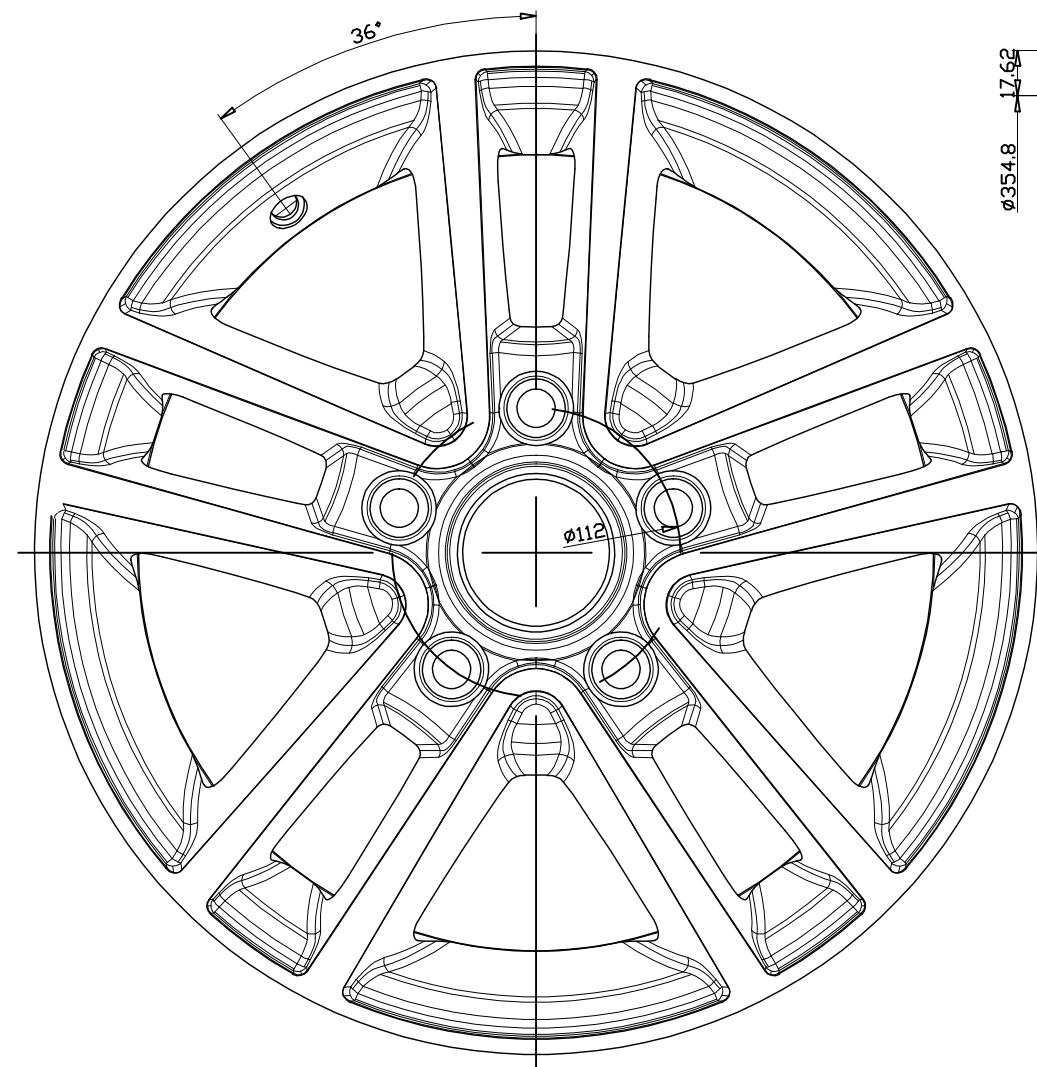


Michael Wang
Project Engineer | Mobility Greater China

RIF.N° FL-ALU-14.55.5.112.30.60°	
DATA 06.11.2019	FIRMA SU



PER APPROVAZIONE FOR APPROVAL	
RIF. N° FL-ALU-14.55.5.112.30.R12	
DATA 06.11.2019	FIRMA SU



10564-1455
ET:30
PCD :5X112
CB Ø67.1
重量: 7KG
载重: 950KG

