

THE NETHERLANDS
(N E D E R L A N D)

COMMUNICATION

Concerning⁽¹⁾:

- approval granted
- approval extended
- approval refused
- approval withdrawn
- production definitely discontinued

of a type of tyre with regard to 'rolling sound emission level' and/or 'adhesion performance on wet surfaces' and/or 'rolling resistance' pursuant to Regulation number 117.

Approval number: E4-117R-029176 S2WR2

Extension number: 04

1. Manufacturer's name and address : Shandong Huasheng Rubber Co.,Ltd.
Daozhuang Industry Zone,Guangrao County
Dongying City,Shandong Province
257336 China(PROC)
2. If applicable, name and address of
manufacturer's representative : Not applicable
3. 'Tyre class' and 'category of use' of
the type of tyre : ~~Class C1/Class C2/ Class C3~~
Normal/ ~~snow~~(snow tyre for use in serve
conditios)/special
- 3.1. Snow tyre for use in severe snow
conditions : yes/no⁽¹⁾
- 3.2. Traction tyre : yes/no⁽¹⁾
4. Tyre type designation :

- 4.1. Brand name(s)/trademark(s) of the type of tyre : AENEAS or FULUTONG or FURUITONG or HABILEAD or HONGTU or HUASHENG or HUMSUNG or JINJI or JINXIN or KAPSEN or ROADBOSS or TAITONG or TERRAKING or TYSONKING or UNITED or DAILYWAY or DOUBLE ROAD or DOLLUP or MESHILINE or TANZA or SATOYA or TORYO or TOYOMOTO or TOURTRACK or BUNGRAH TIRES or SOLACHEY or A-ONE or ORNET or XCEED or IPLAS or TEXXAN or MILEWAY or ROOGOO or KETER or EQUINOX or SHOUHANG or ADDO INDIA or LAZZA or ZEETEX or TOLEDO or CARGOFORCE or ALTAIRE or FIRELION or TIREBOT or SUPERIA or STUD or GRAND or ETERNITY or RODEO
- 4.2. Trade description(s)/Commercial name(s) of the type of tyre : HS268 or OR106 or OR306XLECO or UT652 or DL668 or DR801 or H585 or AVHS222 or SU-022 or TRANS201 or FOREST MS2 or LLF08 or SY855 or A660 or IP01 or OR306XL or TX222 or XD106 or XD106ECO or XD206 or M501 or XD306XLECO or RG268 or KTMA1 or ROADGRIP999 or LZ301 or ZOM10 vfm or DR308 or CAC880 or AP220 or FA18 or SU500 or MH5200SUPER or OR206 or EQ268 or TEC444 or OR303XLECO or KT268 or TG118 or GT168 or TV118 or ST101 or NXA01 or NA02 or CA02 or AF18 or JS268 or KR168 or AVHS111 or LX-A86 or T025 or ZH802 or RM268 or ROADGRIP333 or TT78 or TS505 or KA701 or LM201 or RSL7 or OD901 or HMT86 or TR08 or UF268 or ST230 or DH58 or AJ588 or XD862 or OR862 or MM118 or NU702 or SA695 or AIM100 or SS268 or SN116 or SH926 or CGR888 or SP268 or AM638 or RT502 or MH8500 or EGS690 or GS602 or CZ103 or CS716 or GD268 or EXA777* or RT201
5. Technical service and, where applicable, test laboratory approved for purposes of approval or of verification of conformity tests : TÜV SÜD Auto Service GmbH
Westendstraße 199
D-80686 München
6. Performance(s) approved : sound level at (stage 1/stage 2)⁽¹⁾, wet adhesion level, rolling resistance level (stage 1/stage 2)⁽¹⁾

- 6.1. Sound level of the representative tyre size(13R22.5 154/151L), see Paragraph 2.5. of Regulation number 117, as per item 7. of the test report in the appendix 1 to Annex 3: 72 dB(A) at reference speed of 70/80 km/h⁽¹⁾.
- 6.2. Wet adhesion level of the representative tyre size(13R22.5 154/151L), see Paragraph 2.5. of Regulation number 117, as per item 7. of the test report in the appendix to Annex 5: 1.118(G) using the vehicle or ~~trailer~~-method⁽¹⁾.
- 6.3. Rolling resistance level of the representative tyre size(6.50R16LT 110/105K), see paragraph 2.5. of Regulation number 117, as per item 7. of the test report in the appendix 3 to Annex 6: 6.47 N/kN.
- 6.4. Snow grip level of the representative tyre size, see paragraph 2.5. of Regulation No. 117, as per item 7. of the test report in the appendix⁽²⁾ to Annex 7: ... (Snow grip index) using the brake on snow method⁽¹⁾, spin traction method⁽¹⁾ or acceleration method⁽¹⁾.
7. Number of report issued by that service : 86-R117-3500/18-00;
16-00669-CX-SHA-01
8. Date of report issued by that service : 2018-10-15;
2018-12-13
9. Reason(s) of extension (if applicable) : Additional wet grip testing
Change of technical service
10. Any remarks : ---
11. Place : Zoetermeer
12. Date : 24-DEC-2018
13. Signature :
14. Annexed to this communication are:
- 14.1. A list of documents in the approval file deposited at the Type Approval Authorities having delivered the approval and which can be obtained upon request⁽³⁾.
- 14.2. A list of tyre size designations: Specify for each brand name/trademark and/or each trade description/Commercial name the list of tyre size designations, adding in case of Class C1 tyres the mark 'reinforced' (or 'extra load') or the speed symbol of snow tyres or in the case of tyres of Classes C2 and C3, the mark 'traction', if so required by paragraph 3.1. of this Regulation.

⁽¹⁾ Strike out what does not apply.

⁽²⁾ Appendix 2 for C1 and C2 tyres.

Appendix 3 for C3 tyres.

⁽³⁾ In the case of 'snow tyre for use in severe snow conditions' a test report according to Appendix 2 of Annex 7 shall be submitted.



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Type: HS268

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TECHNICAL REPORT

No.: 16-00669-CX-SHA-01

Uniform provisions concerning the approval of pneumatic tyres with regard to rolling sound emissions and/or to adhesion on wet surfaces and/or to rolling resistance

ECE R117

Including all amendments up to

02 Supplement 9

I. General information

0.1. Trade marks:

AENEAS or FULUTONG or FURUITONG or HABLEAD or HONGTU or HUASHENG or HUMSUNG or JINJI or JINXIN or KAPSEN or ROADBOSS or TAITONG or TERRAKING or TYSONKING or UNITED or DAILYWAY or DOUBLE ROAD or DOLLUP or MESHILINE or TANZA or SATOYA or TORYO or TOYOMOTO or TOURTRACK or BUNGRAH TIRES or SOLACHEY or A-ONE or ORNET or XCEED or IPLAS or TEXXAN or MILEWAY or ROOGOO or KETER or EQUINOX or SHOUHANG or ADDO INDIA or LAZZA or ZEETEX or TOLEDO or CAR-GOFORCE or ALTAIRE or FIRELION or TIRE-BOT or SUPERIA or STUD or GRAND or ETERNITY or RODEO

0.2. Tread patterns:

HS268 or OR106 or OR306XLECO or UT652 or DL668 or DR801 or H585 or AVHS222 or SU-022 or TRANS201 or FOREST MS2 or LLF08 or SY855 or A660 or IP01 or OR306XL or TX222 or XD106 or XD106ECO or XD206 or M501 or XD306XLECO or RG268 or KTMA1 or ROAD-GRIP999 or LZ301 or ZOM10 vfm or DR308 or CAC880 or AP220 or FA18 or SU500 or MH5200SUPER or OR206 or EQ268 or TEC444 or OR303XLECO or KT268 or TG118 or GT168 or TV118 or ST101 or NXA01 or NA02 or CA02 or AF18 or JS268 or KR168 or AVHS111 or LX-A86 or T025 or ZH802 or RM268 or ROAD-GRIP333 or TT78 or TS505 or KA701 or LM201 or RSL7 or OD901 or HMT86 or TR08 or UF268 or ST230 or DH58 or AJ588 or XD862 or OR862 or MM118 or NU702 or



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SA695 or AIM100 or SS268 or SN116 or SH926
or CGR888 or SP268 or AM638 or RT502 or
MH8500 or EGS690 or GS602 or CZ103 or
CS716 or GD268 or EXA777* or RT201

- 0.3. Manufacturer's name and address: Shandong Huasheng Rubber Co.,Ltd.
Daozhuang Industry Zone,Guangrao County
Dongying City,Shandong Province
257336 China(PROC)
- 0.4. Name and address of representative: Not applicable
- 0.5. Tyre class: G1/G2/C3
- 0.6. Category of use: Normal/snow(snow tyre for use in severe snow-
conditions)/special

II. Worst case selection and test result

1. Rolling sound emission: 13R22.5 154/151L 72 dB(A)
2. Wet grip: 13R22.5 154/151L 1.118 G
3. Rolling resistance: 6.50R16LT 110/105K 6.47 N/kN
4. Snow grip performance: Not applicable

III Test record

1. Rolling sound emission

1.1. Test Tyre Details

- 1.1.1. Trade mark: KAPSEN
- 1.1.2. Tread pattern: HS268
- 1.1.3. Plies
Tread: 5 Steel
Side wall: 1 Steel
- 1.1.4. Tyre-size designation: 13R22.5
- 1.1.5. Category of use: Normal/snow(snow tyre for use in severe snow-
conditions)/temporary use
- 1.1.6. Special protective band: Without
- 1.1.7. Structure: Diagonal/bias-belted/radial/run-flat tyre

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- 1.1.8. Speed category symbol: Nominal: L, additional: ---
- 1.1.9. Load-capacity indices
Corresponding to nominal speed: Single: 154 , twinned: 151
Corresponding to additional speed: Single: --- , twinned: ---
- 1.1.10. Ply-rating number of diagonal(bias-ply) tyres: Not applicable
- 1.1.11. Indication: Tubeless/tube type
- 1.1.12. Indication: Standard/reinforced/T-type temporary use spare tyre
- 1.1.13. Date of manufacture: ---

1.2. Test Details

- 1.2.1. Test Date: 2016-04-06 (yyyy-mm-dd)
- 1.2.2. Test Vehicle (Name/Manufacture.): DONGFENG MOTOR COMPANY LTD., DFL1160BX5
- 1.2.3. Test vehicle wheelbase: 4700 mm
- 1.2.4. Location of test track: MTPG, Beijing, China
- 1.2.4.1. Date of track certification to ISO 10844:2011: 2015-11-09 (yyyy-mm-dd)
- 1.2.4.2. Issued by: Highway Inspection Center of China Ministry of Communications
- 1.2.4.3. Method of certification: Residual void content, Sound absorption coefficient, Texture depth
- 1.2.5. Reference inflation pressure: 850 kPa

1.2.6. Test Data:

	Front left	Front right	Rear left	Rear right
Test mass (kg)	2717.5	2717.5	2932.5	2932.5
Tyre load index (%)	72.5%	72.5%	78.2%	78.2%
Inflation pressure (cold) (kPa)	610	610	670	670

- 1.2.7. Test rim width code: 9.75 x 22.5
- 1.2.8. Temperature measurement sensor type: NK5919(air)
HT-806 (track)

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1.2.9. Valid test results:

Run No.	Test speed km/h	Direction of run	Sound level left ¹ measured dB(A)	Sound level right ¹ measured dB(A)	Air temp. °C	Track temp. °C	Sound level left ¹ corrected dB(A)	Sound level right ¹ corrected dB(A)	Comments
1	62.50	S-N	71.2	70.5	15.0	17.0	N.A.	N.A.	---
2	64.40	S-N	71.9	71.4	15.2	18.1	N.A.	N.A.	
3	66.30	S-N	71.8	72.1	16.3	16.5	N.A.	N.A.	
4	68.00	S-N	72.1	71.5	15.9	17.4	N.A.	N.A.	
5	72.30	N-S	74.1	74.0	15.5	17.4	N.A.	N.A.	
6	74.10	N-S	74.0	74.5	16.1	16.7	N.A.	N.A.	
7	76.70	N-S	75.3	74.6	16.0	17.0	N.A.	N.A.	
8	78.20	N-S	75.2	74.6	15.2	17.0	N.A.	N.A.	

¹ Relative to the vehicle

1.2.10. Regression line slope: 44.71 dB(A)/decade

1.2.11. Rolling noise measurements: 73.0 dB(A)

1.2.12. Sound level after temperature correction according to paragraph 4.3 of Annex 3: ---

1.2.13. Final result according to paragraph 4.4 and 4.5 of Annex3: 72 dB(A)

1.3 Remark:

The test data in item III.-1.2. roots in approval with No.: E4-117R-029176 S2WR2 Ext.03 and the relevant test report with No.86-R117-3500/18-00 was issued by TÜV Rheinland Kraftfahrt GmbH.

2. Wet grip

2.1. Test Tyre Details

2.1.1. Trade mark: KAPSEN

2.1.2. Tread pattern: HS268

2.1.3. Plies
Tread: 5 Steel
Side wall: 1 Steel

2.1.4. Tyre-size designation: 13R22.5

2.1.5. Category of use: Normal/snow(snow tyre for use in severe snow-conditions)/temporary use

2.1.6. Special protective band: Without

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- 2.1.7. Structure: Diagonal/~~bias-belted~~/radial/run-flat tyre
- 2.1.8. Speed category symbol: Nominal: L, additional: ---
- 2.1.9. Load-capacity indices:
Corresponding to nominal speed: Single: 154, twinned: 151
Corresponding to additional speed: Single: ---, twinned: ---
- 2.1.10. Ply-rating number of diagonal(bias-ply) tyres: Not applicable
- 2.1.11. Indication: Tubeless/~~tube~~-type
- 2.1.12. Indication: Standard/~~reinforced~~/T-type temporary use spare tyre
- 2.1.13. Date of manufacture: 4818

2.2. Test Details

- 2.2.1. Test method: Using vehicle method
- 2.2.2. Test lab and address: CATARC Yancheng Automotive Proving Ground Co., Ltd.
Crossing of S332&G228, Dafeng Port
Economic Zone, Yancheng, Jiangsu, China

2.2.3. Test Detailed Information and data:

Driver	Tang shuguo		Test Date		2018-12-02	
Track:	Water depth(mm):1.3 mm		Test Vehicle Brand		JAC	
	BPN:50		Test Vehicle Model		Gallop	
No.	SRTT(before)		Candidate Tyre(1 of 2)		SRTT(after)	
Brand	MICHELIN		KAPSEN		MICHELIN	
Pattern	SRTT		HS268		SRTT	
Size	315/70R22.5		13R22.5		315/70R22.5	
Service description	154/150		154/151L		154/150	
Rim	9.00*22.5		9.75*22.5		9.00*22.5	
Front axle pressure(kPa)	630	630	595	595	630	630
Rear axle pressure(kPa)	841	830	795	784	841	830
Front axle load(kg)	Left	2781	Left	2781	Left	2781
	Right	2708	Right	2708	Right	2708
Rear axle load(kg)	Left	3553	Left	3553	Left	3553
	Right	3515	Right	3515	Right	3515
Wet surface temp °C	14.7		15.3		15.7	
Ambient temp °C	17.6		18.0		18.6	

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		Braking distance(m)	Average deceleration(m/s ²)	Braking distance(m)	Average deceleration(m/s ²)	Braking distance(m)	Average deceleration (m/s ²)
Measurement	1	24.1	5.12	21.2	5.82	24.3	5.08
	2	23.9	5.17	21.9	5.64	24.0	5.14
	3	23.6	5.23	21.8	5.66	23.4	5.28
	4	24.5	5.04	21.3	5.80	23.8	5.19
	5	24.0	5.14	21.0	5.88	24.3	5.08
	6	24.2	5.10	21.7	5.69	24.0	5.14
Average AD(m/s ²)		24.05	5.13	21.48	5.75	23.97	5.15
Standard deviation(m/s ²)		0.28	0.06	0.33	0.09	0.31	0.07
Validation of results Coeff of variation(<3%)		1.145%		1.557%		1.301%	
BFC(R)		0.523		0.524		0.525	
BFC(T)		0.523		0.586		0.525	
Wet Grip Index(G)		-		1.118		-	
Remark		The test sequence was R1-T1-T2-R2, using this tyre as T1 in the sequence.					

2.2.4. Final Result: 1.118

3. Rolling Resistance

3.1. Test Tyre Details

3.1.1. Trade mark: KAPSEN

3.1.2. Tread pattern: HS268

3.1.3. Plies
Tread: 4 Steel
Side wall: 1 Steel

3.1.4. Tyre-size designation: 6.50R16LT

3.1.5. Category of use: Normal/snow(snow tyre for use in severe snow conditions)/temporary use

3.1.6. Special protective band: Without

3.1.7. Structure: Diagonal/bias-belted/radial/run-flat tyre

3.1.8. Speed category symbol: Nominal: K, additional: ---

3.1.9. Load-capacity indices
Corresponding to nominal speed: Single: 110, twinned: 105
Corresponding to additional speed: Single: ---, twinned: ---

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- 3.1.10. Ply-rating number of diagonal(bias-ply) tyres: Not applicable
- 3.1.11. Indication: Tubeless/tube type
- 3.1.12. Indication: Standard/reinforced/T-type temporary use spare tyre
- 3.1.13. Date of manufacture: 0116

3.2. Test Record

- 3.2.1. Date of test: 2016-01-29 (yyyy-mm-dd)
- 3.2.2. Test Lab and address: TQSIC, Beijing, China
- 3.2.3. Test Conditions and Test Method

Test Method: Force method

Drum Diameter/Drum Surface: 1.708 m / Smooth steel

Test Pressure: 670 kPa

Reference ambient temperature: 20-30 °C

Test speed: 80 km/h

Test Load (85% of maximum load capacity): 8835.8 N

Test Rim Size/Material: 4.50 x 16/ light alloy

Test Machine: TJR-RR-TB(Y)

Time for Thermal Conditioning: More than 6 Hours

Time for warm up:	Forward rolling	150 minutes
	Reverse rolling	30 minutes

- 3.2.4. Test Condition Information and test results

The pressure before test: 670 kPa

Test Point	Forward Rolling	Reverse Rolling
Test Speed	80.2 km/h	-80.1 km/h
Ambient Temperature	23.33 °C	23.86 °C
Loaded Radius (r _L)	359.26 mm	359.33 mm

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Test Load	8835.41 N	8835.32 N
Spindle force	-20.01 N	79.97 N
Distance from the tyre axis to the drum outer surface under steady state conditions during skim test (r_L)	376.70 mm	376.75 mm
Skim Test Load	397.77 N	397.92 N
Spindle force during skim test	-5.71 N	11.13 N

3.2.5. Rolling Resistance Test Result

Initial value (or average in the case of more than 1): 6.666 N/ kN
Temperature correction: 6.616 N/kN
Temperature and drum diameter correction: 6.47 N/kN
Limited value for C3(Stage I+ II): 6.5 N/kN
Remark: ---

3.3 Remark:

The test data in item III.-3.2. roots in approval with No.: E4-117R-029176 S2WR2 Ext.03 and the relevant test report with No.86-R117-3500/18-00 was issued by TÜV Rheinland Kraftfahrt GmbH.

IV. Enclosures

- Annex 1: List of modification
- Information document No. HS268-SWR-04 dated 2018-12-06 (yyyy-mm-dd)



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Type: HS268

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V. Statement of conformity

The information folder as mentioned under No. IV and the type described therein are in compliance with the test specification mentioned above. The worst-case was selected in accordance with document "Preparation of Test Reports".

The test report may be reproduced and published in full and by the client only. It can be reproduced partially with the written permission of the test laboratory only.

TÜV SÜD Auto Service GmbH is designated as Technical Service by:

Approval authority	Country	Registration-number
Kraftfahrt-Bundesamt (KBA)	Germany	KBA-P 00100-10
Vehicle Certification Agency (VCA)	United Kingdom	VCA-TS-006
Approval Authority of the Netherlands (RDW)	The Netherlands	RDWT-082-xx
National Standards Authority of Ireland (NSAI)	Ireland	Technical Service Number: 49
Vehicle Safety Certification Center (VSCC)	Taiwan	DE04-06-2

München, 2018-12-13
(yyyy-mm-dd)



Heng Liu



Technical Report No.:	16-00669-CX-SHA-01	Annex 1
Manufacturer:	Shandong Huasheng Rubber Co.,Ltd.	
Type:	HS268	Page 1 / 1

Annex 1

List of modification

Correction of:

Modification of:

Technical service

Addition of:

Wet grip testing

Deletion of:

APPLICATION FOR EXTENSION APPROVAL OF TYRES WITH
REGARD TO ROLLING SOUND EMISSION AND TO ADHESION ON
WET SURFACES AND TO ROLLING RESISTANCE ACCORDING TO
REGULATION R117, 02 SERIES OF AMENDMENTS

- 1.1. The performance characteristics to be assessed for the tyre type : rolling sound emission level and adhesion performance level on wet surfaces and rolling resistance
- 1.2. Manufacturer's name : Shandong Huasheng Rubber Co.,Ltd.
- 1.3. Name and address of applicant : Shandong Huasheng Rubber Co.,Ltd.
Daozhuang Industry Zone,Guangrao County
Dongying City,Shandong Province
257336
China(PROC)
- 1.4. Address(es) of manufacturing plant(s) : The same as the applicant
- 1.5. Brand name(s)/trademark(s), trade description(s)/commercial name(s) : (trade mark)AENEAS or FULUTONG or FURUITONG or HABILEAD or HONGTU or HUASHENG or HUMSUNG or JINJI or JINXIN or KAPSEN or ROADBOSS or TAITONG or TERRAKING or TYSONKING or UNITED or DAILYWAY or DOUBLE ROAD or DOLLUP or MESHILINE or TANZA or SATOYA or TORYO or TOYOMOTO or TOURTRACK or BUNGRAH TIRES or SOLACHEY or A-ONE or ORNET or XCEED or IPLAS or TEXXAN or MILEWAY or ROOGOO or KETER or EQUINOX or SHOUHANG or ADDO INDIA or LAZZA or ZEETEX or TOLEDO or CARGOFORCE or ALTAIRE or FIRELION or TIREBOT or SUPERIA or STUD or GRAND or ETERNITY or RODEO
(tread pattern)HS268 or OR106 or OR306XLECO or UT652 or DL668 or DR801 or H585 or AVHS222 or SU-022 or TRANS201 or FOREST MS2 or LLF08 or SY855 or A660 or IP01 or OR306XL or TX222 or XD106 or XD106ECO or XD206 or M501 or XD306XLECO or RG268 or KTMA1 or ROADGRIP999 or LZ301 or ZOM10 vfm or DR308 or CAC880 or AP220 or FA18 or SU500 or MH5200SUPER or OR206 or EQ268 or TEC444 or OR303XLECO or KT268 or TG118 or GT168 or TV118 or ST101 or NXA01 or NA02 or CA02 or AF18 or JS268 or KR168 or AVHS111 or LX-A86 or T025 or ZH802 or RM268 or ROADGRIP333 or TT78 or TS505 or KA701 or LM201 or RSL7 or OD901 or HMT86 or TR08 or UF268 or ST230 or DH58 or AJ588 or XD862 or OR862 or MM118 or NU702 or SA695 or AIM100 or SS268 or SN116 or SH926 or CGR888 or SP268 or AM638 or RT502 or MH8500 or EGS690 or GS602 or CZ103 or CS716 or GD268 or EXA777* or RT201
- 1.6. Tyre class : ~~Class C1/ Class C2~~/Class C3

Information Document: HS268-SWR-04

- 1.6.1. Section width range for class C1 tyres : Not applicable
- 1.7. Tyre structure : ~~Diagonal / Bias belted~~ / Radial*
- 1.8. State whether
 - 1.8.1 For Class C1 tyres
 - 1.8.1.1 Reinforced (or extra load) in case of approval with regard to rolling sound emission level : Not applicable
 - 1.8.1.2 Speed category symbol "Q" or below (excluding "H") or "R" and above (including "H") in case of "snow" tyres for approval with regard to adhesion on wet surfaces : Not applicable
 - 1.8.2 For Classes C2 and C3 tyres
 - 1.8.2.1 M+S marked in case of approval with regard to rolling sound emission level at stage 1 : Not applicable
 - 1.8.2.2 Traction in case of approval with regard to rolling sound emission level at stage 2 : Yes/No
- 1.9. Category of use : Normal / ~~Special / Snow~~ (Snow tyre for use in severe snow conditions)*
- 1.10. A list of tyre size designation covered by this application : See attached "list of tyre sizes" (page 4 and page 5)
- 2.1. Details of major features, with respect to the effects on the performance. (i.e. rolling sound emission level, adhesion on wet surfaces, rolling resistance and snow grip) of the tyres, including the tread pattern, included in the designated range of tyre sizes. This may be drawing, photograph or description, but must be sufficient to allow the type approval authority or technical service to determine whether any subsequent changes to the major features will adversely affect the tyre performance. : See drawing No: Tread pattern

Information Document: HS268-SWR-04

- 2.2. Drawing or photographs of the sidewall, showing the information given in paragraph 3.1.5. above and the approval marking referred to in paragraph 5. : See drawing No : Drawing of the sidewall
- 3.1 Extension reasons : Additional wet grip testing
Change of technical service
- 3.2 Date of the information document : 2018-12-6

We herewith declare that we have not applied and will not apply for approval with another Contracting Party of the ECE for the same type of product.

Manufacture's stamp



This application is accompanied by:

- List of tyre sizes.
- Drawing of tread pattern.
- Drawing of the side wall of the tyre.
- The test report.

LIST OF TYRE SIZES

Brand name or trade mark: AENEAS or FULUTONG or FURUITONG or HABLEAD or HONGTU or HUASHENG or HUMSUNG or JINJI or JINXIN or KAPSEN or ROADBOSS or TAITONG or TERRAKING or TYSONKING or UNITED or DAILYWAY or DOUBLE ROAD or DOLLUP or MESHILINE or TANZA or SATOYA or TORYO or TOYOMOTO or TOURTRACK or BUNGRAH TIRES or SOLACHEY or A-ONE or ORNET or XCEED or IPLAS or TEXXAN or MILEWAY or ROOGOO or KETER or EQUINOX or SHOUHANG or ADDO INDIA or LAZZA or ZEETEX or TOLEDO or CARGOFORCE or ALTAIRE or FIRELION or TIREBOT or SUPERIA or STUD or GRAND or ETERNITY or RODEO

Tread pattern: HS268 or OR106 or OR306XLECO or UT652 or DL668 or DR801 or H585 or AVHS222 or SU-022 or TRANS201 or FOREST MS2 or LLF08 or SY855 or A660 or IP01 or OR306XL or TX222 or XD106 or XD106ECO or XD206 or M501 or XD306XLECO or RG268 or KTMA1 or ROADGRIP999 or LZ301 or ZOM10 vfm or DR308 or CAC880 or AP220 or FA18 or SU500 or MH5200SUPER or OR206 or EQ268 or TEC444 or OR303XLECO or KT268 or TG118 or GT168 or TV118 or ST101 or NXA01 or NA02 or CA02 or AF18 or JS268 or KR168 or AVHS111 or LX-A86 or T025 or ZH802 or RM268 or ROADGRIP333 or TT78 or TS505 or KA701 or LM201 or RSL7 or OD901 or HMT86 or TR08 or UF268 or ST230 or DH58 or AJ588 or XD862 or OR862 or MM118 or NU702 or SA695 or AIM100 or SS268 or SN116 or SH926 or CGR888 or SP268 or AM638 or RT502 or MH8500 or EGS690 or GS602 or CZ103 or CS716 or GD268 or EXA777* or RT201

Size	Approval No.	Limit for rolling sound dB(A) of Stage II	Limit for wet grip index(G)	Limit for rolling resistance coefficient (N/kN) of Stage II	Traction (Yes or no)
13R22.5 154/151L	E4-54R-0038014	73	0.8	6.5	No
315/80R22.5 157/153L	E4-54R-0038015	73	0.8	6.5	No
315/80R22.5 154/151M	E4-54R-0038009	73	0.8	6.5	No
12R22.5 152/149M	E4-54R-0038011	73	0.8	6.5	No
11R22.5 146/143M	E4-54R-0038008	73	0.8	6.5	No
12.00R24 160/157K	E4-54R-0038013	73	0.8	6.5	No
12.00R20 156/153K	E4-54R-0038023	73	0.8	6.5	No
11.00R20 152/149K	E4-54R-0038010	73	0.8	6.5	No
10.00R20 149/146K	E4-54R-0038007	73	0.8	6.5	No
9.00R20 144/142K	E4-54R-0038005	73	0.8	6.5	No
8.25R20 139/137K	E4-54R-0038020	73	0.8	6.5	No
8.25R16LT 128/124K	E4-54R-0038019	73	0.8	6.5	No
8.25R16LT 128/124L	E4-54R-0038230	73	0.8	6.5	No
7.50R16LT 122/118L	E4-54R-0038018	73	0.8	6.5	No
7.00R16LT 118/114K	E4-54R-0038017	73	0.8	6.5	No
7.00R16LT 118/114L	E4-54R-0038231	73	0.8	6.5	No
6.50R16LT 110/105K	E4-54R-0038037	73	0.8	6.5	No
6.50R16LT 110/105L	E4-54R-0038232	73	0.8	6.5	No
295/80R22.5 152/149M	E4-54R-0038012	73	0.8	6.5	No
315/70R22.5 154/150M	E4-54R-0038021	73	0.8	6.5	No
205/75R17.5 124/122M	E4-54R-0038038	73	0.8	6.5	No
215/75R17.5 126/124M	E4-54R-0038028	73	0.8	6.5	No

215/75R17.5 135/133J	E4-54R-0038039	73	0.8	6.5	No
225/70R19.5 128/126M	E4-54R-0038029	73	0.8	6.5	No
235/75R17.5 132/130M	E4-54R-0038030	73	0.8	6.5	No
255/70R22.5 140/137M	E4-54R-0038031	73	0.8	6.5	No
265/70R19.5 140/138M	E4-54R-0038032	73	0.8	6.5	No
275/70R22.5 148/145M	E4-54R-0038024	73	0.8	6.5	No
285/75R24.5 147/144L	E4-54R-0038033	73	0.8	6.5	No
295/75R22.5 146/143L	E4-54R-0038035	73	0.8	6.5	No
11R24.5 149/146M	E4-54R-0038027	73	0.8	6.5	No
12.00R24 156/153K	E4-54R-0038041	73	0.8	6.5	No
12.00R20 154/151K	E4-54R-0038006	73	0.8	6.5	No
7.50R16 124/120K	E4-54R00-21-40819	73	0.8	6.5	No

Remark:

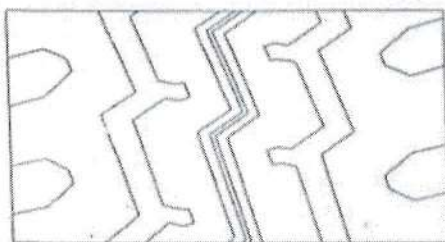
(1)The tread pattern may be named as HS268 or OR106 or OR306XLECO or UT652 or DL668 or DR801 or H585 or AVHS222 or SU-022 or TRANS201 or FOREST MS2 or LLF08 or SY855 or A660 or IP01 or OR306XL or TX222 or XD106 or XD106ECO or XD206 or M501 or XD306XLECO or RG268 or KTMA1 or ROADGRIP999 or LZ301 or ZOM10 vfm or DR308 or CAC880 or AP220 or FA18 or SU500 or MH5200SUPER or OR206 or EQ268 or TEC444 or OR303XLECO or KT268 or TG118 or GT168 or TV118 or ST101 or NXA01 or NA02 or CA02 or AF18 or JS268 or KR168 or AVHS111 or LX-A86 or T025 or ZH802 or RM268 or ROADGRIP333 or TT78 or TS505 or KA701 or LM201 or RSL7 or OD901 or HMT86 or TR08 or UF268 or ST230 or DH58 or AJ588 or XD862 or OR862 or MM118 or NU702 or SA695 or AIM100 or SS268 or SN116 or SH926 or CGR888 or SP268 or AM638 or RT502 or MH8500 or EGS690 or GS602 or CZ103 or CS716 or GD268 or EXA777* or RT201 according to the manufacturer request.

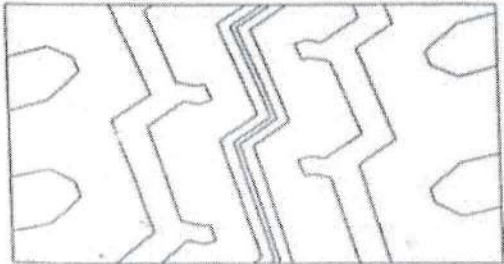
(2)For the tread pattern HS268 or OR106 or OR306XLECO or UT652 or DL668 or DR801 or H585 or AVHS222 or SU-022 or TRANS201 or FOREST MS2 or LLF08 or SY855 or A660 or IP01 or OR306XL or TX222 or XD106 or XD106ECO or XD206 or M501 or XD306XLECO or RG268 or KTMA1 or ROADGRIP999 or LZ301 or ZOM10 vfm or DR308 or CAC880 or AP220 or FA18 or SU500 or MH5200SUPER or OR206 or EQ268 or TEC444 or OR303XLECO or KT268 or TG118 or GT168 or TV118 or ST101 or NXA01 or NA02 or CA02 or AF18 or JS268 or KR168 or AVHS111 or LX-A86 or T025 or ZH802 or RM268 or ROADGRIP333 or TT78 or TS505 or KA701 or LM201 or RSL7 or OD901 or HMT86 or TR08 or UF268 or ST230 or DH58 or AJ588 or XD862 or OR862 or MM118 or NU702 or SA695 or AIM100 or SS268 or SN116 or SH926 or CGR888 or SP268 or AM638 or RT502 or MH8500 or EGS690 or GS602 or CZ103 or CS716 or GD268 or EXA777* or RT201 with completely the same pattern designing.

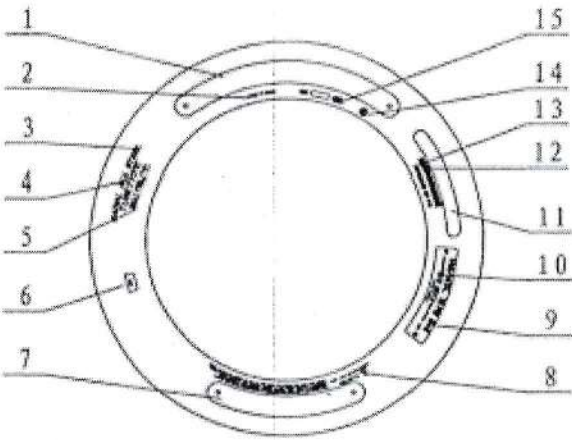
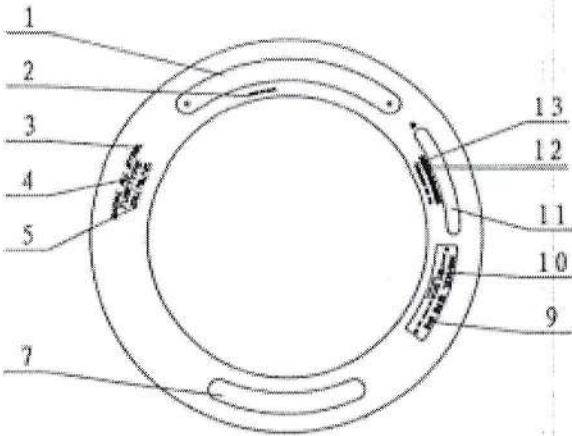
Worst Case Selection for Testing Tire	
Test size for rolling sound:	13R22.5 154/151L
Because of:	Widest
Test size for wet grip:	13R22.5 154/151L
Because of:	The wet grip test result of 13R22.5 154/151L is $G=1.118$, which is 110% above the limit value of ECE-R117(for normal use tyre, the 110% limit value is $G=0.88$)
Test size for rolling resistance:	6.50R16LT 110/105K
Because of:	Lowest load capacity

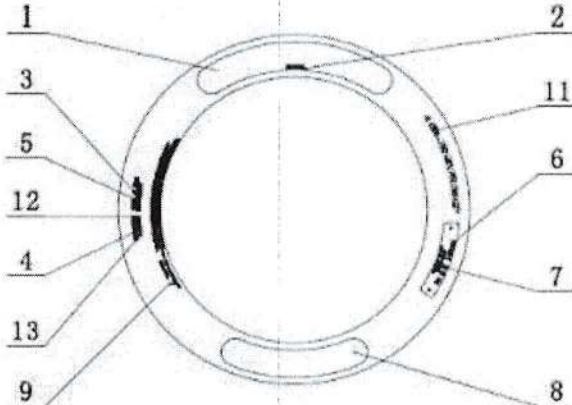
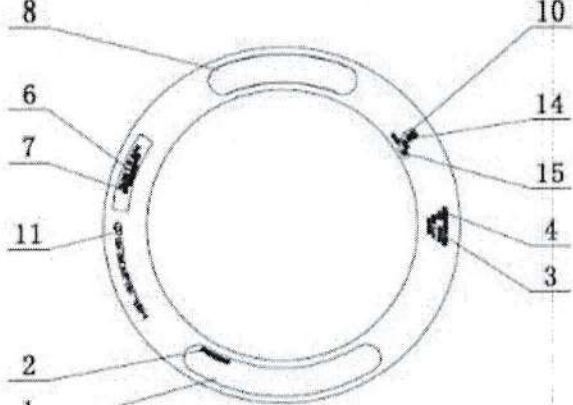
Insert here:

Drawing (and/ or photograph) of the tread pattern including detailed information (pitch number, groove area ratio, width and depth of main/centre shoulder grooves)

Manufacturer name Pattern name	Shandong Huasheng Rubber Co.,Ltd HS268 or OR106 or OR306XLECO or UT652 or DL668 or DR801 or H585 or AVHS222 or SU-022 or TRANS201 or FOREST MS2 or LLF08 or SY855 or A660 or IP01 or OR306XL or TX222 or XD106 or XD106ECO or XD206 or M501 or XD306XLECO or RG268 or KTMA1 or ROADGRIP999 or LZ301 or ZOM10 vfm or DR308 or CAC880 or AP220 or FA18 or SU500 or MH5200SUPER or OR206 or EQ268 or TEC444 or OR303XLECO or KT268 or TG118 or GT168 or TV118 or ST101 or NXA01 or NA02 or CA02 or AF18 or JS268 or KR168 or AVHS111 or LX-A86 or T025 or ZH802 or RM268 or ROADGRIP333 or TT78 or TS505 or KA701 or LM201 or RSL7 or OD901 or HMT86 or TR08 or UF268 or ST230 or DH58 or AJ588 or XD862 or OR862 or MM118 or NU702 or SA695 or AIM100 or SS268 or SN116 or SH926 or CGR888 or SP268 or AM638 or RT502 or MH8500 or EGS690 or GS602 or CZ103 or CS716 or GD268 or EXA777* or RT201 13R22.5 154/151L
Tyre Sizes	
Pitch number Pitch ratio	49 1.04
Void volume [%] Width: main grooves [mm] Depth: center groove [mm] Depth: shoulder groove [mm]	68.10 13.94/13.4/13.94 16.5 11.5
If applicable, for traction tyre: 1. Number of circumferential ribs 2. Number of circumferential block-like elements for each circumferential rib 3. Depth of grooves or sipe elements which separate block-like elements for each circumferential rib [mm]	Not applicable
Pattern	

Manufacturer name Pattern name	Shandong Huasheng Rubber Co.,Ltd HS268 or OR106 or OR306XLECO or UT652 or DL668 or DR801 or H585 or AVHS222 or SU-022 or TRANS201 or FOREST MS2 or LLF08 or SY855 or A660 or IP01 or OR306XL or TX222 or XD106 or XD106ECO or XD206 or M501 or XD306XLECO or RG268 or KTMA1 or ROADGRIP999 or LZ301 or ZOM10 vfm or DR308 or CAC880 or AP220 or FA18 or SU500 or MH5200SUPER or OR206 or EQ268 or TEC444 or OR303XLECO or KT268 or TG118 or GT168 or TV118 or ST101 or NXA01 or NA02 or CA02 or AF18 or JS268 or KR168 or AVHS111 or LX-A86 or T025 or ZH802 or RM268 or ROADGRIP333 or TT78 or TS505 or KA701 or LM201 or RSL7 or OD901 or HMT86 or TR08 or UF268 or ST230 or DH58 or AJ588 or XD862 or OR862 or MM118 or NU702 or SA695 or AIM100 or SS268 or SN116 or SH926 or CGR888 or SP268 or AM638 or RT502 or MH8500 or EGS690 or GS602 or CZ103 or CS716 or GD268 or EXA777* or RT201
Tyre Sizes	6.50R16LT 110/105K
Pitch number	51
Pitch ratio	1.21
Void volume [%]	69.2
Width: main grooves [mm]	8.4
Depth: center groove [mm]	9.5
Depth: shoulder groove [mm]	10.5
If applicable, for traction tyre: 1. Number of circumferential ribs 2. Number of circumferential block-like elements for each circumferential rib 3. Depth of grooves or sipe elements which separate block-like elements for each circumferential rib [mm]	Not applicable
Pattern	

Drawing of the tyre sidewall	
Tyre Size	: 13R22.5 154/151L
 Upper mold	 Lower mold
1.TRADE MARK	1.TRADE MARK
2.MADE IN CHINA	2.MADE IN CHINA
3.RADIAL ALL STEEL	3.RADIAL ALL STEEL
4.TUBELESS	4.TUBELESS
5.TREAD 5 STEEL PLIES SIDEWALL 1 STEEL PLY	5.TREAD 5 STEEL PLIES SIDEWALL 1 STEEL PLY
6."CCC"	7.TREAD PATTERN
7.TREAD PATTERN	9.154/151L 18PR
8.SAFETY WARNING	10.MAX LOAD SINGLE8275LBs(3750KG) DUAL 7615LBs(3450KG) AT125PSI(850KPa)COLD LOAD RANGE
9.154/151L 18PR	11.13R22.5
10.MAX LOAD SINGLE8275LBs(3750KG) DUAL 7615LBs(3450KG) AT125PSI(850KPa)COLD LOAD RANGE	12.REGROOVABLE
11.13R22.5	13.STANDARD RIM 9.75
12.REGROOVABLE	
13.STANDARD RIM 9.75	
14.ECE APPROVAL NO.	
15.DATE CODE XXXX	

Drawing of the tyre sidewall	
Tyre Size	: 6.50R16LT 110/105K
 Upper mold	 Lower mold
1.TRADE MARK	1.TRADE MARK
2.MADE IN CHINA	2.MADE IN CHINA
3.RADIAL ALL STEEL	3.RADIAL ALL STEEL
4.TUBE	4.TUBE
5.TREAD 4 STEEL PLYS SIDEWALL 1 STEEL PLY	6.110/105K 12PR
6.110/105K 12PR	7.MAX LOAD SINGLE 1060KG DUAL 925KG AT670KPa(100psi)COLD LOAD RANGE
7.MAX LOAD SINGLE 1060KG DUAL 925KG AT670KPa(100psi)COLD LOAD RANGE	8.TREAD PATTERN
8.TREAD PATTERN	10."CCC"
9.SAFETY WARNING	11.6.50R16LT
11.6.50R16LT	14.ECE APPROVAL NO.
12.REGROOVABLE	15.DATE CODE XXXX
13.STANDARD RIM4.50F	