

Technical capacities of LLC “Tyre Testing Center “Vershina” for performing certification tests of pneumatic tyres for the CE mark E22





Technical Service of Russia

TTC "Vershina" is appointed as the Russian Technical Service 22P, category A, under the terms of the Geneva Accord, 1958, in accordance with UNECE Regulations No 30, 75, 54, 106, 108, 109, 117.


United Nations		ECE TRANS/WP.29/343/Rev.28/Add.1	
		Economic and Social Council	
		28 February 2020	
		Original: English/French/Russian	
Economic Commission for Europe Commission économique pour l'Europe Европейская экономическая Комиссия		ECE/TRANS/WP.29/343/Rev.28/Add.1	
Inland Transport Committee Comité des transports intérieurs Комитет по внутреннему транспорту			
Russian Federation			
Code	Name and address	Email (E) Website (W) Phone(P) Fax(F)	Notes
22/P	Limited liability company «Tire Testing Center «Vershina» (TTC «Vershina» LLC), Legal and post address: 150003, 81, Sovetskaya str., Yaroslavl city, Russia, post office box 5	E: info@vershina-test.ru W: http://en.vershina-test.ru/ P: +7 (4852) 79-12-32, +7 (4852) 79-12-13, +7 (4852) 79-10-03 F: +7 (4852) 79-12-24, +7 (4852) 79-18-38	

Extract from the Register of Technical Services of the Economic Commission for Europe

Technical Service of the Russian Federation is entitled to carry out certification tests.

Based on the test data protocols, the Administrative authority of Russia issues Communications on the product type approval to the applicant.

Subsequently, upon issuing documents, the Applicant has an opportunity to sell their products in ECE and EAEU countries.

	
МИНИСТЕРСТВО ПРОМЫШЛЕННОСТИ И ТОРГОВЛИ РОССИЙСКОЙ ФЕДЕРАЦИИ	
ФЕДЕРАЛЬНОЕ АГЕНТСТВО ПО ТЕХНИЧЕСКОМУ РЕГУЛИРОВАНИЮ И МЕТРОЛОГИИ (Росстандарт)	
ПРОТОКОЛ	
24.12.2020	№ 135-пр
Москва	
<p>заседания оценочной группы, назначенной для осуществления процедур оценки технических служб в соответствии с Соглашением о принятии согласованных технических правил Организации Объединенных Наций для колесных транспортных средств, предметов оборудования и частей, которые могут быть установлены и/или использованы на колесных транспортных средствах, и об условиях взаимного признания официальных утверждений, выдаваемых на основе этих правил Организации Объединенных Наций, заключенным в г. Женеве 20 марта 1958 г., под председательством заместителя Руководителя Росстандарта А.В.Кулешова</p>	
Присутствовали:	С.А.Аникеев, А.А.Вихарев, С.В.Евстафьев, Д.А.Загарин, И.А.Коровкин, А.М.Кузьмин, Б.Д.Станков, П.В.Гамалеев, представители технических служб
Рассмотрение заявки ООО «Шинный испытательный центр «Вершина»	
<p>1. По результатам рассмотрения оценочной группой заявки, поступившей от ООО «Шинный испытательный центр «Вершина», принято решение о переназначении в качестве технической службы по заявленной области Правил ООН № 30 (кат. А); 54 (кат. А); 64 (кат. А); 75 (кат. А); 106 (кат. А); 108 (кат. А); 109 (кат. А); 117 (кат. А); 124 (Приложение 7) (кат. А.).</p> <p>2. Считать целесообразным проведение выездного заседания в 2021 г.</p>	

Extract from the Protocol on reappointment of Technical Services of Russia for 2021-2026.

Bench testing

Administration

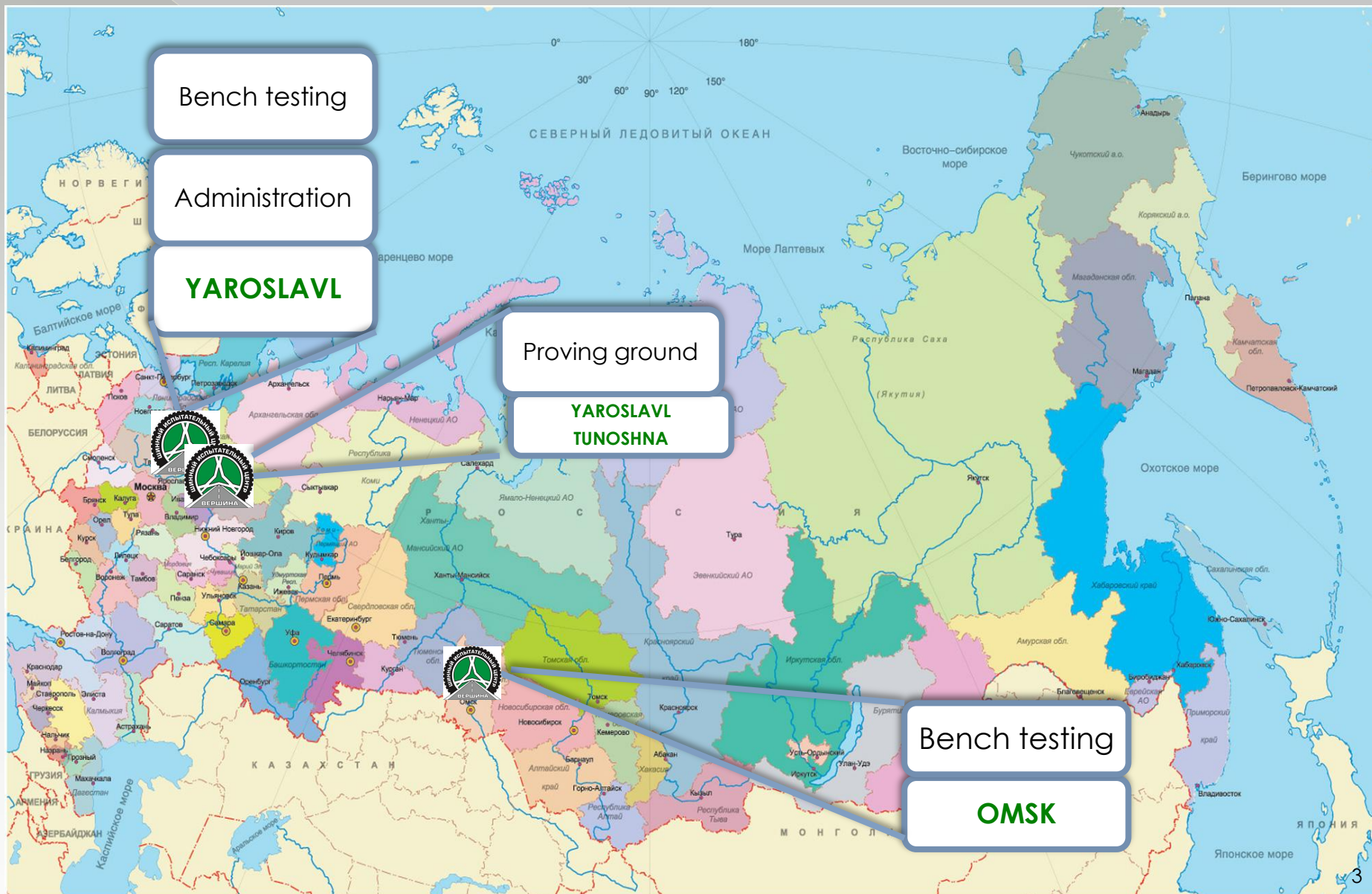
YAROSLAVL

Proving ground

**YAROSLAVL
TUNOSHNA**

Bench testing

OMSK





LLC “Tyre Testing Center “Vershina” today. Performance of certification tests.

LLC “Tyre Testing Center “Vershina”

LLC "Tyre Testing Center "Vershina"		
Administrative and financial department	Yaroslavl Director of the Testing Center	Omsk Deputy Director of the Testing Center
General Director	Bench test department	Bench test department
Human Resources Manager	Road test department	Functions Testing passenger car tyres for the conformity with requirements of UNECE Regulations No 30, No 108. Testing truck and light-truck tyres for the conformity with requirements of UNECE Regulations No 54, No 109. Equipment maintenance. Metrological assurance.
Chief Accountant	Proving ground	
Economist	Electric equipment repair department, EC&I	
	Electromechanical department	
	Functions	

Testing passenger car tyres for the conformity with requirements of UNECE Regulation No 30.
Testing truck and light-truck tyres for the conformity with requirements of UNECE Regulation No 54.
Testing passenger car, light-truck and truck tyres for the conformity with requirements of UNECE Regulation No 117.
Testing quadbike tyress for the conformity with requirements of UNECE Regulation No75.
Testing agricultural tyres for the conformity with requirements of UNECE Regulation No 106.
Testing retreaded truck and light-truck tyres for the conformity with requirements of UNECE Regulation No 109.
Testing retreaded passenger car tyre for the conformity with requirements of UNECE Regulation No108.
Equipment maintenance. Metrological assurance.



Our employees carrying out certification tests

Item No	Requirements or name of the document which contains requirements to vehicle components	Defined characteristics	Omsk	Yaroslavl	Proving ground
1	UNECE Regulation No 30	Marking analysis, main dimensions, inspection for damage, conformance to load and speed	3 engineers 4 technicians	1 manager 3 engineers 4 technicians	
2	UNECE Regulation No 54				
3	UNECE Regulation No 75				
4	UNECE Rule No 106 Annex 9				
5	UNECE Regulation No 108				
6	UNECE Regulation No 109				
7	UNECE Regulation No 106 Annex 8	Test for evaluation of tyre for the burst resistance	-		
8	UNECE Regulation No 117 Annex 2	Marking analysis	-		
9	UNECE Regulation No 117 Annex 6	Rolling resistance coefficient	-		
10	UNECE Regulation No 117 Annex 3	Noise level generated by a tyre during rolling, while the vehicle is freewheeling	-	-	1 manager 3 engineers 1 test person
11	UNECE Regulation No 117 Annex 5	Wet grip index	-	-	
12	UNECE Regulation No 117 Annex 7	Snow grip index	-	-	



Production buildings



Yaroslavl

Overall production floor space 6287 m²

Premises for the interpretation of test results 517,5 m²

Rooms for dynamic machine testing 1080 m²

Rooms for static machine testing 885 m²

Rooms for machine testing of aircraft tyres 872 m²



Omsk

Overall production floor space 2967 m²

Premises for interpretation of test results 775,9 m²

Rooms for static dynamic machine testing 2203 m²



Yaroslavl

45 positions of tyre running machines
2 test presses
5 special machines
4 balancing rigs



Testing equipment

Omsk

22 positions of tyre running machines
2 test presses
2 special machines
3 balancing rigs



Testing equipment for certification tests



Machine for the tyre speed tests, tyre category C1, C2
ETM 25HS VMI

Positions: 2
Load: 25 kN
Speed: 420 km/h
UNECE Regulations No 30, No 75, No 108, No 117 (RR)

- endurance test
- maximum speed test
- rolling resistance

Torque measurement method



Machine for the tyre speed tests, tyre category C3
ETM 1C100 VMI

Positions : 2
Load : 100 kN
Speed : 220 km/h
UNECE Regulations No 54, No 109, No 117 (RR)

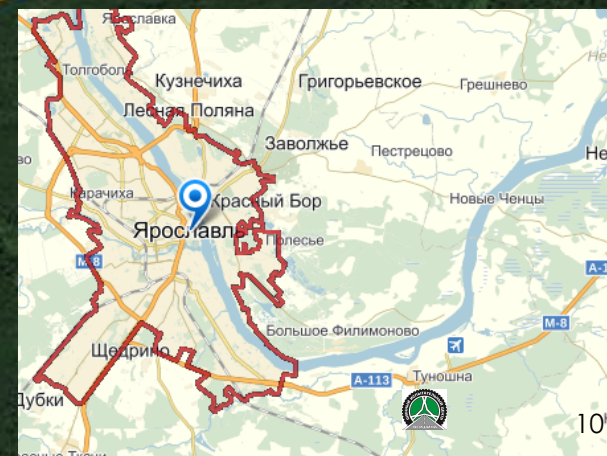
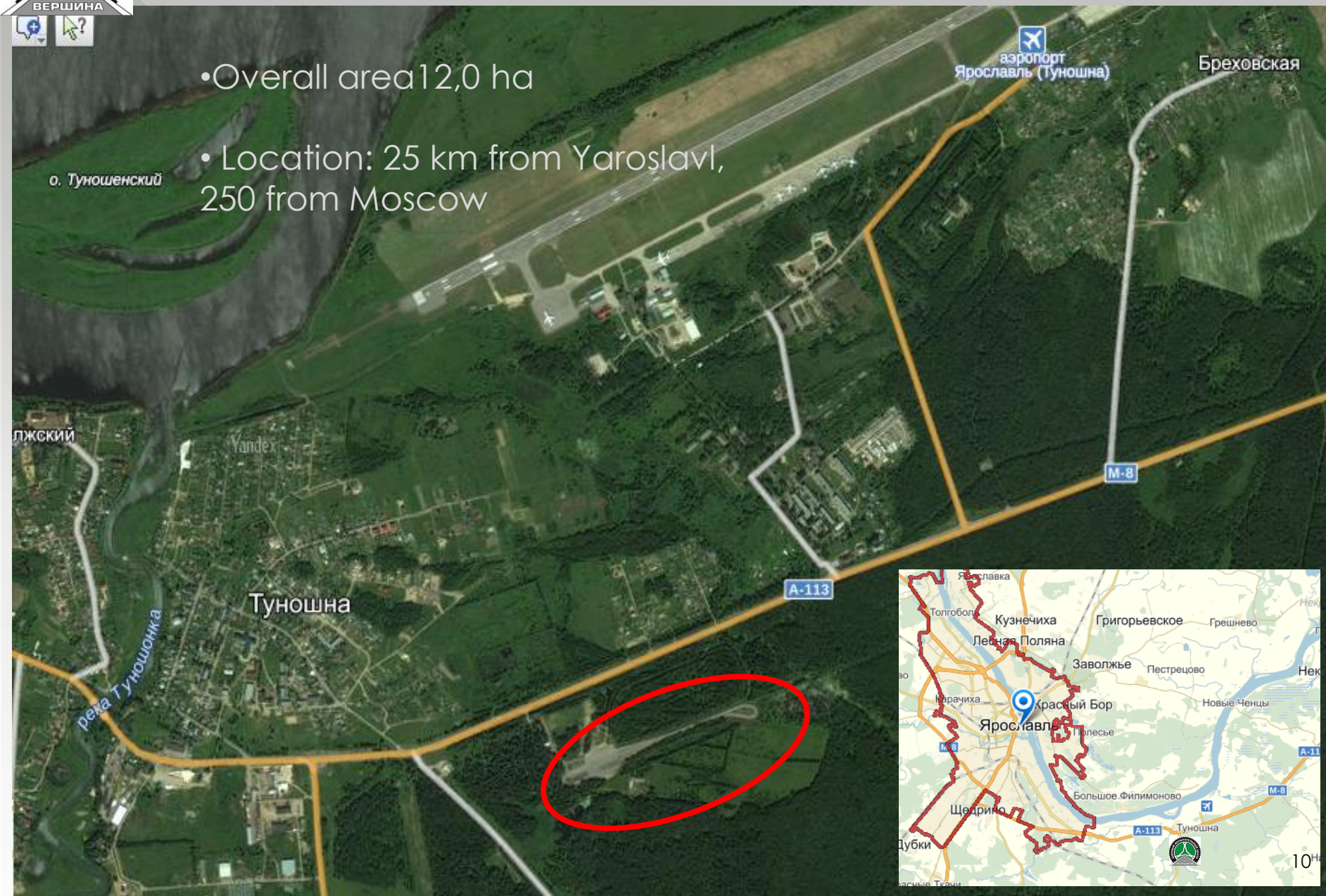
- endurance test
- rolling resistance

Torque measurement method

Testing equipment for certification tests

Item No	Requirements or name of the document which contains requirements to vehicle components	Defined characteristics	Omsk	Yaroslavl
1	UNECE Regulation No 30	Conformity with load and speed	ИПЗ-4	ИПЗ-2 2p ЕТМ 25HS
2	UNECE Regulation No 75			
3	UNECE Regulation No 108			
4	UNECE Regulation No 54		ИПЗ-4М СО2-100	ИПЗ-2 2p ЕТМ IC100
5	UNECE Regulation No 109			
6	UNECE Regulation No 106 Annex 9		-	ИМШ-5
7	UNECE Regulation No 117 Annex 6	Rolling resistance coefficient	-	2p ЕТМ IC100 2p ЕТМ 25HS
8	UNECE Regulation No 106 Annex 8	Burst resistance tests	-	СИШ-25

- Overall area 12,0 ha
- Location: 25 km from Yaroslavl,
250 from Moscow





Technical infrastructure of the proving ground

Technical infrastructure of the proving ground for certification tests

Item No	Requirements or name of the document which contains requirements to vehicle components	Defined characteristics	Technical infrastructure
1	UNECE Regulation No 117 Annex 3	Noise level generated by a tyre during rolling, while the vehicle is freewheeling	<ol style="list-style-type: none"> 1. Testing site certified in conformity with requirements of UNECE Regulation No 117. 2. Measuring complex Bruel & Kjaer / DEWESoft (Denmark/ Slovenia). 3. Noise meter – spectrum analyzer Octave-101A 4. Condenser button microphone 4189. 5. Location and speed meter DS Minitaur-100. 6. Infrared thermometer Testo 845. 7. Thermometer anemometer TTM-2/1-06. 8. Measuring tape P10Y3K. 9. Precise measurement gage MTI.
2	UNECE Regulation No 117 Annex 5	Wet grip index	<ol style="list-style-type: none"> 1. Testing site with a water sprinkler system certified in conformity with requirements of UNECE Regulation No 117. 2. Measuring gage VB0X3i. 3. Precise measurement gage MTI. 4. Reference tyres
3	UNECE Regulation No 117 Annex 7	Snow grip index	<ol style="list-style-type: none"> 1. Testing site with a surface covered with packed snow, in conformity with requirements of UNECE Regulation No 117. 2. Measuring gage VB0X3i. 3. Precise measurement gage MTI. 4. Penetrometer SMITHERS CTI 5. Reference tyres



Sites of the proving ground



Site for external noise measurement

Certified in conformity with requirements of UNECE Regulation No117, ISO 10844.



Site for wet grip measurement

Certified in conformity with requirements of UNECE Regulation No 117. Length: 80 meters, Width: 6 meters



Speed stabilization sections

Width: 8 meters, Length: 170 meters.



Acceleration section

Width: 8 meters, length: 500 meters.



Certification of the Proving Ground

1. Tests of sites and sections of the proving ground. Certification.

Technical Service TUV SUD Czech s.r.o., Prague, Czechia

Road laboratory LLC "Exicon", Moscow



1.1 Tests of the site to determine the tyre external noise level

- longitudinal and transverse slopes
- depth of texture
- residual porosity
- sound reduction coefficient

1.2 Tests of the site to determine the wet grip coefficient

- longitudinal and transverse slopes
- depth of texture
- wet grip index

Tests of the site were performed by the company TUV SUD in order to determine the level of tyre external noise

Tests protocols and certificate of conformity to ISO 10844 requirements were issued.

TÜV SÜD Czech s.r.o.
ECE/UN Technical Service No. E8/C


Czech
1/1

CERTIFICATE
121043 – 12 – TAC

of competency of the test track for noise measurement of tyres
according to

• ECE Regulation No. 117.02

Specification of the test track:

Owner: Tire Testing Center "Vershina"
Ul. Sovetskaja 81
150003 Yaroslavl
Russian Federation

Site of the track: Test track Vershina, specified part - see used documents
Yaroslavl
Russian Federation

Used documents: Measurement of acoustic absorption –
Technical report No. 10/2012 of 21 September 2012, issued by lab
EXICON LLC in Moscow, Russia
Measurement of texture depth –
Technical Report No. 240214 – 12 – TAC of 4 October 2012, issued by
TÜV SÜD Czech s.r.o. in Prague, Czech Republic

On the base these used documents
we certificate that the specified part of "Vershina" test track
complies
with requirements on the test track for noise measurement of tyres
according to ECE Regulation No. 117.02.


Mr. Vilem Kunzl
Officially recognized expert


Mr. Martin Hron
Business Unit Manager
of Vehicle Certification



Prague 4 October 2012

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Measuring instruments for certification tests

Measurement complex **Brüel & Kjær / DEWESoft** (Denmark/ Slovenia), world famous company in the field of sound and vibration analysis, is used for external tyre noise measurement, in accordance with UNECE Regulation No 117.



➤ Road tests equipment in accordance with UNECE Regulation No 117.

➤ **7 testing vehicles:** Hyundai Accent, Renault Logan, Ford Focus - 2 pieces, Ford Ranger, Gazon Next, VW Tiguan.

➤ **Reference tyres:**
14", 16", 19.5", 22.5"

Measuring complexes **Racelogic** (UK), well-known brand in the sphere of GPS-technologies VBOX VB20SL3 20 Hz GPS VBOX and VB100SL3 100 Hz GPS GLONASS, system of measurement and registration of rolling parameters of automotive vehicles, used for wet grip tests in conformity with requirements of UNECE Regulation No 117.





Proving ground. Tests for the conformity with requirements of UNECE Regulation No 117



UNECE Regulation No 117, Annex No 3. Noise level generated by a tyre at rolling, while the vehicle is freewheeling.



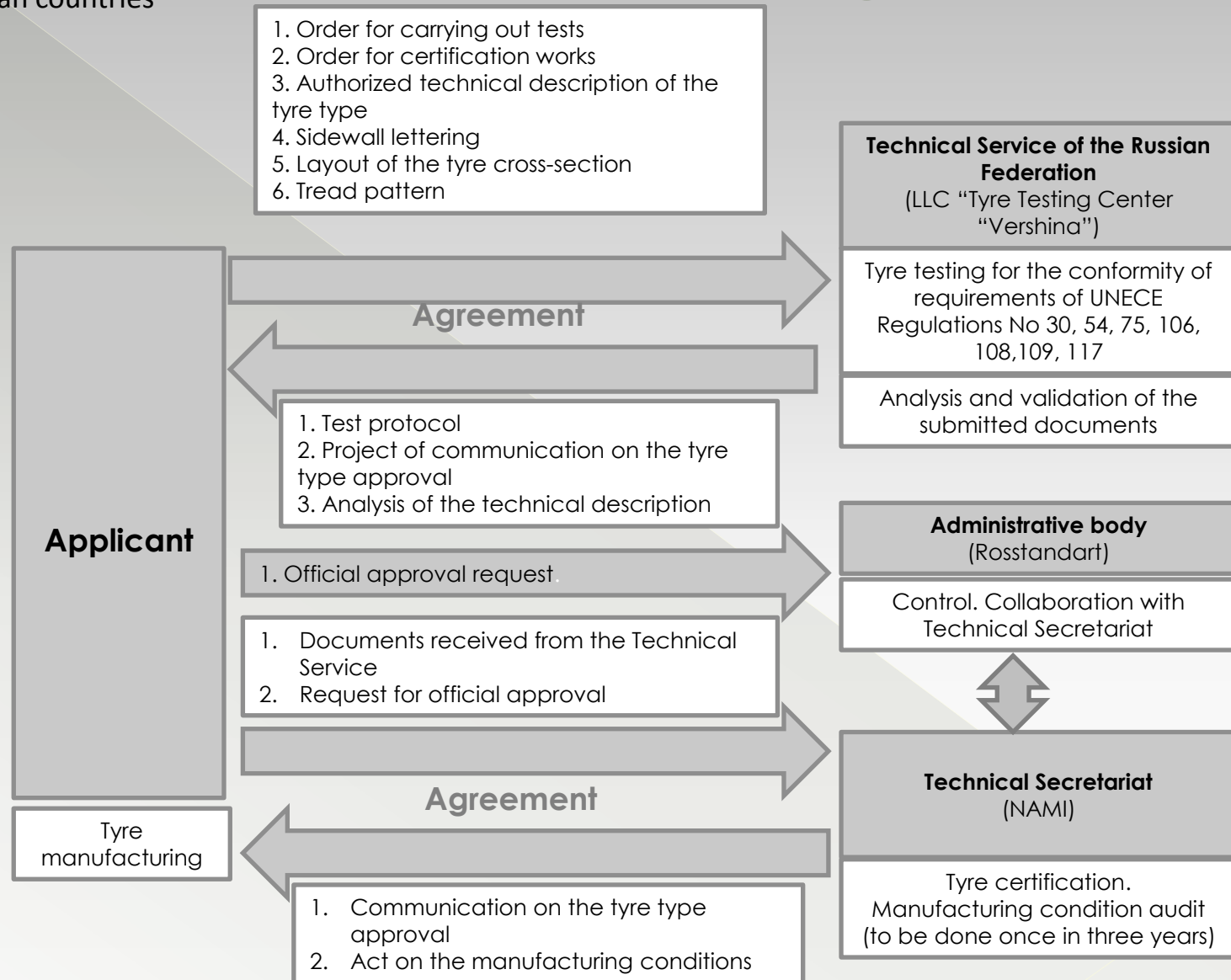
UNECE Regulation No 117, Annex No 5. Wet grip measurement.



UNECE Regulation No 117, Annex No 7. Snow grip efficiency.

Tyre certification scheme

- ✓ Receipt of Communication on the tyre type approval from ECE for sign E22 which allows selling tyres in European countries



- ✓ Additional requirements for selling tyres on the EU territory.

In order to sell tyres on the territory of the EU countries (European states), it is required to have a European marking (label) on tyres, in addition to Communication on the tyre type approval, in accordance with Regulations of the European Parliament and the Council of the European Union No 1222/2009.

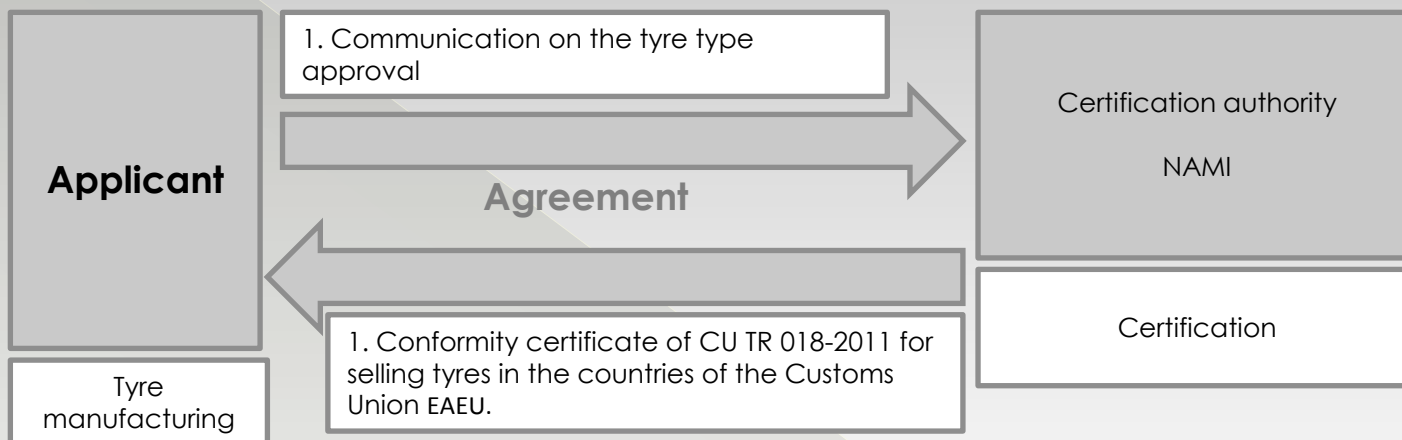
Information on the European marking is in conformity with measuring results of the noise level, wet grip index and snow grip index.

LLC “Tyre Testing Center “Vershina” can carry out the following tests required by Regulations No 1222/2009:

- measuring noise level generated while rolling for tyres C1 (passenger car tyres), C2 (light-truck tyres), C3 (truck tyres) (as per UNECE Regulations No 117, Annex 3).
- measuring wet grip index for tyres C1, C2
(As per Regulations of the EU Commission No 228/2011).

Tyre certification scheme

✓ Certification is made in accordance with requirements of the Customs Union Technical Regulation CU TR 018/2011 “On safety of wheeled vehicles” for selling tyres on the territory of countries of the Customs Union EAEU.



In order to sell tyres on the territory of Eurasian Economic Union (EAEU), the Applicant must receive certificates of conformity to the Technical Regulation of the Customs Union CU TR 018/2011 “On safety of wheeled vehicles” issued by certification bodies included into EAEU register.

Certificates of conformity are given based on Communications on the official approval of tyre type, which are issued on the availability of test results carried out by Technical Service (LLC Tyre Testing Center “Vershina”).

- 1. Tyre Testing Center “Vershina” – Technical Service of the Russian Federation – possesses all opportunities required to perform certification tests of tyres for conformity with UNECE Regulations requirements.**
- 2. Tyre Testing Center “Vershina” is an independent, dynamically developing company.**
- 3. We are specialized in pneumatic tyre testing and have all required technical infrastructure and qualified staff.**
- 4. We are open for cooperation in the sphere of tyre certification and tyre quality control on the Russian market with the support of the government.**
- 5. We are ready to master new methods and consider the implementation of test methods as agreed upon with the customer.**

Used definitions and abbreviations

EAЭC – Eurasian Custom Union

Countries of the Eurasian Customs Union EAЭC:

- Republic of Belarus;
- The Russian Federation;
- Republic of Armenia;
- Republic of Kazakhstan;
- Kyrgyz Republic

ECE– Economic Commission for Europe

56 countries are members of the Commission:

All European states, Transcaucasian countries (Azerbaijan, Armenia, Georgia) and Central Asian countries (Kazakhstan, Kirghizia, Tadjikistan, Turkmenistan, Uzbekistan) as well as the USA, Canada and Israel.



Contact information

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