



Sava

EUROPEAN QUALITY TIRES



TIRES FOR TRUCKS, TRAILERS AND BUSES



Tires for steering axle



Segmentation			LHS	RHS	RHS	MSS	MCS	RHS	RHS	MSS
Size	Index 1 Load & Speed	Index 2 Load & Speed	AVANT 4	AVANT A3 (PLUS)	AVANT PLUS	AVANT MS2	CITY U4	COMET M3	COMET PLUS	ORJAK 24 PLUS
10R22.5	144/142M				●					
11R22.5	148/145L			●						
12.00R20 TT	154/150 K							●		
12R22.5	152/148K					●				
12R22.5	152/148L	150/148 M		●						
12.00R24 TT	160/156K									●
13R22.5	156/150G	154/150K				●				
13R22.5	156/150L	154/150M		●						
205/75R17.5	124/122M			●						
215/75R17.5	126/124M			●						
225/75R17.5	129/127M			●						
235/75R17.5	132/130M			●						
245/70R19.5	136/134M			●						
265/70R19.5	140/138M			●						
275/70R22.5	148/145J	152/148E					●			
285/70R19.5	146/144L	140/137M		●						
295/80R22.5	152/148J	154/150E					●			
295/80R22.5	152/148M		●							
315/70R22.5	154/150L	152/148M	●							
315/80R22.5	156/150K					●				
315/80R22.5	156/150L	154/150M	●							
8.5R17.5	121/120M								●	
9.5R17.5	129/127M								●	

AVANT 4



NEW CAVITY SHAPE OPTIMIZED WITH NUMERICAL TOOLS FOR AN OPTIMAL FOOTPRINT SHAPE

- Uniform and good mileage

OPTIMIZED BLADING GEOMETRY

- Excellent wet skid performance
- Improved all-season capability
- Low noise emissions

NEW TREAD COMPOUND TECHNOLOGY FOCUSED ON MILEAGE PERFORMANCE

● - available

LHS = long haul steer

RHS = regional haul steer

MSS = mixed service steer

MCS = municipal steer

AVANT A3 (PLUS) - 22.5"



AVANT A3 (PLUS) - the AVANT A3 tire, due to its three longitudinal grooves, offers precise steering during abrupt and frequent cornering. Its wide, solid shoulder and enclosed shoulder zone contributes to the vehicle's lateral stability. The diagonal tread block pitch with the optimal distribution of elements of various sizes ensures reliable tire grip and uniform wear.

ORJAK 24 PLUS



ORJAK 24 PLUS - a tire designed for all axes of trucks and trailers. Its authentic construction and robust tread design ensure optimal on- and off-road driving performance. Deep transversal grooves provide reliable grip and lateral stability in severe driving conditions.

AVANT A3 - 17.5" / 19.5"



AVANT A3 - state-of-the-art tread design, featuring uniform ground pressure across the entire footprint, provides precise steering, excellent grip and a long service life. The rigid and solid shoulder zone ensures reliable lateral stability during abrupt and frequent cornering. All of these features enhance the tire's economic performance on steered axles.

AVANT PLUS



AVANT PLUS - is a tire designed for use on the steering axles of trucks and buses, in regional transport on well arranged roads. The shape of different sized tread blocks distributed along the tire circumference provides road traction and reliable steering of the vehicle, even during frequent and abrupt cornering. The closed shoulder structure contributes to excellent lateral stability and handling response of the vehicle.

AVANT MS2



AVANT MS2 - The mixed service steer tires, combines excellent mileage, robust carcass, damage resistant design and materials and good traction. Available in robust 5 rib (low aspect ratio sizes) and 4 rib (standard aspect ratio sizes) patterns.

COMET M3



COMET M3 - the new Comet M3 is developed for steer axle and all position usage for regional haul application. Its wide tread associated to deep tread depth ensures a high mileage performance. The robust pattern and the new carcass geometry bring a better damage resistance.

COMET PLUS



COMET PLUS - The tire is designed for use on the steering axles of light trucks and on all axes of buses in regional transport. Its longitudinal grooves connected with cross blades provide precise steering and good traction. It is distinguished for high mileage, steering ease and smooth running.

CITY U4



CITY U4 - High performance steel radial tire for municipal buses and extra deep tread for high mileage, reinforced sidewall and fuel-saving tread compound.

Tires for driving axle

Segmentation			LHD	RHD	MSD	MSD	MSD	RHD
Size	Index 1 Load & Speed	Index 2 Load & Speed	ORJAK 4	ORJAK 03 (PLUS)	ORJAK 24 MS	ORJAK MS	ORJAK S	TAMAR PLUS
11R22.5	148/145L			●				
12.00R20 TT	154/150K						●	
12R22.5	152/148K					●		
12R22.5	152/148L			●				
12.00R24 TT	160/156K				●			
13R22.5	156/150G	154/150K				●		
13R22.5	156/150L	154/150M		●				
205/75R17.5	124/122M			●				
215/75R17.5	126/124M			●				
225/75R17.5	129/127M			●				
235/75R17.5	132/130M			●				
245/70R19.5	136/134M			●				
265/70R19.5	140/138M			●				
285/70R19.5	146/144L	140/137M		●				
295/80R22.5	152/148M		●					
315/70R22.5	154/150L	152/148M	●					
315/80R22.5	156/150K					●		
315/80R22.5	156/150L	154/150M	●					
8.5R17.5	121/120M							●
9.5R17.5	129/127M							●

ORJAK 4



NEW CAVITY SHAPE OPTIMIZED WITH NUMERICAL TOOLS FOR AN OPTIMAL FOOTPRINT SHAPE

- Uniform and good mileage

DEEPTREAD DEPTH

- Good mileage
- Maintained best traction through whole tire life

SEMI-OPEN DESIGN WITH MULTI - DECOUPLED BLOCKS

- Winter traction
- Wet traction

NEW TREAD COMPOUND TECHNOLOGY FOCUSED ON MILEAGE PERFORMANCE

● - available

LHD = long haul drive

MSD = mixed service drive

RHD = regional haul drive

ORJAK 03 (PLUS) - 22.5"



ORJAK 03 (PLUS) - tire with outstanding grip when braking or accelerating. The arrangement of different size blocks, together with deep cross grooves, increases the number of grip edges meaning that the tire offers optimal motor power transmission and traction even in adverse driving conditions. A wide shoulder with partly closed cross grooves increases lateral stability and handling. The arrangement and pitching of different size blocks reduces tire wear and rolling noise, providing greater driving comfort and economy.

ORJAK S M+S



ORJAK S M+S - is a tire designed for the driving axles of trucks and buses, operating in adverse driving conditions. Distinctive cross ribs on the tread shoulder provide excellent grip. The central longitudinal ribs improve vehicle handling, ensure uniform tread wear and prolong tire life.

ORJAK 03 - 17.5" / 19.5"



ORJAK 03 - its deep transversal grooves ensure reliable tire road grip even in unsteady driving conditions. Partially full shoulder grooves increase the tire's lateral stability. Due to block pitching, more gripping edges are in contact with the road at any time, improving the tire's road grip and extending its service life. Its silent running boosts driving comfort.

TAMAR PLUS



TAMAR PLUS - the tire is designed for the driving axles of light trucks and buses. Tread blocks of various sizes together with intermediate grooves form numerous gripping edges, providing reliable road grip and excellent traction. The tire is also distinguished for its increased lateral stability.

ORJAK MS



ORJAK MS - is a heavy service tire, constructed with RCS technology, which improves carcass strength and thus enables use in the harshest conditions. Deep cross shoulder grooves provide outstanding grip on off-road areas and buildingsites. The solid central longitudinal rib reduces the possibility of mechanical damage and punctures, and simultaneously improves vehicle handling and stability.

ORJAK 24 MS



ORJAK 24 MS - is a specialized tire for drive axles on road/-off-road service in difficult road and climate conditions. Reinforced RCS structure increase resistance to mechanical damage, absorbs sudden strains and thus contributes to improved tire endurance and life. Robust tread blocks and wide shoulder grooves maintain optimal traction and excellent self cleaning.

Tires for Trailers

CARGO C3 PLUS



CARGO C3 PLUS - is a wide tread tire with optimal construction providing large load capacity and durability. The bladeless tread pattern improves resistance to mechanical damage. Good lateral and longitudinal stability is a special feature of this tire. Low noise and the ability to dampen sudden jolts provide greater driving comfort.

CARGO PLUS



CARGO PLUS - is a tire of top driving performance, suitable for two axle or threeaxle low-loader semi-trailers and trailers. Its optimal distribution of longitudinal grooves provides uniform load distribution at the tire/road contact surface and thus prolonged tire life. The special shape of tread grooves results in reduced possibility of stone trapping, and consequently reduced possibility of tire mechanical damage. Its closed and solid shoulder structure provides reliable lateral stability.

CARGO C3



CARGO C3 - a tire of high driving performance, suitable for trailers and low-loader semi-trailers. It is distinguished for up-to-date construction and special tread design with distinctive circumferential grooves. Its closed and solid shoulder improves trailer stability. Reduced rolling resistance results in lower fuel consumption while its low noise increases driving comfort.

CARGO MS



CARGO MS - is a tire intended for adverse driving conditions for offroad and buildingsite use. It is constructed on the basis of RCS technology and features improved mechanical damage resistance and carcass strength. The use of a special compound prevents the tread elements from flaking or tearing. Reinforced carcass structure improves tire durability and life.

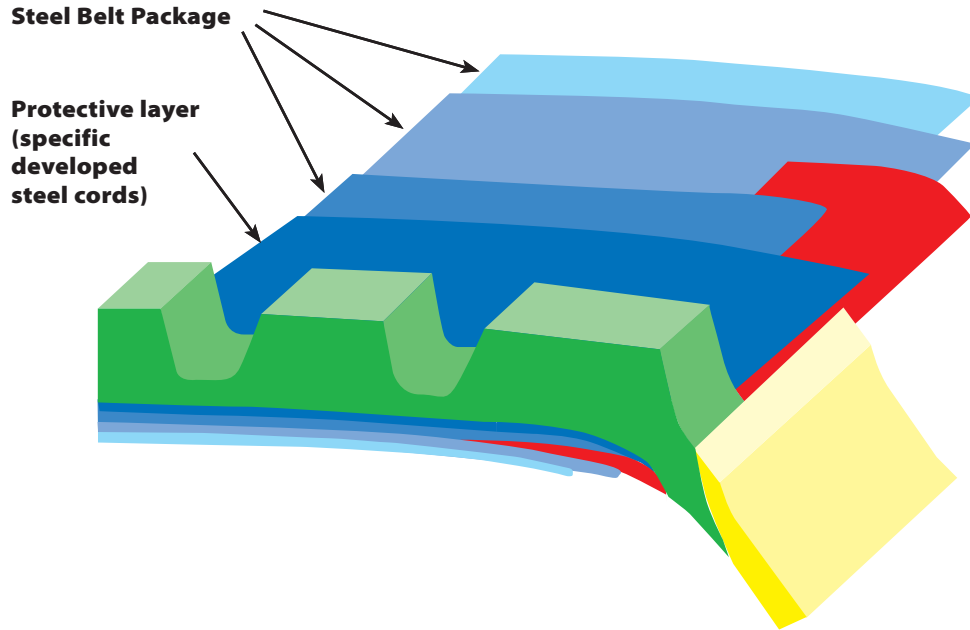
Segmentation			LHT	LHT	MST	RHT
Size	Index 1 Load & Speed	Index 2 Load & Speed	CARGO C3 PLUS	CARGO C3	CARGO MS	CARGO PLUS
215/75R17.5	135/133J					●
235/75R17.5	143/141J			●		
245/70R19.5	141/140J			●		
265/70R19.5	143/141J			●		
385/65R22.5	160/J 158/K				●	
385/65R22.5	160/K 158/L		●			
8.25R15 TT	143/141 J					●
9.5R17.5	143/141G	141/140J				●

● - available

LHT = long haul trailer

RHT = regional haul trailer

MST = mixed service trailer



CHARACTERISTICS

- * Reinforced and protected carcass and tread structure – overlapped steel belt package

ADVANTAGES

- * Anti-corrosion protection of steel armature
- * Enhanced retreadability
- * Reduced ply damage

AVANT MS2



ORJAK MS



CARGO MS



RCS technology (Reinforced Carcass Structure) is based on a construction that improves tire endurance and the possibility of use in adverse driving conditions.

1. RESISTANCE TO CORROSION – BY A PROTECTIVE TOP LAYER OVERLAPPING THE STEEL BELT PACKAGE

Protection of the inner structure and of individual truck tire parts against the penetration of sharp mechanical elements (stones, glass, metal parts, etc.) essentially contributes to improved resistance of the tire steel constituents to corrosion.
Prolonged life and enhanced retreadability.

2. TRUCK TIRE CASING OF HIGH TENSILE STRENGTH STEEL CORD

The high resistance of the tire constituents to fatigue and the ability to dampen strains caused by sudden jolts.
Several retreadings possible.

3. REINFORCED TRUCK TIRE SIDEWALL

Resistance of sidewall to mechanical damage and sudden lateral strains.
Improved durability and longer life.

4. REINFORCEMENT OF TIRE BEAD CONSTRUCTION

The uniform transmission of load between individual constituents improves tire bead durability; reduced possibility of cracking caused by sudden jolts.
Increased rigidity and optimal tire bead and rim fit.

5. BLADELESS TREAD PATTERN

The anti-stone-trapping tread design prevents mechanical damage and irregular wear caused by tearing of the rubber surface.
More mileage and enhanced retreadability.

6. TIRE SIDEWALL MARKING

MS marking integrated into the tread design marking, ex. ORJAK MS (MS – Mixed Service). Tires built according to RCS technology include RCS marking on the tire sidewall.

RCS
Reinforced Carcass Structure



Main impacts on truck tire life

Impact of ambient temperature

external impacts	tire mileage	
	spring (15°C)	100%
	summer (30°C)	80%
	autumn (10°C)	100%
	winter (-10°C)	115%

Impact of truck tire position on the trailer

position on the trailer	tire mileage	
	1. axle	66%
	2. axle	100%
	3. axle	33%

Road surface impact

road type	tire mileage	
	straight road	100%
	straight road with slight slopes	95%
	road with bends and rises	75%
	hairpin bends and steep slopes	50%

Impact of tire pressure

pressure	tire mileage	
	100% recommended pressure life	100%
	15% below recommended pressure	90%
	30% below recommended pressure	70%
	45% recommended pressure	40%

Impact of load

load	tire mileage	
	permitted load	100%
	20% below permitted load	160%
	30% above permitted load	60%
	50% above permitted load	40%

Impact of speed

speed	tire mileage	
	slow (40 km/h)	120%
	average (50 km/h)	100%
	high speed (70 km/h)	75%
	above-average speed (90 km/h)	50%

Truck tire segmentation

Impact of the transport type and driving conditions on tire life

roadway	----	-+++	---+	----	-+++	-+++
off-road	----	--++	-+++	++++	---+	--++
longitudinal	---+	--++	-+++	++++	++++	--++
lateral forces	---+	-+++	-+++	-+++	-+++	--++
"aggressive" roads	----	--++	-+++	++++	-+++	-+++

	long distances	regional transport	roadway and building site	building site	city traffic	winter transport
steering axle	AVANT 4, AVANT A3 ^(PLUS)		AVANT MS2		CITY U4	
	AVANT ^{PLUS} , COMET M3, COMET ^{PLUS} , ORJAK 24 ^{PLUS}					
driving axle	ORJAK 4, ORJAK 03 ^(PLUS)		ORJAK MS, ORJAK 24 MS		ORJAK S M+S	
	ORJAK S, TAMAR ^{PLUS}					
trailer	CARGO ^{PLUS}		CARGO MS			
	CARGO C3, CARGO C3 ^{PLUS}					

---- minimum -++ average +++ maximum

Any type of transport, roadway configuration and mode of use requires the selection of a suitable tire.

Speed index table

speed index	maximum permitted speed (km/h)	speed index	maximum permitted speed (km/h)
E	70	K	110
F	80	L	120
G	90	M	130
J	100	N	140

Load index table

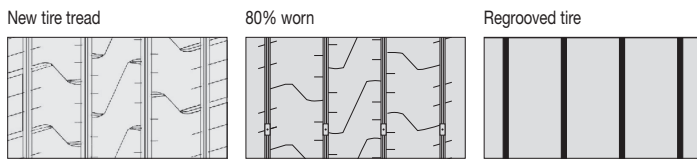
Index	kg	Index	kg	Index	kg
120	1400	137	2300	154	3750
121	1450	138	2360	155	3875
122	1500	139	2430	156	4000
123	1550	140	2500	157	4125
124	1600	141	2575	158	4250
125	1650	142	2650	159	4375
126	1700	143	2725	160	4500
127	1750	144	2800	161	4625
128	1800	145	2900	162	4750
129	1850	146	3000	163	4875
130	1900	147	3075	164	5000
131	1950	148	3150	165	5150
132	2000	149	3250	166	5300
133	2060	150	3350	167	5450
134	2120	151	3450	168	5600
135	2180	152	3550	169	5800
136	2240	153	3650	170	6000

Regrooving guidelines

Depending on conditions of use and maintenance, Sava truck tire casings can give each tire multiple lives thanks to regrooving and retreading while ensuring safety, performance and minimising operating costs. With regrooving tire mileage would be 30% increased.

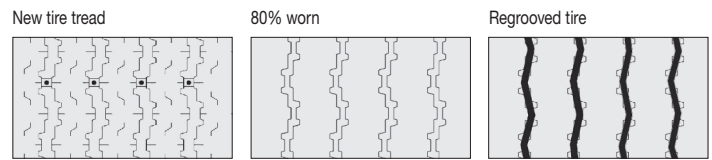
Tires for steering axle

Avant 4



Maximum regrooving depth 3 mm, regrooving width 6 mm.

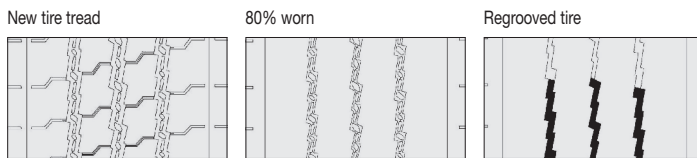
Comet M3



• Regrooving depth indicator.

Maximum regrooving depth 3 mm, regrooving width 6 mm.

Avant A3 (PLUS) - 22,5"



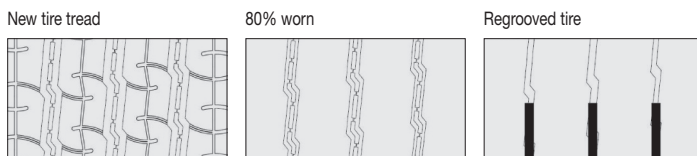
Maximum regrooving depth 3 mm, regrooving width 6 mm.

Comet PLUS



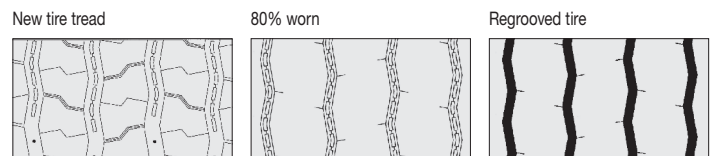
Maximum regrooving depth 3 mm, regrooving width 6 mm.

Avant A3 - 17,5" / 19,5"



Maximum regrooving depth 3 mm, regrooving width 6 mm.

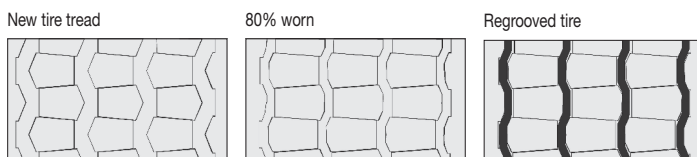
City U4



• Regrooving depth indicator.

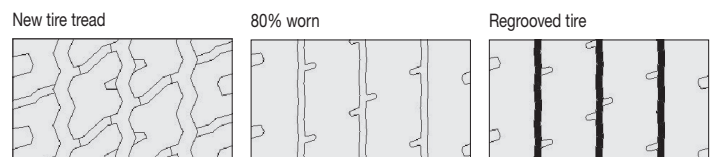
Maximum regrooving depth 3 mm, regrooving width 6 mm.

Avant PLUS



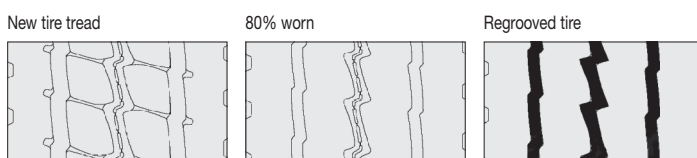
Maximum regrooving depth 3 mm, regrooving width 6 mm.

Orjak 24 PLUS



Maximum regrooving depth 3 mm, regrooving width 6 mm.

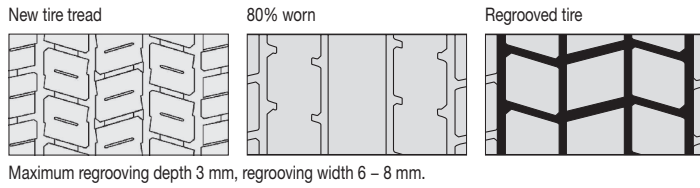
Avant MS2



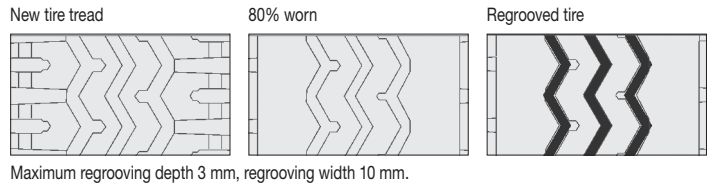
Maximum regrooving depth 3 mm, regrooving width 8 mm.

Tires for driving axle

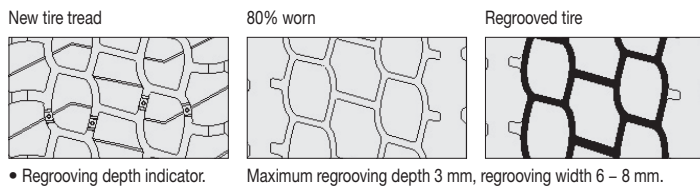
Orjak 4



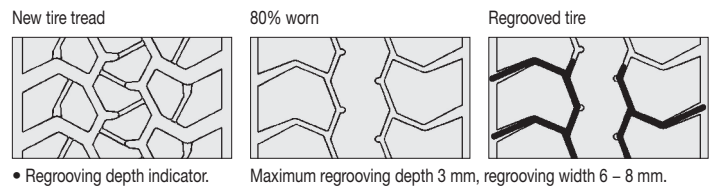
Orjak S M+S



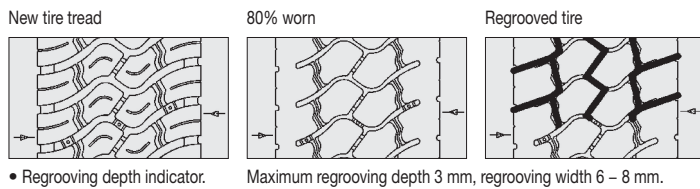
Orjak O3 (PLUS) - 22,5"



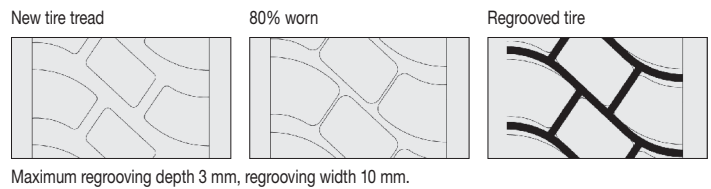
Orjak MS



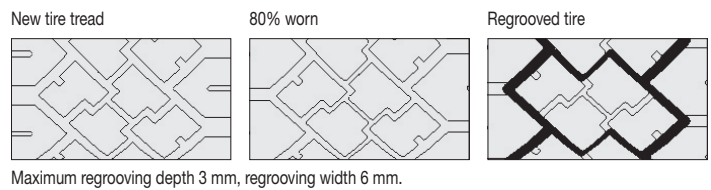
Orjak O3 - 17.5" / 19.5"



Orjak 24 MS

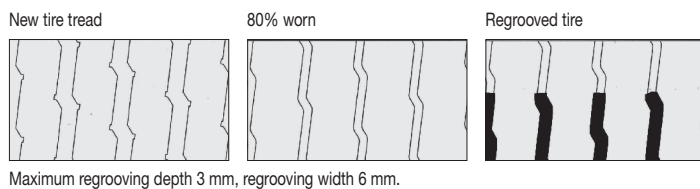


Tamar^{PLUS}

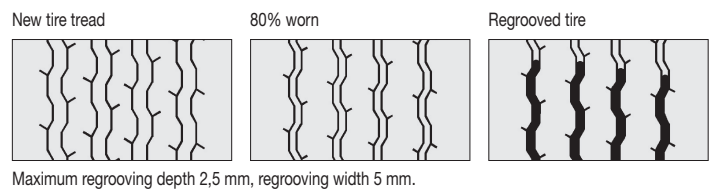


Tires for trailers

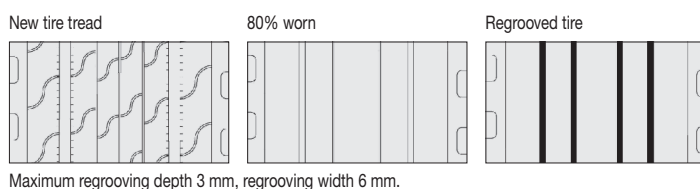
Cargo C3^{PLUS}



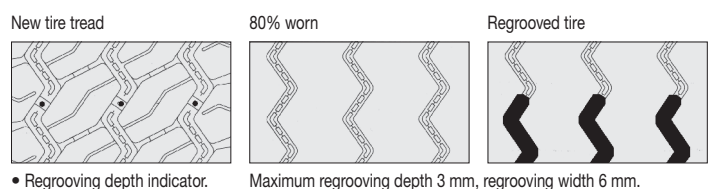
Cargo^{PLUS}



Cargo C3



Cargo MS





Sava

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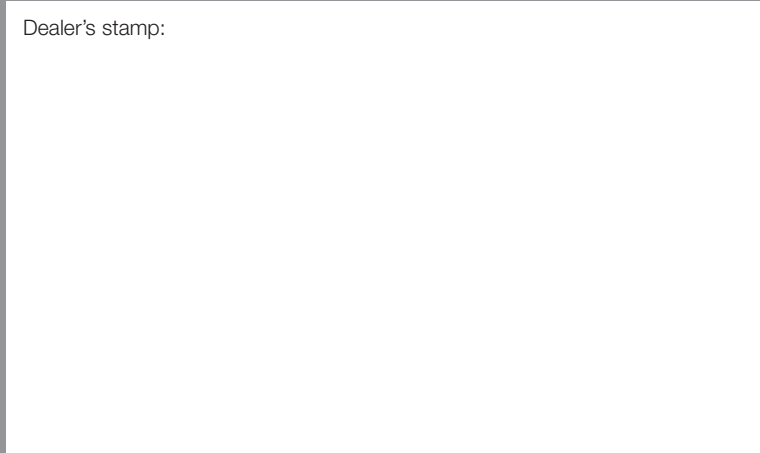
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Sava

EUROPEAN QUALITY TIRES



NEW SAVA ON ROAD 22.5" RANGE

New 22.5" truck tire range
for cost-conscious fleet

Lower operating cost
for a reliable tire



NEW Sava's on road 22.5" tire range:

New Sava's on road 22.5" range has been specifically developed for cost-conscious fleets, which need a good performing tire on various road applications for a limited cost.

Avant 4 steer axle tires and **Orjak 4** drive axle tires feature brand new cavities developed for providing enhanced performances respecting already coming 2012 EU regulation (Reg 661/2009).

The combination of **Avant 4**, **Orjak 4** and **Cargo C3 PLUS** result in lower operating cost thanks to further improvement in mileage and fuel consumption.

Durable carcass technology enables regrooving and retreadability of the full range.

Features and Benefits:



Avant 4

- Optimized cavity for a better fuel consumption and good mileage
- Wide and shallow bladed shoulder ribs for more resistance against shoulder wear
- Optimized blading geometry for wet grip and all weather capability improvement
- Tread compound technology focused on mileage performance



Orjak 4

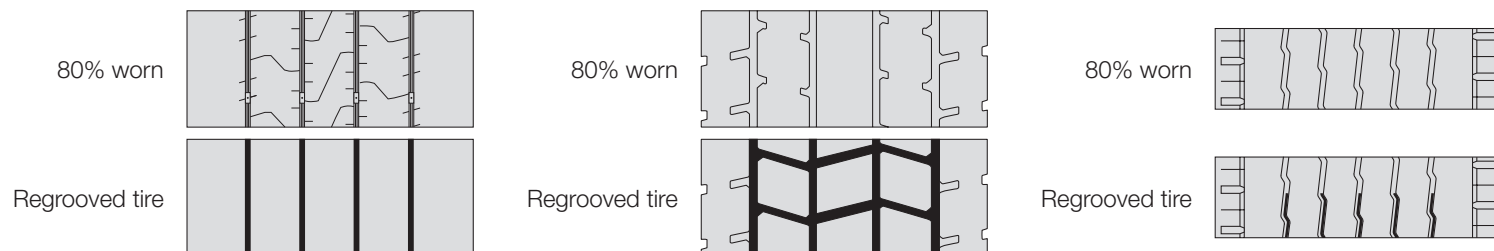
- Optimized cavity for a better fuel consumption and good mileage
- Multi-decoupled blocks, semi-open shoulder for increasing wet grip and snow traction
- Deep tread depth for maximizing the mileage and the traction through whole tire life
- Tread compound technology focused on mileage performance and cut resistance



Cargo C3^{PLUS}

- Wide, 6 robust rib tread pattern – excellent mileage
- 5 Zig-Zag grooves, good braking on wet
- Wide solid shoulder ribs – improved mileage and lateral stability
- Carcass construction lowering heat build-up and improving durability

Regrooving guidelines: depth = 3 mm, width = 6 mm



Size line up and technical details:

Design	Size	Load / Speed index	Axle load (single) (kg)	Axle load (dual) (kg)	Rec. Rim (inch)	Nominal infl. (bar)
Avant 4	315/80 R 22.5	156/150 L (154/150 M)	8000 (7500)	13400 (13400)	9.00"	8.5
	315/70 R 22.5	154/150 L (152/148 M)	7500 (7100)	13400 (12600)	9.00"	9
	295/80 R 22.5	152/148 M	7100	12600	8.25"	8.5
Orjak 4	315/80 R 22.5	156/150 L (154/150 M)	8000 (7500)	13400 (13400)	9.00"	8.5
	315/70 R 22.5	154/150 L (152/148 M)	7500 (7100)	13400 (12600)	9.00"	9
	295/80 R 22.5	152/148 M	7100	12600	8.25"	8.5
Cargo C3 ^{PLUS}	385/65 R 22.5	160 K (158 L)	9000	8500	11.75"	9



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