

**The Appendix is an integral part of
Certificate of Accreditation No. 322/2023 of 15/06/2023**

Accredited entity according to ČSN EN ISO/IEC 17025:2018:

Yokohama TWS Czech Republic a.s.
CAB number 1253, TTC Zlín
Šternberská 446, Louky, 763 02 Zlín

The Laboratory applies a flexible approach to the scope of accreditation.

The current list of activities carried out within the flexible scope is publicly available at the Laboratory at <https://www.trelleborg-tires.com/en/about-us> in the form “List of activities within the flexible scope of accreditation”.

Tests:

Ordinal number ¹	Test procedure / method name	Test procedure / method identification ²	Subject of the test	Degrees of freedom ³
1	Measurement of basic dimensions	MZR-A-004 (ECE-R106); MZR-A-320 (Conti-A MEC); MZR-AC-401 (Mitas LET); MZR-C-002 (ECE-R54); MZR-C-006 (ECE-R109); MZR-C-010 (GS-646/1997); MZR-C-013 (GS-962/1997); MZR-C-320 (Conti-C MEC); MZR-EM-320 (Conti-EM MEC); MZR-IP-101 (ČSN 53 1504); MZR-IP-320 (Conti-IP MEC); MZR-M-003 (ECE-R75); MZR-M-023 (InMetro:Port. No.379); MZR-M-043 (GB/T 518); MZR-P-001 (ECE-R30); MZR-P-005 (ECE-R108); MZR-P-007 (FMVSS-109); MZR-P-009 (GS-53/1986); MZR-P-013 (GS-962/1997)	Tyres for agriculture, aerospace, trucks, passenger cars, motorcycles, construction machines, industrial applications and skid steers	A, B, D
2	Measurement of tyre tread grooves	MDD-A-320 (TWS); MDD-C-008 (FMVSS-119); MDD-C-320 (TWS); MDD-EM-320 (TWS); MDD-IP-320 (TWS); MDD-M-008 (FMVSS-119); MDB-M-022 (FIM); MDD-M-048 (GB-518; GB/T512); MDD-P-001 (ECE-R30); MDD-P-007 (FMVSS-109)	Tyres for agriculture, trucks, passenger cars, motorcycles, construction machines, industrial applications and skid steers	A, B, D

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3	Air-tightness test	ZV-A-203 (Barum-01/19); ZV-AC-017 (TSO-C62e); ZV-AC-020 (ETSO-C62e); ZV-C-203 (Barum-01/19); ZV-EM-203 (Barum-01/19); ZV-IP-203 (Barum-01/19); ZV-M-203 (Barum-01/19); ZV-M-803 (TWS)	Tyres for agriculture, aerospace, trucks, motorcycles, construction machines, industrial applications and skid steers	A, B, D
4	Determination of breaking energy using a plunger	ZTRN-A-008 (FMVSS-119); ZTRN-A-326 (FMVSS-119); ZTRN-BC-023 (ABNT NBR 13585); ZTRN-C-008 (FMVSS-119); ZTRN-EM-008 (FMVSS-119); ZTRN-IP-012 (ISO 10454/1993); ZTRN-M-008 (FMVSS-119); ZTRN-P-007 (FMVSS-109); ZTRN-P-009 (GS-53/1986)	Tyres for agriculture, trucks, passenger cars, motorcycles, construction machines, bicycles, industrial applications and skid steers	A, B, D
5	Water pressure test	ZVT-A-004 (ECE-R106); ZVT-A-111 (ČSN 63 1535); ZVT-A-327 (Conti-BURE); ZVT-AC-401 (Mitas LET); ZVT-C-111 (ČSN 63 1535); ZVT-EM-111 (ČSN 63 1535); ZVT-IP-111 (ČSN 63 1535); ZVT-M-111 (ČSN 63 1535); ZVT-P-111 (ČSN 63 1535)	Tyres for agriculture, aerospace, trucks, passenger cars, motorcycles, construction machines, industrial applications and skid steers	A, B, D
6	Speed test	RZ-C-008 (FMVSS-119); RZ-C-523 (Conti-HMB); RZ-M-003 (ECE-R75); RZ-M-0031 (ECE-R75); RZ-M-003e (ECE-R75-ext); RZ-M-008 (FMVSS-119); RZ-M-023 (InMetro:Port. No.379); RZ-M-0231 (InMetro:Port. No.379);	Tyre for trucks, motorcycles, passenger cars	A, B, D

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		RZ-M-023e (InMetro:Port. No.379); RZ-M-513 (Mitas-IGTT); RZ-M-043 (GB/T 518); RZ-M-0431 (GB/T 518); RZ-P-001 (ECE-R30); RZ-P-005 (ECE-R108); RZ-P-007 (FMVSS-109); RZ-P-009 (GS-53/1986); RZ-P-013 (GS-962/1997)		
7	Durability test	ZT-A-308 (Conti-ENE); ZT-A-308e (Conti-ENE); ZT-A-309 (Conti-ENC); ZT-A-312 (Conti-BSTS1); ZT-A-312s (Conti-BSTS1); ZT-A-314 (Conti-ENDF); ZT-A-315 (Conti-ENDR); ZT-A-316 (Conti-ALDF); ZT-A-004 (ECE-R106); ZT-A-812 (TWS-ICDT 005/V1); ZT-A-815 (TWS-ICA / V2); ZT-AC-401 (Mitas LET); ZT-C-002 (ECE-R54); ZT-C-006 (ECE-R109); ZT-C-008 (FMVSS-119); ZT-C-010 (GS-646/2009); ZT-C-302 (Conti-BSTP); ZT-C-304 (Conti-BSTS); ZT-C-306 (Conti-ENE); ZT-C-307 (Conti-ENC); ZT-IP-307 (Conti-ENC); ZT-IP-339 (Conti-BEL); ZT-M-008 (FMVSS-119); ZT-M-521 (DOT-119-IGTT); ZT-P-007 (FMVSS-109); ZT-P-009 (GS-53/1986)	Tyres for agriculture, aerospace, trucks, passenger cars, motorcycles, industrial applications and skid steers	A, B, D

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Ordinal number ¹	Test procedure / method name	Test procedure / method identification ²	Subject of the test	Degrees of freedom ³
8	Determination of bead durability on a test wheel	ZTP-A-311 (Conti-BEAD); ZTP-A-340 (Conti-BEAS); ZTP-A-840 (TWS-IBSD 004/V2); ZTP-C-311 (Conti-BEAD); ZTP-C-340 (Conti-BEAS); ZTP-EM-803 (Conti-BS-bead durability); ZTP-IP-311 (Conti-BEAD); ZTP-IP-803 (Conti-BS-bead durability)	Tyres for agriculture, trucks, construction machines, industrial applications and skid steers	A, B, D
9	Service life test by radial load	ZDK-R-024 (ECE-R124); ZDK-R-601 (H-Tw-04,05/1996); ZDK-R-602 (ES-S96BB); ZDK-R-605 (HLA-2006); ZDK-R-606 (HLA-2006)	Disc wheel	A, B, D
10	Measurement of dynamic increase	MDN-M-003 (ECE-R75); MDN-M-043 (GB/T 518); MDN-M-023 (InMetro:Port. No.379)	Motorcycle tyres	A, B, D
11	Measurement of rolling circumference	MOO-A-018 (ISO-11795); MOO-A-338 (Conti-RCR); MOO-C-018 (ISO-11795); MOO-EM-018 (ISO-11795); MOO-IP-018 (ISO-11795)	Tyres for agriculture, trucks, construction machines, industrial applications and skid steers	A, B, D
12	Check of sidewall markings	KPB-A-004 (ECE-R106); KPB-C-002 (ECE-R54); KPB-C-006 (ECE-R109); KPB-C-008 (FMVSS-119); KPB-C-010 (GS-646/1997); KPB-M-003 (ECE-R75); KPB-M-008 (FMVSS-119); KPB-P-001 (ECE-R30); KPB-P-005 (ECE-R108); KPB-P-007 (FMVSS-109)	Tyre for agriculture, trucks, motorcycles, passenger cars	A, B, D

¹ asterisk at the ordinal number identifies the tests, which the Laboratory is qualified to carry out outside the permanent laboratory premises

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- ² if the document identifying the test procedure is dated, only these specific procedures are used. If the document identifying the test procedure is not dated, the latest edition of the specified procedure is used (including any changes)
- ³ degree of freedom: A - Flexibility concerning materials/products (subject of the test), B - Flexibility concerning components/parameters/characteristics, C - Flexibility concerning the performance of the method, D - Flexibility concerning the method

The laboratory can modify the test procedures with the specified degree(s) of freedom in the scope of accreditation while maintaining the principle of measurement. If no degree of freedom is specified, the laboratory cannot apply a flexible approach to the scope of accreditation for the test

Explanatory notes: MZR, MDD, ZV, ZTRN, ZVT, RZ, ZT, ZTP, ZDK, MDN, KPB..... in-house procedures

Barum, Conti, Mitas, VÚGPT, BS, IGTT, TWS, MIL, HLA, TL customer procedures

ČSN Czech Technical Standard

Gost Gosudarstvjennyj standart sojuza SSR

ECE Economic Commission of Europe (Regulation no....)

GS Saudi Arabian Standard (Gulf Standard)

FMVSS Federal Motor Vehicle Safety Standards and Regulations (National highway traffic safety)

ISO International Organization for Standardization

InMetro National Institute of Metrology, Standardization, and Industrial Quality

ABNT Brazilian Association of Technical Standards

GB/T National Standard of the People's Republic of China