



THE NETHERLANDS

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- ~~approval withdrawn~~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 ⁽²⁾: **E4*117R02/14*12924*01**Suffix(es) ⁽³⁾: **S2WR2**

1. Manufacturer's name and address : Double Coin Group (Jiang Su) Tyre Co., Ltd.
No.888 North Yishou Road, Chengbei Street,
226500, Rugao city, Jiangsu Province, China (PRC)
2. If applicable, name and address of manufacturer's representative : not applicable
3. "Tyre class" of the type of tyre : ~~Class C1 / Class C2 /~~ Class C3
4. "Category of use" of the type of tyre : ~~normal /~~ snow / ~~special~~
- 4.1. Snow tyre for use in severe snow conditions : yes/~~no~~ ⁽¹⁾
- 4.1.1. Ice grip tyre : ~~yes/~~no ⁽¹⁾
- 4.2. Traction tyre : ~~yes/~~no ⁽¹⁾
5. Tyre structure : ~~diagonal (bias ply) /~~ radial
6. Type of tyre designation :
- 6.1. Brand name(s)/trademark(s) of the type of tyre : DOUBLE COIN; Warrior(Brand names)

Approval number: E4*117R02/14*12924*01

- 6.2. Trade description(s)/Commercial name(s) : RLB468; WD219(Tread pattern names) of the type of tyre
7. Technical service and, where applicable, test laboratory approved for purposes of approval or of verification of conformity tests : TÜV NORD Mobilität GmbH & Co. KG
IFM - Institut für Fahrzeugtechnik und Mobilität
Schönscheidtstr. 28,
D-45307 Essen
8. Performance(s) approved : sound level at (~~stage 1~~/stage 2)⁽¹⁾, wet adhesion level, rolling resistance level (~~stage 1~~/stage 2)⁽¹⁾
- 8.1. Sound level of the representative tyre size, see paragraph 2.7. of this Regulation, as per item 7. of the test report in Appendix 1 to Annex 3: 72 dB(A) at reference speed of ~~70~~/80 km/h⁽¹⁾
- 8.2. Wet adhesion level of the representative tyre size, see paragraph 2.7. of this Regulation, as per the test report examples shown in the appendix to Annex 5: 1.12(G) using the vehicle ~~or trailer~~ method⁽¹⁾.
- 8.3. Rolling resistance level of the representative tyre size, see paragraph 2.7. of this Regulation, as per item 7. of the test report in Appendix 1 to Annex 6: 6.11 N/kN.
- 8.4. Snow performance level of the representative tyre size, see paragraph 2.7. of Regulation No. 117, as per item 7. of the test report in the appendix⁽⁴⁾ to Annex 7: 1.87 (Snow grip index) using the brake on snow method⁽¹⁾, ~~spin traction method⁽¹⁾ or acceleration method⁽¹⁾~~.
- 8.4.1. Ice performance level of the representative tyre size, see paragraph 2.7. of Regulation No. 117, as per item 7. of the test report in the appendix 2 to Annex 8: --- (Ice grip index) using the brake on ice method⁽¹⁾.
9. Number of report issued by that service : CS117-A0-2021-02263
CS117-B0-2023-02702
10. Date of report issued by that service : December 14, 2021
August 31, 2023
11. Reason(s) of extension (if applicable) : trade mark and tread pattern, The previous test data is still valid. Update the manufacturer's name and address, Upgrade the supplement of the regulation
12. Any remarks : the application is based on the provision in 12.12 and 12.13 according ECE R117 supplement 14
13. Place : Zoetermeer
14. Date : 15 September 2023
15. Signature :



T. H. K. Spatz

Approval number: E4*117R02/14*12924*01

16. Annexed to this communication are:

16.1 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⁾.

16.2 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 and service descriptions, adding in case of Class C1 tyres whether "reinforced" (or "extra load") or not.

⁽¹⁾ Strike out what does not apply.

⁽²⁾ According to Schedule 4 to Revision 3 of the 1958 Agreement.

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

⁽⁴⁾ Appendix 2 for C1 and C2 tyres.
Appendix 3 for C3 tyres.



Double Coin Group (Jiang Su) Tyre Co., Ltd.

Information folder No.: S210003 Page 1 of 6

RELATING TO ECE TYPE-APPROVAL FOR A TYPE OF TYRE WITH REGARD TO ROLLING SOUND EMISSIONS AND TO ADHESION ON WET SURFACES AND ROLLING RESISTANCE (ECE Regulation No. 117. 02)

1. GENERAL

- 1.1 The performance characteristics to be assessed for the tyre type : rolling sound level / adhesion performance level on wet surfaces / rolling resistance / Snow performance
- 1.2 Manufacturer's name and address : Double Coin Group (Jiang Su) Tyre Co.,Ltd.
No.888 North Yishou Road
Chengbei Street
226500, Rugao city, Jiangsu Province
China (PRC)
- 1.3 If applicable, name and address of manufacturer's representative : not applicable
:
:
- 1.4 Brand name(s)/trademark(s), trade description(s)/commercial name(s) : Double Coin;Warrior
: RLB468;WD219

2. TYRE

- 2.1 Tyre classification (class C1, C2, C3) : ~~Class C1 / Class C2~~ / Class C3
- 2.2 Category of use (normal, snow, special) : ~~normal~~ / snow / ~~special~~
- 2.3 Tyre structure : ~~diagonal~~ / ~~bias belted~~ / radial
- 2.3.1 For Class C1 tyres, state weather :
2.3.1.1 Reinforced (or extra load) in case of approval with regard to rolling sound mission level : not applicable
2.3.1.2 Whether tyre for use in severe snow conditions or not for stage 2 : not applicable
- 2.3.2 For Class C2 and C3 tyres, state whether:
2.3.2.1 M+S marked in case of approval with regard to rolling sound emission level at stage 1 : Yes / ~~No~~
2.3.2.2 Traction in case of approval with regard to rolling sound emission level at stage 2. : ~~Yes~~ / No
2.3.2.3 Whether tyre for use in severe snow conditions or not for stage 2 : Yes / ~~No~~
- 2.4 A list of tyre designations covered by this application : see attached list of tyre size
- 2.5 Details of major features, with respect to the effects on tyre performance (i.e. rolling emission level or adhesion on wet surfaces, respectively) of the tread pat-tern(s) to be used on the designated range of tyre sizes. This may be by 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 attached drawing of tread pattern

Double Coin Group (Jiang Su) Tyre Co., Ltd.
Information folder No.: S210003 Page 2 of 6

MANUFACTURER'S STAMP



Signature:

.....

Name: ...Xie bin...

THIS APPLICATION IS ACCOMPANIED BY:

- List of tyre size
- Drawing of tread pattern
- The test report

Double Coin Group (Jiang Su) Tyre Co., Ltd.

Information folder No.: S210003 Page 3 of 6

List of tyre size

Brand name(s) or Trade mark(s) : **Double Coin;Warrior**
Tread pattern : **RLB468;WD219**

Tyre size	Approval No.	Trademark	Tread pattern	S2	W	R2	Indication	Marking
315/70R22.5 154/150L (152/148M)	E4-0049673	Double Coin <u>Warrior</u>	RLB468 <u>WD219</u>	73	0.65	7.5	---	M+S/ 
315/80R22.5 156/152L	E4-0017662	Double Coin	RLB468					
<u>315/80R22.5</u> <u>157/154L</u>	<u>E4-0050347</u>	<u>Double Coin</u> <u>Warrior</u>	<u>RLB468</u> <u>WD219</u>					

Double Coin Group (Jiang Su) Tyre Co., Ltd.

Information folder No.: S210003 Page 4 of 6

Test size for tyre noise:

Test Size : **315/70R22.5 154/150L(152/148M)**
Because of : **Largest section width**
Lowest aspect ratio

Test size for wet grip:

Test Size : **315/70R22.5 154/150L(152/148M)**
Because of : **---**
Calculated limit value : **0.715**

Test size for rolling resistance:

Test Size : **315/70R22.5 154/150L(152/148M)**
Because of : **Lowest load index.**
Calculated limit value : **---**

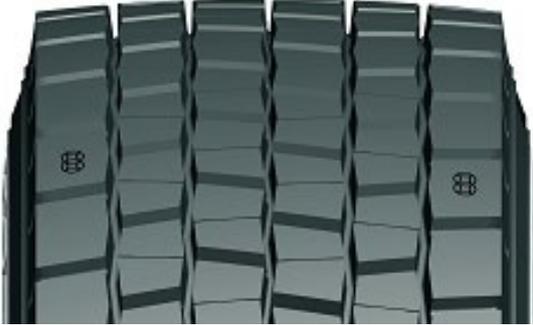
Test size for snow performance:

Test Size : **315/70R22.5 154/150L(152/148M)**
Because of : **---**
Calculated limit value : **1.45**

Double Coin Group (Jiang Su) Tyre Co., Ltd.

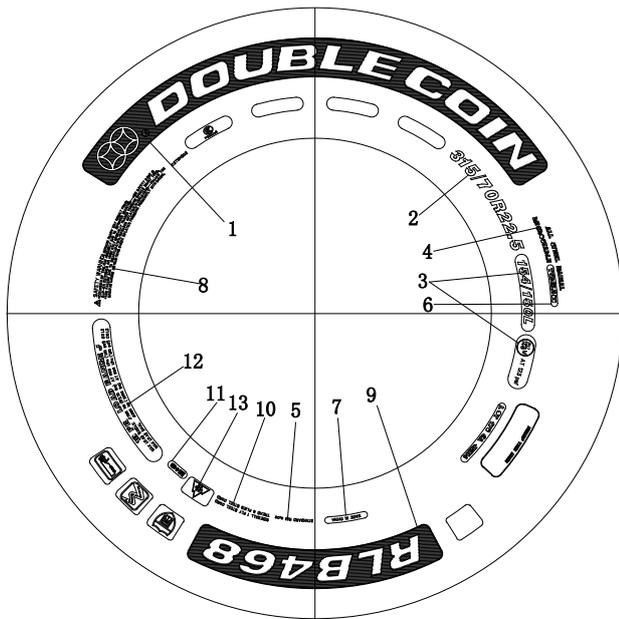
Information folder No.: S210003 Page 5 of 6

Drawing of the tread pattern (for measured tyre)

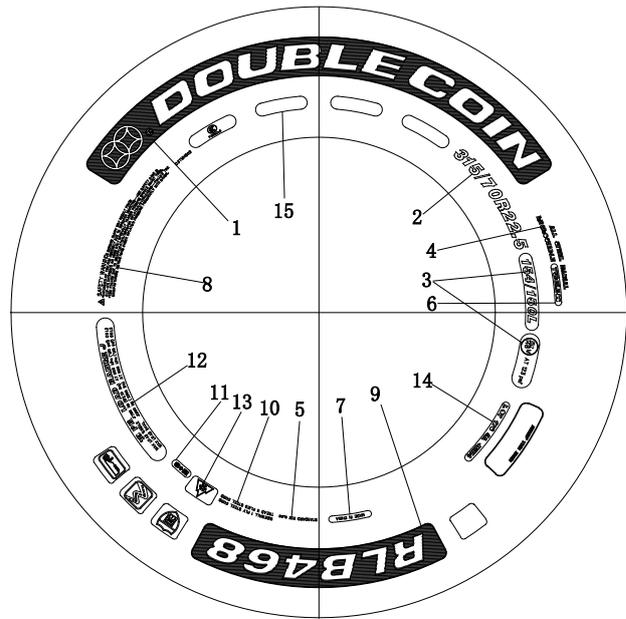
Manufacturer name	Double Coin Group (Jiang Su) Tyre Co., Ltd.
Pattern name	Double Coin RLB468
Tyre Size	315/70R22.5 154/150L(152/148M)
Market	EU/US
Marking	M+S/ 
Pitch number	47
Pitch ratio	1.00
Number of circumferential block like elements on traction tyre	
Void volume [%]	27.3
Width: main grooves [mm]	8.0
Depth: center groove [mm]	20.5
Depth: shoulder groove [mm]	20.5
Pattern	

Double Coin Group (Jiang Su) Tyre Co., Ltd.

Information folder No.: S210003 Page 6 of 6



UPPER MOLD



LOWER MOLD

NO.	UPPER MOLD	NO.	LOWER MOLD
1	DOUBLE COIN	1	DOUBLE COIN
2	315/70R22.5	2	315/70R22.5
3	154/150L $\left(\frac{152}{148} M\right)$	3	154/150L $\left(\frac{152}{148} M\right)$
4	REGROOVABLE	4	REGROOVABLE
5	STANDARD RIM 9.00	5	STANDARD RIM 9.00
6	TUBELESS	6	TUBELESS
7	MADE IN CHINA/MADE IN THAILAND	7	MADE IN CHINA/MADE IN THAILAND
8	SAFETY WARNING	8	SAFETY WARNING
9	RLB468	9	RLB468
10	TREAD 5 STEELCORD SIDEWALL 1 STEELCORD	10	TREAD 5 STEELCORD SIDEWALL 1 STEELCORD
11	M+S	11	M+S
12	MAX. LOAD SINGLE 3750kg AT 900kPa MAX. LOAD DUAL 3350kg AT 900kPa	12	MAX. LOAD SINGLE 3750kg AT 900kPa MAX. LOAD DUAL 3350kg AT 900kPa
13		13	
		14	DOT ****(WEEK NUMBER)
		15	$\left(E4\right)$ *****

Type : **RLB468; WD219**Manufacturer : **Double Coin Group (Jiang Su) Tyre Co., Ltd.**

Test Report

Agreement concerning the adoption of uniform technical prescriptions for the wheeled vehicles, equipment and parts which can be fitted and/or be used on wheeled vehicles and the conditions for reciprocal recognition of approvals granted on the basis of these prescriptions

**Uniform Provisions Concerning The Approval Of Types With
 Regard To Rolling Sound Emissions And To Adhesion On Wet
 Surfaces And Rolling Resistance And Snow Performance**

ECE-R 117

as last amended

Revision 4-Amendment 2

Supplement 14 to the 02 series of amendments

Approval status	
ECE	Number of approval
	E4*117R02/14*12924*01

Type : **RLB468; WD219**Manufacturer : **Double Coin Group (Jiang Su) Tyre Co., Ltd.****1. Genreal information**

- 1.1. Manufacturer's name and address : Double Coin Group (Jiang Su) Tyre Co., Ltd.
No.888 North Yishou Road, Chengbei Street,
226500, Rugao city, Jiangu Province, China
(PRC)
- 1.2. Brand Name(s) or Trade(s) description : DOUBLE COIN; Warrior(Brand names)

 RLB468; WD219(Tread pattern names)
- 1.3. Tyre class : C3
- 1.4. Category of use : snow(M+S&3PMSF)
- 1.5. Tyre structure : radial
- 1.6. Worse case : refer to RDW announcement 2018-1
- 1.7. Sound level according to paras. 4.4. and 4.5. of Annex 3 : 315/70R22.5 154/150L(152/148M) 72 dB(A)

 limit value for list of tyre size(s) : ≤73 dB(A)
- 1.8. Wet adhesion 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 to Annex 5 : 315/70R22.5 154/150L(152/148M) 1.12 (G)

 limit value for list of tyre size(s) : ≥0.65*1.1=0.715 (G)
- 1.9. Rolling resistance coefficient of the representative tyre size, see paragraph 2.5. of Regulation No. 117, according to paragraph 6.2 and 6.3 of Annex 6 : 315/70R22.5 154/150L(152/148M) 6.11 N/kN

 limit value for list of tyre size(s) : ≤7.5 N/kN
- 1.10. Traction tyre fulfils the requirement according to paragraph 6.5.1 of Regulation No. 117. : N.A

Type : **RLB468; WD219**

Manufacturer : **Double Coin Group (Jiang Su) Tyre Co., Ltd.**

- 1.11. Test date
- rolling sound emission : September 02, 2021
 - wet grip : September 02, 2021
 - rolling resistance : July 24, 2021
- 1.12. Snow grip index of the representative tyre size, see paragraph 2.5. of Regulation No. 117, according to paragraph 6.4 of Annex 7
- 315/70R22.5 154/150L(152/148M) 1.87 (SG)
- limit value : $\geq 1.25 + 0.2 = 1.45$
 - test date : November 26, 2021
- 1.13. Ice performance level of the representative tyre size, see paragraph 2.7. of Regulation No. 117, as per item 7. of the test report in the appendix 2 to Annex 8
- limit value : N.A
 - test date : N.A
- 1.14. Final conclusion for all testing : Pass
- Sound level : refer to TÜV NORD test report CS117-A0-2021-02263 corresponding with type approval No. E4*117R02/13*12924*00
 - Wet adhesion level : refer to TÜV NORD test report CS117-A0-2021-02263 corresponding with type approval No. E4*117R02/13*12924*00
 - Rolling resistance coefficient : refer to TÜV NORD test report CS117-A0-2021-02263 corresponding with type approval No. E4*117R02/13*12924*00
 - Snow grip level : refer to TÜV NORD test report CS117-A0-2021-02263 corresponding with type approval No. E4*117R02/13*12924*00
 - Ice performance level : N.A
- 1.15. Comments (if any) : trade mark and tread pattern, The previous test data is still valid. Update the manufacturer's name and address, Upgrade the supplement of the regulation

2. Remarks concerning tested object(s) :

All versions of the type as stated in the information document are covered with the tested version(s) and test object(s) respectively.

Type : **RLB468; WD219**
Manufacturer : **Double Coin Group (Jiang Su) Tyre Co., Ltd.**

3. Appendices

0	List of modifications	
	Information document no.	: S210003
	Tyre noise test report	: N.A
	Wet grip test report	: N.A
	Rolling resistance test report	: N.A
	Snow performance test report	: N.A
	Ice performance test report	: N.A

4. Statement of conformity

The type described in this test report and the appendices attached are in compliance with the Test Specification mentioned above.

The samples / test vehicles used were representative in terms of the type to be approved.

The Test Report comprises pages 1 to 5

The Test Report shall be reproduced and published in full only and by the client only. It shall be reproduced partially with the written permission of the Test Laboratory only.

TEST LABORATORY

TÜV NORD Mobilität GmbH & Co. KG
IFM - Institut für Fahrzeugtechnik und Mobilität,
Schönscheidtstr. 28, D-45307 Essen

Designated Technical Service
RDW No. RDWT-04

Shanghai, August 31, 2023

CS/PY



B.S.M.E Patrick Yu



Type : **RLB468; WD219**

Manufacturer : **Double Coin Group (Jiang Su) Tyre Co., Ltd.**

List of modifications

Appendix 0

More details for application of : Date : August 31, 2023

Correction of : ---

Modification of : ---

Addition of : trade mark and tread pattern, The previous test data is still valid. Update the manufacturer's name and address, Upgrade the supplement of the regulation

Deletion of : ---

Type : **RLB468**
Manufacturer : **Double Coin Group Jiangsu Tyre Co., Ltd.**

Test Report

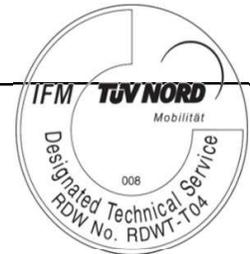
Agreement concerning the adoption of uniform technical prescriptions for the wheeled vehicles, equipment and parts which can be fitted and/or be used on wheeled vehicles and the conditions for reciprocal recognition of approvals granted on the basis of these prescriptions

Uniform Provisions Concerning The Approval Of Types With Regard To Rolling Sound Emissions And To Adhesion On Wet Surfaces And Rolling Resistance And Snow Performance

ECE-R 117
as last amended

Revision 4-Amendment 2
Supplement 13 to the 02 series of amendments

Approval status	
ECE	Number of approval
	E4*117R02/13*12924*00



Type : **RLB468**
Manufacturer : **Double Coin Group Jiangsu Tyre Co., Ltd.**

1. Genreal information

- 1.1. Manufacturer's name and address : Double Coin Group Jiangsu Tyre Co., Ltd.
No.888 North Yishou Road, Chengbei Street,
226500 Rugao, Jiangsu, China (PRC)

- 1.2. Brand Name(s) or Trade(s) description : Double Coin(Brand names)

RLB468(Tread pattern names)

- 1.3. Tyre class : C3
- 1.4. Category of use : snow(M+S&3PMSF)
- 1.5. Tyre structure : radial
- 1.6. Worse case : refer to RDW announcement 2018-1
- 1.7. Sound level according to paras. 4.4. and 4.5. of Annex 3 : 315/70R22.5 154/150L(152/148M) 72 dB(A)

limit value for list of tyre size(s) : $\leq 73+1=74$ dB(A)
- 1.8. Wet adhesion 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 to Annex 5 : 315/70R22.5 154/150L(152/148M) 1.12 (G)

limit value for list of tyre size(s) : ≥ 0.65 (G)
- 1.9. Rolling resistance coefficient of the representative tyre size, see paragraph 2.5. of Regulation No. 117, according to paragraph 6.2 and 6.3 of Annex 6 : 315/70R22.5 154/150L(152/148M) 6.11 N/kN

limit value for list of tyre size(s) : $\leq 6.5+1=7.5$ N/kN
- 1.10. Traction tyre fulfils the requirement according to paragraph 6.5.1 of Regulation No. 117. : N.A



Type : **RLB468**
Manufacturer : **Double Coin Group Jiangsu Tyre Co., Ltd.**

- 1.11. Test date
 - rolling sound emission : September 02, 2021
 - wet grip : September 02, 2021
 - rolling resistance : July 24, 2021
- 1.12. Snow grip index of the representative tyre size, see paragraph 2.5. of Regulation No. 117, according to paragraph 6.4 of Annex 7
 - 315/70R22.5 154/150L(152/148M) 1.87 (SG)
 - limit value : ≥ 1.45
 - test date : November 26, 2021
- 1.13. Final conclusion for all testing : Pass
 - Sound level : Pass
 - Wet adhesion level : Pass

 - Rolling resistance coefficient : Pass

 - Snow grip level : Pass
- 1.14. Comments (if any) : ---

2. Remarks concerning tested object(s) :
All versions of the type as stated in the information document are covered with the tested version(s) and test object(s) respectively.

3. Appendices

- 0 List of modifications
 - Information document no. : S210003

 - Tyre noise test report : Appendix 1
 - Wet grip test report : Appendix 2
 - Rolling resistance test report : Appendix 3
 - Snow performance test report : Appendix 4



Type : **RLB468**
Manufacturer : **Double Coin Group Jiangsu Tyre Co., Ltd.**

4. Statement of conformity

The type described in this test report and the appendices attached are in compliance with the Test Specification mentioned above.

The samples / test vehicles used were representative in terms of the type to be approved.

The Test Report comprises pages 1 to 13.

The Test Report shall be reproduced and published in full only and by the client only. It shall be reproduced partially with the written permission of the Test Laboratory only.

TEST LABORATORY

TÜV NORD Mobilität GmbH & Co. KG
IFM - Institut für Fahrzeugtechnik und Mobilität,
Schönscheidtstr. 28, D-45307 Essen

Designated Technical Service
RDW No. RDWT-04

Shanghai, December 14, 2021

CS/PY



B.S.M.E Patrick Yu



Type : **RLB468**
Manufacturer : **Double Coin Group Jiangsu Tyre Co., Ltd.**

List of modifications

Appendix 0

More details for application of : **Date** : **December 14, 2021**

Correction of : -

Modification of : -

Addition of : -

Deletion of : -



Type : **RLB468**
Manufacturer : **Double Coin Group Jiangsu Tyre Co., Ltd.**

Appendix 1

1. Regard to rolling sound emission level

- 1.1. Test data : Test tyre type 1
- 1.1.1. Date of test : September 02, 2021
- 1.1.2. Test vehicle
- Manufacturer : Dongfeng
- Vehicle name : DFM Tianlong
- VIN or Year : LGAG3DV28D2809664
- ENG displacement : 11120 cc
- Test vehicle wheelbase : 3750 mm
- 1.1.3. Location of test track : Dingyuan Gound for Highway and Traffic
- 1.1.3.1. Date of track certification to ISO 10844:2014 : December 03, 2007 / December 12, 2019
- 1.1.3.2. Issued by : China Department of Transportation Highway Inspection Center
- 1.1.3.3. Method of certification : Residual void content, Sound absorption coefficient, Mean profile depth
- 1.1.4. Tyre test details
- 1.1.4.1. Trademark and tread pattern : DOUBLE COIN RLB468
- Tyre size designation : 315/70R22.5 154/150L
- Manufactures date code : 176 3A JMH4
- Category of use : Snow(M+S&3PMSF)
- Indication : M+S&3PMSF
- ECE Approval No. : E4-0049673
- 1.1.4.2. Reference inflation pressure : 900 kPa
- 1.1.5. Test data
- Reference load : 3750 kg



Test Report
No. : CS117-A0-2021-02263
 ECE Regulation No.117



Type : **RLB468**
 Manufacturer : **Double Coin Group Jiangsu Tyre Co., Ltd.**

Appendix 1

	Front left	Front right	Rear left	Rear right	Average
Test mass (kg)	2795	2772	2977	2943	2871.75
Tyre load index	74.53%	73.92%	79.39%	78.48%	76.58%
Inflation pressure (cold) (kPa)	685	675	740	730	---

1.1.5.1. Test rim width code : 9.00

1.1.5.2. Temperature measurement sensor type : Not applicable

1.1.6 Valid Test results

Running No.	Speed km/h	Direction of run	Sound Level Measured dB(A)		Air Temp. °C	Track Temp. °C	Sound Level Measured dB(A)		Comments
			Left	Right			Left Temp. Correction	Right Temp.	
1	61.8	one direction	72.2	72.3	28.7	32.3	---	---	---
2	64.0	one direction	72.6	72.6	28.8	32.5	---	---	---
3	66.2	one direction	73.0	73.2	29.1	32.6	---	---	---
4	68.0	one direction	73.5	73.7	29.2	32.6	---	---	---
5	72.1	one direction	74.1	74.2	29.2	32.8	---	---	---
6	73.8	one direction	74.7	74.6	29.3	33.0	---	---	---
7	76.1	one direction	75.4	75.2	29.5	33.1	---	---	---
8	78.2	one direction	75.9	75.7	29.5	33.2	---	---	---
Limit value	60-80	---			5°C ~ 40°C	5°C ~ 50°C			

1.1.6.1 Regression line slope : 34.31

1.1.6.2 Sound level according to paraphrase 4.3. of annex3 : 73.97 dB(A)

1.1.6.3 Sound level according to paras. 4.4. and 4.5. of Annex 3 : 72 dB(A)



Type : **RLB468**
Manufacturer : **Double Coin Group Jiangsu Tyre Co., Ltd.**

Appendix 2

1. Adhesion on wet surface

- 1.1. Test data : Test tyre type 1
- 1.1.1. Date of test : September 02, 2021
- 1.1.2. Test vehicle(make, model, year, modifications, etc or trailer identification) : DFM Tianlong LGAG3DV28D2809664
- 1.1.3. Vehicle configuration : Configuration 1
- 1.1.4. Location of test track : Dingyuan Ground for Highway and Traffic
- 1.1.5. Test track characteristics
 - Texture depth (mm) : 0.654
 - BPN : 57.49
- 1.1.6. Issued by : TÜV NORD
- 1.1.7. Method of certification : BPN / ASTM E 965
- 1.1.8. Water depth (mm) : 0.5-2.0
- 1.1.9. Identification of SRTT : HAKP OOTX 4319
- 1.1.10. Initial speed (km/h) : 60
- 1.1.11. Final speed (km/h) : 20
- 1.1.12. Valid test results



Test Report
No. : CS117-A0-2021-02263
 ECE Regulation No.117



Type : **RLB468**
 Manufacturer : **Double Coin Group Jiangsu Tyre Co., Ltd.**

Appendix 2

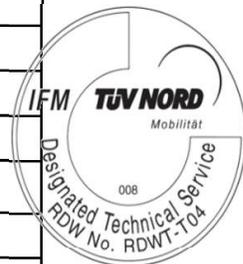
No.	SRTT1		C1		C2		C3		SRTT1	
Trademark	C3W-SRTT		DOUBLE COIN		---		---		C3W-SRTT	
Tread pattern	ASTM F 2870		RLB468		---		---		ASTM F 2870	
SIZE	315/70R22.5		315/70R22.5		---		---		315/70R22.5	
Service description	154/150L		154/150 L		---		---		154/150L	
Category of use	---		Snow(M+S&3PMSF)		---		---		---	
Tyre identification	HAKP OOTX 4319		176 3A JMH4		---		---		HAKP OOTX 4319	
Reference load (kg)	3750		3750		---		---		3750	
Reference pressure(kPa)	900		900		---		---		900	
Rim	9		9		---		---		9	
Tyre loads FA (kg)	3115	3089	3115	3089	---	---	---	---	3115	3089
Tyre loads RA (kg)	3174	3203	3174	3203	---	---	---	---	3174	3203
Load index FA (%)	83.07	82.37	83.07	82.37	---	---	---	---	83.07	82.37
Load index RA (%)	84.64	85.41	84.64	85.41	---	---	---	---	84.64	85.41
FA pressure (kPa)	714	706	713.7	706.3	---	---	---	---	714	706
RA pressure (kPa)	731	739	730.7	739	---	---	---	---	731	739
Wet surface temp (°C)	29.8		30.1		---		---		29.9	
Ambient temp (°C)	30.3		31.3		---		---		30.7	
Measurement	BD (m)	WA (m/s ²)	BD (m)	WA (m/s ²)	BD (m)	WA (m/s ²)	BD (m)	WA (m/s ²)	BD (m)	WA (m/s ²)
1	26.21	4.71	23.56	5.24	---	---	---	---	26.55	4.65
2	26.36	4.68	23.72	5.20	---	---	---	---	27.26	4.53
3	26.72	4.62	23.81	5.19	---	---	---	---	26.56	4.65
4	---	---	23.38	5.28	---	---	---	---	---	---
5	---	---	24.26	5.09	---	---	---	---	---	---
6	---	---	23.87	5.17	---	---	---	---	---	---
Average AD (m/s ²)	26.43	4.67	23.77	5.20	---	---	---	---	26.79	4.61
Standard deviation(m/s ²)	0.21	0.04	0.27	0.06	---	---	---	---	0.33	0.06
Validation of results Coeff. of variation ≤ 3%	0.807		1.147		---		---		IFM TUV NORD 230 Mobilität	
Total SRTT ≤ 3%	---		---		---		---		1.236	
BFC(R)reference tyre	0.476		0.475		---		---		0.470	
BFC(T)rcandidate tyre	0.476		0.530		---		---		0.470	
Wet grip index (%)	1.00		1.12		---		---		1.00	

Type : **RLB468**
 Manufacturer : **Double Coin Group Jiangsu Tyre Co., Ltd.**

1. Rolling resistance

- 1.1. Test data : Test tyre type 1
- 1.1.1 Date of test : July 24, 2021
- 1.1.2 Test machine identification : ---
 - drum diameter(m) : 1.7076
 - surface : smooth surface
- 1.1.3 Test Location : Jiangsu
- 1.1.4 Test tyre details
 - Tyre size designation and service description : 315/70R22.5 154/150L(152/148M)
 - tyre brand and trade description : Double Coin RLB468
 - Reference inflation pressure(kPa) : 900
 - Category of use : Snow(M+S&3PMSF)
 - ECE Approval No. : E4-0049673
- 1.1.5 Measurement method : Force
- 1.1.6 Test speed(km/h) : 80
- 1.1.7 Test inflation pressure, initial(kPa) : 900
- 1.1.8 Test rim width : 9.00
 - material : Steel
- 1.1.9 Measurement

procedure	Forward Rotation		Reverse Rotation	
Warm up Time (min)	180		more than 30 minutes	
Temp.(°C)	25.31		26.53	
Item	Load	skim test	Load	Skim test
L _m (kN)	31.2369	0.4001	31.2346	0.4025
r _L (m)	0.4861	0.5155	0.4861	0.5153
F _t (N)	122.07	6.08	140.390	7.200
F _{r25}	182.156		210.690	
F _{r02}	177.126		204.872	
C _r	5.821		6.684	



Type : **RLB468**
Manufacturer : **Double Coin Group Jiangsu Tyre Co., Ltd.**

Appendix 3

- 1.2 Rolling resistance coefficient
 - 1.2.1 Initial value (or average in the case of more th : 6.252
 - 1.2.2 Temperature corrected N/kN : -0.036
 - 1.2.3 Temperature and drum diameter corrected : 6.11
for un-aligned measurement



Type : **RLB468**
 Manufacturer : **Double Coin Group Jiangsu Tyre Co., Ltd.**

1. Snow performance

1.1. Test data

1.1.1. Test Location and address : Test World

1.1.2. Test tyre details

tyre size designation and service description : 315/70R22.5 154/150L(152/148M)

tyre brand and trade description : Double Coin RLB468

Category of use : Snow(M+S&3PMSF)

Reference inflation pressure : 900 kPa

Indication : M+S&3PMSF

ECE Approval No. : E4-0049673

1.1.3. Snow index relative to SRTT according to paragraph 6.4.1.1.

Test method : acceleration method

Test with control tyres : NO

Test procedure : SRTT-T1-T2-SRTT

1.1.4. Test vehicle (make, model and type, year)

For control tyre : N.A

For candidate tyre : Volvo FM 42 TB 2018 YV2XTY0A3JA835184

1.1.5. Test tyre data 1 :

Test track characteristics	Begin	Finish	standard
Weather	Cloudy	Cloudy	---
Ambient temperature	-10.9	-10.9	-2 °C to -15 °C
Snow temperature	-9.2	-9.2	-4 °C to -15 °C
CTI index	86	86	80 to 90



Type : **RLB468**
 Manufacturer : **Double Coin Group Jiangsu Tyre Co., Ltd.**

Appendix 4

1.1.5.1 Test results

No.	S1		C1		C2		---		S1	
Trademark	C3W-SRTT		Double Coin						C3W-SRTT	
Tread pattern	ASTM F 2870		RLB468						ASTM F 2870	
SIZE	315/70R22.5		315/70R22.5						315/70R22.5	
Service description	154/150L		154/150L						154/150L	
Tyre Identification	M+S		176 3A JMH4						M+S	
Reference load (kg)	3750		3750						3750	
Reference pressure(kPa)	900		900						900	
Test rim width code	9.00		9.00						9.00	
Tyre loads FA (kg)	2580	2500	2580	2500					2580	2500
Tyre loads RA (kg)	1630	1625	1630	1625					1630	1625
Ratio of FA/RA	158%	154%	158%	154%					158%	154%
Load index RA	43%	43%	43%	43%					43%	43%
FA pressure (kPa)	900	900	900	900					900	900
RA pressure (kPa)	630	630	630	630					630	630
Run number	Dis(m)	AD	Dis(m)	AD	Dis(m)	AD	Dis(m)	AD	Dis(m)	AD
1	---	0.62	---	1.14					---	0.60
2	---	0.62	---	1.13					---	0.59
3	---	0.60	---	1.13					---	0.59
4	---	0.60	---	1.12					---	0.59
5	---	0.60	---	1.11					---	0.59
6	---	0.59	---	1.11					---	0.57
Mean	---	0.61	---	1.12					---	0.59
Std-deviation	---	0.01	---	0.01					---	0.01
Slip ratio(percent)	24.00	30.00	19.00	21.00					24.00	28.00
CV (%)	1.8		1.0						1.5	
Validation SRTT (%)	---		---						0.0	
AFC(Ra)	---		0.061						---	
Snow index	---		1.874						---	

Refer to Test World report TW-TL21-DC008-E117SP