

Rules | Guidelines | Recommendations

# **Imprint**

Date of issue 10/2025

# Hämmerling The Tyre Company GmbH

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# **ATHOS**

# The tyre for professionals who do the math

For over 17 years, ATHOS has stood for high-performance truck tyres that combine economy, reliability, and technical expertise. Developed in Germany in accordance with the latest European requirements and based on decades of experience in retreading, ATHOS meets the highest demands of modern fleets.

Manufactured in four specialized production plants in Asia, ATHOS offers a consistently practical solution for customers in the original equipment, tyre retail, and international freight forwarding sectors.

Every ATHOS tyre offers:

- Stable carcass structure for high recutting and retreading capability
- Uniform wear pattern for predictable mileage
- Optimized rolling resistance for reduced fuel consumption
- Precise tread design for traction, driving stability, and safety

ATHOS is a brand that is 100% owned and controlled by a German company – with a clear focus on quality, technical development, and partnership-based service.

Put your trust in a tyre that is used worldwide, supported by **German service and trained specialists on site**.



# **Quality from a single source** with European character

Since its market launch in 2008, ATHOS has stood for independence and economic success. As a European brand, all tyres are developed in collaboration with the German brand owner and produced under strict quality requirements – from the initial concept to the finished product. This organisation enables a quick response to market trends in the form of implementing innovative ideas and responding to customer needs.

Continuous research and development is at the heart of the brand and drives its success. The focus is on continuous improvement and solution-oriented product design. This enables ATHOS tyres to meet the complex requirements of different customer groups with uncompromisingly high standards.



As part of the exclusive **ATHOS** family, you will be actively involved in key strategic developments for the brand. This culture is reflected throughout the entire value chain – reliable, flexible, and passionate about the tyre trade.

# Tyre management

# A system that pays off

A good fleet management system is the digital twin of a vehicle fleet. It enables you to manage your fleet in such a way that you can save up to **10% on fuel costs** and also reduce CO2 emissions.

Data-based analysis is crucial for effective fleet management, as tyres account for around 50% of a vehicle's operating costs.

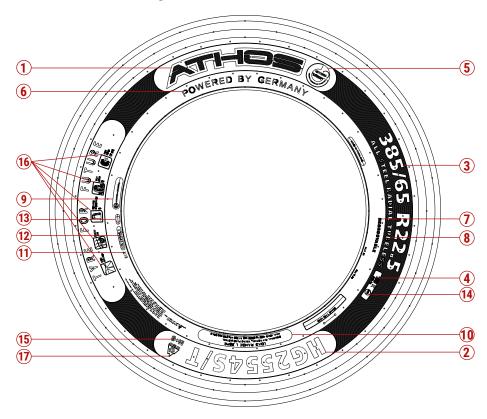
Intelligent tyre solutions enable proactive and sustainable tyre management, so that tyres are considered a valuable asset rather than just a cost factor.

Find your optimal tyre strategy and increase the efficiency of your vehicles. As a tyre partner with many years of experience, we are happy to help you implement this strategy.





# Sidewall labelling



1 Brand name

# 2 Tread designation

# 3 Size designation

385 = Tyre width in mm

65 = Aspect ratio

= 65% (Sidewall height to width)

R = Radial construction

22.5 = Rim diameter in inches

# 4 Operating ID,

consisting of

160 = Load index

for single configuration

K = Code Letter for the reference speed

# 5 TÜV (Technical Inspection Association) stamp

All products and production facilities have been tested and certified by TÜV Nord

6 Powered by Germany

Development with German know-how

# 7 Regrooveable

The tyre is designed to be regrooved.

# **8** Tubeless

Tyre without tube

# 9 Tube Type

Tyre with tube

# 10 ECE label

E = Type approval authority

E4 = Country code for the country in which the E marking was approved (E1=Germany, E2=France, E4=-Netherlands, E11=England).

In the case of truck tyres, the ECE guidelines 54 and 117 must be fulfilled.

S2WR2 - Stands for fulfilment of the current ECE guideline 117.

# (11) DOT marking

The tyre complies with FMWSS 119 regulations in the USA

# 12 DOT code

Identification number for factory, tyre size and tyre design

## 13) Production date

Production week (digit 1+2) and production year (digit 3+4)

### (14) Double ID

Alternative load and speed index for simultaneous use as a front axle or trailer tyre

#### (15) M+S

Labelling for winter-ready tyres (mud + snow)

#### 16 Eco-Icons

High Mileage: High running

performance

Energy-Efficient: Fuel-saving
Low Noise: Low rolling noise
Clean Air: Produced with

Produced with green oil, retreadable to protect the environment.lt.

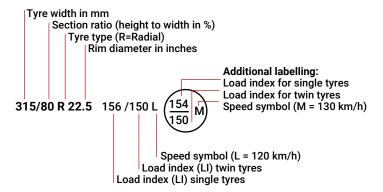
# (17) 3PMSF-Icon

The **3 P**eak **M**ountain **S**now **F**lake symbol indicates that the tyre meets the industry standard for winter-ready tyres

# **Size designation**

The tyre size designation is located on the sidewall of the tyre and indicates the dimension and design characteristics (R=radial or D=diagonal).

The ECE54 standard authorises an additional operating ID (also called double ID), which can be found near the basic operating ID in a circle on the sidewall.



# **Speed index**

The speed symbol indicates the maximum speed at which a tyre can be loaded under standard air pressure according to the load capacity index.

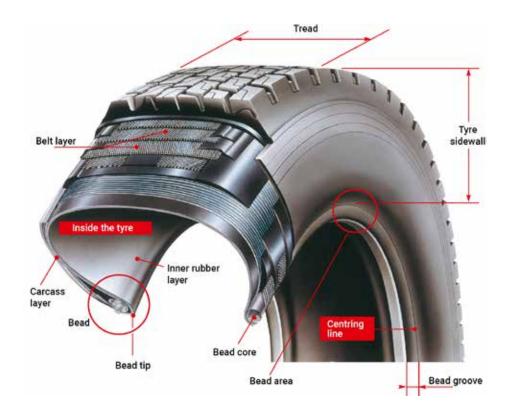
Symbol	Speed (km/h)	
Е	70	
F	80	M N
G	90	L P
J	100	130 140
K	110	$K \longrightarrow (81) (87) \longrightarrow Q$
L	120	(68) (99)
М	130	$J = \left( 100 \left( \frac{\text{km/h}}{\text{mph}} \right) (106) \right) 170 \right) - R$
N	140	(mph) (112)
Р	150	G (50) (118) 180 S
Q	160	80 190
R	170	F T
S	180	
Τ	190	

# **Load capacity index**

The load capacity index, also called the load index (LI), indicates the maximum load capacity (in kg) under standard air pressure in a tyre at maximum speed (according to speed symbol).

LI	Kg	Ш	Kg	LI	Kg
100	800	134	2.120	168	5.600
101	825	135	2.180	169	5.800
102	850	136	2.240	170	6.000
103	875	137	2.300	171	6.150
104	900	138	2.360	172	6.300
105	925	139	2.430	173	6.500
106	950	140	2.500	174	6.700
107	975	141	2.575	175	6.900
108	1.000	142	2.650	176	7.100
109	1.030	143	2.725	177	7.300
110	1.060	144	2.800	178	7.500
111	1.090	145	2.900	179	7.750
112	1.120	146	3.000	180	8.000
113	1.150	147	3.075	181	8.250
114	1.180	148	3.150	182	8.500
115	1.215	149	3.250	183	8.750
116	1.250	150	3.350	184	9.000
117 118	1.285	151	3.450	185 186	9.250 9.500
118	1.320 1.360	152 153	3.550 3.650	186	9.500
120	1.400	155 154	3.750	188	10.000
120	1.450	155	3.875	189	10.300
121	1.500	156	4.000	190	10.500
123	1.550	157	4.125	191	10.900
124	1.600	158	4.250	192	11.200
125	1.650	159	4.375	193	11.500
126	1.700	160	4.500	194	11.800
127	1.750	161	4.625	195	12.150
128	1.800	162	4.750	196	12.500
129	1.850	163	4.875	197	12.850
130	1.900	164	5.000	198	13.200
131	1.950	165	5.150	199	13.600
132	2.000	166	5.300		
133	2.060	167	5.450		

# Terminology and design



**Tread:** The tyre tread is the upper layer of a tyre that is designed with a tread

pattern (except for slicks). It primarily ensures the tyre's traction and wear resistance and protects the carcass underneath. New truck tyres have a pattern depth of approx. 13.5-22mm. The pattern and tread compound formula are critical for a variety of tyre characteristics such as

grip, wear pattern, rolling resistance, and wet performance.

**Belt:** The tyre belt consists of several layers of rubber-embedded, flat-angled

steel cord layers and is essentially inextensible.

The belt serves to stabilise the tread and prevents foreign bodies such as

stones from entering the carcass.

**Sidewall:** The sidewall is a single steel cord layer embedded in a flexible rubber

layer that protects the carcass from damage. The tyre sidewall, also known as the flank or tyre flank, influences both comfort and driving performance with better damping performance and can protect against potential damage through reinforcement, such as in bus tyres. All tyre

markings are located on the sidewall.

**Tyre shoulder:** The tyre shoulder is the area where the sidewall and the tread meet.

**Bead core:** The bead core ensures a tight fit on the wheel with the help of one or

more wire cores and carcass threads around it.

**Inner liner:** The sealing rubber layer inside the tyre replaces the tyre tube and is also

called an inner core, inner liner or inner lining.

Inner liners extend up to the level of the rim flange and around the bead. This rubber layer is self-sealing/self-closing to a certain extent to prevent

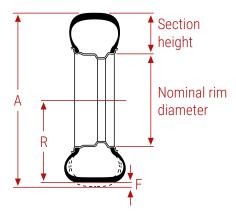
foreign bodies from entering.

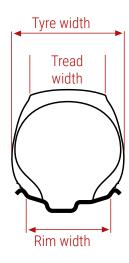
**Carcass:** The carcass is the so-called basic structure of the tyre and normally

consists of rubberised textile cords. It connects the bead and belt and, together with the air pressure, determines the strength (load capacity) of

the tyre.

# **Dimensions**





#### (A) Outer diameter:

The outer diameter is the diameter of an inflated tyre mounted on the rim up to the outermost point of the tread belt.

# (R) Static radius:

The static radius is the distance from the wheel centre to the road surface of the tyre loaded with the highest permissible load capacity.

# (F) Deflection:

So-called deflection describes the change in the tyre radius under normal loads. It corresponds to the distance that the axle sinks at maximum load. Tyres are thus designed to maintain a certain degree of deflection. If a tyre with incorrect (too high or low) deflection is used, this shortens the service life.

#### Tyre width:

The tyre width is indicated in mm and measures the width of an inflated tyre mounted on a standard rim. The tyre width is also indicated in the tyre size (e.g. **315**/80 R 22.5).

#### Tread width:

The tread width is indicated in mm and measures the width of the applied tread belt.

# **Section height:**

The section height is the distance between the bead seat and the outer tread of an inflated tyre.

#### Rim width:

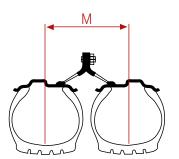
The rim width measures the distance between the rim flanges and is also called the rim mouth width.

#### Minimum rim centre distance:

The minimum rim centre distance is a recommended value indicated in mm and is intended to ensure the proper functioning of two dual assembly tyres (according to ETRTO standard - European Tyre and Rim Technical Organisation - without chains).

#### Nominal rim diameter:

The nominal rim diameter measures the diameter of a rim from rim edge to rim edge. The value is included in the designation of tyre and rim sizes and is usually indicated in inches (") (e.g. 315/80 R **22.5**).



Winter ty	res in Europe			Tyres	Snow chains	Tread	
also have the s	es have the M+S marking – in add 3PMSF marking. This guarantees ies are met. Furthermore, the ma have the 3PMSF marking.	that the criteria for winter tyres	in all Eu- I steering		Winter tyres required from 01/12 to 28/02 (between mid-October and April in Lapland), including on braked trailers. Spikes are allowed from 1/11 to the first Monday after Easter.	Use only permitted on roads covered with snow and ice.	Up to 3.5 t, M+S 3 mm Over 3.5 t, drive & steering axle M+S 5 mm Otherwise 3
Albania	Winter tyres are	Carriage requirement from	Tread M+S	France	Can be mandated by traffic	Installation can be mandated	mm M+S
	recommended.	,			signs. From Saturday before 11/11 to the last Sunday in March, spikes are allowed	by traffic signs. Max. 50 km/h	3.5 mm
Belgium	Spikes are allowed from 1/11 to 31/03.	Use only permitted on roads covered with snow and ice.	1.6 mm		for vehicles under 3.5 t of maximum permissible total		
Bosnia and Herzegovina	Winter tyres required from 15/11 to 15/04; alternatively, snow chains must be carried for at least one drive axle.	For summer tyres, snow chains must be carried for at least one drive axle from 15/11 to 15/04.	4 mm	Greece	weight. Max. 60/90 km/h N/A	Use only permitted on roads covered with snow and ice.	Drive axle 2 mm Otherwise 1.6
Bulgaria	Minimum tread depth 4 mm from 15/11 to 01/03.	Carriage requirement from 01/11 to 30/03, installation can be mandated by traffic	4 mm	United Kingdom	Can be mandated by traffic signs.	Installation can be mandated by traffic signs.	mm M+S 1.6 mm
Denmark	Spikes are allowed from 1/11	signs. Max. 50 km/h Snow chains are allowed from	igns. Max. 50 km/h	Ireland	Spikes are allowed. Max. 96/112	Use only permitted on roads covered with snow and ice.	1.6 mm
Germany	to 15/04. Winter tyres required (3PMSF)	1/11 to 15/04. Installation can be mandated	1.6 mm Up to 3.5 t,	Iceland	Winter tyres required from 15/11 to 15/04. Spikes are	Use only permitted on roads covered with snow and ice.	M+S 1.6 mm
	in winter conditions on all axles of vehicles under 3.5 t of permissible total weight and on the drive and front steering axle of vehicles over 3.5 t of permissible total weight.	by traffic signs. Max. 50 km/h 3.5 t of and eering t of and		Italy	allowed. Max. 90 km/h A winter tyre requirement can be mandated by traffic signs from 15/11 to 31/03 (in Aosta Valley from 15/10 to 15/04, South Tyrol, Bolzano and Brenner Autobahn A22 from 15/11 to 15/04). If the speed index is below the maximum	Carriage requirement, installation can be mandated by traffic signs. Max. 50 km/h.	M+S 1.6 mm
Estonia	Winter tyres required for vehicles under 3.5 t of permissible total weight from 1/12 to 1/03 (but depending on the weather between October and April). Spikes are allowed from 1/10 to 1/03.	Use only permitted on roads covered with snow and ice.	Radial tyres 3 mm		speed of the vehicle, it may not be driven with winter tyres from 15/05 to 14/10. Spikes are allowed from 15/11 to 15/03.		

	Tyres	Snow chains	Tread		Tyres	Snow chains	Tread
Croatia	Winter tyres required from 15/11 to 15/04; alternatively, snow chains must be carried for at least	For summer tyres, snow chains must be carried for at least one	Up to 3.5 t, 4 mm Over 3.5 t,	Netherlands	N/A	Use prohibited.	1.6 mm
	one drive axle. For trucks over 3.5 t of maximum permissible total weight, winter tyres are only required on the drive axle.	drive axle from 15/11 to 15/04. (Snow chains required in the Lika/ Gorski Kotar region)	drive axle M+S 4 mm	Norway	Winter tyres required on all axles for vehicles over 3.5 t of permissible total weight, incl. trailer (M+S), drive and steering axles (3PMSF), from 15/11 to 31/03.	Carriage requirement for vehicles over 3.5 t of permissible total weight from 1/11 (as early as 16/10 in Nordland,	Up to 3.5 t, M+S 3 mm Over 3.5 t, drive &
Latvia	Winter tyres required for vehicles up to 3.5 t of permissible total weight and trailers from 1/12 to 1/03.  Spikes are allowed from 1/10 to 30/04.	Use only permitted on roads covered with snow and ice.	Up to 3.5 t: M+S 4 mm Over 3.5 t, 3 mm	Acceptation	Spikes are allowed from 1/11 (as early as 16/10 in Nordland, Troms, Finnmark) until the first Sunday after Easter.	Troms, Finnmark) until the first Sunday after Easter.	steering axle 3PMSF 5 mm Otherwise M+S
Liechten- stein	Winter tyres are recommended. From 1/11 to 30/04, spikes are allowed on country roads for vehicles up to 7.5 t of permissible total weight. Max. 80 km/h	Installation can be mandated by traffic signs.	N/A	Austria	Winter tyres required from 1/11 to 15/04. (Buses until 15/03.) For trucks over 3.5 t of permissible total weight, winter tyres are only required on the drive axle. From 1/10 to 31/05, spikes are allowed	Requirement to carry snow chains for at least one drive axle from 1/11 to 15/04, buses excepted.	Up to 3.5 t, M+S 3 mm Over 3.5 t, M+S tyres drive axle dia-
Lithuania	Winter tyres required for vehicles up to 3.5 t of permissible total weight from 1/11 to 1/04. Spikes are allowed from 1/11 to 9/04.	Use only permitted on roads covered with snow and ice.	Up to 3.5 t: M+S 3 mm Over 3.5 t, 1.6 mm		for vehicles under 3.5 t of permissible total weight and with a max. axle load of 1.8 t. Max. 80/100 km/h		gonal tyres 6 mm or radial tyres 5 mm
Luxembourg	Winter tyres required in winter road conditions. From 1/12 to 31/03, spikes are allowed for	Use only permitted on roads covered with snow and ice.	M+S drive axle 1.6 mm	Poland	N/A	Installation can be mandated by traffic signs.	M+S 1.6 mm Buses 3 mm
	vehicles up to 3.5 t of permissible total weight. Max. 70/90 km/h			Portugal	N/A	Installation can be man- dated by traffic signs.	M+S 1.6 mm
Malta	N/A	N/A	N/A	Romania	Winter tyres required in winter road conditions. For trucks over	Carriage requirement for vehicles over 3.5 t of	M+S drive axle
Macedonia	Winter tyres required from 15/11 to 15/03; alternatively, snow chains must be carried for at least one drive axle.	For summer tyres, snow chains must be carried for at least one drive axle from 15/10 to 15/03. Max. 50 km/h	Up to 3.5 t, 4 mm Over 3.5 t, 6 mm		3.5 t of maximum permissible total weight, winter tyres are only required on the drive axle.	maximum permissible total weight; installation can be mandated by traffic signs.	1.6 mm
Montenegro	Winter tyres required in winter road conditions from 15/11 to 31/03.	Requirement to carry snow chains for at least one drive axle; installation can be mandated by traffic signs.	M+S drive axle 4 mm	Russia	Winter tyres required from December to February.	Snow chains are  **recommended.	M+S 4 mm

	Tyres	Snow chains	Tread		Tyres	Snow chains	Tread
Sweden	Winter tyres required from 1/12 to 31/03 on all axles (3PMSF) for vehicles up to 3.5 t of permissible total weight and on the drive axle (3PMSF) and all other axles (M+S) for vehicles over 3.5 t of permissible total weight.	Use only permitted on roads covered with snow and ice.	Up to 3.5 t, 3PMSF 5 mm Over 3.5 t, drive axle 3PMSF 5 mm	Czech Republic	Winter tyres required from 01/11 to 31/03 for vehicles up to 3.5 t of permissible total weight, only in winter conditions. For trucks over 3.5 t, winter tyres are only required on the drive axle.	Installation can be mandated by traffic signs.	Up to 3.5 t, M+S 4 mm Over 3.5 t, M+S drive axle 6 mm
	(Some M+S tyres are still allowed until 30/11/2024, for trailers even until 30/11/2028) Spikes are allowed from 1/10 to 15/04 (local exceptions in Stockholm, Uppsala and Gothenburg). Max. 50 km/h		Otherwise M+S 5 mm <b>Trailer</b> 1.6 mm	Turkey	A winter tyre requirement can be mandated in winter conditions from 1/12 to 1/04. For vehicles over 3.5 t of permissible total weight, winter tyres are only required on the drive axle.	Use only permitted on roads covered with snow.	Up to 3.5 t, M+S 1.6 mm Over 3.5 t, M+S drive axle 4 mm
Switzerland	Winter tyres are recommended. Spikes are allowed from 1/11 to 30/04 for vehicles under 7.5 t. Max. 80 km/h	Requirement to carry snow chains for at least one drive axle; installation can be mandated by traffic signs.	1.6 mm	Ukraine	Winter tyres required from November to April. Spikes are allowed.	Use only permitted on roads covered with snow.	M+S 6 mm
Serbia	Winter tyres required in winter conditions from 01/11 to 01/04.	Carriage requirement, installation can be mandated by traffic signs.	M+S 4 mm	Hungary	Can be mandated by traffic signs.	Carriage requirement, installation can be mandated by traffic signs. Max. 50 km/h	M+S 1.6 mm
Slovakia	Winter tyres required for vehicles up to 3.5 t of permissible total weight with closed snow cover and for trucks over 3.5 t of	Carriage requirement, installation can be mandated by traffic signs.	M+S 3 mm	Cyprus	N/A	Installation can be mandated by traffic signs.	N/A
	permissible total weight from 15/11 to 31/03.			The accuracy	of any of this information is not guara	inteed.	



# Listed by "The Scandinavian Tyre & Rim Organization"

"STRO" represents the countries of Sweden, Norway, Finland and Denmark in establishing standards for tyres and rims. All tyres used on vehicles in the specified countries must be listed by the "STRO". All Athos tyres have been approved by the Swedish Transport Administration, as well as by the Norwegian Public Roads Administration, and have also been listed by the "STRO".

Spain

Slovenia

Winter tyres required (3PMSF) on all axles for high mountain roads. Exemption for special vehicles.

Winter tyres required from 15/11

to 15/04 and in winter conditions;

alternatively, snow chains must be

carried for at least one drive axle.

For trucks over 3.5 t of maximum

tyres are only required on the drive

permissible total weight, winter

axle.

For summer tyres, snow chains must be carried for at least one drive axle from 15/11 to 15/04. Max. 50 km/h.

Alternative to winter tyres for special vehicles between 3.5 t and 7.5 t, as well as buses. Max. 50 km/h 3PMSF 4 mm

Drive axle

3 mm

# **Care and maintenance**

Every tyre change involves risks and should therefore only be carried out by trained and appropriately equipped personnel.

# **Disassembly**

- Before disassembling the tyre, please always check that all components of the rim /tyre are properly seated.
- Remove the valve insert and let all the air out of the tyre before removing the entire wheel from the vehicle.
- Before performing any repair work, remove the valve insert and the insert holder to ensure the air completely flows out.
- 1 Do not lean, stand or reach over the tyre or rim while the air is flowing out.
- Never try to pull off tyre beads when the tyres are full.
- ⚠ Do not hit the tyre or rim with any heavy objects.

#### Installation

- Always check the inside of the tyre for any loose cord layers, cuts, punctures or other damage to the mantle.
- Before inserting the tube, always check the inside of the tyre for dirt, liquids or other foreign substances and remove them.
- Never insert a damaged, warped or kinked tube.
- Always use new tubes and new rim bands for new tyres.
- Before inserting the tube, check it for cleanliness.

- Only use lubricants that are suitable for installing tyres.
   Any petroleum-based antifreeze, silicone or lubricant should not be used.
- Do not hit the tyre or rim with any heavy objects.
- Always make sure that all rim parts are properly seated before filling the tyre.
- Always place the entire wheel (tyre + rim) in a safety cage while inflating, setting and/or filling the tyre for operation.
- Keep your distance during filling and always use an extension hose with a pressure indicator.
- Never try to fit rings on partially or fully inflated tyres.
- Never refill an empty tyre or a tyre with too little air pressure without first checking it completely (tube, tyre, rim) for any damage.
- Check the valve inserts and replace any damaged or leaking inserts.
- Adjust the air pressure of tyres when cold to the recommendations of ATHOS truck tyres.
- Always install radial tyres only in conjunction with radial tubes and radial rim tape.

# **Minimum tread depth**

The wear limit at which a tyre change is mandatory in Germany is 1.6 mm for a truck tyre.

The tread indicators are located in the main tread grooves at the level of the markings (TWI or  $\Delta$ ) on the tyre shoulder.

# **Care and maintenance**

## Tyre inflation pressure

An unadjusted tyre inflation pressure has a negative influence on basic, safety-relevant features such as the resistance of the carcass, the stability and road performance of the vehicle, the grip or traction of the tyres, and the sensitivity in the event of a collision with an obstacle.

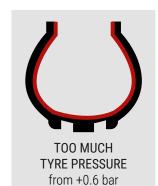


- heavy wear on the sides
- poor stability and grip
- low mileage
- higher fuel consumption

Risk of damage and risk from driving on a flat tyre!



- + good stability and grip
- + high mileage
- + optimal fuel consumption



- heavy wear in the centre
- poor stability and grip
- low mileage
- higher fuel consumption

Risk of damage and risk from driving on a flat tyre!

It is absolutely essential that the tyre be checked for residual tread depth, types of wear and damage, and particularly the tyre inflation pressure as well. It is advisable to follow certain recommendations here

- Use a calibrated and accurate pressure gauge.
- Check the tyre inflation pressure at regular intervals and adjust it if necessary for cold tyres.
- Check the tyre inflation pressure again 24 hours after reinstalling tyres.
- Never release air when tyres are warm.
- Never inflate a truck tyre at more than 10 bar.

#### **Rotating tyres**

Tyre rotation, also known as tyre changing, reduces tyre costs, as this prevents irregular wear and thus extends the service life.

# 1. Rotate the tyre on the rim while it remains in the same wheel position

- Prevents one-sided shoulder wear
- Also beneficial when tyres are used that are susceptible to high wear or sidewall wear.

# 2. Change tyres on the same axle from right to left

 Balances out the effect of varying wear rates on vehicles that are mainly used in regional transport

# 3. Change tyres from the outside to the inside

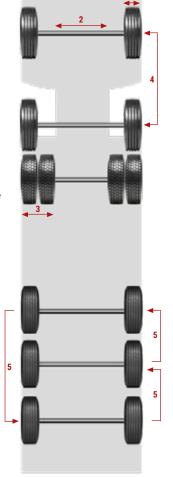
 Balances out the wear on dual tyres and brings the outer sidewall inwards

## 4. Change tyres from one axle to the other

Maximises tyre life between the first and third axle for 6x2 vehicles where there are differences in the cornering load/force which in turn lead to higher wear rates on the front axle

# 5. Reposition trailer tyres: first axle on the third axle, third axle on the second axle, and the second axle on the first axle

Maximises service life and resistance to irregular wear on all trailer axles.



# Storage

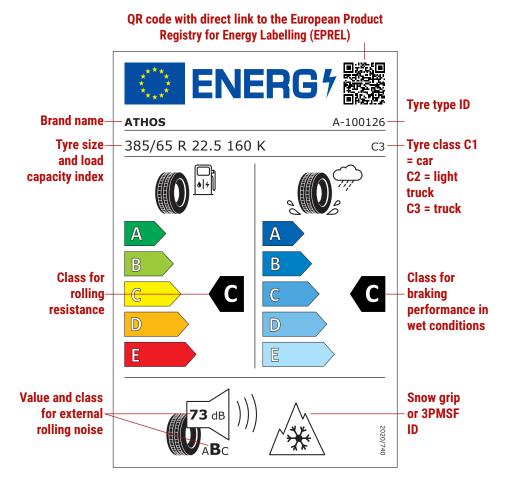
Tyres should generally be stored in a cool, dry place and away from direct sunlight. It is essential to avoid storing them near fuels, lubricants, solvents and chemicals.

Tyres should preferably be stored upright. If this is not possible, the stack height should not exceed approx. 1.5 m to prevent significant deformation of the lowermost tyre. This applies equally to unmounted tyres and tyres mounted as an entire wheel.

# Labelling and energy label

Labelling tyres enables more relevant and comparable information to be shown about rolling resistance, braking performance in wet conditions and external rolling noise, so that a cost-effective and environmentally friendly buying decision can be made when purchasing tyres.

Regulation (EC) 1222/2009 applies to car, truck and bus tyres with a production date before 01/05/2021. As of the said production date, the new Regulation (EU) 2020/740 shall apply. In addition to changes in the label values displayed for external rolling noises, this includes a labelling option for snow and ice grip. All the following information specifically concerns the new regulation.





# **Rolling resistance**

In addition to driving conditions and driver behaviour, the rolling resistance of tyres determines the fuel consumption of the vehicle. The measured rolling resistance (rolling resistance coefficient) of tyres is divided into classes A to E.

A car that was fully equipped with class A tyres would have a 7.5% lower fuel consumption than if it were equipped with class E tyres. For commercial vehicles, this value may even be higher. However, very few class A tyres are currently available on the market.

Rolling resistance is measured in N/kN at 80 km/h and a load of 80% of the maximum tyre load capacity on a drum test rig.



# **Braking performance in wet conditions**

During full braking on wet roads, among other vehicle-specific factors, a tyre's grip has a direct influence on the safety of passengers. The range of wet grip also extends from class A (shortest braking distance) to class E (longest braking distance).

If a car brakes from 80 km/h to a standstill on wet roads, the braking distance is extended by up to 18 m for class E tyres compared to those of class A. For commercial vehicles, the difference is even more significant.

The grip value between the road and the tyre on a wet road is measured in comparison to a standard reference test tyre (SRTT). The standardised measured value (reference temperature and reference grip of the measured road) is assigned to the corresponding class.

# **Labelling and energy label**



# **External rolling noise**

In addition to engine noise, rolling noises from tyres may be a source of noise from vehicles. The EU has thus set limits for the external rolling noise of tyres. These are not the same for all tyres and depend on factors such as tyre width and tyre type.

The value of external rolling noise is indicated in decibels and with classes A to C:

Class A is more than 3 dB below the EU limit.

Class B is up to 3 dB **below the** EU limit.

Class C exceeds the EU limit value. It is not permitted in road traffic.

The noise level of tyres on a rolling vehicle is measured at 80 km/h in dB(A) on a measured road specified according to ISO 10844. After normalisation to the reference temperature, the assignment is made to the specified classes.



# Ice grip

For car winter tyres (class C1), which are specially designed for use on icy roads in northern Europe, a certain minimum grip on ice is confirmed here. This is achieved, among other things, with special rubber compounds (soft compounds). These tyres are generally not intended for use outside northern Europe.



# **Snow grip**

For a tyre to bear the snowflake or alpine symbol (in English 3 Peak Mountain Snow Flake, 3PMSF symbol for short), a certain braking or traction capacity must be demonstrated on a solidified snow cover compared to a standard reference test tyre (SRTT).



# **Funding eligibility**



The EU funds the purchase of tyres with 3PMSF IDs. Tyres on trailer axles are usually funded at 80% of the net goods value. Conversely, for tyres on steering and drive axles, the funding amount also depends on the rolling noise. Applications for funding can be submitted to the Federal Logistics and Mobility Office:

www.antrag.gbbmdv.bund.de/de-minimis-dm-



#### **VECTO**

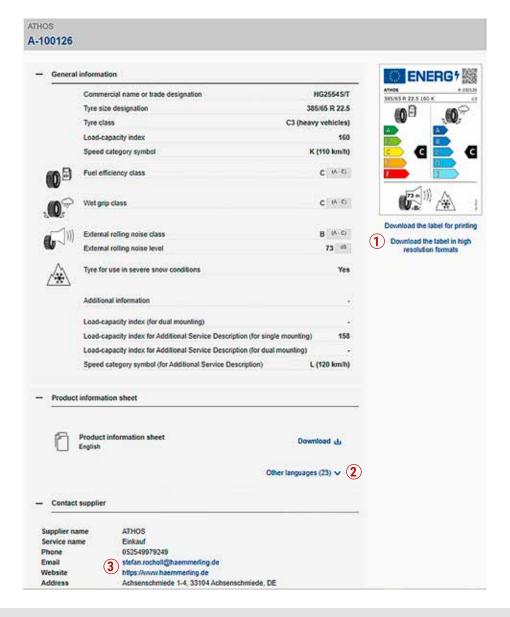
In Europe, the strong reduction of emissions is the top topic in the transport sector. In order to give companies and manufacturers the opportunity to simulate the emissions of various vehicle configurations in advance, the EU has introduced a tool: the Vehicle Energy Consumption Calculation Tool, or VECTO for short.

What does VECTO mean for tyres? By simulating completely different vehicles, we as tyre manufacturers and dealers can respond even better to customer requirements and better determine the best choice for the respective use.

We are happy to help you with this topic. Get in touch with us.

# **Labelling and energy label**

The QR code on the energy label or on the manufacturer's website allows you to access the public section of the European product database, where the most important information on all tyres manufactured after 1/08/2017 is provided.



# **European Product Registry** for Energy Labelling (EPREL)

Regulation (EU) 2017/1369 introduced the product database called the European Product Registry for Energy Labelling, EPREL for short, in Europe. All energy-related products bearing an energy label must be registered in the database before they can be placed on the market in Europe. EPREL has been accessible via the European internet portal since 1 January 2019.

The database is developed and maintained by the EU Commission. It has a public section and a confidential compliance section. Since the second quarter of 2020, consumers, retailers or experts have been able to download information in the public section about energy-related products, such as product data sheets or energy labels.

# 1 Download energy label

# 2 Download product data sheet in national language

# Product data sheet

Delegated Regulation (EU) 2020/740	
Name or trade mark of the supplier	ATHOS
Trade name or trade mark	HG2554S/T
Tyre type identifier	A-100126
Tyre size designation	385/65 R 22.5
Laod-capacity index (for single mounting)	160
Laod-capacity index (for dual mounting)	
Speed category symbol	к
Fuel efficiency class	c
Wet grip class	С
External rolling noise class	В
External rolling noise value	73 dB
Tyre suitable for extreme snow conditions	yes
Date of start of production	33/20
Date of end of production	-
Further information	
Laod-capacity index for Additional Service Description (for single mounting)	158
Laod-capacity index for Additional Service Des	scription (for dual mounting)
Speed category symbol (for the additional service description)	L

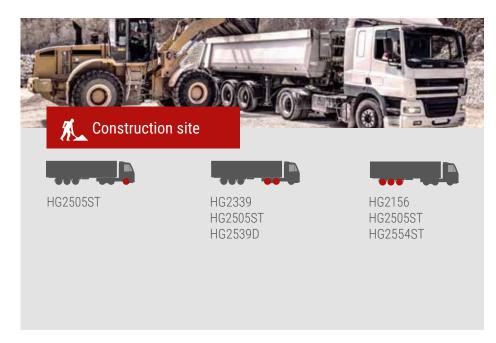
# 3 Manufacturer contact details

# **Areas of application**





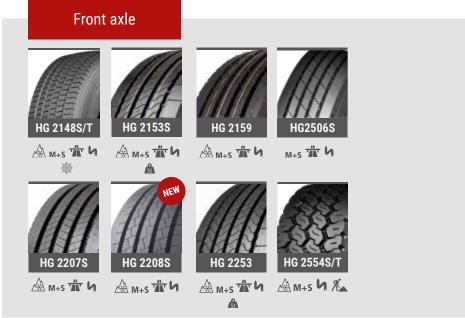


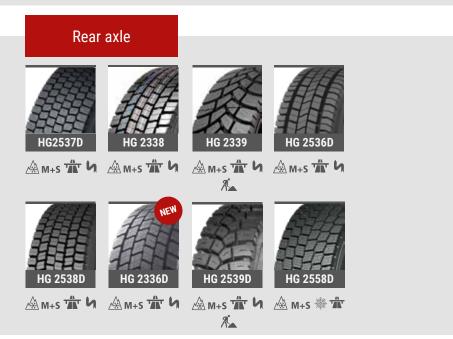




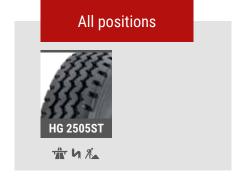
# **Axle overview**



















Construction site





- M+S marking
- Long-distance transport
- Local transport
- 51

5,000 kg load

- With its more dynamic tread design, the new generation of trailer tyres has been developed for longer mileage with lower fuel consumption
- Safe driving experience thanks to excellent braking performance, even on wet surfaces, with a load capacity of up to 5 tonnes
- Independent quality assurance of the production process by TÜV Nord
- Sustainable production with selected raw materials
- Regroovable & suitable for cold and hot retreading

PRODUCT RANGE	Trea	nd	Load/speed	Tread dep	oth Weigh	nt /	o de la companya de l	<b>1</b>	)) <sup>M+</sup>	S /3PM	SF Ice grip
385/55 R22.5	HG2144	<u>\$</u>	164J	15	69 kg	В	В	72 B	✓		-
385/65 R22.5	HG2144	St.	164J	18	78 kg	В	В	72 B	✓		-

# HG2146T

<u>\*\*</u>

3PMSF marking

M+S marking

Long-distance transport

h

Local transport



5,000 kg load

- Trailer
- High-performance carcass with a load capacity of up to 5 tonnes with excellent mileage
- Precise tread grooves ensure high grip, even in winter weather conditions
- Safe driving experience thanks to excellent braking performance, even on wet surfaces
- Independent quality assurance of the production process by TÜV Nord
- Sustainable production with selected raw materials
- Regroovable & suitable for cold and hot retreading

PRODUCT RANGE	Tread	Load/speed	Tread dep mm	th Weigh	nt /		<b>(</b> -1)	)) <sup>M</sup>	S 3PN	ISF Ice grip
385/65 R22.5	HG2146T	164J	18	78	С	В	72 B	✓	<u></u>	-

## You can access the EPREL database here:

385/55 R22.5



385/65 R22 5



## You can access the EPREL database here:

85/65 R22.5









M+S marking



Loc

Local transport



Winter tyres

#### Front axle /Trailer

- Newly developed tread design offers excellent handling, especially in severewinter conditions with snow and ice
- The stable carcass construction ensures a particularly high stability
- Independent quality assurance of the production process by TÜV Nord
- Sustainable production with selected raw materials
- Regroovable & suitable for cold and hot retreading

PRODUCT RANGE	Tread	Load/speed	Tread dep	oth Weigh	nt /	i di	<b>(</b> -1)	)/ <sup>M+</sup>	·S /3PM	ISF Ice grip
385/55 R22.5	HG2148S/T	160K	14.5	68	С	В	72 B	✓	҈Ѧ	_
385/65 R22.5	HG2148S/T	164K	15	77	С	В	72 B	<b>√</b>	A	_

# HG2153S

3PMSF marking

M+S marking

Long-distance transport

Local transport

5,000 kg load

- Front axle
- Improved rolling performance of the 4-groove tread with wavy sipes ensures more precise handling with lower fuel consumption
- Thanks to the special carcass construction, the widened tread facilitates a long service life at high loads of up to 5 tonnes
- Safe driving experience due to excellent braking capacity in wet conditions
- Independent quality assurance of the production process by TÜV Nord
- Sustainable production with selected raw materials

Regroovable & suitable for cold and hot retreading

PRODUCT RANGE	Tread	Load/speed	Tread dep	oth Weigh	nt /		<b>1</b>	)) <sup>M+</sup>	S /3PM	ISF Ice grip
385/65 R22.5	HG2153S	164K (160L)	12.5	73 kg	С	В	70 A	✓	<u></u>	-

## You can access the EPREL database here:





## You can access the EPREL database here:

385/65 R22.5









5,000 kg load

FRT marking

- High-performance carcass with a load capacity of up to 5 tonnes with excellent
- Robust 5-groove tread with reduced rolling resistance and significantly lower fuel consumption

mileage

- The finer transverse sipes ensure better and safer braking performance on wet roads
- Independent quality assurance of the production process by TÜV Nord
- Sustainable production with selected raw materials
- Regroovable & suitable for cold and hot retreading

PRODUCT RANGE	Trea	d	Load/speed	Tread dep	oth Weigh	nt /	d C	<b>1</b>	)/ <sup>M+</sup>	S 3PM	ISF Ice grip
385/55 R22.5	HG2155	ŝ	164J	14.5	70 kg	С	В	73 B	✓	A.	-

- Improved carcass structure thanks to optimised materials in the steel belt, resulting
  - The steel layers in the **bead** core and bead wrap have also been reinforced, which improves performance

HG2156

in increased resistance

**HG2156** 

**Trailer** 

- Higher load capacity of up to 5 tonnes thanks to the special carcass design
- Independent quality assurance of the production process by TÜV Nord
- Sustainable production with selected raw materials

3PMSF marking M+S marking Long-distance transport Local transport Construction site

5,000 kg load

■ Regroovable & suitable for

cold and hot retreading

FRT marking

**PRODUCT** Load/speed Tread Tread RANGE depth mm

14,5



#### You can access the EPREL database here:

# You can access the **EPREL database here:**

385/65 R22.5

385/65 R22,5





**Technical updates** 







M+S marking

Long-distance transport transport

Local transport

5,000 kg load

FRT marking

**Trailer** 

- Improved tread design and the wider tread contact area ensure more even load distribution; combined with a reinforced carcass, with a load capacity of up to 5 tonnes, a lower fuel consumption is ensured at
- pound in combination with an optimised tyre section and carefully selected raw materials guarantee high efficiency
- Independent quality process by TÜV Nord
- Sustainable production with selected raw materials
- Regroovable & suitable for cold and hot retreading

PRODUCT RANGE	Trea	d	Load/speed	Tread dep	oth Weigl	nt /	o de	<b>(1-1)</b>	)) <sup>M+</sup>	·S /3PN	ISF Ice grip
435/50 R19.5	HG2157	ŝ	164J	12.5	69 kg	В	В	73 B	✓		-
445/45 R19.5	HG2157	<u>\$</u>	164J	12.5	70 kg	В	В	73 B	✓		-

# A wear-resistant rubber com-

- Safe driving experience due to excellent braking capacity in wet conditions
- assurance of the production

PRODUCT RANGE	Tread	Load/speed	Tread dep	oth Weigh	nt /	d di		)) <sup>/ M+</sup>	·S /3PM	ISF Ic
215/75 R17.5	HG2159	126/124M (135/133L)	13	28 kg	D	В	72 B	✓	<u></u>	-
235/75 R17.5	HG2159	143/141L (146/146F)	13	30 kg	D	В	72 B	<b>✓</b>	A.	-

32 kg

13

Safe driving experience due

mance in wet conditions

Independent quality assuran-

Sustainable production with

selected raw materials

by TÜV Nord

ce of the production process

to excellent braking perfor-



M+S marking

Long-distance transport transport



Local transport

Regroovable & suitable for

cold and hot retreading

You can access the EPREL database here:

HG2159

143/141K

(146/146F)

215/75 R17.5

245/70 R17.5

Flexible application options,

even in winter weather con-

ditions, due to the adapted

uniform wear, the 4-groove

tread ensures excellent

mileage, better handling

and less rolling noise when

In addition to the more

tread

driving



235/75 R17.5



245/70 R17.5

72 B



the same time

#### You can access the EPREL database here:

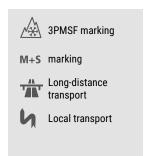
435/50 R19.5



445/45 R19.5







Due to its modern tread design, this bus tyre is suitable for all weather conditions

■ While a special tread compound ensures less heat generation and thus higher durability, the load capacity is improved by the reinforced carcass

Reinforced sidewalls, with a depth indicator of 5 mm, as protection against impact injuries and curb scuffing

Independent quality assurance of the production process by TÜV Nord

■ Regroovable & suitable for cold and hot retreading

Suitable for electric buses

PRODUCT RANGE	Tread	Load/speed	Tread dep	oth Weigh	nt /		<b>1</b>	)) <sup>M+</sup>	S /3PN	ISF Ice grip
275/70 R22.5	HG2202	150/145 J (152/148 F)	20.5	53 kg	Е	С	72 B	✓	A	-



3PMSF marking M+S marking Long-distance transport Local transport

- The profile is designed for all position tyre use on buses with good traction and precise steering behavior
- Reinforced sidewalls, with built-in depth indicator to protect against impact damage and curb wear
- Independent quality assurance of the production process by TÜV Nord
- Regroovable & suitable for cold and hot retreading

PRODUCT RANGE	Tread	Load / Speed	Tread dep	oth Weigh	nt /		(C-1)	)/ <sup>M+</sup>	S 3PN	ISF ice grip
295/80 R22.5	HG2203	154/150 M (152/148 M)	20,5	60,5 kg	С	В	71 A	✓	<u></u>	-

# You can access the EPREL database here:

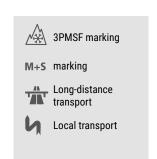


## You can access the EPREL database here:









- Front axle
- The wider tread contact surface results in improved mileage with better road grip over the entire service life at the same time
- The siping of the 4-groove tread gives the tyre improved steering precision and excellent traction and braking performance in changing weather conditions
- Independent quality assurance of the production process by TÜV Nord
- Sustainable production with selected raw materials
- Regroovable & suitable for cold and hot retreading

PRODUCT RANGE	Tread	Load/speed	Tread dep	oth Weigh	nt /	h /	<b>1</b>	)) <sup>M+</sup>	s /зрм	SF Ice grip
315/70 R22.5	HG2207S	156/150L (154/150M)	15.5	62 kg	D	В	73 B	✓	A	-
315/80 R22.5	HG2207S	158/150L (154/150M)	15.5	70 kg	D	В	73 B	✓	A	-

# You can access the EPREL database here:

315/70 R22.5



315/80 R22.5





3PMSF marking

M+S marking

Long-distance transport

Local transport

#### Front axle

The modern tread design ensures optimal water drainage and consistently good steering behavior, even in changing weather conditions.

- With its particularly robust shoulder construction, the steering tire offers maximum stability - even under difficult conditions.
- Independent quality assurance of the production process by TÜV Nord
- Sustainable production with selected raw materials
- Regroovable & suitable for cold and hot retreading

PRODUCT RANGE	Tread	Load/speed	Tread de	oth Weig	ht 🕼	<sup>6</sup>		)) <sup>M+</sup>	S 3PN	ISF Ice grip
315/60 R22.5	HG2208S	154/150L	15	53 kg	С	В	73 C	✓	<i>A</i>	-
315/70 R22.5	HG2208S	158/150L (154/150M)	15	57 kg	С	В	73 C	✓	<u> </u>	-
315/80 R22.5	HG2208S	158/150L (154/150M)	16	68 kg	С	В	73 C	✓	<u> </u>	-

## You can access the EPREL database here:













Long-distance transport transport

Local transport

5,000 kg load

- Improved rolling performance of the 4-groove tread ensures excellent handling and precise steering performance with lower fuel consumption
- Thanks to the special carcass construction, the increased tread width facilitates excellent mileage at high loads of up to 5 tonnes
- Safe driving experience due to excellent braking capacity in wet conditions
- Independent quality assurance of the production process by TÜV Nord
- Sustainable production with selected raw materials
- Regroovable & suitable for cold and hot retreading

TO NORD
HG2336D
Rear axle



3PMSF marking

M+S marking

Long-distance transport transport

Local transport

- The directional tread pattern reduces wear, thus increasing tyre life without compromising traction or braking performance.
- Optimized rolling resistance ensures reduced fuel consumption while maintaining good traction.
- Independent quality assurance of the production process by TÜV Nord
- Sustainable production with selected raw materials
- Regroovable & suitable for cold and hot retreading

PRODUCT RANGE	Tread	Load/speed	Tread dep	oth Weigh	nt /	d A	<b>1</b>	)/ <sup>M+</sup>	S 3PM	ISF Ice grip
385/55 R22.5	HG2253	164K (158L)	12.5	68 kg	С	В	71 A	✓	A	-

PRODUCT RANGE	Tread	Load/speed	Tread dep	th Weigh	nt 🕡	0	(T-1)	)/M+	S /3PM	ISF Ice grip
295/60 R22.5	HG2336D	150/147K (149/146L)	18	49,5 kg	С	В	76 C	✓	<u> </u>	-
315/70 R22.5	HG2336D	156/150L (154/150M)	19,5	61 kg	С	В	76 C	✓	<u> </u>	-
315/80 R22.5	HG2336D	158/150L (154/150M)	20,5	75,5 kg	С	В	76 C	✓	A	-

# You can access the EPREL database here:



## You can access the EPREL database here:

295/60 R22.5





315/80 R22.5









- Rear axle
- A wider tread contact surface than its predecessor results in even higher mileage and efficiency
- The higher sipe density ensures improved traction and braking performance throughout the year for different types of use and weather conditions
- An extended tread depth ensures even wear and reduced quality reduction over the entire product life
- Safe driving experience due to excellent braking capacity in wet conditions
- Independent quality assurance of the production process by TÜV Nord
- Sustainable production with selected raw materials
- Regroovable & suitable for cold and hot retreading

PRODUCT RANGE	Tread	Load/speed	Tread dep	oth Weigl	nt /		(I-1)	)) <sup>M+</sup>	·S /3PM	ISF Ice grip
315/70 R22.5	HG2338	154/150M	19.5	66 kg	D	С	74 B	✓	A	-
315/80 R22.5	HG2338	156/150L (154/150M)	21.5	76 kg	D	С	74 B	✓	A	-





- The block tread with open shoulders offers better traction, especially on unpaved surfaces
- Self-cleaning of the tread with coarser peripheral blocks with ejection openings on both shoulder sides
- Damage resistance with reinforcements in the bead and shoulder area
- Independent quality assurance of the production process by TÜV Nord
- Sustainable production with selected raw materials
- Regroovable & suitable for cold and hot retreading

PRODUCT RANGE	Tread	Load/speed	Tread dep	oth Weigh	nt /		<b>1</b>	)/ <sup>M+</sup>	S /3PM	ISF Ice grip
315/80 R22.5	HG2339	156/150M	21.5	74 kg	D	В	75 B	✓	A	-

## You can access the EPREL database here:

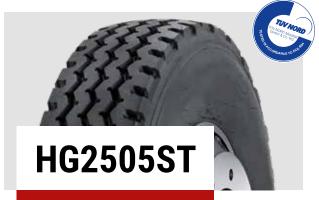
315/70 R22.5



## You can access the EPREL database here:







- Long-distance transport
- Local transport
- Construction site

- **All positions**
- The special ON/OFF tread facilitates excellent traction on different road surfaces, even in changing weather conditions
- Damage resistance with reinforcements in the bead and shoulder area
- With improved resistance to impacts, stones and other damage due to carcass optimisation
- Independent quality assurance of the production process by TÜV Nord
- Sustainable production with selected raw materials
- Regroovable & suitable for cold and hot retreading

PRODUCT RANGE	Tread	Load/speed	Tread dep	oth Weigh	nt /	o de la companya de l	(I-1)	)/ <sup>M+</sup>	S 3PM	ISF Ice grip
13 R22.5	HG2505S/T	156/151K	16	65 kg	D	В	73 B			-
315/80 R22.5	HG2505S/T	154/151M (156/150L)	16	74 kg	D	С	73 B			-



- M+S marking
- Long-distance transport
- Local transport

- The siping of the 4-groove tread gives the tyre improved steering precision in changing weather conditions
- With its more dynamic tread design, the new generation of steering axle tyres has been developed for longer mileage with lower fuel consumption
- Independent quality assurance of the production process by TÜV Nord
- Sustainable production with selected raw materials
- Regroovable & suitable for cold and hot retreading

PRODUCT RANGE	Tread	Load/speed	Tread dep	oth Weigh	nt /		(I-1)	)/ <sup>M+</sup>	S /3PM	ISF Ice grip
295/80 R22.5	HG2506S	154/149M	16	56 kg	D	С	73 B	✓		-

## You can access the EPREL database here:

13 R22.5



315/80 R22.5

## You can access the EPREL database here:

95/80 R22.5









M+S marking

Long-distance transport transport

Local transport

Rear axle

- The higher sipe density ensures improved traction and braking performance throughout the year for different types of use and weather conditions
- More tread ensures increased mileage and uniform wear over the entire product life
- The modern tread impresses with improved traction and braking performance for different types of use and weather conditions
- Independent quality assurance of the production process by TÜV Nord
- Sustainable production with selected raw materials
- Regroovable & suitable for cold and hot retreading

PRODUCT RANGE	Tread	Load/speed	Tread dep	oth Weigh	nt /		<b>1</b>	)/ <sup>M+</sup>	S /3PM	ISF Ice grip
215/75 R17.5	HG2536D	128/126M	15	28 kg	D	В	74 B	✓	<u>₩</u>	-
235/75 R17.5	HG2536D	132/130M	16	32 kg	D	В	74 B	✓	<u></u>	-
245/70 R17.5	HG2536D	136/134M	15	33 kg	D	В	74 B	✓	/A	_

# **HG2537D**

3PMSF marking

M+S marking

Long-distance transport

Local transport

#### Rear axle

- The finer block tread ensures improved traction and braking performance throughout the year for different types of use and weather conditions
- Fuel savings due to reduced weight
- Independent quality assurance of the production process by TÜV Nord
- Sustainable production with selected raw materials
- Regroovable & suitable for cold and hot retreading

PRODUCT RANGE	Tread	Load/speed	Tread dep	oth Weigh	nt /		<b>1</b>	)) <sup>M+</sup>	S /3PM	ISF Ice grip
295/80 R22.5	HG2537D	152/149L	19	57 kg	Е	В	73 A	✓	A	-

## You can access the EPREL database here:

215/75 R17.5





245/70 R17.5



## You can access the EPREL database here:









- The higher block density ensures improved traction
  - and braking performance throughout the year for different types of use and weather conditions
- More tread ensures increased mileage and uniform wear over the entire product life
- Independent quality assurance of the production process by TÜV Nord
- Sustainable production with selected raw materials
- Regroovable & suitable for cold and hot retreading

PRODUCT RANGE	Tread	Load/speed	Tread dep	oth Weigh	nt /		<b>1</b>	)) <sup>/M+</sup>	·S /3PM	ISF Ice grip
295/60 R22.5	HG2538D	150/147K (149/146L)	19	50 kg	Е	В	74 B	✓	<u> </u>	-
315/60 R22.5	HG2538D	154/150L (152/148M)	18	58 kg	Е	В	74 B	✓	A	_

# **HG2539D**

3PMSF marking M+S marking Long-distance transport Local transport

- Rear axle
- The coarse block tread with open shoulders offers better traction, especially on unpaved surfaces
- Self-cleaning of the tread with coarser peripheral blocks with ejection openings on both shoulder sides
- Damage resistance with reinforcements in the bead and shoulder area
- Independent quality assurance of the production process by TÜV Nord
- Sustainable production with selected raw materials

Construction site

■ Regroovable & suitable for cold and hot retreading

PRODUCT RANGE	Tread	Load/speed	Tread dep	pth Weigh	nt 🕼	(A)	<b>1</b>	)) <sup>/ M·</sup>	+S /3PN	ISF Ice	PRODUCT RANGE	Tread	Load/speed	Tread dep	oth Weigh	t A		(C-1))	)/M+	S /3PM
295/60 R22.5	HG2538D	150/147K (149/146L)	19	50 kg	Е	В	74 B	✓	<u> </u>	-	13 R22.5	HG2539D	156/151K	23	74 kg	Е	С	74 B	✓	<u> </u>
315/60 R22.5	HG2538D	154/150L (152/148M)	18	58 kg	Е	В	74 B	1	<u> </u>	-	295/80 R22.5	HG2539D	152/149K	22	65 kg	Е	С	74 B	<b>√</b>	$\triangle$

## You can access the EPREL database here:

295/60 R22.5





# You can access the EPREL database here:





- 3PMSF marking
- M+S marking
- Local transport
- Construction site

# **All positions**

- Thanks to its modern tread design, this tyre offers flexible application options
- Self-cleaning of the tread with coarser peripheral blocks with ejection openings on both shoulder sides
- The block tread with open shoulders offers better grip, especially on unpaved surfaces
- Independent quality assurance of the production process by TÜV Nord
- Sustainable production with selected raw materials
- Regroovable & suitable for cold and hot retreading

PRODUCT RANGE	Tread	Load/speed	Tread dep	oth Weigh	nt /	o de la companya de l		)) <sup>M</sup> †	S 3PM	ISF Ice grip
385/65 R22.5	HG2554S/T	160K (158L)	18	77 kg	С	С	73 B	✓	<u></u>	-
445/65 R22.5	HG2554T	169K	18	93 kg	D	С	73 B	✓	A	-

# You can access the EPREL database here:

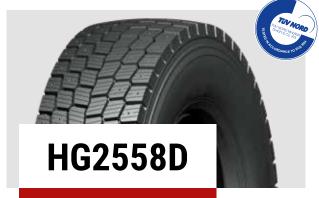
385/65 R22 5



445/65 R22.5

# **ATHOS tread**





3PMSF marking

M+S marking

Long-distance transport

Local transport

Winter tyres

Rear axle

- The special tread design and its integrated sipes ensure excellent traction
- Best suited for winter weather conditions
- Independent quality assurance of the production process by TÜV Nord
- Sustainable production with selected raw materials
- Regroovable & suitable for cold and hot retreading

PRODUCT RANGE	Tread	Load/speed	Tread dep mm	oth Weigh	ıt 🕼	0	( <b>(</b> -1)	)/M+	S /3PM	ISF Ice grip
315/70 R22.5	HG2558D	154/150K (152/148L)	19	62 kg	Е	С	73 A	✓	À	-
315/80 R22.5	HG2558D	156/153K (154/151L)	21	71 kg	Е	С	73 A	✓	A	-

## You can access the EPREL database here:

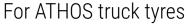
315/70 R22.5



315/80 R22.5

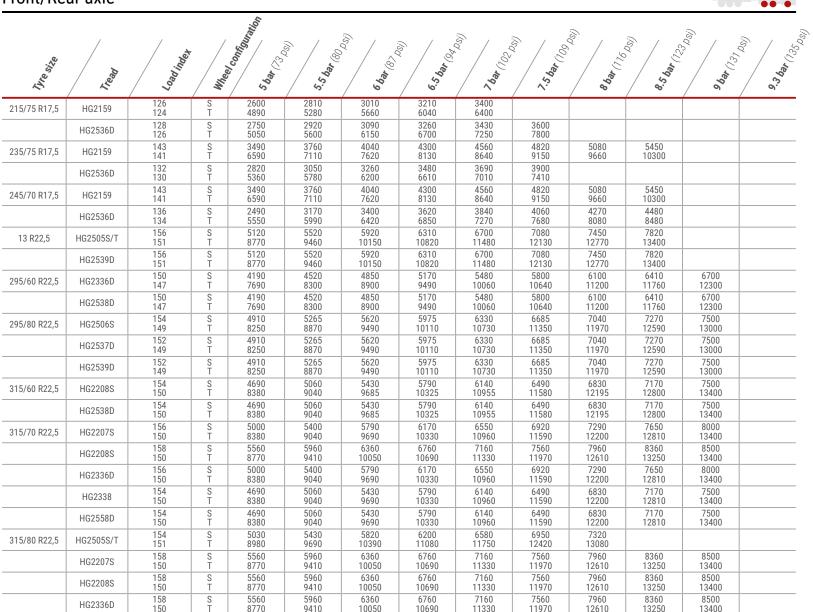


# Air pressure recommendation





# Front/Rear axle



#### Disclaimer:

Permissible load capacity (kg) per axle at air pressure in bar (psi) under normal conditions.

All values are indicative, do not represent legal requirements, and cannot be used for legal purposes.

For more information, please refer to the care and maintenance chapter; tyre Inflation Pressure.

#### **Advantages:**

A correct tyre inflation pressure provides:

- Safety
- High mileage
- Fuel savings
- Comfort

#### **Recommendation:**

To determine the correct tyre inflation pressure, the load weight must be known.

Regularly check the tyre inflation pressure on the "cold" tire. Never let air out of "warm" tyres.

For air pressures from 8.0 bar (116 psi) and above, use valve slot cover plate.

# **Tyre configuration:**

S = Single

T = Twin





J.V.e. Size	<sup>1</sup> read	<sup>kopu</sup> peo <sub>7</sub>	/	Spar (3)	/	/		/				964 (737	9.3 bet (3.5 S.S.)
	HG2338	156 150	S T	5240 8770	5650 9460	6060 10150	6460 10820	6850 11480	7240 12130	7630 12770	8000 13400		
	HG2339	156 150	S T	5240 8770	5650 9460	6060 10150	6460 10820	6850 11480	7240 12130	7630 12770	8000 13400		
	HG2558D	156 153	S T	5240 9380	5650 10100	6060 10840	6460 11550	6850 12240	7240 12940	7630 13630	8000 14280		
385/55 R22,5	HG2148S/T	160	S	5630	6070	6510	6940	7370	7780	8200	8600	9000	
	HG2253	164 158	S S	5620	6120 5560	6620 6000	7120 6430	7620 6855	8120 7275	8620 7690	9120 8095	9620 8500	10000
385/65 R22,5	HG2148S/T	164	S	6250	6750	7230	7710	8180	8650	9110	9560	10000	
	HG2153S	164 158	S S	6250 5560	6700 6010	7150 6440	7600 6860	8050 7280	8500 7700	8950 8100	9400 8500	9850	10000
	HG2554S/T	160 158	S S	5630 5560	6070 6010	6510 6440	6940 6860	7370 7280	7780 7700	8200 8100	8600 8500	9000	
275/70 R22,5	HG2202	150 145	S T	4815 8330	5190 8995	5565 9645	5935 10280	6295 10910	6660 11530	7010 12140	7360 12740	7705 13340	
295/80 R22,5	HG2203	154 150	S T	5640 9775	6085 10550	6525 11310	6960 12060	7385 12795	7805 13525	8210 14235	8625 14950		

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١	ra		ler

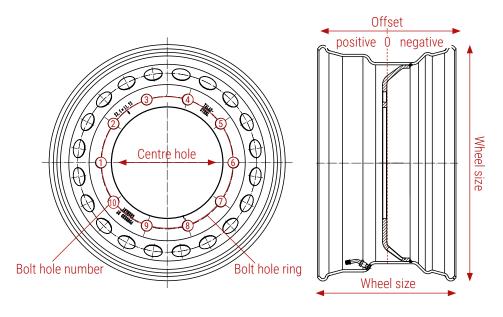
Hallel												•••	
215/75 R17,5	HG2159	135 133	S T	2860 5390	3080 5820	3300 6240	3520 6650	3740 7060	3950 7460	4160 7850	4360 8240		
235/75 R17,5	HG2159	143 141	S T	3490 6590	3760 7110	4040 7620	4300 8130	4560 8640	4820 9150	5080 9660	5450 10300		
245/70 R17,5	HG2159	143 141	S T	3490 6590	3760 7110	4040 7620	4300 8130	4560 8640	4820 9150	5080 9660	5450 10300		
385/55 R22,5	HG2144	164	S	5620	6120	6620	7120	7620	8120	8620	9120	9620	10000
	HG2148S/T	160	S	5630	6070	6510	6940	7370	7780	8200	8600	9000	
	HG2155	164	S	5620	6120	6620	7120	7620	8120	8620	9120	9620	10000
385/65 R22,5	HG2144	164	S	6250	6700	7150	7600	8050	8500	8950	9400	9850	10000
	HG2146T	164	S	6250	6700	7150	7600	8050	8500	8950	9400	9850	10000
	HG2148S/T	164	S	6250	6750	7230	7710	8180	8650	9110	9560	10000	
	HG2156	164	S	6250	6750	7230	7710	8180	8650	9110	9560	10000	
	HG2554S/T	160 158	S S	5630 5560	6070 6010	6510 6440	6940 6860	7370 7280	7780 7700	8200 8100	8600 8500	9000	
435/50 R19,5	HG2157	164	S	5620	6220	6820	7420	8020	8620	9220	9610	10000	
445/45 R19,5	HG2157	164	S	5620	6120	6620	7120	7620	8120	8620	9120	9620	10000
445/65 R22,5	HG2554T	169	S	7250	7830	8390	8950	9490	10030	10560	11090	11600	

## TPMS:

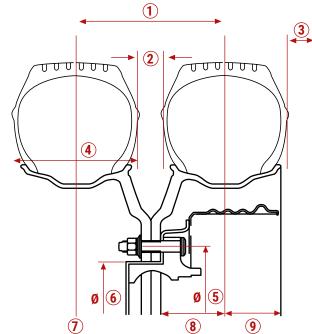
The right air pressure is even more important for trucks than for cars. Not only are accidents prevented, but the service life and efficiency of tyres are also strongly influenced by their air pressure. Continuous monitoring of tyre pressure with a TPMS solution is therefore perfectly sensible. The law has also arrived at this view and is mandating its use for all newly registered vehicles as of July 2024.

We are happy to help you with the topic of TPMS and give you all needed information about original equipment and retrofitting. Get in touch with us.

# **TALAS truck steel rims**



Wheel Size	Wheel model	Com	Boh,	Bols.	Office of the part	la l	1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1
6.00 x 17.5	MZ (Ø 26) IV	176	225	10	113	2.750	205/65 R 17.5
							205/75 R 17.5
							215/75 R 17.5
							225/75 R 17.5
6.75 x 17.5	BMZ (Ø 21) AV	161	205	6	0	3.000	215/75 R 17.5
6.75 x 17.5	BMZ (Ø 26) IV	176	225	10	123	3.000	225/75 R 17.5
6.75 x 17.5	BMZ (Ø 26) IV	176	225	10	129	2.750	235/75 R 17.5
6.75 x 17.5	BMZ (Ø 26) IV	176	225	10	129	3.000	245/70 R 17.5
7.50 x 19.5	MZ (Ø 26) IV	221	275	8	139	2.800	245/70 R 19.5
							265/70 R 19.5
							285/70 R 19.5
8.25 x 22.5	BMZ (Ø 26) AV	281	335	10	154	3.750	12 R 22.5
							275/70 R 22.5
							285/60 R 22.5
							295/60 R 22.5
							295/80 R 22.5



TALAS

- 1) Centre to centre distance
- **2** Tyre installation space
- **3** Vehicle installation space
- **4** Tyre section width
- **5** Hole ring diameter
- **(6)** Centre hole diameter
- 7 Tyre centre line
- 8 Offset
- 9 Distance between wheel disc and rim flange

More info on our rims at www.talas-steel.de

Wheel Size	Mineel model	Com	8011,	Both 1	Offse, number	la-	Me Size
9.00 x 22.5	BMZ (Ø 26) AV	281	335	10	161	4.000	13 R 22.5
							295/60 R 22.5
							295/80 R 22.5
							315/60 R 22.5
							315/70 R 22.5
							315/80 R 22.5
11.75 x 22.5	BMZ (Ø 26) AV	281	335	10	0	5.000 👫	355/50 R 22.5
11.75 x 22.5	MZ (Ø 26) AV	281	335	10	120	5.000 👫	385/55 R 22.5
11.75 x 22.5	MZ (Ø 26) AV	281	335	10	135	5.000 👫	385/65 R 22.5
14.00 x 19.5	MZ (Ø 26) AV	281	335	10	0	5.000 🔒	425/55 R 19.5
14.00 x 19.5	MZ (Ø 26) AV	281	335	10	120	4.500	435/50 R 19.5
14.00 x 19.5	MZ (Ø 26) AV	281	335	10	120	5.000 🔒	445/45 R 19.5

TALAS rims are coated with either powder or wet paint.

AV = external valve | IV = internal valve | 💰 5,000 kg load

# **Customer feedback**











