



INSTITUT GUMÁRENSKÉ TECHNOLOGIE A TESTOVÁNÍ, A.S.
RUBBER TECHNOLOGY AND TESTING INSTITUTE, Plc.
INSTITUT FÜR GUMMITECHNOLOGIE UND PRÜFWESEN, A.G.
A.O. «ИНСТИТУТ ТЕХНОЛОГИИ РЕЗИНЫ И ИСПЫТАНИЙ»

Společnost je zapsána v obchodním rejstříku vedeném Krajským soudem v Brně, oddíl B, vložka 818



Zlín 26th February 2024

E8*75R00/19*1541*00

Yokohama TWS Slovenija d.o.o.
Škofjeloška cesta 6
4000 Kranj
SLOVENIA

Communication concerning the approval and notification of approval number and inspection report issued by Inspection body IGTT

Tyre type fully complies requirements of ECE/UN R75.

Enclosed you will find the Communication concerning the approval of your tyres according to ECE/UN Regulation No. 75

On the base of this approval you are entitled to produce in your factory tyres of the dimension:

170/60B17 MITAS ENDURO TRAIL XT+ DAKAR ALL TERRAIN 72T

with the approval number : **E8 75R - 001541**
date of inspection : **26th February 2024**
inspector's name : **Václav Hořelka**

Sincerely yours,



Václav Hořelka
Head Of Tyre Approval Department
Head Of Inspection Body IGTT

**APPLICATION FOR APPROVAL OF A TYPE OF PNEUMATIC TYRE
FOR MOTORCYCLES AND MOPEDS ACCORDING TO ECE REGULATION No. 75**

E8 75R – 001541

4.1.1. Tyre size designation:	170/60B17
4.1.2. Manufacturers name, tyre name:	MITAS, ENDURO TRAIL XT+ DAKAR, all-terrain
4.1.3. The category of use:	SNOW
4.1.4. Structure (diagonal, bias belted, radial):	BIAS BELTED
4.1.5. The speed category:	T
4.1.6. The load-capacity index of the tyre:	72
4.1.7. Tube type or Tubeless:	TUBELESS/TUBE TYPE
4.1.8. Normal or Reinforced:	NORMAL
4.1.9. Ply rating number of tyres for motorcycle derivatives:	TREAD: 2 POLYESTER + 2 ARAMID SIDEWALL: 2 POLYESTER
4.1.10. The overall dimensions overall section width: overall diameter:	Overall section width: 167.2 mm Overall diameter: 649.0 mm
4.1.11. The rims on which the tyre can be mounted:	4.00x17, 4.25x17, 4.50x17, 5.00x17, 5.50x17
4.1.12. The measuring rim and test rim:	4.50x17
4.1.13. The test and measurement pressure	Test pressure: 350 kPa Measuring pressure: 280 kPa
4.1.14. Factor x	/
4.1.15. Max allowed speed for load-capacity defined in 4.1.6.	190 km/h

Manufacturer's name and address:

Tyre Manufacturer (1)

Yokohama TWS Slovenija d.o.o.
Škofjeloška cesta 6,
4000 Kranj, Slovenia

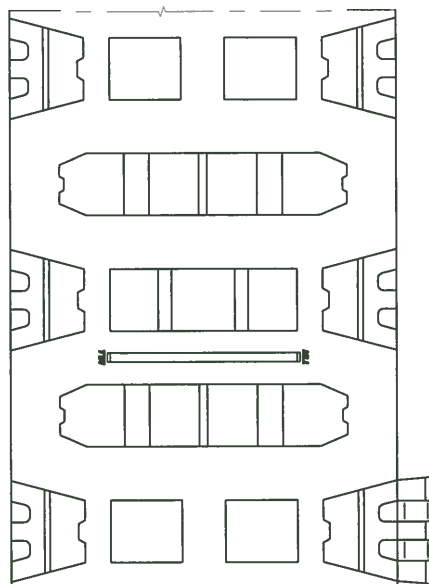
Tyre Manufacturer (2)

SYAM Trelleborg Tires LLP
Plot No. 521, Sayakha Industrial Estate,
Near Village Juned, Taluka Vagra,
Dist. Bharuch, Gujarat, Pin-392140.

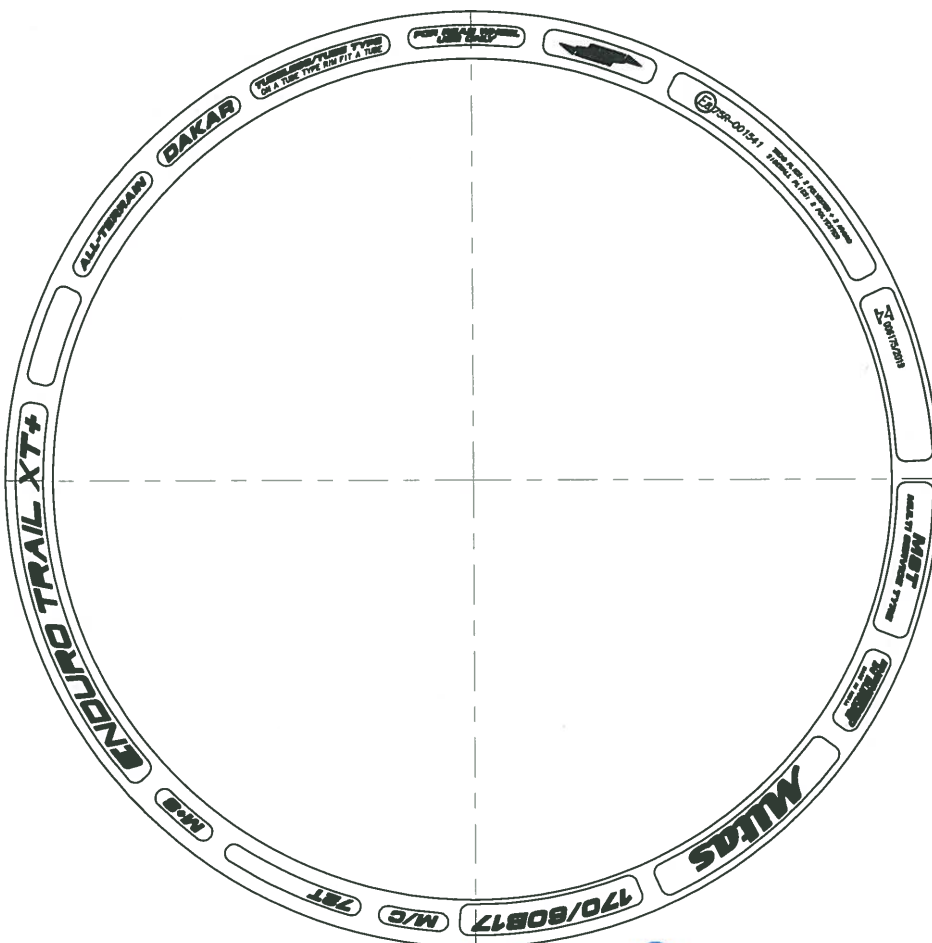
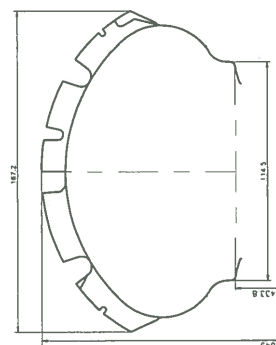
Tyre Manufacturer (3)

Yokohama TWS Czech Republic a.s.
Vavrečkova 7248
760 02 Zlín, Czech Republic



CROSS SECTION OF MOUNTED TIRE



IGTT a.s.

Tyre Approval Department
Štemberská 446, Louky
763 02 Zlín, Czech Republic

IČ/ID: 46900080 DIČ/VAT: CZ46900080

IGT

[illegible]



ČIČ/VAT: CZ46900080

[illegible]

TEST REPORT No. 2023 - 5150

TTC Zlín, Šternberská 446, Louky, 763 02 Zlín

Testing Laboratory No.1253, accredited by Czech Accreditation Institute according ČSN EN ISO/IEC 17025:2018

1. Customer: Yokohama TWS Czech Republic a.s.
 Švehlova 1900/3
 106 25 Praha 10
 Česká republika
 Responsible: ing. Macháčová
 Requirement No.: MM/23364
 Dept.: Moto Kran Task:
 Project No.: 70001180
 Application date: 25.09.2023
 Report issue date: 03.10.2023
 Test motive: Prototype tyres V1 (ECE homologation), Code: 70001180 (new)

2. Tested sample: Tyre
 Sort: M Ident. No.: 56869
 Dimension 170/60B17 Name: Mitas Enduro Trail XT+ Dakar
 Designation Product: TWS India Approval E8 75R 001541
 LI: 72 SS: T IP: 290 kPa PR LR: B Type TL/TT M+S M
 Weight: 7,58 kg Measuring rim 4,50x17 DOT: 05J DOP: 3123

3. Test: Sidewall lettering inspection
 Method: KPB-M-003 accredited

4. Test condition: Testing machine: - Drum: - mm Ambient temperature: 25±5°C
 Testing rim: MT4,50x17 H2 Inflation: kPa
 Load: daN Drum speed: km/h Slip: 0° Camber: 0°
 Cycle min/max: Track min/max: km

5. Results: See appendix of protocol: 23-5150
 Undergo cycles: Undergo track: km

6. Evaluation: Criterion defined in ECE-R75 and other standards
 U = 0,5 mm

U: Expanded uncertainty = multiplying the combined standard uncertainty by a coverage factor k=2, what for normal distribution have a level of confidence of 95%

7. Appendix: 1. Tyre lettering inspection

8. Warning: Test results are concerning this sample only. It is strongly prohibited to copy any part of this report without permission of the Testing Laboratory. The results apply to the sample as received. All tests are performed in lab permanent facility. The laboratory is responsible for all the information provided in the report, except the "designation" which is provided by customer.

Approved by: Laboratory quality manager Ing. Petr Husták, Ph.D.



Sample No.: 56869 Size: 170/60B17 Mitas Enduro Trail XT+ D Method: KPB-M-003

Date: 29.09.2023

Dimension of approval mark:

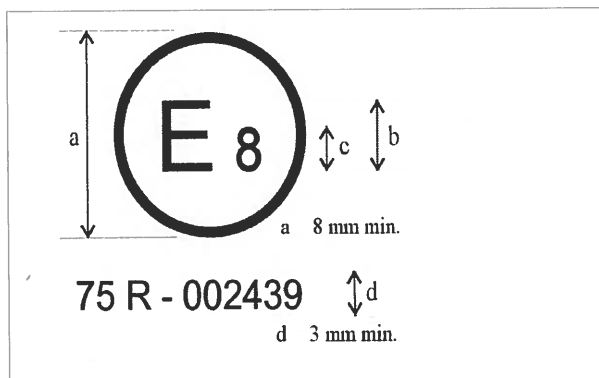
diameter of circle: 11 mm

height of letter E: 6 mm

height of number: 4 mm

height of text 75R....: 4 mm

Sidewall lettering:

b $\geq$ 4 mm (min): 3 mm

b TUBELESS M + S

Measured where (text): Tubeless

Size designation (text) : Yes

Structure (diagonal/bias belted/radial): B

Trade name (mark): Yes

Speed category (mark): Yes

Load capacity (mark): Yes

Ply rating (mark): No

TUBELESS (text): No

REINFORCED or REINF (text): No

M+S or M.S or MaS (mark): Yes

MST (mark): Yes

Date of production (wwyy): Yes

M/C (mark): Yes

MOPED or CYCLOMOTEUR (text): -

(W) for SS>270km/h: No

Running rotation (mark): Yes

Visible defects or damages: No

QC check mark (stamp): No

Manuf.name or country of or Yes

TWI markings: Yes

DP (mark): No

NHS (mark): No

TEST REPORT No. 2023 - 5152

TTC Zlín, Šternberská 446, Louky, 763 02 Zlín

Testing Laboratory No.1253, accredited by Czech Accreditation Institute according ČSN EN ISO/IEC 17025:2018

1. Customer: Yokohama TWS Czech Republic a.s. Requirement No.: MM/23364
 Švehlova 1900/3 Dept.: Moto Kran Task:
 106 25 Praha 10 Project No.: 70001180
 Česká republika Application date: 25.09.2023
 Responsible: ing. Macháčová Report issue date: 05.10.2023
 Test motive: Prototype tyres V1 (ECE homologation), Code: 70001180 (new)

2. Tested sample: Tyre Sort: M Ident. No.: 56869
 Dimension 170/60B17 Name: Mitas Enduro Trail XT+ Dakar
 Designation Product: TWS India Approval E8 75R 001541
 LI: 72 SS: T IP: 290 kPa PR LR: B Type TL/TT M+S M
 Weight: 7,58 kg Measuring rim 4,50x17 DOT: 05J DOP: 3123

3. Test: Measurement of tyre dimensions
 Method: MZR-M-003 accredited

4. Test condition: Testing machine: - Drum: - mm Ambient temperature: 25±5°C
 Testing rim: MT4,50x17 H2 Inflation: 280 kPa
 Load: daN Drum speed: km/h Slip: 0° Camber: 0°
 Cycle min/max: Track min/max: km

5. Results: Overall diameter: 649 mm
 Overall width: 167,2 mm
 Undergo cycles: Undergo track: km

6. Evaluation: Criterion defined in ECE-R75
 Udiam = 1,5 mm; Uwidth = 1,0 mm

U: Expanded uncertainty = multiplying the combined standard uncertainty by a coverage factor k=2, what for normal distribution have a level of confidence of 95%

7. Appendix: 1. Measurement of tyre dimensions

8. Warning: Test results are concerning this sample only. It is strongly prohibited to copy any part of this report without permission of the Testing Laboratory. The results apply to the sample as received. All tests are performed in lab permanent facility. The laboratory is responsible for all the information provided in the report, except the "designation" which is provided by customer.

Approved by: Laboratory quality manager Ing. Petr Husták, Ph.D.



Sample No 56869 Tyre size: 170/60B17 Mitas Enduro Tra Method: MZR-M-003

Date of measurement	Tyre		Tyre width at six points on circumference						Overall tyre	
	inflation	cicumf.	1	2	3	4	5	6	width	diameter
	kPa	mm	mm	mm	mm	mm	mm	mm	mm	mm
05.10.2023	280	2 040	167,2	167,2	167,1	167,1	167,2	167,2	167,2	649

TEST REPORT No. 2023 - 5298

TTC Zlín, Šternberská 446, Louky, 763 02 Zlín

Testing Laboratory No.1253, accredited by Czech Accreditation Institute according ČSN EN ISO/IEC 17025:2018

1. Customer: Yokohama TWS Czech Republic a.s. Requirement No.: MM/23364
 Švehlova 1900/3 Dept.: Moto Kran Task:
 106 25 Praha 10 Project No.: 70001180
 Česká republika Application date: 25.09.2023
 Responsible: ing. Macháčová Report issue date: 17. 10. 2023
 Test motive: Prototype tyres V1 (ECE homologation), Code: 70001180 (new)

2. Tested sample: Tyre Sort: M Ident. No.: 56873
 Dimension 170/60B17 Name: Mitas Enduro Trail XT+ Dakar
 Designation Product: TWS India Approval E8 75R 001541
 LI: 72 SS: T IP: 290 kPa PR LR: B Type TL/TT M+S M
 Weight: 7,4 kg Measuring rim 4,50x17 DOT: 05J DOP: 3123

3. Test: Dynamic growth test
 Method: MDN-M-003 accredited

4. Test condition: Testing machine: DN Drum: - mm Ambient temperature: 25±5°C
 Testing rim: MT4,50x17 H2 Inflation: 290 kPa capped
 Load: daN Drum speed: 190 km/h Slip: 0° Camber: 0°
 Cycle min/max: Track min/max: km

5. Results: Max. centrifugal radius of tyre at max. speed: 329,6 mm
 Overall width of tyre at max. speed: 157,8 mm
 Undergo cycles: Undergo track: km

6. Evaluation: Criterion profil doesn't exceed limit curve
 Uinfl = 3 kPa; Utime +1 s; Uspeed = 2 km/h; Udist=0,7mm

U: Expanded uncertainty = multiplying the combined standard uncertainty by a coverage factor k=2, what for normal distribution have a level of confidence of 95%

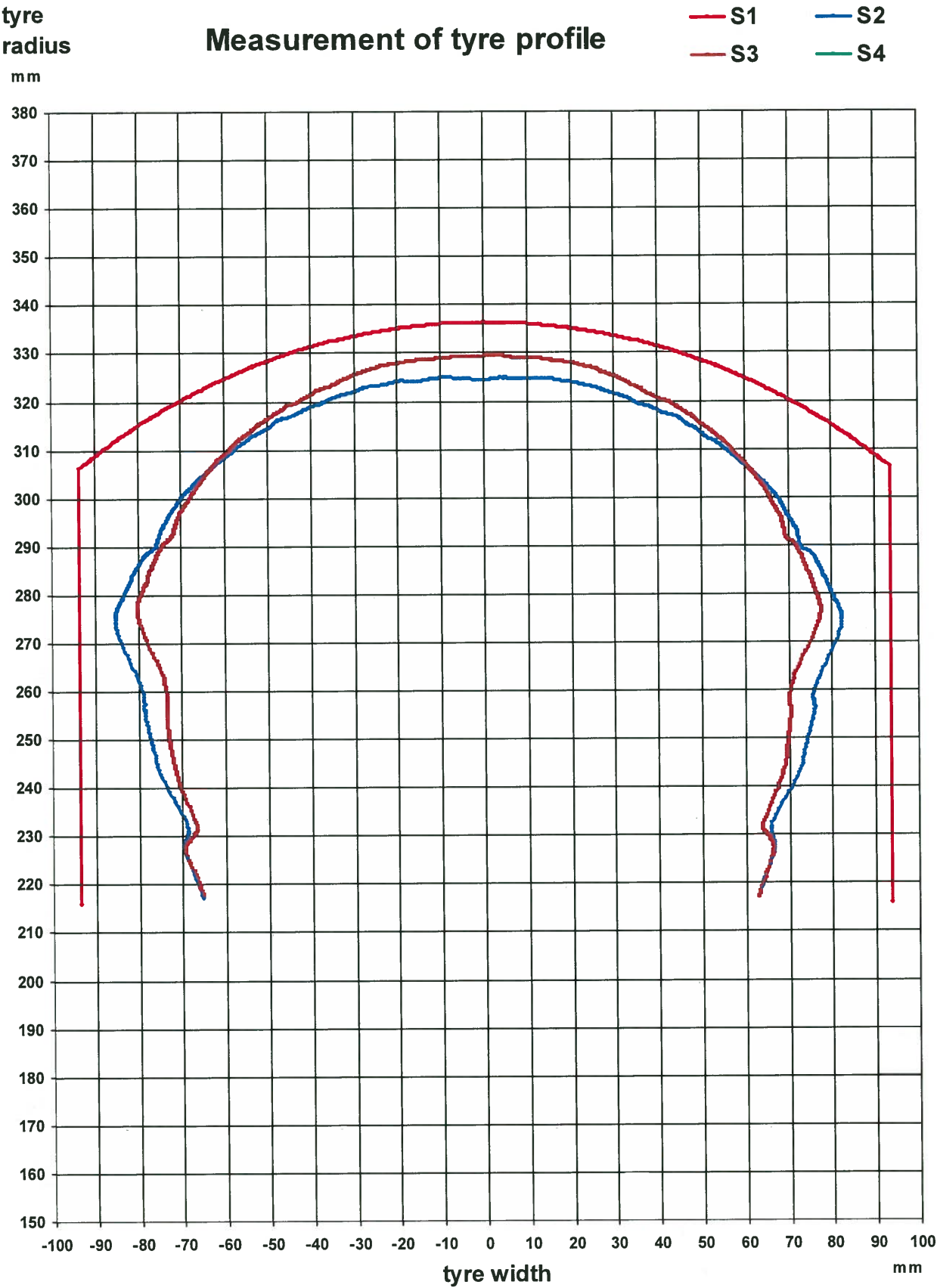
7. Appendix: 1. Tyre profile record : S1-Test limit, S2-10 km/h, S3-190 km/h

8. Warning: Test results are concerning this sample only. It is strongly prohibited to copy any part of this report without permission of the Testing Laboratory. The results apply to the sample as received. All tests are performed in lab permanent facility. The laboratory is responsible for all the information provided in the report, except the "designation" which is provided by customer.

Approved by: Laboratory quality manager Ing. Petr Husták, Ph.D.



IGTT a.s.
 Tyre Approval Department
 Šternberská 446, Louky
 763 02 Zlín, Czech Republic
 IČ/D: 46900080 DIČ/VAT: CZ46900080



TEST REPORT No. 2024 - 541

TTC Zlín, Šternberská 446, Louky, 763 02 Zlín

Testing Laboratory No.1253, accredited by Czech Accreditation Institute according ČSN EN ISO/IEC 17025:2018

1. Customer: Yokohama TWS Slovenia, d.o.o.
 Škofjeloška cesta 6
 4000 Kranj
 Slovenia
 Responsible: ing. Macháčová
 Requirement No.: MM/24062
 Dept.: Moto Kranj Task:
 Project No.: 70001180
 Application date: 23.01.2024
 Report issue date: 30.01.2024
 Test motive: Prototype tyres V3 (ECE homologation), Code: 70001180 (new)

2. Tested sample: Tyre
 Sort: M Ident. No.: 57497
 Dimension 170/60B17 Name: Mitas Enduro Trail XT+ Dakar
 Designation V3 Product: Yokohama TWS I Approval E8 75R 001541
 LI: 72 SS: T IP: 290 kPa PR LR: Type TL M+S MST
 Weight: 7,46 kg Measuring rim 4,50x17 DOT: 05J DOP: 4523

3. Test: Speed test
 Method: RZ-M-003 accredited

4. Test condition: Testing machine: H1L Drum: 1700 mm Ambient temperature: 38±3°C
 Testing rim: MT4,50x17 H2 Inflation: 350 kPa capped
 Load: 226 daN Drum speed: km/h Slip: 0° Camber: 0°
 Cycle min/max: Track min/max: km

5. Results: Without failure.
 Difference of tyre circumference at start and at end of test: 0,2 %

Undergo cycles: 66 901 Undergo track: 135 km

6. Evaluation: Criterion no defects and circumf.difference before and 6h after test max. ±3,5%
 Uinfl = 3 kPa; Utime +1 s; Uspeed = 2 km/h;
 Uload = 5% (40 - 500 daN), 1% (501 - 30000 daN)
 U: Expanded uncertainty = multiplying the combined standard uncertainty by a coverage factor k=2, what for normal distribution have a level of confidence of 95%

7. Appendix: 1. Drum tyre test record

8. Warning: Test results are concerning this sample only. It is strongly prohibited to copy any part of this report without permission of the Testing Laboratory. The results apply to the sample as received. All tests are performed in lab permanent facility. The laboratory is responsible for all the information provided in the report, except the "designation" which is provided by customer.

Approved by: Laboratory quality manager Ing. Petr Husták, Ph.D.



Sample No.: 57497		Dimension:		170/60B17		Mitas Enduro Trail		Test:		RZ-M-003			
ID No.	Test stage	Date time dd.mm.yyyy hh:mm:ss	Step duration hhh:mm:ss	Test duration hhh:mm:ss	Speed km/h	Load daN	Inflation kPa	Radius mm	Surface °C	Room °C	Distance km	Cycles	Diameter/ deflection mm
1	Start	28.01.2024 13:24:43	000:00:00	000:00:00			350			36,0			650
2	Cont	28.01.2024 13:45:30	000:20:00	000:20:00	75,1	224		316		36,5	25	12 476	9
3	Cont	28.01.2024 13:55:32	000:10:00	000:30:00	150,0	224		318		37,1	50	24 908	7
4	Cont	28.01.2024 14:05:34	000:10:00	000:40:00	160,0	224		319		37,4	77	38 118	6
5	Cont	28.01.2024 14:15:36	000:10:00	000:50:00	170,0	224		319		37,5	105	52 102	6
6	Cont	28.01.2024 14:25:38	000:10:00	001:00:00	180,0	224		320		37,0	135	66 901	5
7	Int:M	28.01.2024 14:31:44	000:06:06	001:00:00						37,1			
8	Int:O	29.01.2024 6:42:59	016:11:15	001:00:00			307			37,1			651
9	End	29.01.2024 6:43:08	000:00:09	001:00:00						37,1			

Tyre width immediately after end of test(mm): 169,5 - 168,7 - 170,5 - 169,6 - 169,2 - 170,2

Change of tyre circumference before test and 6h after test (%): 0,15

Cont=Continuation, Int=Interruption: M-compulsory check, O-operator check, K-radius low limit, H-inflation low limit, T-surface temperature limit, S-tread or sidewall separation, C-cycles limit, D-distance limit, Ć-time limit, P-machine problem, A-current increase