

REPORT NO. : K055-A0-0308-0288  
MANUFACTURER: Hankook Tire Co., Ltd.  
TYPE : W300?



**Inspection report regarding the tyre/road noise emission of a tyre in accordance with the Council Directive, Annex V to Directive 92/23/EEC, as last amended by Directive 2005/11/EC and ECE Regulation no. 117.**

**Part1-Report**

1. Type approval authority or Technical Service : RDW
2. Name and address of applicant : Hankook Tire Co., Ltd.  
#647-15, Yoksam-dong, Kangnam-ku  
Seoul, 135-723, Korea
3. Test report No. : K055-A0-0308-0288
4. Manufacturer and Brand Name or Trade description : HANKOOK W300?, AURORA W300?
5. Tyre Class (C1, C2 or C3) : C1
6. Category of use : snow
7. Sound level according to paras. 4.4. and 4.5. of Annex 3 of : 68 dB(A) / 80 km/h  
ECE R 117 and paras. 4.4. and 4.5. of Annex V appendix1  
of the Directive 92/23 EC at reference speed of 70 or  
80km/h
8. Tyre/Road Noise level according to paras. 6.1.1. through : Limit value expressed in dB(A) according to  
paras 6.1.3. of ECE R 117 and paras.4.2.1 through 4.2.3 of Regulation & Directive :  
Annex V of the Directive 92/23 EC at reference speed of C1 category ;  
70 or 80km/h (strike out what does not apply) \*\* 145 and lower 72 dB(A), over 145 up to 165 73 dB(A),  
over 165 up to 185 74 dB(A), over 185 up  
to 215 75 dB(A), over 215 76 dB(A) \* C1a 71(72) dB(A),  
C1b 72(73) dB(A), C1c 73(74) dB(A),  
C1d 75 dB(A), C1e 76 dB(A)  
XL/+ 1 dB(A) & Special/+ 2dB(A)  
\* ( ) means for 92/23/EEC \*\* ( ) means for ECE R117
9. Comments (if any) : ~~The actual test of the tyre was not required and results  
of the previous tests are still valid.~~
10. Date of test report : April 15, 2008
11. Signature :



**Part2-Test data**

- 1. Date of test: : March 12, 2008
- 2. Test vehicle (Make, model, year, modifications, etc.) : HYUNDAI New Avante XD  
VIN: KMHDN41DP4U877452/2004
- 2.1. Test vehicle wheelbase : 2650 mm
- 3. Location of test track : GTRACK  
#433 Myungam-ri, Jewon-Myun, Geumsan-gun,  
Chungnam, 312-824, Korea
- 3.1 Date of track certification to ISO 10844:1994 : April 13, 2007
- 3.2. Issued by : RDW TCL/DB/2003-1, K038-A1-0306-0208
- 3.3. Method of certification : Residual void content, Sound absorption coefficient,  
Texture depth
- 4. Tyre test details
- 4.1. Tyre size designation/DOT Number : 205/55R16 / 0708
- 4.2. Tyre service description : Standard / ~~Reinforced~~
- Load Index : 91
- Speed Category : H
- 4.3. Reference inflation pressure : 250 kPa
- 4.4. Test data

	Front left	Front right	Rear left	Rear right
Test mass (kg)	436	436	429	429
Tyre load index (%)	71.0	71.0	70.0	70.0
Inflation pressure (cold)(kPa)	170	170	170	170

- 4.5. Test rim width code : 6.5J x 16
- 4.6. Temperature measurement sensor type : Digital Thermometer(KESTREL K2000)

5. Valid test results

Run No.	Speed km/h	Direction of run	Sound level left 2/ measured dB(A)	Sound level right 2/ measured dB(A)	Air temp. C	Track temp. C	Sound level left 2/ temp.corrected dB(A)	Sound level right 2/ temp.corrected dB(A)	Comments
1	71.4	North-South	65.7	69.6	14.6	24.0	65.8	69.7	-
2	73.5	North-South	66.6	70.3	14.4	24.0	66.7	70.4	-
3	75.8	North-South	66.9	71.3	15.4	23.0	67.0	71.4	-
4	78.0	North-South	67.9	72.0	15.0	23.0	68.0	72.1	-
5	81.5	North-South	68.7	72.0	14.7	24.0	68.9	72.1	-
6	83.5	North-South	69.1	72.3	14.2	24.0	69.2	72.4	-
7	85.8	North-South	70.0	72.8	14.0	22.0	70.0	72.9	-
8	87.0	North-South	69.8	73.2	14.9	23.0	69.9	73.3	-

5.1. Regression line slope : a = -37.14

5.2. Sound level after temperature correction-according to para.4.3 of Annex 3 of ECE R117 and para. 4.3 of Annex V appendix 1 of the Directive 92/23 : 69.88 dB(A)

5.3. The final result of sound level according to para.4.4. of annex 3 of ECE R117 and para. 4.4 of Annex V appendix 1 of the Directive 92/23 : 68 dB(A)

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**List of modifications**

Correction of : - --

Modification of : - --

Addition of : - --

Deletion of : - --



RDW

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



COMMUNICATION

Concerning <sup>(1)</sup>:

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

of a type of tyre with regard to rolling sound emission level pursuant to Regulation number 117.

Approval number: E4-117R-000208

Extension number: 00

Approval mark:



000208 S

1. Manufacturer's name and address(es) : Hankook Tire Co., Ltd.  
#647-15, Yoksam-dong, Kangnam-ku  
Seoul, 135-723, Korea
2. If applicable, name and address of manufacturer's representative : not applicable
3. "Tyre class" and "category of use" of the type of tyre : C1 / snow
4. Brand(s) name(s) and/or Trade description(s) of the type of tyre : HANKOOK W300?, AURORA W300?
5. Technical service and, where appropriate, test laboratory approved for purposes of approval or of verification of conformity tests : TÜV NORD Mobilität GmbH & Co. KG  
Institut für Fahrzeugtechnik und Mobilität  
Adlerstrasse 7, D-45307 Essen
6. Sound level of the representative tyre size, see Paragraph 2.5. of Regulation number 117, as per item 7. of the test report: 68 dB(A) at reference speed of 70/80 km/h <sup>(1)</sup>.
7. Number of report issued by that service : K055-A0-0308-0288
8. Date of report issued by that service : April 15, 2008
9. Reason(s) of extension (if applicable) : not applicable





Postbus 777  
2700 AT Zoetermeer  
The Netherlands

Tel +31 79 345 81 43  
Fax +31 79 345 80 33  
www.rdw.nl

Vehicle Approval and Information

10. Any remarks :
11. Place :Zoetermeer
12. Date : 21-APR-2008
13. Signature

  
F.E. Plancius



14. Annexed to this communication are: Information folder no; P2008-A03-04
- 14.1. A list of documents in the approval file deposited at the Administration services having delivered the approval and which can be obtained upon request.
- 14.2. A list of tread-pattern designations: Specify for each trademark or brand name and trade description the list of tyre size designations adding, in the case of Class C1 tyres, the mark "Reinforced" or "Extra Load", if applicable.

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<sup>(1)</sup> Strike out what does not apply.



**HANKOOK TIRE CO., LTD.**

647-15 Yeoksam-dong, Gangnam-gu, Seoul 135-723 Korea  
Phone : 82-2-2222-1000 Facsimile : 82-2-2222-1100

Date: March. 10, 2008

**INFORMATION DOCUMENT No. P2008-A03-04 RELATING TO EC TYPE APPROVAL FOR A TYPE  
OF TYRE RELATING TO TYRE/ROAD NOISE EMISSION  
(Annex V to Directive 2005/11/EC& Regulation. 117)**

**1. GENERAL**

- 1.1 Manufacturer's name : HANKOOK TIRE CO., LTD.
- 1.2 Name and address of applicant : HANKOOK TIRE  
#647-15 Yoksam-dong, Kangnam-ku  
Seoul, 135-723, Korea
- 1.3 Address(es) of manufacturing plant(s) : Plant 1  
#100 Moksang-dong, Teaduck-Gu,  
Deajeon, 306-120, Korea  
Plant 2  
#433 Myungam-ri, Jewon-Myun, Geumsan-gun,  
Chungnam, 312-824, Korea
- 1.4 Brand name(s), Trade description(s) or Trade mark(s) : HANKOOK, AURORA,

**2. TYRES**

- 2.1 Tyre classification (class C1, C2 or C3) : Class C1
- 2.2 Category of use (normal, snow or specail ) : snow
- 2.3 Details of the major features, with respect t the effects : W300? – see Drawing No. 200803-PBN- W300  
on tyre/road noise emission, of the tread pattern(s) to  
be used on the disignated 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/road noise emission
- 2.3 Tyre structure (Bias, Bias-belted or Radial) : Radial
- 2.5 List of tread-pattern designations : see the attached tyre type list

*K. T. Kim*

K. T. Kim (G. Manager)  
Quality Assurnce Team



## Pattern of Tires

W300?

SIZE		Limit (dB)
185/55R15H	82H	74
185/55R15T	82T	
185/65R15H	88H	
195/55R16H	87H	75
195/55R16V	87V	
195/55RF16V	87V	
195/60R15H	88H	
195/65R15H	91H	
205/55R16H	91H	
205/55R16V	91V	
205/55R16V XL	94V	
205/55RF16V	91V	
205/60R15H	91H	
205/60R15T	91T	
205/60R16H	92H	
205/65R15H	94H	
195/55R15H XL	89H	
195/55R16H XL	91H	

Test Size : 205/55R16 91H

Reason of choice : Widest

Lowest aspect ratio

Biggest rim size



Drawing of the tread pattern (Measured tire)

Manufacture's name	HANKOOK TIRE CO., LTD.
Pattern name	W300
Tire size	205/55R16H
Max. Load	615 kg
Pitch number	59
Pitch ratio (Max./Min.)	1.31
Groove area ratio (%)	30.50%
Width : main grooves (mm)	(Inside) 8.5 / 8.5 / 8.5 / 7.5 (Outside)
Depth : center grooves (mm)	9.2
Depth : shoulder grooves (mm)	9.2
Pattern	