

MIT THE KING

MARANGONI INDUSTRIAL TYRES



INDUSTRIAL & MPT TYRES
TECHNICAL DATA BOOK 2020



MARANGONI
INDUSTRIAL TYRES
ONYX

MARANGONIINDUSTRIALTYRES.IT

STRONGER PERFORMANCE SAVES YOU TIME

MARANGONI INDUSTRIAL TYRES ARE THE ONLY CHOICE for those who want maximum performance and minimum wear. Those who work hard know how crucial time is. Continuous and extended use with no downtime for maintenance is a critical time saver. This indisputable advantage combined with high quality compounds and raw materials that extend the tyre's lifespan allows us to achieve another key result: a reduction in costs. The wide range of MARANGONI INDUSTRIAL TYRES products is able to meet any and all requirements in terms of reliability, performance and safety. Guaranteed return for a long-term investment.

A SINGLE RESPONSE TO ALL YOUR NEEDS: PERFORMANCE



CUT OPERATING COSTS

Reducing rolling resistance means reducing heat and thus energy consumption. The benefits are a greater yield per battery charge for electric forklifts and fewer refuelling stops for those based on internal combustion engines.

ACHIEVE HIGH STANDARDS OF QUALITY AND RELIABILITY

The management of the entire production process makes MARANGONI INDUSTRIAL TYRES one of the few companies able to choose compounds, technologies, machinery and moulds, while at the same time implementing unparalleled know-how.

This results in highly proven and cutting edge products that always offer the performance you need.

IMPROVE EFFICIENCY

Constant performance levels, limited wear, plus comfort, stability and excellent loading capacity guarantee higher efficiency even for heavy duty forklifts.

CHOOSE THE BEST PRODUCT

Many of the leading manufacturers of forklifts and industrial vehicles have chosen MARANGONI INDUSTRIAL TYRES as their original equipment supplier and have cooperated with the Research and Development Centre to develop their products according to different needs: efficiency, safety, and comfort.

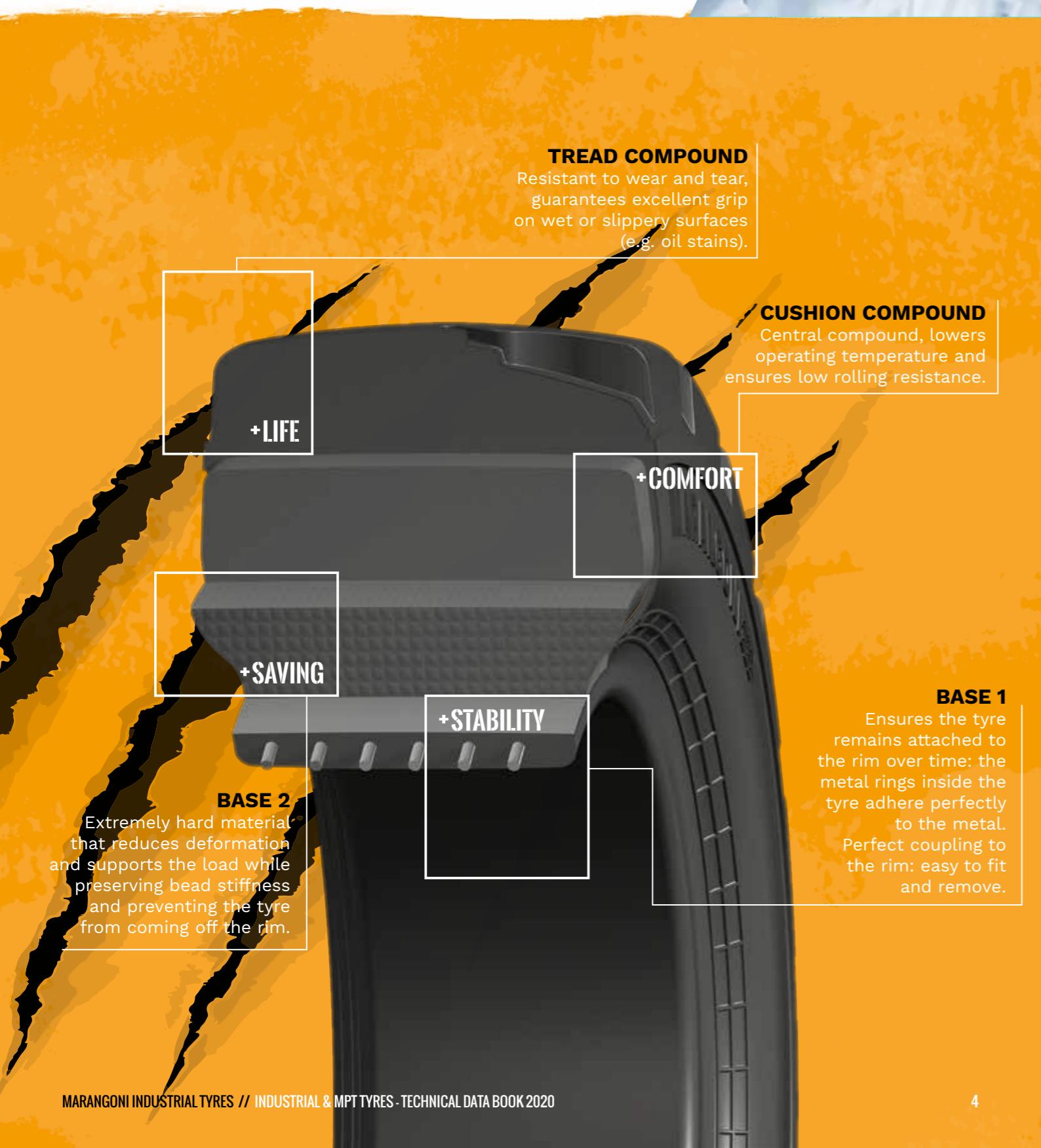
Users can benefit from the wide range of products offered by MARANGONI INDUSTRIAL TYRES, a leading specialist in the sector globally.

REDUCE YOUR COMPANY'S FOOTPRINT

By ensuring industrial tyres a longer lifespan and decreasing the energy consumption of vehicles, which in turn reduces polluting emissions and thus the overall ecological impact is significantly reduced.

SPECIALIST STRENGTH

The quality of the compounds used is essential in the solid industrial tyre sector.



SPECIAL-S

This version was designed and developed especially for loaders and produced in the 20 and 24 inch sizes. It is constructed using compounds which are particularly resistant to tearing. The tyre stands out for its resistance to wear and tear, jolts, cuts and abrasions, as well as for its high rigidity that provides stability to the vehicle and, therefore, to the load. Used for vehicles which carry loads, usually in environments with extreme conditions, such as scrap yards and dumps.



HIGH CAPACITY-HL

This is a tyre designed with a highly rigid structure in comparison to standard tyres. It is constructed with extremely hard compounds that are able to maintain all the other physical and mechanical characteristics to excellent levels. The distinguishing feature of Super-elastic and Cushion tyres is their ability to sustain high loads with minimal deformation. It is widely used in situations where it is of paramount importance to maintain the stability of the vehicle and, therefore, of the load. It is also utilised in other specific cases. Contact a MARANGONI INDUSTRIAL TYRES technician for advice before choosing this version.



ANTISTATIC-AS

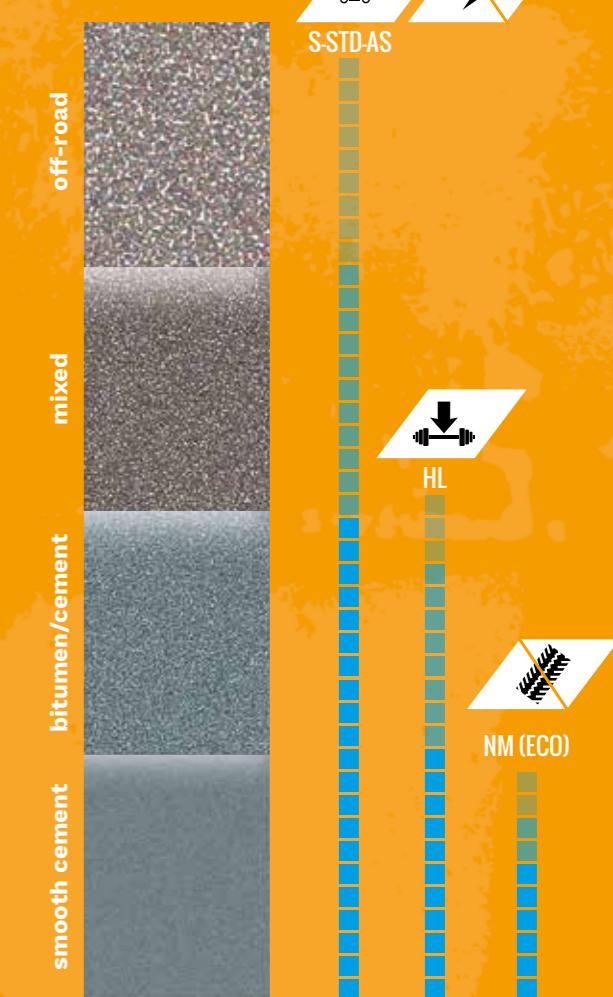
This tyre was designed to release the static electricity accumulated by the vehicle onto the ground. It is constructed with special additives which perform this action while maintaining all the other physical and mechanical characteristics to excellent levels. It is typically used in paint and solvent factories, in gas tank deposits, in environments with easily flammable fine dust particles or in environments where the accumulation of static electricity can cause explosions. In all of these cases, the use of this tyre increases safety levels. The AS Super-elastic and Cushion tyres are in compliance with the ISO/DIS 2883 standards. A certificate of conformity shall be provided upon customers' request.



NO MARKING-NM

This is a yellow coloured tyre, designed not to leave dark marks on the ground surface. It is constructed with a yellow mixture, containing no dark substances. Its use is recommended in environments where cleanliness is of great importance, for example in the pharmaceutical, food and beverage, and electronic industries, or anywhere light coloured floors must stay clean.

SURFACE: RECOMMENDED USE



INNOVATIVE SOLUTIONS

SUPER-ELASTIC ELTOR® E3 INTEGRATED LOADER SYSTEM

The MARANGONI INDUSTRIAL TYRES integrated loader system is ideal for all stressful situations in which the machines have to work in a stationary position, travelling just short distances and carrying particularly heavy loads (scrap yards, landfills, timber yards, etc.).

TYRE
square and compact pattern less vertical deformation
MORE STABILITY

COMPOUND
resistant to cuts and tears
+ LIFE

TREAD
designed to transmit
MORE TRACTION

SPACER
prevents infiltration of debris and other similar objects

REINFORCED RIM WITH FLAT BOTTOM CHANNEL

increased thickness
no aeration or inflation valve holes
STURDIER
perfect coupling to the tyres
MORE SOLIDITY



ELTOR® E3 TYRE

High stability tyre designed to withstand very high loads. The reinforced sidewall limits vertical deformation and protects against accidental impact. The compounds used guarantee maximum resistance to cuts and tears and consequently longer life. The tread is designed to improve traction in all working conditions.

RING PROTECTOR

The spacer perfectly traces the profile of the MARANGONI INDUSTRIAL TYRES Eltor® E3 tyre sidewall, thus preventing infiltration of debris and the like.

RIM

The reinforced rim with flat bottom channel, designed especially to mount MARANGONI INDUSTRIAL TYRES solid tyres, solves all skidding problems. Especially robust due to increased thickness and elimination of the aeration holes and the hole for the inflation valve.

SUPER-ELASTIC ELTOR FIX®

ELTOR FIX® FOR QUICK AND EASY INSTALLATION



FOR BEAD FIX VERSION

FIX - Bead structure consist of a special border made of highly resistant rubber; guarantees a perfect fit on the rim with no need for fastening rings.

ELTOR® STANDARD (NON FIX) FOR FITTING ON INDUSTRIAL MULTIPiece RIMS



FOR BEAD NON-FIX VERSION
Movable rim parts 1, 2 and 3.

RIMS FOR FIX SOLID TYRES

- Fit all sizes of FIX Solid Tyres from 8" to 20".
- Available for all standard applications.
- Adaptable to most custom applications.



INDUSTRIAL MULTIPiece RIMS

- Fit all sizes of Industrial Tyres from 8" to 24".
- Available for all standard and heavy duty (20 and 24") applications.
- Multipiece design includes 2 or 3 piece components or base wheel for the FIX type applications.
- Fit tube type tyres as well as NON FIX solid tyres.
- Designed for easy tyre installation and precise fitment.



SPLIT RIMS (DIVIDED TYPE)

- Designed for easy tyre installation and precise fitment without press.



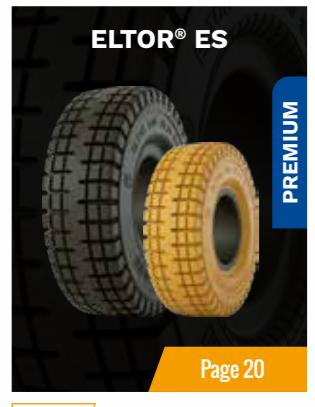
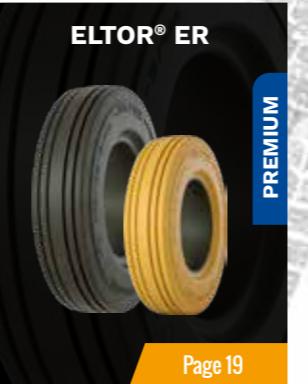
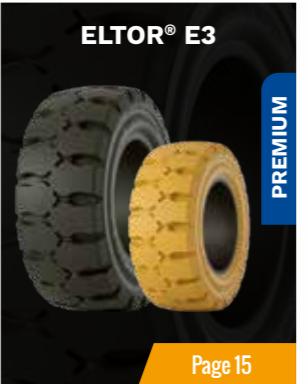
WHEELS FOR POB CUSHION TYRES

- Fit all sizes of press on band cushion from 6,5" to 22".
- Available for all standard applications.
- Adaptable to most custom applications.



SPECIALISED RANGE

SUPER-ELASTIC



PRESS ON BAND CUSHION FORZA



CONVENTIONAL PNEUMATIC INDUSTRIAL TYRES



CONVENTIONAL PNEUMATIC SKID STEER TYRES FOR SMALL-SIZED MACHINES



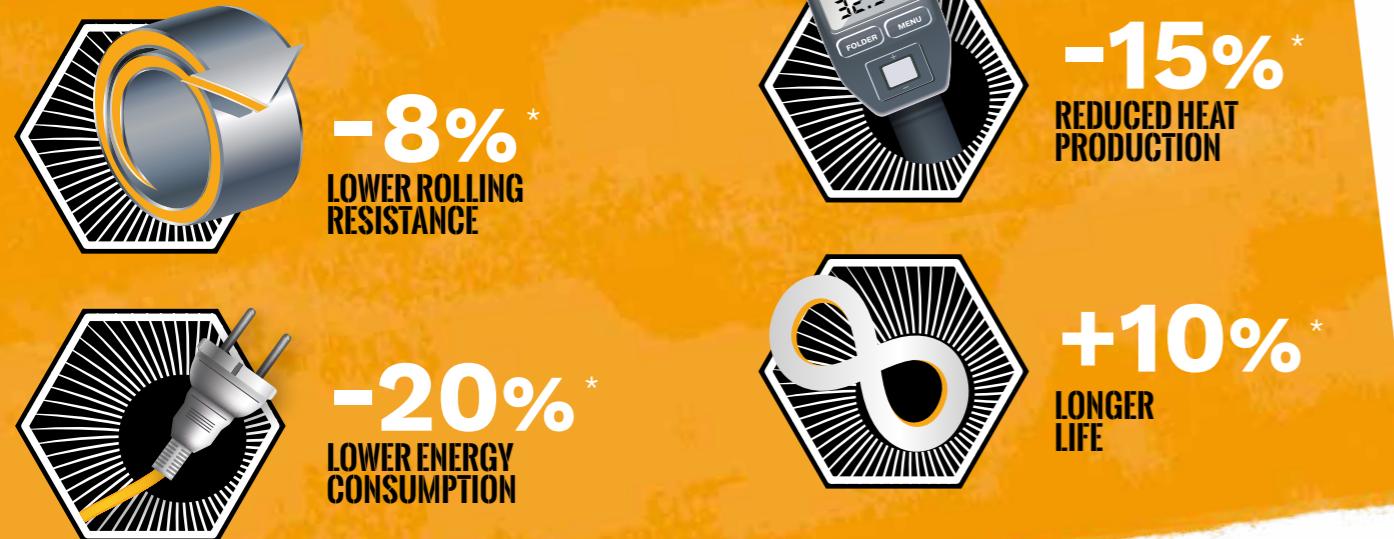
MULTI-PURPOSE CONVENTIONAL PNEUMATIC TYRES FOR MANUFACTURING MACHINES



ELTOR® EVO

THE TECHNOLOGY THAT ANTICIPATES TOMORROW BY 10%

Our prime objective? To extend tyre life and save our customers time and money, without compromising on performance. Rather, improving performance even more compared to similar competing products. MARANGONI INDUSTRIAL TYRES' response has a name: **Eltor® EVO**. This new range can withstand a high number of working hours (10% more compared to other premium products) by generating less heat, the result of a new structure and optimised characteristics of the compounds.



* Tests conducted in the laboratory with other premium products.



MORE TIME, MORE EVOLUTION

The results achieved today with **Eltor® EVO** in terms of reliability, performance and safety were unconceivable just a few years ago.

Longer continuous service without stopping for maintenance means savings in terms of time and costs, as well as reducing environmental impact.

Less replacements mean less CO₂ emissions, beneficial for the environment.

NEW TREAD STRUCTURE,
WITH THE GOI POSITIONED
ON A SMALLER DIAMETER

= longer life compared to
other premium products

DEEPER TREAD

Eltor® EVO is the super-elastic superior tyre by MARANGONI INDUSTRIAL TYRES offering the best performance in terms of durability, reliability and energy consumption.

The MARANGONI INDUSTRIAL TYRES R&D Division, after hundreds of hours spent on testing, has achieved the goal to optimize structures and compounds so as to obtain the best product in the market.

Low rolling resistance together with reduced heat generation allow **Eltor® EVO** to be used even in extreme operating conditions, guaranteeing long product life.

COMPOUNDS DESIGNED FOR
BETTER ROLLING RESISTANCE
AND LESS FRICTION BETWEEN
THE TREAD AND THE GROUND

= lower energy consumption and
maximum battery efficiency

GOOD
DIRECTIONALITY



BETTER
TRACTION



GREATER STABILITY
SMOOTH RUNNING



ELTOR® EVO**ELTOR® EVO NO MARKING****S**
special**HL**
high capacity**AS**
antistatic**NM**
no marking

- Higher mileage.
- High reliability on all forklift trucks, even for heavy duty applications.
- Optimum comfort level.
- Maximum traction.

(1) Sizes are intended for tyres not fitted on rims;
 (2) Capacity values indicated in reference to ELTOR tyres mounted on vehicles whose speed with no cargo is less than 25 km/h (according to E.I.R.T.O. standards);
 (3) Only for interior courses inferior to 2,000 metres; if otherwise, contact dealer (according to E.I.R.T.O. standards).



Ø	TYRE SIZE (inches)	PROFILE	RIM SIZE	TYRE DIMENSIONS (1)		WEIGHT (kg)	LOAD CAPACITY (KG) AT MAX SPEED (KM/H) (2)		
				W (mm) ± 2%	D (mm) ± 2%		CARRYING WHEEL 25 km/h	STEERING WHEEL 25 km/h	TRAILERS (3)
4"	4.00-4	NEW	EVO	2.50C-4	101 ± 2%	303 ± 2%	6,6	535 412	485 535
8"	4.00-8		EVO	3.00D-8	105,9 ± 2%	403,5 ± 2%	10,7	950 730	860 860
	4.00-8		EVO FIX	3.00D-8	105,9 ± 2%	403,5 ± 2%	11,0	950 730	860 950
	15x4½-8 (125/75-8)		EVO	3.00D-8	109 ± 2%	377 ± 2%	9,4	1.040 800	800 945
	15x4½-8 (125/75-8)		EVO FIX	3.00D-8	109 ± 2%	377 ± 2%	9,7	1.040 800	800 945
	15x4½-8 (125/75-8) NEW		EVO	3.25D-8	107 ± 2%	377 ± 2%	9,6	1.040 800	800 945
	5.00-8		EVO	3.00D-8	120 ± 2%	458 ± 2%	17,1	1.415 1.090	1.090 1.285
	5.00-8		EVO FIX	3.00D-8	120 ± 2%	458 ± 2%	17,2	1.415 1.090	1.090 1.415
	16x6-8 (150/75-8)		EVO	4.33R-8	151 ± 2%	421 ± 2%	17,1	1.495 1.150	1.150 1.360
	16x6-8 (150/75-8)		EVO FIX	4.33R-8	151 ± 2%	421 ± 2%	17,4	1.495 1.150	1.150 1.495
	18x7-8 (180/70-8)		EVO	4.33R-8	152 ± 2%	453 ± 2%	20,2	2.145 1.650	1.650 1.945
	18x7-8 (180/70-8)		EVO FIX	4.33R-8	152 ± 2%	453 ± 2%	20,5	2.145 1.650	1.650 2.145
9"	140/55-9		EVO	4.00E-9	130 ± 2%	380 ± 2%	11,5	1.170 900	900 1.060
	140/55-9		EVO FIX	4.00E-9	130 ± 2%	380 ± 2%	11,8	1.170 900	900 1.060
	6.00-9		EVO	4.00E-9	139 ± 2%	525 ± 2%	26,1	1.885 1.450	1.450 1.710
	6.00-9		EVO FIX	4.00E-9	139 ± 2%	525 ± 2%	26,4	1.885 1.450	1.450 1.885
	21x8-9 (200/75-9)		EVO	6.00E-9	183 ± 2%	522 ± 2%	34,2	2.755 2.120	2.120 2.500
	21x8-9 (200/75-9)		EVO FIX	6.00E-9	183 ± 2%	522 ± 2%	34,6	2.755 2.120	2.120 2.755
10"	6.50-10		EVO	5.00F-10	160 ± 2%	575 ± 2%	36,6	2.340 1.800	1.800 2.125
	6.50-10		EVO FIX	5.00F-10	160 ± 2%	575 ± 2%	36,8	2.340 1.800	1.800 2.340
	180/60-10		EVO	5.00F-10	152 ± 2%	454 ± 2%	18,5	2.410 1.850	1.850 2.180
	180/60-10		EVO FIX	5.00F-10	152 ± 2%	454 ± 2%	19,0	2.410 1.850	1.850 2.410
	7.50-10		EVO	5.50F-10	176 ± 2%	636 ± 2%	52,3	3.070 2.360	2.360 2.785
	7.50-10		EVO FIX	5.50F-10	176 ± 2%	636 ± 2%	52,3	3.070 2.360	2.360 3.070
	200/50-10		EVO	6.50F-10	189 ± 2%	464 ± 2%	25,6	2.470 1.900	1.900 2.240
	200/50-10		EVO FIX	6.50F-10	189 ± 2%	464 ± 2%	26,1	2.470 1.900	1.900 2.470
	23x9-10 (225/75-10)		EVO	6.50F-10	195 ± 2%	581 ± 2%	46,0	3.445 2.650	2.650 3.125
	23x9-10 (225/75-10)		EVO FIX	6.50F-10	195 ± 2%	581 ± 2%	46,3	3.445 2.650	2.650 3.445
12"	7.00-12		EVO	5.00S-12	169 ± 2%	658 ± 2%	47,6	2.920 2.240	2.240 2.645
	7.00-12		EVO FIX	5.00S-12	169 ± 2%	658 ± 2%	48,3	2.920 2.240	2.240 2.920
	23x10-12 (250/60-12)		EVO	8.00G-12	227 ± 2%	586 ± 2%	49,9	3.770 2.900	2.900 3.420
	23x10-12 (250/60-12)		EVO FIX	8.00G-12	227 ± 2%	586 ± 2%	50,6	3.770 2.900	2.900 3.770
	27x10-12 (250/75-12)		EVO	8.00G-12	235 ± 2%	672 ± 2%	73,5	3.900 3.000	3.000 3.540
	27x10-12 (250/75-12)		EVO FIX	8.00G-12	235 ± 2%	672 ± 2%	74,3	3.900 3.000	3.000 3.900
	315/45-12		EVO	10.00G-12	275 ± 2%	588 ± 2%	61,0	4.485 3.450	3.450 4.070
	315/45-12		EVO FIX	10.00G-12	285 ± 2%	574 ± 2%	61,4	4.485 3.450	3.450 4.485
15"	7.00-15		EVO	5.5-15	180 ± 2%	728 ± 2%	59,0	3.545 2.725	2.725 3.215
	7.00-15		EVO FIX	5.5-15	180 ± 2%	728 ± 2%	59,5	3.545 2.725	2.725 3.545
	7.50-15		EVO	5.5-15	205 ± 2%	758 ± 2%	72,2	3.900 3.000	3.000 3.540
	7.50-15		EVO FIX	5.5-15	205 ± 2%	758 ± 2%	72,7	3.900 3.000	3.000 3.900
	7.50-15		EVO	6.0-15	205 ± 2%	758 ± 2%	72,6	3.900 3.000	3.000 3.540
	7.50-15		EVO FIX	6.0-15	205 ± 2%	758 ± 2%	73,5	3.900 3.000	3.000 3.900
	7.50-15		EVO	6.5-15	205 ± 2%	758 ± 2%	72,9	3.900 3.000	3.000 3.540
	7.50-15		EVO FIX	6.5-15	205 ± 2%	758 ± 2%	74,2	3.900 3.000	3.000 3.900
	8.25-15		EVO	6.5-15	203 ± 2%	822 ± 2%	90,9	4.750 3.650	3.650 4.300
	8.25-15		EVO FIX	6.5-15	203 ± 2%	822 ± 2%	92,4	4.750 3.650	3.650 4.750
	28x9-15 (225/75-15)		EVO	7.0-15	214 ± 2%	699 ± 2%	61,8	3.445 2.650	2.650 3.125
	28x9-15 (225/75-15)		EVO FIX	7.0-15	214 ± 2%	699 ± 2%	62,2	3.445 2.650	2.650 3.445
	250-15 (250/70-15)		EVO	7.0-15	214 ± 2%	721 ± 2%	66,5	4.745 3.650	3.650 4.310
	250-15 (250/70-15)		EVO FIX	7.0-15	214 ± 2%	721 ± 2%	67,0	4.745 3.650	3.650 4.745
	250-15 (250/70-15)		EVO	7.5-15	214 ± 2%	721 ± 2%	67,5	4.745 3.650	3.650 4.310
	250-15 (250/70-15)		EVO FIX	7.5-15	214 ± 2%	721 ± 2%	68,5	4.745 3.650	3.650 4.745
	300-15 (315/70-15)								



SUPER-ELASTIC ELTOR® EVO

SUPERIOR

Ø	TYRE SIZE (inches)	PROFILE	RIM SIZE	TYRE DIMENSIONS (1)		WEIGHT (kg) ± 2%	LOAD CAPACITY (KG) AT MAX SPEED (KM/H) (2)					
				W (mm) ± 2%	D (mm) ± 2%		CARRYING WHEEL 25 km/h	STEERING WHEEL 25 km/h	TRAILERS (3)	25 km/h	10 km/h	6 km/h
20"	355/50-20	EVO	10.0-20	309	832	119,0	8.970	6.900	6.900	8.140	8.970	
	355/50-20	EVO FIX	10.0-20	309	832	119,8	8.970	6.900	6.900	8.140	8.970	
9.00-20	NEW	EVO	6.5-20	243	991	149,0	5.400	4.500	4.500	4.905	5.400	
9.00-20	NEW	EVO	7.0-20	243	991	149,0	5.400	4.500	4.500	4.905	5.400	
10.00-20	NEW	EVO	7.0-20	258	1.011	167,0	6.000	5.000	5.000	5.450	6.000	
10.00-20	NEW	EVO	7.5-20	258	1.011	167,0	6.000	5.000	5.000	5.450	6.000	
10.00-20	NEW	EVO	8.0-20	258	1.011	167,0	6.000	5.000	5.000	5.450	6.000	
12.00-20	NEW	EVO	8.0-20	267	1.099	216,0	7.560	6.300	6.300	6.885	7.560	
12.00-20	NEW	EVO	8.5-20	267	1.099	217,0	7.560	6.300	6.300	6.885	7.560	
12.00-20	NEW	EVO	10.0-20	303	1.099	257,0	7.800	6.500	6.500	7.085	7.800	
12.00-24	NEW	EVO	8.5-24	281	1.183	236,0	8.040	6.700	6.700	7.305	8.040	
14.00-24	NEW	EVO	10.0-24	353	1.300	375,0	11.100	9.250	9.250	1.085	11.100	

SUPER-ELASTIC

ELTOR® E3



ELTOR® E3 NO MARKING



PREMIUM



S
special



HL
high capacity



AS
antistatic



NM
no marking

- Tested structure that always offers good mileage.
- High stability, suitable for large forklift trucks and loaders.
- Excellent comfort in every situation.



SUPER-ELASTIC ELTOR® E3

PREMIUM

Ø	TYRE SIZE (inches)	PROFILE	RIM SIZE	TYRE DIMENSIONS (1)		WEIGHT (kg) ± 2%	LOAD CAPACITY (KG) AT MAX SPEED (KM/H) (2) CARRYING STEERING TRAILERS (3)					
				W (mm) ± 2%	D (mm) ± 2%		25 km/h	25 km/h	25 km/h	10 km/h	6 km/h	
4"	3.00-4	E1	2.10-4	76	250	3,5	260	195	195	235	260	
	4.00-4	E3	2.50C-4	101	303	6,6	535	412	412	485	535	
6"	3.50/4.00-6	E3	3.75-6	112	311	7,0	410	315	315	370	410	
	140/55-6	E3	4.50-6	131	311	8,3	1.070	825	825	970	1.070	
8"	4.00-8	E3	3.00D-8	100	403	10,3	950	730	730	860	950	
	4.00-8	E3 FIX	3.00D-8	100	403	10,6	950	730	730	860	950	
	15x4½-8 (125/75-8)	E3	3.00D-8	109	375	9,3	1.040	800	800	945	1.040	
	15x4½-8 (125/75-8)	E3 FIX	3.00D-8	109	375	9,5	1.040	800	800	945	1.040	
	15x4½-8 (125/75-8)	E3	3.25D-8	107	377	9,2	1.040	800	800	945	1.040	
	5.00-8	E3	3.00D-8	123	455	16,6	1.415	1.090	1.090	1.285	1.415	
	5.00-8	E3 FIX	3.00D-8	123	455	16,9	1.415	1.090	1.090	1.285	1.415	
	5.00-8	E3	3.25D-8	123	455	16,3	1.415	1.090	1.090	1.285	1.415	
	16x6-8 (150/75-8)	E3	4.33R-8	150	418	16,5	1.495	1.150	1.150	1.360	1.495	
	16x6-8 (150/75-8)	E3 FIX	4.33R-8	150	418	16,8	1.495	1.150	1.150	1.360	1.495	
	18x7-8 (180/70-8)	E3	4.33R-8	148	448	19,8	2.145	1.650	1.650	1.945	2.145	
	18x7-8 (180/70-8)	E3 FIX	4.33R-8	148	448	20,0	2.145	1.650	1.650	1.945	2.145	
	18x9-8	E3	7.00E-8	214	454	29,5	2.300	1.900	1.900	2.090	2.300	
9"	140/55-9	E3	4.00E-9	130	380	10,0	1.170	900	900	1.060	1.170	
	140/55-9	E3 FIX	4.00E-9	130	380	10,3	1.170	900	900	1.060	1.170	
	6.00-9	E3	4.00E-9	139	522	25,3	1.885	1.450	1.450	1.710	1.885	
	6.00-9	E3 FIX	4.00E-9	139	522	25,6	1.885	1.450	1.450	1.710	1.885	
	21x8-9 (200/75-9)	E3	6.00E-9	182	520	33,2	2.755	2.120	2.120	2.500	2.755	
	21x8-9 (200/75-9)	E3 FIX	6.00E-9	182	520	33,6	2.755	2.120	2.120	2.500	2.755	
10"	6.50-10	E3	5.00F-10	163	570	35,5	2.340	1.800	1.800	2.125	2.340	
	6.50-10	E3 FIX	5.00F-10	163	570	35,7	2.340	1.800	1.800	2.125	2.340	
	6.50-10	E3	5.50F-10	163	570	35,0	2.570	1.975	1.975	2.335	2.570	
	7.50-10	E3	5.50F-10	176	636	49,8	3.070	2.360	2.360	2.785	3.070	
	200/50-10	E3	6.50F-10	193	457	24,0	2.470	1.900	1.900	2.240	2.470	
	200/50-10	E3 FIX	6.50F-10	193	457	24,8	2.470	1.900	1.900	2.240	2.470	
	23x9-10 (225/75-10)	E3	6.50F-10	194	578	44,1	3.445	2.650	2.650	3.125	3.445	
	23x9-10 (225/75-10)	E3 FIX	6.50F-10	194	578	44,5	3.445	2.650	2.650	3.125	3.445	
12"	7.00-12	E3	5.00S-12	168	649	45,9	2.920	2.240	2.240	2.645	2.920	
	7.00-12	E3 FIX	5.00S-12	168	649	46,6	2.920	2.240	2.240	2.645	2.920	
	23x10-12 (250/60-12)	E3	8.00G-12	227	580	47,4	3.770	2.900	2.900	3.420	3.770	
	23x10-12 (250/60-12)	E3 FIX	8.00G-12	227	580	47,8	3.770	2.900	2.900	3.420	3.770	
	27x10-12 (250/75-12)	E3	8.00G-12	237	669	69,6	3.900	3.000	3.000	3.540	3.900	
	27x10-12 (250/75-12)	E3 FIX	8.00G-12	237	669	70,4	3.900	3.000	3.000	3.540	3.900	
	315/45-12	E3	10.00G-12	285	574	55,9	4.485	3.450	3.450	4.070	4.485	
	315/45-12	E3 FIX	10.00G-12	285	574	56,7	4.485	3.450	3.450	4.070	4.485	
13"	23x5-13	E3	3.75P-13	138	612	32,0	1.495	1.150	1.150	1.360	1.495	
	23x5-13	E3 FIX	3.75P-13	138	612	32,8	1.495	1.150	1.150	1.360	1.495	

(1) Sizes are intended for tyres not fitted on rims;
(2) Capacity values indicated are in reference to ELTOR tyres mounted on vehicles whose speed with no cargo is less than 25 km/h (according to E.T.R.T.O. standards);
(3) Only for interior courses inferior to 2,000 metres; if otherwise, contact dealer (according to E.T.R.T.O. standards).



SUPER-ELASTIC ELTOR® E3

PREMIUM

Ø	TYRE SIZE (inches)	PROFILE	RIM SIZE	TYRE DIMENSIONS (1)		WEIGHT (kg) ± 2%	LOAD CAPACITY (KG) AT MAX SPEED (KM/H) (2) CARRYING STEERING TRAILERS (3)					
				W (mm) ± 2%	D (mm) ± 2%		25 km/h	25 km/h	25 km/h	10 km/h	6 km/h	
15"	7.00-15	E3	5.5-15	178	723	55,7	3.545	2.725	2.725	3.215	3.545	
	7.00-15	E3 FIX	5.5-15	178	723	56,2	3.545	2.725	2.725	3.215	3.545	
	7.00-15	E3	6.0-15	178	723	57,0	3.545	2.725	2.725	3.215	3.545	
	7.50-15	E3	5.5-15	205	750	67,4	3.900	3.000	3.000	3.540	3.900	
	7.50-15	E3 FIX	5.5-15	205	750	68,5	3.900	3.000	3.000	3.540	3.900	
	7.50-15	E3	6.0-15	205	750	69,6	3.900	3.000	3.000	3.540	3.900	
	7.50-15	E3 FIX	6.0-15	205	750	70,0	3.900	3.000	3.000	3.540	3.900	
	7.50-15	E3	6.5-15	205	750	70,2	3.900	3.000	3.000	3.540	3.900	
	7.50-15	E3 FIX	6.5-15	205	750</td							

SUPER-ELASTIC

ELTOR® EL

ELTOR® EL NO MARKING

PREMIUM



- Smooth tread suitable for dry floors.
- Excellent comfort thanks to low rolling noise.
- Greater protection against damage.

AS
antistatic

NM
no marking



SUPER-ELASTIC

ELTOR® ER

ELTOR® ER NO MARKING

PREMIUM



- Tread pattern with circumferential ribbing.
- Suitable for small vehicles, both motorised and unpowered.
- Very useful in situations where vibrations need to be avoided and friction minimised.

AS
antistatic

NM
no marking

Ø	TYRE SIZE (inches)	PROFILE	RIM SIZE	TYRE DIMENSIONS (1) W (mm) ± 2% D (mm) ± 2%	WEIGHT (kg) ± 2%	LOAD CAPACITY (KG) AT MAX SPEED (KM/H) (2)				
						CARRYING WHEEL 25 km/h	STEERING WHEEL 25 km/h	25 km/h	10 km/h	6 km/h
8"	15x4½-8 (125/75-8)	EL	3.00D-8	108 377	9,7	1.040	800	800	945	1.040
	15x4½-8 (125/75-8)	EL FIX	3.00D-8	108 377	9,9	1.040	800	800	945	1.040
5.00-8		EL	3.00D-8	124 454	15,7	1.415	1.090	1.090	1.285	1.415
17x7-8	EL	4.33R-8	156 430	18,0	1.800	1.380	1.380	1.640	1.800	
18x7-8 (180/70-8)	EL	4.33R-8	147 448	21,0	2.145	1.650	1.650	1.945	2.145	
9"	6.00-9	EL	4.00E-9	144 523	26,4	1.885	1.450	1.450	1.710	1.885
	6.00-9	EL FIX	4.00E-9	144 523	30,0	1.885	1.450	1.450	1.710	1.885
10"	6.50-10	EL	5.00F-10	163 570	36,5	2.340	1.800	1.800	2.125	2.340
12"	7.00-12	EL	5.00S-12	168 649	47,3	2.920	2.240	2.240	2.645	2.920
	7.00-12	EL FIX	5.00S-12	168 649	48,1	2.920	2.240	2.240	2.645	2.920
15"	7.00-15	EL	5.5-15	178 723	57,4	3.545	2.725	2.725	3.215	3.545
	7.00-15	EL FIX	5.5-15	178 723	57,9	3.545	2.725	2.725	3.215	3.545
8.25-15	EL	6.5-15	208 813	88,5	4.750	3.650	3.650	4.300	4.750	
300-15 (315/70-15)	EL	8.0-15	258 816	120,0	5.850	4.500	4.500	5.310	5.850	
300-15 (315/70-15)	EL FIX	8.0-15	258 816	120,9	5.850	4.500	4.500	5.310	5.850	
20"	355/50-20	EL	10.0-20	320 845	122,0	8.970	6.900	6.900	8.140	8.970
	355/50-20	EL FIX	10.0-20	320 845	124,5	8.970	6.900	6.900	8.140	8.970
12.00-20	EL	8.0-20	263 1.102	215,2	7.560	6.300	6.300	6.865	7.560	
12.00-20	EL	8.5-20	267 1.102	220,0	7.560	6.300	6.300	6.865	7.560	
12.00-20	EL	10.0-20	312 1.102	262,0	7.800	6.500	6.500	7.085	7.800	
24"	12.00-24	EL	8.5-24	292 1.180	256,0	8.040	6.700	6.700	7.305	8.040
	12.00-24	EL	10.0-24	292 1.180	260,5	9.000	7.500	7.100	7.750	8.500

(1) Sizes are intended for tyres not fitted on rims;

(2) Capacity values indicated are in reference to ELTOR tyres mounted on vehicles whose speed with no cargo is less than 25 km/h (according to E.T.R.T.O. standards);

(3) Only for interior courses inferior to 2.000 metres; if otherwise, contact dealer (according to E.T.R.T.O. standards).

SUPER-ELASTIC

ELTOR® ES



ELTOR® ES NO MARKING



PREMIUM

SUPER-ELASTIC

FORZA F1



FORZA F1 NO MARKING



QUALITY



- Grooved tread.
- Created exclusively for size 3.00-4.
- Particularly efficient on wet and damp surfaces thanks to excellent grip and directional hold, even on slippery surfaces such as ceramic tiles wet by liquid detergents.



NM no marking

- The quality alternative for normal requirements and standard applications.
- Good traction.
- Low rolling resistance.
- High reliability.

Ø	TYRE SIZE (inches)	PROFILE	RIM SIZE	TYRE DIMENSIONS (1)		WEIGHT (kg) ± 2%	LOAD CAPACITY (KG) AT MAX SPEED (KM/H) (2)				
				W (mm) ± 2%	D (mm) ± 2%		CARRYING WHEEL 25 km/h	STEERING WHEEL 25 km/h	WHEEL 25 km/h	10 km/h	6 km/h
4"	3.00-4	ES	2.10-4	85	248	3,6	260	195	195	235	260

(1) Sizes are intended for tyres not fitted on rims;

(2) Capacity values indicated are in reference to ELTOR tyres mounted on vehicles whose speed with no cargo is less than 25 km/h (according to E.T.R.T.O. standards);

(3) Only for interior courses inferior to 2.000 metres; if otherwise, contact dealer (according to E.T.R.T.O. standards).

SUPER-ELASTIC FORZA

QUALITY



Ø	TYRE SIZE (inches)	PROFILE	RIM SIZE	TYRE DIMENSIONS (1)		WEIGHT (kg)	LOAD CAPACITY (KG) AT MAX SPEED (KM/H) (2)								
				W (mm) ± 2%	D (mm) ± 2%		CARRYING WHEEL 25 km/h	STEERING WHEEL 25 km/h	25 km/h	10 km/h	6 km/h	TRAILERS (3)			
4"	4.00-4	NEW	F1	2.50C-4	100	300	6,4	535	412	412	485	535			
8"	4.00-8		F1	3.00D-8	100	403	10,5	950	730	730	860	950			
	4.00-8		FIX F1	3.00D-8	100	403	10,8	950	730	730	860	950			
	15x4½-8 (125/75-8)		F1	3.00D-8	108	372,5	9,0	1.040	800	800	945	1.040			
	15x4½-8 (125/75-8)		FIX F1	3.00D-8	108	372,5	9,2	1.040	800	800	945	1.040			
	15x4½-8 (125/75-8) NEW		F1	3.25D-8	107	372,5	9,4	1.040	800	800	945	1.040			
	5.00-8		F1	3.00D-8	119	451,4	15,4	1.415	1.090	1.090	1.285	1.415			
	5.00-8		FIX F1	3.00D-8	119	451,4	15,8	1.415	1.090	1.090	1.285	1.415			
	16x6-8 (150/75-8)		F1	4.33R-8	145	412,5	15,3	1.495	1.150	1.150	1.360	1.495			
	16x6-8 (150/75-8)		FIX F1	4.33R-8	145	412,5	15,5	1.495	1.150	1.150	1.360	1.495			
	18x7-8 (180/70-8)		F1	4.33R-8	149	450,2	18,9	2.145	1.650	1.650	1.945	2.145			
	18x7-8 (180/70-8)		FIX F1	4.33R-8	149	450,2	19,1	2.145	1.650	1.650	1.945	2.145			
9"	140/55-9		F1	4.00E-9	130	380	9,7	1.170	900	900	1.060	1.170			
	140/55-9		FIX F1	4.00E-9	130	380	10,0	1.170	900	900	1.060	1.170			
	6.00-9		F1	4.00E-9	135	527	24,2	1.885	1.450	1.450	1.710	1.885			
	6.00-9		FIX F1	4.00E-9	135	527	24,4	1.885	1.450	1.450	1.710	1.885			
	21x8-9 (200/75-9)		F1	6.00E-9	175	521	31,9	2.755	2.120	2.120	2.500	2.755			
	21x8-9 (200/75-9)		FIX F1	6.00E-9	175	521	32,4	2.755	2.120	2.120	2.500	2.755			
10"	6.50-10		F1	5.00F-10	160	572	33,5	2.340	1.800	1.800	2.125	2.340			
	6.50-10		FIX F1	5.00F-10	160	572	33,8	2.340	1.800	1.800	2.125	2.340			
	200/50-10		F1	6.50F-10	185	455	23,5	2.470	1.900	1.900	2.240	2.470			
	200/50-10		FIX F1	6.50F-10	185	455	23,4	2.470	1.900	1.900	2.240	2.470			
	23x9-10 (225/75-10)		F1	6.50F-10	192	579	43,3	3.445	2.650	2.650	3.125	3.445			
	23x9-10 (225/75-10)		FIX F1	6.50F-10	192	579	43,5	3.445	2.650	2.650	3.125	3.445			
12"	7.00-12		F1	5.00S-12	168	653	45,3	2.920	2.240	2.240	2.645	2.920			
	7.00-12		FIX F1	5.00S-12	168	653	45,8	2.920	2.240	2.240	2.645	2.920			
	23x10-12 (250/60-12)		F1	8.00G-12	227	579	46,3	3.770	2.900	2.900	3.420	3.770			
	23x10-12 (250/60-12)		FIX F1	8.00G-12	227	579	46,8	3.770	2.900	2.900	3.420	3.770			
	27x10-12 (250/75-12)		F1	8.00G-12	227	672	68,2	3.900	3.000	3.000	3.540	3.900			
	27x10-12 (250/75-12)		FIX F1	8.00G-12	227	672	68,9	3.900	3.000	3.000	3.540	3.900			
	315/45-12 NEW		F1	10.00G-12	275	574	56,0	4.485	3.450	3.450	4.070	4.485			
	315/45-12 NEW		F1 FIX	10.00G-12	275	574	56,5	4.485	3.450	3.450	4.070	4.485			
15"	7.00-15	NEW	F1	5.5-15	170	723	56,3	3.445	2.725	2.725	3.215	3.545			
	7.00-15	NEW	F1 FIX	5.5-15	170	723	56,8	3.445	2.725	2.725	3.215	3.545			
	7.00-15	NEW	F1	6.0-15	170	723	56,5	3.445	2.725	2.725	3.215	3.545			
	7.00-15	NEW	F1 FIX	6.0-15	170	723	57,0	3.445	2.725	2.725	3.215	3.545			
	8.25-15		F1	6.5-15	205	814	84,6	4.750	3.650	3.650	4.300	4.750			
	8.25-15		FIX F1	6.5-15	205	814	85,5	4.750	3.650	3.650	4.300	4.750			
	28x9-15 (225/75-15)		F1	7.0-15	207	689	55,9	3.445	2.650	2.650	3.125	3.445			
	28x9-15 (225/75-15)		FIX F1	7.0-15	207	689	57,0	3.445	2.650	2.650	3.125	3.445			
	250-15 (250/70-15)		F1	7.0-15	207	715	62,9	4.745	3.650	3.650	4.310	4.745			
	250-15 (250/70-15)		FIX F1	7.0-15	207	715	63,5	4.745	3.650	3.650	4.310	4.745			
	250-15 (250/70-15)		F1	7.5-15	207	715	63,0	4.745	3.650	3.650	4.310	4.745			
	250-15 (250/70-15)		FIX F1	7.5-15	207	715	63,6	4.745	3.650	3.650	4.310	4.745			
	300-15 (315/70-15)		F1	8.0-15	251	816	104,2	5.850	4.500	4.500	5.310	5.850			
	300-15 (315/70-15)		FIX F1	8.0-15	251	816	105,1	5.850	4.500	4.500	5.310	5.850			
	28x12½-15 (355/45-15)		F1	9.75-15	275	706	84,0	5.690	4.375	4.375	5.165	5.690			
	28x12½-15 (355/45-15)		FIX F1	9.75-15	275	706	85,0	5.690	4.375	4.375	5.165	5.690			
	355/65-15 (350-15)		F1	9.75-15	297	816	124,9	7.800	6.000	5.450	6.430	7.085			
	355/65-15 (350-15)		FIX F1	9.75-15	297	816	125,8	7.800	6.000	5.450	6.430	7.085			

(1) Sizes are intended for tyres not fitted on rims;

(2) Capacity values indicated are in reference to ELIOR tyres mounted on vehicles whose speed with no cargo is less than 25 km/h (according to E.T.R.T.O. standards);

JUMBO J2**JUMBO J2 NO MARKING****NM**
no marking

- Excellent quality/price ratio.
- Structure optimised for light applications.
- Good driving comfort.



Ø	TYRE SIZE (inches)	PROFILE	RIM SIZE	TYRE DIMENSIONS (1)		WEIGHT (kg)	LOAD CAPACITY (KG) AT MAX SPEED (KM/H) (2)			TRAILERS (3)		
				W (mm) ± 2%	D (mm) ± 2%		CARRYING WHEEL 25 km/h	STEERING WHEEL 25 km/h	25 km/h	10 km/h	6 km/h	
4"	4.00-4	J2	2.50C-4	99	303	6,5	535	412	412	485	535	
8"	12x3,5-8	JL	3.00D-8	99	305	4,8	780	600	600	700	780	
	4.00-8	J2	3.00D-8	100,5	400	10,1	950	730	730	860	950	
	4.00-8	J2 BLOCK	3.00D-8	100,5	400	10,2	950	730	730	860	950	
	15x4,5-8 (125/75-8)	J2	3.00D-8	109	373	8,6	1.040	800	800	945	1.040	
	15x4,5-8 (125/75-8)	J2 BLOCK	3.00D-8	109	373	8,9	1.040	800	800	945	1.040	
	15x4,5-8 (125/75-8)	JL	3.25D-8	109	373	9,1	1.040	800	800	945	1.040	
	5.00-8	J2	3.00D-8	120	454	16,0	1.415	1.090	1.090	1.285	1.415	
	5.00-8	J2 BLOCK	3.00D-8	120	454	16,3	1.415	1.090	1.090	1.285	1.415	
	16x6-8 (150/75-8)	J2	4.33R-8	151	414	15,5	1.495	1.150	1.150	1.360	1.495	
	16x6-8 (150/75-8)	J2 BLOCK	4.33R-8	151	414	15,8	1.495	1.150	1.150	1.360	1.495	
	17x7-8	JL	4.33R-8	155,6	431,4	18,4	1.800	1.380	1.380	1.640	1.800	
	18x7-8 (180/70-8)	J2	4.33R-8	147	448	19,5	2.145	1.650	1.650	1.945	2.145	
	18x7-8 (180/70-8)	J2 BLOCK	4.33R-8	147	448	19,6	2.145	1.650	1.650	1.945	2.145	
9"	140/55-9	J2	4.00E-9	123	380,3	10,0	1.170	900	900	1.060	1.170	
	140/55-9	J2 BLOCK	4.00E-9	123	380,3	10,4	1.170	900	900	1.060	1.170	
	6.00-9	J2	4.00E-9	142	523	25,0	1.885	1.450	1.450	1.710	1.885	
	6.00-9	J2 BLOCK	4.00E-9	142	523	25,4	1.885	1.450	1.450	1.710	1.885	
	21x8-9 (200/75-9)	J2	6.00E-9	185	519	32,0	2.755	2.120	2.120	2.500	2.755	
	21x8-9 (200/75-9)	J2 BLOCK	6.00E-9	185	519	32,4	2.755	2.120	2.120	2.500	2.755	
10"	6.50-10	J2	5.00F-10	165	569	34,6	2.340	1.800	1.800	2.125	2.340	
	6.50-10	J2 BLOCK	5.00F-10	165	569	35,0	2.340	1.800	1.800	2.125	2.340	
	7.50-10	J2	5.50F-10	178	639	49,3	3.070	2.360	2.360	2.785	3.070	
	7.50-10	J2 BLOCK	5.50F-10	178	639	49,8	3.070	2.360	2.360	2.785	3.070	
	200/50-10	J2	6.50F-10	179,5	458,4	23,3	2.470	1.900	1.900	2.240	2.470	
	200/50-10	J2 BLOCK	6.50F-10	179,5	458,4	24,1	2.470	1.900	1.900	2.240	2.470	
	23x9-10 (225/75-10)	J2	6.50F-10	197	576	42,5	3.445	2.650	2.650	3.125	3.445	
	23x9-10 (225/75-10)	J2 BLOCK	6.50F-10	197	576	42,9	3.445	2.650	2.650	3.125	3.445	
12"	7.00-12	J2	5.00S-12	169	649	45,6	2.920	2.240	2.240	2.645	2.920	
	7.00-12	J2 BLOCK	5.00S-12	169	649	46,0	2.920	2.240	2.240	2.645	2.920	
	23x10-12 (250/60-12)	J2	8.00G-12	228	578	46,1	3.770	2.900	2.900	3.420	3.770	
	23x10-12 (250/60-12)	J2 BLOCK	8.00G-12	228	578	46,7	3.770	2.900	2.900	3.420	3.770	
	27x10-12 (250/75-12)	J2	8.00G-12	234	667	67,5	3.900	3.000	3.000	3.540	3.900	
	27x10-12 (250/75-12)	J2 BLOCK	8.00G-12	234	667	68,4	3.900	3.000	3.000	3.540	3.900	
15"	7.00-15	J2	5.5-15	178	723	55,7	3.545	2.725	2.725	3.215	3.545	
	7.00-15	J2 BLOCK	5.5-15	178	723	56,2	3.545	2.725	2.725	3.215	3.545	
	7.50-15	NEW	J2	5.5-15	205,5	752	72,6	3.900	3.000	3.000	3.540	3.900
	7.50-15	NEW	J2 BLOCK	5.5-15	205,5	752	72,8	3.900	3.000	3.000	3.540	3.900
	7.50-15	J2	6.0-15	205,5	752	73,0	3.900	3.000	3.000	3.540	3.900	
	7.50-15	J2 BLOCK	6.0-15	205,5	752	73,5	3.900	3.000	3.000	3.540	3.900	
	7.50-15	J2	6.5-15	205,5	752	73,4	3.900	3.000	3.000	3.540	3.900	
	7.50-15	J2 BLOCK	6.5-15	205,5	752	73,6	3.900	3.000	3.000	3.540	3.900	
	8.25-15	J2	6.5-15	209,4	818	90,0	4.750	3.650	3.650	4.300	4.750	
	8.25-15	J2 BLOCK	6.5-15	209,4	818	90,8	4.750	3.650	3.650	4.300	4.750	
	28x9-15 (225/75-15)	J2	7.0-15	213,5	700	60,7	3.445	2.650	2.650	3.125	3.445	
	28x9-15 (225/75-15)	J2 BLOCK	7.0-15	213,5	700	61,9	3.445	2.650	2.650	3.125	3.445	
	250-15 (250/70-15)	J2	7.0-15	217,5	715	67,6	4.745	3.650	3.650	4.310	4.745	
	250-15 (250/70-15)	J2 BLOCK	7.0-15	217,5	715	68,1	4.745	3.650	3.650	4.310	4.745	
	300-15 (315/70-15)	J2	8.0-15	262,1	828	113,0	5.850	4.500	4.500	5.310	5.850	
	300-15 (315/70-15)	J2 BLOCK	8.0-15	262,1	828	113,6	5.850	4.500	4.500	5.310	5.850	
	28x12½-15 (355/45-15) NEW	J2	9.75-15	275	706	85,0	5.690	4.375	4.375	5.165	5.690	
	28x12½-15 (355/45-15) NEW	J2 BLOCK	9.75-15	275	706	86,0	5.690	4.375	4.375	5.165	5.690	
	355/65-15 (350-15)	J2	9.75-15	308,1	828	135,0	7.800	6.000	5.450	6.430	7.085	
	355/65-15 (350-15)	J2 BLOCK	9.75-15	308,1	828	135,4	7.800	6.000	5.450	6.430	7.085	
20"	10.00-20	J2	7.0-20	237	1.017	147,0	6.000	5.000				

SUPER-ELASTIC

SUPER-BUDGET

ATHLETIK® A1



SUPER-ELASTIC

SKS



SKS NO MARKING



- Deep tread for improved traction.
- Reduced downtime by eliminating punctures.
- Improved stability.



- Resilient compound with apertures for operational comfort.
- Reduced downtime by eliminating punctures.
- Excellent traction.

TYRE SIZE (inches)	PROFILE	RIM SIZE	TYRE DIMENSIONS (1)		WEIGHT (kg) ± 2%	LOAD CAPACITY (KG) AT MAX SPEED (KM/H) (2)				
			W (mm) ± 2%	D (mm) ± 2%		CARRYING WHEEL 25 km/h	STEERING WHEEL 25 km/h	25 km/h	10 km/h	6 km/h
10.00-20	NEW	A1	7.0-20	234 1.011	138,8 ± 2%	6.000	5.000	5.000	5.450	6.000
10.00-20	NEW	A1	7.5-20	234 1.011	140,5 ± 2%	6.000	5.000	5.000	5.450	6.000
10.00-20	NEW	A1	8.0-20	234 1.011	141,5 ± 2%	6.000	5.000	5.000	5.450	6.000
12.00-20	NEW	A1	8.0-20	257 1.090	189,8 ± 2%	7.560	6.300	6.300	6.885	7.560
12.00-20	NEW	A1	8.5-20	257 1.090	196,0 ± 2%	7.560	6.300	6.300	6.885	7.560
12.00-20	NEW	A1	10.0-20	293 1.090	229,3 ± 2%	7.800	6.500	6.500	7.085	7.800

(1) Sizes are intended for tyres not fitted on rims;

(2) Capacity values indicated are in reference to ELTOR tyres mounted on vehicles whose speed with no cargo is less than 25 km/h (according to E.T.R.T.O. standards);

(3) Only for interior courses inferior to 2.000 metres; if otherwise, contact dealer (according to E.T.R.T.O. standards).

TYRE SIZE (inches)	PROFILE	RIM SIZE	TYRE DIMENSIONS (1)		WEIGHT (kg) ± 2%	LOAD CAPACITY (KG) AT MAX SPEED (KM/H) (2)				
			W (mm) ± 2%	D (mm) ± 2%		CARRYING WHEEL 25 km/h	STEERING WHEEL 25 km/h	25 km/h	10 km/h	6 km/h
10x16.5 (31x10-20)	NEW	SKS FIX left	7.5-20	237	781 ± 2%	66,2	4.030	3.100	3.100	3.660 4.030
10x16.5 (31x10-20)	NEW	SKS FIX right	7.5-20	237	781 ± 2%	66,2	4.030	3.100	3.100	3.660 4.030
12x16.5 (33x12-20)	NEW	SKS FIX left	7.5-20	287	831 ± 2%	92,5	5.200	4.000	4.000	4.720 5.200
12x16.5 (33x12-20)	NEW	SKS FIX right	7.5-20	287	831 ± 2%	92,5	5.200	4.000	4.000	4.720 5.200

BS



BS NO MARKING



BSC



BSC NO MARKING



BL



BL NO MARKING



The press-on-band tyres by MARANGONI INDUSTRIAL TYRES are characterized by low rolling resistance, high heat dissipation capacity and excellent stability. The structure is characterized by the use of specialist compounds, so as to increase comfort.

BS

- Tread offering the best balance between stability and traction.

BSC

- Tread with optimal traction and minimal deformation during the transport of loads.

BL

- Smooth tread with wider footprint for maximum stability and no vibrations.



PRESS ON BAND
CUSHION MARANGONI

PREMIUM

TYRE SIZE D W do (inches)	PROFILE	TYRE SIZE D W do (mm)	WEIGHT (kg)	LOAD CAPACITY (KG) FOR VEHICLES AT THE MAX SPEEDS OF								LOAD CAPACITY FOR VEHICLES MANUAL TRACTION	LOAD CAPACITY FOR VEHICLES MAX SPEED (16 km/h)
				10 km/h		16 km/h		25 km/h					
CARRYING WHEEL	STEERING WHEEL	CARRYING WHEEL	STEERING WHEEL	CARRYING WHEEL	STEERING WHEEL	CARRYING WHEEL	STEERING WHEEL	CARRYING WHEEL	STEERING WHEEL	CARRYING WHEEL	STEERING WHEEL		
-	BL	200x90x120	5,0	-	-	-	-	-	-	725	435		
-	BL	250x90x150	5,0	-	-	-	-	-	-	870	525		
10X4X6½	BL	254X102X165,1	NEW	9,0	780	640	695	585	565	465	-	555	
10x5x6½	BL	254x127x165,1		11,0	1.015	835	905	765	735	605	-	725	
10½x3½x6½	BL	267x89x165,1		9,0	-	-	-	-	-	900	540		
10½x5x6½	BS	267x127x165,1		11,0	1.080	885	965	810	785	645	-	770	
-	BSC	300x100x203,2		7,0	870	715	775	655	635	520	-	620	
12x3½x8	BL	305x89x203,2		7,0	-	-	-	-	-	995	595		
12x4½x8	BL	305x114x203,2		9,0	1.045	855	935	785	760	625	-	745	
13x4½x8	BS	330x114x203,2		9,0	1.120	920	1.000	840	815	665	-	800	
13x5x8	BSC	330x127x203,2		10,0	1.290	1.060	1.155	970	935	770	-	925	
13x6x8	BS	330x152x203,2		13,0	1.620	1.330	1.445	1.215	1.175	965	-	1.155	
14x4½x8	BL	356X114X203,2	NEW	11,0	1.165	960	1.045	875	845	695	-	835	
14x4½x8	BSC	356x114x203,2		11,0	1.165	960	1.045	875	845	695	-	835	
14x5x10	BL	356X127X254	NEW	14,0	1.335	1.095	1.195	1.000	970	795	-	-	
15½x5x10	BSC	394x127x254		16,0	1.475	1.210	1.315	1.105	1.070	880	-	1.055	
15½x6x10	BSC	394x152x254		18,0	1.865	1.535	1.665	1.400	1.355	1.110	-	1.335	
16x5x10 ½	BL	406X127X266,7	NEW	15,0	1.510	1.240	1.345	1.130	1.095	900	-	1.080	
16x5x10½	BS	406x127x266,7		15,0	1.510	1.240	1.345	1.130	1.095	900	-	1.080	
16x6x10 ½	BL	406X152X266,7	NEW	18,0	1.905	1.565	1.705	1.430	1.385	1.135	-	1.365	
16x6x10½	BSC	406x152x266,7		18,0	1.905	1.565	1.705	1.430	1.385	1.135	-	1.365	
15x5x11¼	BL	381x127x285,8		15,0	1.395	1.145	1.245	1.045	1.015	830	-	995	
15x5x11¼	BSC	381x127x285,8		14,0	1.395	1.145	1.245	1.045	1.015	830	-	995	
15x6x11¼	BL	381x152x285,8		14,0	1.720	1.415	1.535	1.290	1.250	1.025	-	1.230	
16¼x5x11¼	BL	413X127X285,8	NEW	17,0	1.525	1.255	1.365	1.145	1.110	910	-	1.090	
16¼x5x11¼	BSC	413x127x285,8		16,0	1.525	1.255	1.365	1.145	1.110	910	-	1.090	
16¼X6X11¼	BL	413X152X285,8	NEW	18,0	1.915	1.575	1.710	1.435	1.395	1.140	-	1.370	
16¼x6x11¼	BSC	413x152x285,8		19,0	1.915	1.575	1.710	1.435	1.395	1.140	-	1.370	
16¼x7x11¼	BL	413X178X285,8	NEW	23,0	2.320	1.905	2.075	1.740	1.685	1.385	-	1.660	
16¼x7x11¼	BSC	413x178x285,8		22,0	2.320	1.905	2.075	1.740	1.685	1.385	-	1.660	
-	BL	405x130x305	NEW	15,0	1.510	1.240	1.350	1.135	1.095	900	-	1.080	
-	BL	405x260x305	NEW	30,0	3.325	2.730	2.970	2.495	2.415	1.980	-	2.375	
-	BL	415x100x305	NEW	14,0	1.115	915	1.000	835	810	665	-	795	
-	BL	425x150x305	NEW	22,0	1.910	1.570	1.700	1.435	1.385	1.135	-	1.365	
-	BL	425x260x305	NEW	32,0	3.325	2.730	2.970	2.495	2.415	1.980	-	2.375	
-	BL	425x300x305	NEW	39,8	4.245	3.485	3.790	3.185	3.085	2.530	-	3.030	
-	BL	450x300x305	NEW	49,7	4.245	3.485	3.790	3.185	3.085	2.530	-	3.030	
16x4x12½	BL	406x102x308		11,0	1.120	920	1.000	840	815	670	-	800	
17x4½x12½	BS	432x114x308		13,0	1.370	1.125	1.225	1.025	995	815	-	980	
17x5x12½	BL	432X127X308	NEW	16,0	1.570	1.290	1.400	1.180	1.145	935	-	1.120	
17x5x12½	BS	432x127x308		15,0	1.570	1.290	1.400	1.180	1.145	935	-	1.120	
17x6x12½	BL	432X152X308	NEW	19,0	1.980	1.630	1.770	1.485	1.435	1.180	-	1.410	
17x6x12½	BSC	432x152x308		18,0	1.980	1.630	1.770	1.485	1.435	1.180	-	1.410	
18x5x12½	BL	457x127x308		19,0	1.640	1.350	1.470	1.230	1.195	980	-	1.170	
18x6x12½	BL	457x152x308		23,0	2.100	1.720	1.870	1.575	1.525	1.250	-	1.500	
18x6x12½	BSC	457x152x308		21,0	2.100	1.720	1.870	1.575	1.525	1.250	-	1.500	
18x7x12½	BL	457X178X308	NEW	25,0	2.550	2.100	2.280	1.910	1.855	1.520	-	1.820	
18x7x12½	BS	457x178x308		24,0	2.550	2.100	2.280	1.910	1.855	1.520	-	1.820	
18x8x12½	BL	457X203X308	NEW	29,0	3.000	2.475	2.680	2.255	2.180	1.790	-	2.150	
18x8x12½	BSC	457x203x308		28,0	3.000	2.475	2.680	2.255	2.180	1.790	-	2.150	



PRESS ON BAND
CUSHION MARANGONI

PREMIUM

TYRE SIZE D W do (inches)	PROFILE	TYRE SIZE D W do (mm)	WEIGHT (kg)	LOAD CAPACITY (KG) FOR VEHICLES AT THE MAX SPEEDS OF								LOAD CAPACITY FOR VEHICLES MANUAL TRACTION	LOAD CAPACITY FOR VEHICLES MAX SPEED<br/

TR



TR NO MARKING GREY



SM



SM NO MARKING GREY

QUALITY

QUALITY



NMG
no marking grey

- Deep treaded traction tyre.
- Long lasting quality compound.
- Low rolling resistance.



TYRE SIZE D W do (inches)	PROFILE	TYRE SIZE D W do (mm)	WEIGHT (kg)	LOAD CAPACITY (KG) FOR VEHICLES AT THE MAX SPEEDS OF						LOAD CAPACITY FOR VEHICLES MANUAL TRACTION	LOAD CAPACITY FOR VEHICLES MAX SPEED (16 km/h)
				10 km/h CARRYING WHEEL	10 km/h STEERING WHEEL	16 km/h CARRYING WHEEL	16 km/h STEERING WHEEL	25 km/h CARRYING WHEEL	25 km/h STEERING WHEEL		
10x4x6½	SM	254x102x165,1	5,8	780	640	695	585	565	465	-	555
10x5x6½	SM	254x127x165,1	7,2	1.015	835	905	765	735	605	-	725
10x5x6½	TR	254x127x165,1	7,0	1.015	835	905	765	735	605	-	725
12x4½x8	SM	305x114x203,2	9,0	1.045	855	935	785	760	625	-	745
14x4½x8	SM	356x114x203,2	11,3	1.165	960	1.045	875	845	695	-	835
14x5x10	SM	356x127x254	11,5	1.335	1.095	1.195	1.000	970	795	-	-
16x5x10½	SM	406x127x266,7	14,8	1.510	1.240	1.345	1.130	1.095	900	-	1.080
16x5x10½	TR	406x127x266,7	14,5	1.510	1.240	1.345	1.130	1.095	900	-	1.080
16x6x10½	SM	406x152x266,7	17,7	1.905	1.565	1.705	1.430	1.385	1.135	-	1.365
16x6x10½	TR	406x152x266,7	17,3	1.905	1.565	1.705	1.430	1.385	1.135	-	1.365
16x7x10½	SM	406x178x266,7	20,7	2.325	1.910	2.070	1.740	1.685	1.380	-	-
15x5x11¼	SM	381x127x285,8	12,1	1.395	1.145	1.245	1.045	1.015	830	-	995
15x6x11¼	SM	381x152x285,8	14,5	1.720	1.415	1.535	1.290	1.250	1.025	-	1.230

TYRE SIZE D W do (inches)	PROFILE	TYRE SIZE D W do (mm)	WEIGHT (kg)	LOAD CAPACITY (KG) FOR VEHICLES AT THE MAX SPEEDS OF						LOAD CAPACITY FOR VEHICLES MANUAL TRACTION	LOAD CAPACITY FOR VEHICLES MAX SPEED (16 km/h)
				10 km/h CARRYING WHEEL	10 km/h STEERING WHEEL	16 km/h CARRYING WHEEL	16 km/h STEERING WHEEL	25 km/h CARRYING WHEEL	25 km/h STEERING WHEEL		
16½x5x11¼	SM	413x127x285,8	14,0	1.525	1.255	1.365	1.145	1.110	910	-	1.090
16½x6x11¼	SM	413x152x285,8	17,3	1.915	1.575	1.710	1.435	1.395	1.140	-	1.370
16½x6x11¼	TR	413x152x285,8	17,0	1.915	1.575	1.710	1.435	1.395	1.140	-	1.370
16½x7x11¼	SM	413x178x285,8	20,3	2.320	1.905	2.075	1.740	1.685	1.385	-	1.660
18x6x12½	SM	457x152x308	20,6	2.100	1.720	1.870	1.575	1.525	1.250	-	1.500
18x6x12½	TR	457x152x308	20,2	2.100	1.720	1.870	1.575	1.525	1.250	-	1.500
18x7x12½	SM	457x178x308	24,6	2.550	2.100	2.280	1.910	1.855	1.520	-	1.825
18x7x12½	TR	457x178x308	24,1	2.550	2.100	2.280	1.910	1.855	1.520	-	1.825
18x8x12½	SM	457x203x308	28,2	3.000	2.475	2.680	2.255	2.180	1.790	-	2.150
18x8x12½	TR	457x203x308	27,8	3.000	2.475	2.680	2.255	2.180	1.790	-	2.150
21x7x15	SM	533x178x381	30,1	2.875	2.350	2.560	2.150	2.085	1.710	-	2.050
21x7x15	TR	533x178x381	29,4	2.875	2.350	2.560	2.150	2.085	1.710	-	2.050
21x8x15	SM	533x203x381	34,6	3.375	2.775	3.025	2.540	2.455	2.015	-	2.425
21x8x15	TR	533x203x381	34,0	3.375	2.775	3.025	2.540	2.455	2.015	-	2.425
20x8x16	SM	508x203x406,4	34,0	3.010	2.470	2.685	2.255	2.185	1.790	-	-
22x8x16	SM	559x203x406,4	38,3	3.500	2.875	3.130	2.625	2.545	2.085	-	2.500
22x9x16	SM	559x229x406,4	40,2	4.050	3.325	3.600	3.025	2.930	2.400	-	2.895
22x9x16	TR	559x229x406,4	39,4	4.050	3.325	3.600	3.025	2.930	2.400	-	2.895
22x12x16	SM	559x305x406,4	54,0	5.625	4.625	5.030	4.225	4.090	3.350	-	4.025
22x12x16	TR	559x305x406,4	53,0	5.625	4.625	5.030	4.225	4.090	3.350	-	4.025
28x12x22	SM	711x305x559	74,6	6.740	5.540	6.020	5.060	4.900	4.015	-	4.820

CONVENTIONAL PNEUMATIC INDUSTRIAL TYRES

SW



LT



- Deep tread.
- Good stability.
- Resistant to damage to sidewalls: Side Wall structure.
- Good traction.
- Good driving comfort.
- Complete SET*: Tyre + Tube + Flap

APPLICATIONS

- Forklifts.
- Small-sized industrial tractors.
- Indoor trailers.
- Airport vehicles.

* The conventional industrial tyres SW and LT are TT (Tube Type) models for which complete assembly of tube and flap is recommended.



CONVENTIONAL PNEUMATIC INDUSTRIAL TYRES

TYRE SIZE	PROFILE	PR	TYPE	RIM WIDTH	INFLATION PRESSURE ETRTO (bar)	OVERALL DIAMETER (mm) ±2%	OVERALL SECTION WIDTH (mm) ±2%	REFERENCE LOAD (kg) 25 km/h	STATIC LOAD CAPACITY ETRTO (kg)	SET WEIGHT (kg)	
4.00-8*	NEW	WL	6	TT	3.00D-8	4,25	420	110	600	905	4,5
5.00-8	SW	8	TT	3.00D; 3.75L-8	8,25	485	150	950	1.435	8,1	
15x4.5-8 (125/75-8)*	LT	12	TT	3.25L-8	10,00	385	122	750	1.130	4,2	
16x6-8 (150/75-8)	SW	18	TT	4.33R-8	10,50	420	155	1.180	1.780	9,0	
18x7-8 (180/70-8)	SW	16	TT	4.33R-8	10,00	465	175	1.650	2.490	12,3	
6.00-9	SW	14	TT	4.00E-9	10,50	540	170	1.495	2.260	13,0	
21x8-9 (200/75-9)	SW	16	TT	6.00E-9	10,00	530	215	2.120	3.200	21,2	
6.50-10	SW	14	TT	5.00; 5.50F-10	10,00	590	190	1.800	2.720	16,1	
23x9-10 (225/75-10)	SW	20	TT	7.00F-10	10,00	585	230	2.650	4.000	23,3	
7.00-12	SW	16	TT	5.00S-12	10,00	675	200	2.240	3.380	22,3	
23x10-12 (250/60-12)	SW	22	TT	8.00G-12	10,50	600	260	2.985	4.510	30,3	
27x10-12 (250/75-12)	SW	20	TT	8.00G-12	10,00	695	270	3.550	5.360	33,6	
7.00-15	SW	16	TT	5.00; 5.50-15	10,00	740	205	2.725	4.115	24,5	
7.50-15	SW	16	TT	5.00; 6.00; 6.50-15	10,00	785	225	3.000	4.530	27,7	
28x9-15 (225/75-15)	SW	16	TT	7.0-15	10,50	715	220	3.090	4.665	27,1	
32x12.1-15	SW	24	TT	9.75-15	10,30	810	325	4.835	7.300	64,7	
8.25-15	SW	18	TT	6.0; 6.5; 7.0-15	9,25	840	255	3.650	5.510	43,2	
250-15 (250/70-15)	SW	20	TT	7.0; 7.5-15	10,00	735	245	3.875	5.850	36,4	
300-15 (315/70-15)	SW	20	TT	8.0-15	9,00	820	280	5.000	7.550	56,5	
28x12½-15 (355/45-15)	SW	24	TT	9.75-15	10,50	710	305	3.730	5.630	45,4	
9.00-20	LT	14	TT	7.00-20	7,60	1.034	259	4.500	6.795	48,5	
10.00-20	SW	20	TT	7.0; 7.50; 8.0-20	10,00	1.070	290	5.320	8.035	103,5	
12.00-20	SW	20	TT	8.00; 8.50; 9.00-20	10,00	1.145	320	6.900	10.420	103,5	

* Only tyre and tube without flap.

CONVENTIONAL PNEUMATIC SKID STEER TYRES FOR SMALL-SIZED MACHINES



SS

- Standard tread with sidewall properties.
- Good traction.

SD

- Resistant tread reinforced in the middle.
- Compound resistant to punctures.
- Balanced tread wear.
- Reinforced sidewalls.

SKZ+

- Sturdy tyres for extreme conditions.
- High pattern: improves performance and tyre life.
- Good self-cleaning properties.

CONVENTIONAL PNEUMATIC TYRES FOR INDUSTRIAL TRACTORS FOR CONSTRUCTION AND ROAD WORKS



IM54

- Structure ensuring excellent traction.
- Suitable for industrial and agricultural applications.

TI09

- Industrial pattern with sturdy tread.
- Compound highly resistant to abrasion.
- Good traction and self-cleaning properties.

TYRE SIZE	PROFILE	PR	TYPE	RIM WIDTH	INFLATION PRESSURE ETRTO (bar)	OVERALL DIAMETER (mm) ±2%	OVERALL SECTION WIDTH (mm) ±2%	LOAD CAPACITY (kg) 8 km/h	LOAD CAPACITY (kg) 16 km/h	WEIGHT (kg)
5.70-12	SD	6	TL	4.50	4,10	570	146	660	520	7,9
23x8.50-12	SS	6	TL	7.0	3,40	575	215	820	650	12,7
27x8.50-15	SS	8	TL	7.0	4,80	680	210	1.250	990	15,2
27X10.50-15	SS	8	TL	8.5	3,50	700	260	1.280	1.010	18,1
10x16.5	SS	10	TL	8.25	5,10	775	280	2.135	1.685	22,7
10x16.5	SKZ+	10	TL	8.25	5,20	773	264	2.135	1.685	20,2
12x16.5	SS	12	TL	9.75	5,60	845	330	2.890	2.285	36,6
12x16.5	SKZ+	12	TL	9.75	5,50	831	307	2.890	2.285	40,2

TYRE SIZE	PROFILE	PR	TYPE	RIM WIDTH	INFLATION PRESSURE ETRTO (bar)	OVERALL DIAMETER (mm) ±2%	OVERALL SECTION WIDTH (mm) ±2%	LOAD CAPACITY (kg) 40 km/h	WEIGHT (kg)
15.5/80-24	IM54	16	TL	W12	4,00	1.260	415	4.680	70,5
18.4-26	TI09	12	TL	16.00	2,50	1.420	490	4.000	93,5
16.9-28	TI09	14	TL	15.00	3,00	1.415	460	3.860	83,5

MT63



MT45



MT54



MT72



MT 90



MT63

- Tread for on/off-road applications.
- Good traction.

Applications:
Municipality vehicles used
on roads.
Agricultural vehicles.
Special service vehicles.

MT45

- Tread with good traction and self-cleaning properties for on/off-road applications.
- Good stability and manoeuvrability.

MT54

- Multipurpose tread with excellent pattern for special applications.
- Good traction and self-cleaning properties.

MT72

- Tread especially suitable for loader applications.
- Good traction and self-cleaning properties.

MT90

- Tread with good traction characteristics and increased stability.
- Suitable for excavators and telescopic hoisting devices.

TYRE SIZE	PROFILE	PR	TYPE	RIM WIDTH	INFLATION PRESSURE ETRTO (bar)	OVERALL DIAMETER (mm) ±2%	OVERALL SECTION WIDTH (mm) ±2%	LOAD CAPACITY (kg) 40 km/h	WEIGHT (kg)
10.5/80-18	MT45	10	TL	9.00	3,70	910	280	1.950	31,9
12.5/80-18	MT45	12	TL	W9	3,70	990	310	2.650	42,1
18-19.5	MT63	18	TL	14.00	6,75	1.090	455	5.605	75,0
10.5-20	MT54	10	TL	9.00	3,75	960	275	2.070	31,8
12.5-20	MT54	12	TL	11.00	3,50	1.055	330	2.300	48,8
14.5-20	MT54	14	TL	11.00	3,50	1.095	355	2.795	58,4
405/70-20	MT54	14	TL	13.00	3,50	1.090	385	3.335	60,5
405/70-20	MT72	14	TL	13.00	3,50	1.150	405	3.335	67,2
18-22.5	MT90	18	TL	14.00	6,75	1.185	477	6.095	95,0
405/70-24	MT54	14	TL	13.00	3,50	1.190	415	3.620	76,0
405/70-24	MT72	14	TL	13.00	3,50	1.200	420	3.620	78,3

MULTI-PURPOSE CONVENTIONAL PNEUMATIC TYRES FOR MANUFACTURING MACHINES



- Classical tread with excellent pattern for all applications.
- Good traction and self-cleaning properties.

TYRE SIZE	PROFILE	PR	TYPE	RIM WIDTH	INFLATION PRESSURE ETRTO (bar)	OVERALL DIAMETER (mm) ±2%	OVERALL SECTION WIDTH (mm) ±2%	LOAD CAPACITY (kg) 25 km/h	WEIGHT (kg)
8.25-20	MT54	14	TT	6.5-20	6,75	970	232	2.180	35,0
9.00-20	MT54	14	TT	7.0-20	7,00	1.012	256	2.650	43,0
10.00-20	MT54	16	TT	7.5-20	7,50	1.050	280	3.190	50,0

SERVICE, ACCESSORIES - SOLID TYRES FITTING PRESS 250 TON



FITTING AND REMOVAL PRESS FOR SUPER-ELASTIC AND CUSHION TYRES

This press is able to perform fitting and removal operations of all sizes of super-elastic tyres (with the exception of 14.00-24).

The machine's fundamental characteristics are: reliability, speed, power and precision. The press is composed of a metal structure, an adjustable lower work platform with area of 200 mm and an upper moveable platform with 600 mm of usable stroke. Manually controlled hydraulic movements. The press does not require a foundation. The press comes complete with CE certification, an Instruction Booklet for fitting and removal operations, as well as Use and Maintenance Booklet. The equipment necessary for fitting and removal of the super-elastic and cushion tyres is sold separately upon request.

SUPER-ELASTIC TYRES INSTALLATION EQUIPMENT

- The installation equipment is available for wheel size from 8" to 20".
- Each size is painted in a different colour.



1 - Thrusting ring



2 - Bevelled ring



3 - Press ring



4 - FIX de-mounting ring
(up to 15")



5 - Seating rim

SOLID TYRES - USER INSTRUCTIONS, MAINTENANCE, REPLACEMENT AND CALCULATION OF WEAR LIMITS

1) INTRODUCTION

Tyres are the only contact between the vehicle and the ground. It is therefore of paramount importance that they are maintained in good condition at all times, and that when the time comes to change them, correct replacements are done.

The tyres fitted to your vehicle as Original Equipment were selected by the vehicle and tyre manufacturers concerned taking into account the intended operations of the vehicle.

Changes in tyre type, size and load capacity should not be made without first checking with the tyre and/or vehicle manufacturer regarding possible effects on vehicle behaviour and safety.

2) FITTING AND REMOVAL OF TYRES

It is recommended that these operations be entrusted only to specialists who have the necessary equipment and expertise. Inexpert fitment may lead to personal injury and concealed damage to tyres and wheels.

No special equipment is necessary for fitting solid tyres on centrally divided conical rims, but appropriate presses and accessories are required for fitment on offset divided conical rims, cylindrical rims and pneumatic tyre rims.

The published instructions of the tyre manufacturer must be strictly followed. Only approved proprietary tyre lubricants should be used.

To avoid damage to the base of the tyre, it must be placed on the rim concentrically and parallel to the axis. Only rims recommended by the tyre manufacturer must be used.

3) TYRE LOAD AND SPEED

Tyre load capacities are specified per tyre. Published Standards or manufacturers' Manuals should be consulted to obtain the actual values applicable to a particular application at the speed specified, up to a maximum of 25 km/h.

Load interpolation within the specified speed steps is not permitted and the speed rating of the tyre must be at least equal to the maximum speed capability of the unladen vehicle.

Continuous running should be avoided in order, to

prevent excessive heat build-up which may lead to tyre break-up.

4) TYRE MAINTENANCE

Although solid tyres require relatively little maintenance, they should be inspected from time to time in order to check their suitability for further use.

5) TYRE REPLACEMENT

Worn or damaged tyres must be replaced in accordance with the tyre manufacturer's recommendations. Also, national legal requirements should be checked as they vary from Country to country. When replacing a tyre, special attention should be paid to the condition and suitability of the rim, as rim damage and incorrect fitment can result in tyre break-up.

6) TYRE AGEING

Tyres age even if they have not been used or have only been used occasionally. Rubber cracking may be evidence of ageing. Exposure to sunlight, heat and ozone will accelerate this process. Aged tyres should be examined by a tyre specialist to check their suitability for further use.

7) TYRE MIXING

Tyres mounted on the same axle must be of the same type and size and must have approximately the same external diameter.

8) TREAD WEAR

8.1 INTRODUCTION

The limit for the tread wear of industrial vehicles is not defined by national or international standards. Several manufacturers provide instructions solely for their products. Recommendations by tyre manufacturers should always be followed. However, in case no recommendations are provided by manufacturers, please abide by the contents published in this standard.

8.2 PURPOSE

This standard suggests tread wear limits for solid tyres used on industrial vehicles that operate under conditions that are not regulated by the Highway Code and are to be used in case no instructions are provided by the manufacturer of the vehicle or tyres. NOTE: Industrial vehicles that operate on public roads must be in order and comply with traffic circulation standards.

8.3 HAZARDS DUE TO EXCESSIVE TYRE TREAD WEAR

The hazards due to excessive tyre wear are the following:

- a) Loss of load capacity that promotes the accelerated wear of the tread and leads to overheating of the tyre.
- b) Loss of adhesion while accelerating or braking on unstable road conditions.
- c) Hazards are heightened if the tyres mounted on the same axle are worn differently.
- d) Reduction in the vehicle's stability.
- e) Loss of the vehicle's directional control.
- f) Uneven load on twinned tyres.

8.4 REDUCING HAZARDS

The hazards mentioned in the foregoing section can be reduced if: The tyres mounted on the same axle are built by the same manufacturer, have the same size and are worn equally (this applies to any type of tyre).

8.5 TYRE TREAD WEAR LIMITS

1) Pneumatic tyre rim sizes

Wear indicators or Kerbing Rib are recommended. Solid Rubber tyres for Pneumatic Rims may be used until the tread is worn to the wear indicator, if the tyre has such a marking, or to the top of the kerbing rib, see page IS.3 of EDI. Where there is no indicator, use the tyre until 3/4 of the original total thickness of the tyre remains. To calculate the minimum diameter corresponding to this wear limit, measure the outside diameter of the worn tyre, the outside diameter of an unworn tyre of the same type, make and size, and the diameter of the wheel rim. The minimum permitted diameter of the

worn tyre is given by the formula:

$$D_{worn} = \frac{3}{4} (D_{new} - D_{rim}) + D_{rim}$$

where D_{worn} = the outside diameter of the worn tyre
 D_{new} = the outside diameter of an unworn
 D_{rim} = the diameter of the wheel rim

2) Press-on-band, cured-on-band and conical base tyres (rubber and non-rubber)

Press-on-band, cured-on and conical base tyres may be used until 2/3 of the original total radial thickness of the tyre remains, as given by the formula:

Cured-on tyres:

$$D_{worn} = \frac{2}{3} (D_{new} - D_{rim}) + D_{rim}$$

Press-on-band and conical base tyres:

$$D_{worn} = \frac{2}{3} (D_{new} - D_{rim} - 20) + (D_{rim} + 20)$$

Notes:

- a) All dimensions are measured in millimetres.
- b) The outside diameter of the tyre D_{worn} and D_{new} may be calculated by measuring the circumference of the tyre with a flexible tape, and calculating the diameter from the formula:

$$\text{Diameter} = \frac{\text{Circumference}}{\pi}$$

TREAD WEAR INDICATOR (TWI) MARANGONI INDUSTRIAL TYRES recommends for tyres not to be worn beyond the TWI (Tread Wear Indicator) positioned on the tread of the tyre.

The height of the TWI was defined according to a study based on safety and cost savings for the user. However, in case there is no TWI, MARANGONI INDUSTRIAL TYRES recommends to replace the tyres for safety reasons when 10% of the original tread is worn.

General conditions of sales available on
WWW.MARANGONIINDUSTRIALTYRES.IT



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