

MARANGONI

STRONGER PERFORMANCE SAVES YOU TIME

INDUSTRIAL & MPT TYRES - TECH

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 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

IMPROVE EFFICIENCY

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

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 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.

CHOOSE THE BEST PRODUCT

Many of the leading manufacturers of forklifts and industrial vehicles have chosen Marangoni 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, a leading specialist in the sector globally.

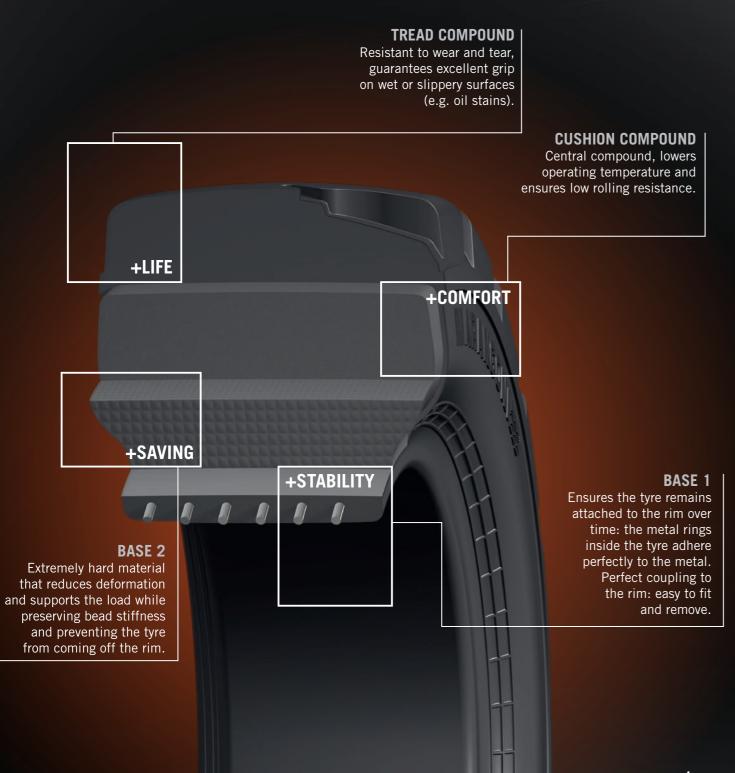
REDUCE YOUR COMPANY'S FOOTPRINT

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.





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.



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. It's 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.



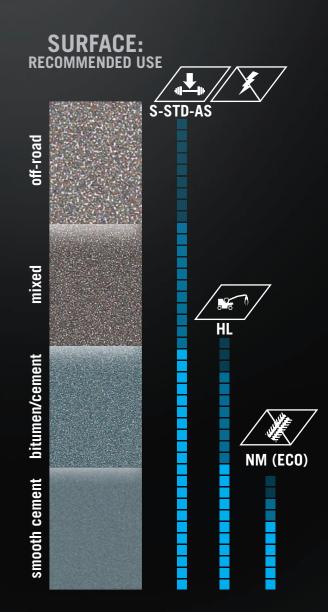
HIGH CAPACITY-HL

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 technician for advice before choosing this version.



ANTISTATIC-AS

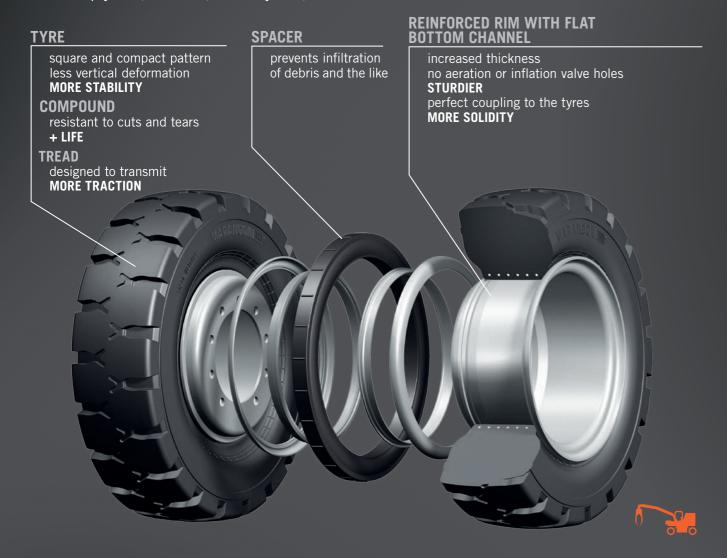
This tyre was designed to release the static electricity accumulated by the vehicle onto the ground. It is constructed with special additives which perform this action while maintaining all the other physical and mechanical characteristics to excellent levels. It is typically used in paint and solvent 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 Superelastic and Cushion tyres are in compliance with the ISO/DIS 2883 standards. A certificate of conformity shall be provided upon customers' request.



INNOVATIVE SOLUTIONS

SUPER-ELASTIC **ELTOR® 3** INTEGRATED LOADER SYSTEM

The Marangoni 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.).



ELTOR® 3 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 Eltor® 3 tyre sidewall, thus preventing infiltration of debris and the like.

RIM

The reinforced rim with flat bottom channel, designed especially to mount Marangoni 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.

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.

FOR BEAD FIX VERSION

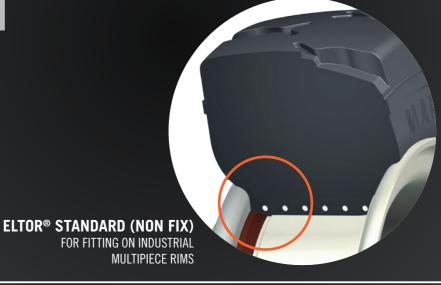


FOR BEAD NON-FIX VERSION Movable rimparts 1, 2 and 3.





SUPER-ELASTIC ELTOR FIX®



RIMS FOR FIX SOLID TYRES

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



INDUSTRIAL MULTIPIECE RIMS

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

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

SPLIT RIMS (DEVIDED TYPE)



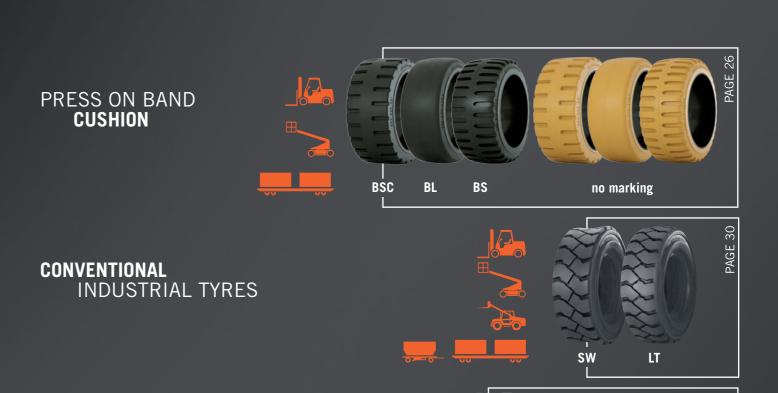
WHEELS FOR POB CUSHION TYRES

- Fit all sizes of press on band cushion from 6.5" to 22".
- Available for all standard application.
- Adaptable to most custom application.









CONVENTIONAL
SKID STEER TYRES
FOR SMALL-SIZED MACHINES

FOR INDUSTRIAL TRACTORS



MULTI-PURPOSE CONVENTIONAL TYRES FOR MANUFACTURING MACHINES

CONVENTIONAL TYRES

FOR CONSTRUCTION AND ROAD WORKS



INDUSTRIAL & MPT TYRES - TECHNICAL DATA BOOK 2017

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MARANGONI

SUPERIOR PREMIUM QUALITY BUDGET

				Z D				Section 1		造曲											
TYRE SIZE	RIM SIZE	EV	VO	E	3	E	L	E	R	E	S	E1	FOF	RZA		JUM	IBO		RIM SIZE	TYRE SIZE	
(inches)	NIIVI SIZE	STD	FIX	STD	FIX	STD	FIX	STD	FIX	STD	FIX	STD	STD	FIX	J2	J2 BLOCK	JL	J1	NIIVI SIZE	(inches)	
4" 3.00-4	2.10-4							•		•		•							2.10-4	3.00-4	4"
12X3,5-8	3.00D-8																•		3.00D-8	12X3,5-8	
4.00-4 6" 3.50/4.00-6	2.50C-4 3.75-6			•				•							•		•		2.50C-4 3.75-6	4.00-4 3.50/4.00-6	6"
140/55-6	4.50-6			•															4.50-6	140/55-6	0
8" 4.00-8	3.00D-8	•	•	•	•										•	•			3.00D-8	4.00-8	8"
15x4½-8 (125/75-8)	2.50D-8							•											2.50D-8	15x4½-8 (125/75-8)	
15x4½-8 (125/75-8)	3.00D-8 3.25D-8	•	•	•	•	•	•	•	•				•	•	•	•	•		3.00D-8 3.25D-8	15x4½-8 (125/75-8)	
15x4½-8 (125/75-8) 5.00-8	3.25D-6 3.00D-8	•	•		•	•							•	•	•	•			3.25D-6 3.00D-8	15x4½-8 (125/75-8) 5.00-8	
5.00-8	3.25D-8			•															3.25D-8	5.00-8	
16x6-8 (150/75-8)	4.33R-8	•	•	•	•								•	•	•	•			4.33R-8	16x6-8 (150/75-8)	
17x7-8	4.33R-8		•		•	•							•	•	•		•		4.33R-8	17x7-8	
18x7-8 (180/70-8) 18x9-8	4.33R-8 7.00E-8	•	•	•												•			4.33R-8 7.00E-8	18x7-8 (180/70-8) 18x9-8	
9" 140/55-9	4.00E-9	•	•	•	•			•	•				•	•	•	•			4.00E-9	140/55-9	9"
6.00-9	4.00E-9	•	•	•	•	•	•						•	•	•	•			4.00E-9	6.00-9	
21x8-9 (200/75-9)	6.00E-9	•	•	•	•								•	•	•				6.00E-9	21x8-9 (200/75-9)	10"
10" 6.50-10 6.50-10	5.00F-10 5.50F-10	•	•	•	•	•							•	•	•	•			5.00F-10 5.50F-10	6.50-10 6.50-10	10"
180/60-10	5.00F-10	•	•																5.00F-10	180/60-10	
7.50-10	5.50F-10	•	•	•											•				5.50F-10	7.50-10	
200/50-10	6.50F-10	•	•	•	•								•	•	•	•			6.50F-10	200/50-10	
23x9-10 (225/75-10) 12" 7.00-12	6.50F-10 5.00S-12	•	•	•	•								•	•	•	•			6.50F-10 5.00S-12	23x9-10 (225/75-10) 7.00-12	12"
23x10-12 (250/60-12)	8.00G-12																		8.00G-12	23x10-12	12
27x10-12 (250/75-12)	8.00G-12	•	•	•	•								•	•	•	•			8.00G-12	27x10-12	
315/45-12	10.00G-12	•	•	•	•														10.00G-12	315/45-12	
13" 23x5-13	3.75P-13			•	•														3.75P-13		13" 15"
15" 7.00-15 7.00-15	5.5-15 6.0-15	•	•	•	•	•	•						_		•	•			5.5-15 6.0-15	7.00-15 7.00-15	15"
7.50-15	5.50-15	•	•	•	•											_			5.50-15	7.50-15	
7.50-15	6.0-15			•	•										•				6.0-15	7.50-15	
7.50-15	6.5-15	•	•	•	•										•	•			6.5-15	7.50-15	
200-15 (200/75-15) 8.25-15	6.5-15 6.5-15		•	•		•							•						6.5-15 6.5-15	200-15 (200/75-15) 8.25-15	
28x9-15 (225/75-15)	7.0-15	•	•	•	•								•	•	•	•			7.0-15	28x9-15 (8.15-15)	
250-15 (250/70-15)	7.0-15	•	•	•	•								•	•	•	•			7.0-15	250-15 (250/70-15)	
250-15 (250/70-15)	7.5-15	•	•	•	•	•	•												7.5-15	250-15 (250/70-15)	
300-15 (315/70-15) 28x12½-15 (355/45-15)	8.0-15 9.75-15	•	•	•	•	•	•						•	•	•	•			8.0-15 9.75-15	300-15 (315/70-15) 28x12½-15	
355/65-15 (350-15)	9.75-15	•	•	•	•								•	•	•	•			9.75-15	355/65-15 (350-15)	
400/60-15	11.0-15			•	•														11.0-15	400/60-15	
20" 7.50-20	6.00T-20			•												_			6.00T-20	7.50-20	20"
7.50-20 8.25-20	7.0-20 6.00T-20			•									_			_			7.0-20 6.00T-20	7.50-20 8.25-20	
8.25-20	6.50-20			•															6.50-20	8.25-20	
8.25-20	7.0-20			•															7.0-20	8.25-20	
355/50-20	10.0-20	•	•			•	•												10.0-20	355/50-20	
9.00-20 9.00-20	6.5-20 7.0-20			•															6.5-20 7.0-20	9.00-20 9.00-20	
10.00-20	7.0-20			•									•						7.0-20	10.00-20	
10.00-20	7.5-20			•									•						7.5-20	10.00-20	
10.00-20	8.0-20			•									•					•	8.0-20	10.00-20	
11.00-20 12.00-20	8.0-20 8.0-20			•		•							•						8.0-20 8.0-20	11.00-20 12.00-20	
12.00-20	8.5-20			•		•							•						8.5-20	12.00-20	
12.00-20	10.0-20			•		•													10.0-20	12.00-20	
24" 12.00-24	8.5-24			•		•													8.5-24		24"
12.00-24 14.00-24	10.0-24 10.0-24			•		•													10.0-24 10.0-24	12.00-24 14.00-24	
14.00-24	10.0-24																		10.0-24	14.00-24	



ELTOR EVO THE TECHNOLOGY THAT ANTICIPATES TOMORROW BY 10%

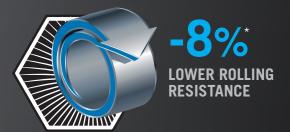
Our prime objective? To extend tyre life and save our customers time and money, without compromising on performance. Rather, improving performance even more compared to similar competing products.

Marangoni's 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.

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.







-15% **PRODUCTION**



+10% **LONGER LIFE**

MORE TIME, MORE EVOLUTION

THICKER TREAD

NEW TREAD STRUCTURE, WITH THE 60J POSITIONED ON A SMALLER DIAMETER = longer life compared to other premium products

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

The Marangoni 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 **EVOLVED AND** DIRECTIONALITY **UPGRADED** COMPOUNDS



GREATER STABILITY SMOOTH RUNNING



BETTER



MARANGONI

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^{*} Tests conducted in the laboratory with other premium products.

SUPER-ELASTIC

ELTOR EVO ELTOR EVO NO MARKING













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





SUPER-ELASTIC ELTOR EVO

ØΙ											RIOR
	TYRE SIZE (inches)	PROFILE	RIM SIZE	DIMENS W (mm)	IONS (1)	WEIGHT (kg)	LOAI CARRYING I WHEEL	D CAPACITY STEERING WHEEL		SPEED (KM/H TRAILERS (3)	(2)
				± 2%	± 2%	± 2%	25 km/h	25 km/h	25 km/h	10 km/h	6 km/h
	4.00-8	EV0	3.00D-8	105,9	403,5	10,7	950	730	730	860	950
	4.00-8	EVO FIX	3.00D-8	105,9	403,5	11	950	730	730	860	950
	15x4½-8 (125/75-8)	EVO FIX	3.00D-8	109	377	9,4	1.040	800	800	945	1.040
	15x4½-8 (125/75-8)	EVO FIX	3.00D-8	109	377	9,7	1.040	800 1.090	800	945	1.040
	5.00-8 5.00-8	EVO EVO FIX	3.00D-8 3.00D-8	120 120	458 458	17,1 17,2	1.415 1.415	1.090	1.090 1.090	1.285 1.285	1.415 1.415
	16x6-8 (150/75-8)	EVO FIX	4.33R-8	151	421	17,2	1.415	1.150	1.150	1.360	1.415
	16x6-8 (150/75-8)	EVO FIX	4.33R-8	151	421	17,1	1.495	1.150	1.150	1.360	1.495
	18x7-8 (180/70-8)	EVO	4.33R-8	152	453	20,2	2.145	1.650	1.650	1.945	2.145
	18x7-8 (180/70-8)	EVO FIX	4.33R-8	152	453	20,5	2.145	1.650	1.650	1.945	2.145
	140/55-9	EVO	4.00E-9	130	380	11,5	1.170	900	900	1.060	1.170
	140/55-9	EVO FIX	4.00E-9	130	380	11,8	1.170	900	900	1.060	1.170
- 1	6.00-9	EV0	4.00E-9	139	525	26,1	1.885	1.450	1.450	1.710	1.885
	6.00-9	EVO FIX	4.00E-9	139	525	26,4	1.885	1.450	1.450	1.710	1.885
	21x8-9 (200/75-9)	EV0	6.00E-9	183	522	34,2	2.755	2.120	2.120	2.500	2.755
	21x8-9 (200/75-9)	EVO FIX	6.00E-9	183	522	34,6	2.755	2.120	2.120	2.500	2.755
	6.50-10	EV0	5.00F-10	160	575	36,6	2.340	1.800	1.800	2.125	2.340
	6.50-10	EVO FIX	5.00F-10	160	575	36,8	2.340	1.800	1.800	2.125	2.340
	180/60-10	EV0	5.00F-10	152	454	18,5	2.410	1.850	1.850	2.180	2.410
	180/60-10	EVO FIX	5.00F-10	152	454	19	2.410	1.850	1.850	2.180	2.410
	7.50-10	EV0	5.50F-10	176	636	52,3	3.070	2.360	2.360	2.785	3.070
	7.50-10	EVO FIX	5.50F-10	176	636	52,3	3.070	2.360	2.360	2.785	3.070
	200/50-10	EVO FIX	6.50F-10	189	464	25,6	2.470	1.900	1.900	2.240	2.470
	200/50-10 23x9-10 (225/75-10)	EVO FIX EVO	6.50F-10 6.50F-10	189 195	464 581	26,1 46	2.470 3.445	1.900 2.650	1.900 2.650	2.240 3.125	2.470 3.445
	23x9-10 (225/75-10)	EVO FIX	6.50F-10	195	581	46,3	3.445	2.650	2.650	3.125	3.445
_	7.00-12	EVO	5.00S-12	169	658	47,6	2.920	2.240	2.240	2.645	2.920
	7.00-12	EVO FIX	5.00S-12	169	658	48,3	2.920	2.240	2.240	2.645	2.920
	23x10-12 (250/60-12)	EV0	8.00G-12	227	586	49,9	3.770	2.900	2.900	3.420	3.770
	23x10-12 (250/60-12)	EVO FIX	8.00G-12	227	586	50,6	3.770	2.900	2.900	3.420	3.770
	27x10-12 (250/75-12)	EVO	8.00G-12	235	672	73,5	3.900	3.000	3.000	3.540	3.900
	27x10-12 (250/75-12)	EVO FIX	8.00G-12	235	672	74,3	3.900	3.000	3.000	3.540	3.900
- 1	315/45-12	EV0	10.00G-12	275	588	61	4.485	3.450	3.450	4.070	4.485
_	315/45-12	EVO FIX	10.00G-12	285	574	61,4	4.485	3.450	3.450	4.070	4.485
	7.00-15	EV0	5.5-15	180	728	59	3.545	2.725	2.725	3.215	3.545
	7.00-15	EVO FIX	5.5-15	180	728	59,5	3.545	2.725	2.725	3.215	3.545
	7.50-15	EV0	5.5-15	205	758	72,2	3.900	3.000	3.000	3.540	3.900
	7.50-15	EVO FIX	5.5-15	205	758	72,7	3.900	3.000	3.000	3.540	3.900
	7.50-15	EVO FIX	6.5-15	205	758	72,9	3.900	3.000	3.000	3.540	3.900
	7.50-15	EVO FIX	6.5-15	205	758	74,2	3.900	3.000	3.000	3.540	3.900
	8.25-15	EVO EIV	6.5-15	203	822	90,9	4.750	3.650	3.650	4.300	4.750
	8.25-15 28x9-15 (225/75-15)	EVO FIX EVO	6.5-15 7.0-15	203 214	822 699	92,4 61,8	4.750 3.445	3.650 2.650	3.650 2.650	4.300 3.125	4.750 3.445
	28x9-15 (225/75-15)	EVO FIX	7.0-15	214	699	62,2	3.445	2.650	2.650	3.125	3.445
	250-15 (250/70-15)	EVO FIX	7.0-15	214	721	66,5	4.745	3.650	3.650	4.310	4.745
	250-15 (250/70-15)	EVO FIX	7.0-15	214	721	67	4.745	3.650	3.650	4.310	4.745
	250-15 (250/70-15)	EVO TIX	7.5-15	214	721	67,5	4.745	3.650	3.650	4.310	4.745
	250-15 (250/70-15)	EVO FIX	7.5-15	214	721	68,5	4.745	3.650	3.650	4.310	4.745
	300-15 (315/70-15)	EV0	8.0-15	256	821	114	5.850	4.500	4.500	5.310	5.850
	300-15 (315/70-15)	EVO FIX	8.0-15	256	821	114,9	5.850	4.500	4.500	5.310	5.850
	28x12½-15 (355/45-15)	EV0	9.75-15	285	716	91	5.690	4.375	4.375	5.165	5.690
	28x12½-15 (355/45-15)	EVO FIX	9.75-15	285	716	92	5.690	4.375	4.375	5.165	5.690
	355/65-15 (350-15)	EV0	9.75-15	300	821	135,2	7.800	6.000	5.450	6.430	7.085
_	355/65-15 (350-15)	EVO FIX	9.75-15	300	821	136,1	7.800	6.000	5.450	6.430	7.085
	355/50-20	EV0	10.0-20	309	832	119	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

Sizes are intended for tyres not fitted on rims;
 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);
 Only for interior courses inferior to 2.000 metres; if otherwise, contact dealer (according to E.T.R.T.O. standards).



SUPER-ELASTIC

ELTOR® 3 ELTOR® 3 NO MARKING











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



PREMIUM

						, ()				PREI	/IIUM
Ø	TYRE SIZE (inches)	PROFILE	RIM SIZE	DIMENS	/RE SIONS (1) D (mm) ± 2%	WEIGHT (kg) ± 2%		D CAPACITY STEERING WHEEL 25 km/h	(KG) AT MAX	SPEED (KM/F TRAILERS (3)	,
4"	3.00-4	E1	2.10-4		250		260	195	195		260
4	4.00-4	E1 E3	2.10-4 2.50C-4	76 101	303	3,5 6,6	535	412	412	235 485	535
6"	3.50/4.00-6	E3	3.75-6	112	311		410	315	315	370	410
O	140/55-6	E3	4.50-6	131	311	8,3	1.070	825	825	970	1.070
	4.00-8	E3	3.00D-8	100	403	10,3	950	730	730	860	950
U	4.00-8	E3 FIX	3.00D-8	100	403	10,5	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	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	1.170	900	900	1.060	1.170
ŭ	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	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	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	E3	3.75P-13	138	612	32	1.495	1.150	1.150	1.360	1.495
	23x5	E3 FIX	3.75P-13	138	612	32,8	1.495	1.150	1.150	1.360	1.495
	(1) Sizon are intended for turce no										

Sizes are intended for tyres not fitted on rims;
 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);
 Only for interior courses inferior to 2.000 metres; if otherwise, contact dealer (according to E.T.R.T.O. standards).

SUPER-ELASTIC ELTOR® 3



PREMIUM

				00	00	01	<u> </u>				
Ø	TYRE SIZE (inches)	PROFILE	RIM SIZE	DIMENS	'RE SIONS (1) D (mm)	WEIGHT (kg)	LOA CARRYING WHEEL	D CAPACITY STEERING WHEEL	(KG) AT MAX	SPEED (KM/H TRAILERS (3)) (2)
				± 2%	± 2%	± 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	3.545	2.725	2.725	3.215	3.545
	7.50-15	E3	5.50-15	205	750	67,4	3.900	3.000	3.000	3.540	3.900
	7.50-15	E3 FIX	5.50-15	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	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	71,7	3.900	3.000	3.000	3.540	3.900
	200-15	E3	6.5-15	204	710	60	3.160	2.430	2.430	2.865	3.160
	200-15	E3 FIX	6.5-15	204	710	60,5	3.160	2.430	2.430	2.865	3.160
	8.25-15	E3	6.5-15	209	812	87,2	4.750	3.650	3.650	4.300	4.750
	8.25-15	E3 FIX	6.5-15	209	812	88,3	4.750	3.650	3.650	4.300	4.750
	28x9-15 (225/75-15)	E3	7.0-15	217	693	59,6	3.445	2.650	2.650	3.125	3.445
	28x9-15 (225/75-15)	E3 FIX	7.0-15	217	693	60,7	3.445	2.650	2.650	3.125	3.445
	250-15 (250/70-15)	E3	7.0-15	217	715	66,5	4.745	3.650	3.650	4.310	4.745
	250-15 (250/70-15)	E3 FIX	7.0-15	217	715	67,3	4.745	3.650	3.650	4.310	4.745
	250-15 (250/70-15)	E3	7.5-15	217	715	66,6	4.745	3.650	3.650	4.310	4.745
	250-15 (250/70-15)	E3 FIX	7.5-15	217	715	67,8	4.745	3.650	3.650	4.310	4.745
	300-15 (315/70-15)	E3	8.0-15	258	816	109,2	5.850	4.500	4.500	5.310	5.850
	300-15 (315/70-15)	E3 FIX	8.0-15	258	816	110	5.850	4.500	4.500	5.310	5.850
	28x12½-15 (355/45-15)	E3	9.75-15	285	711	88,5	5.690	4.375	4.375	5.165	5.690
	28x12½-15 (355/45-15)	E3 FIX	9.75-15	285	711	89,6	5.690	4.375	4.375	5.165	5.690
	355/65-15 (350-15)	E3	9.75-15	300	816	130,3	7.800	6.000	5.450	6.430	7.085
	355/65-15 (350-15)	E3 FIX	9.75-15	300	816	131,7	7.800	6.000	5.450	6.430	7.085
	400/60-15 400/60-15	E3 E3 FIX	11.0-15	332 332	817 817	145,6	8.970	6.900	6.900	8.140	8.970 8.970
20"	7.50-20	E3 FIX	11.0-15 6.00T-20	211	880	147 88,4	8.970 3.900	6.900 3.250	6.900 3.250	8.140 3.545	3.900
20	7.50-20	E3	7.0-20	211	880	90	4.020	3.350	3.350	3.650	4.020
	8.25-20	E3	6.00T-20	206	941	107,8	4.380	3.650	3.650	3.980	4.020
	8.25-20	E3	6.50-20	206	941	107,8	4.380	3.650	3.650	3.980	4.380
	8.25-20	E3	7.0-20	206	941	110	4.380	3.650	3.650	3.980	4.380
	9.00-20	E3	6.5-20	241	989	143,6	5.400	4.500	4.500	4.905	5.400
	9.00-20	E3	7.0-20	241	989	149,2	5.400	4.500	4.500	4.905	5.400
	10.00-20	E3	7.0-20	258	1.011	163,5	6.000	5.000	5.000	5.450	6.000
	10.00-20	E3	7.5-20	258	1.011	165,6	6.000	5.000	5.000	5.450	6.000
	10.00-20	E3	8.0-20	258	1.011	166,7	6.000	5.000	5.000	5.450	6.000
	11.00-20	E3	8.0-20	261	1.086	200,5	6.540	5.450	5.450	5.940	6.540
	12.00-20	E3	8.0-20	267	1.099	211	7.560	6.300	6.300	6.865	7.560
	12.00-20	E3	8.5-20	267	1.099	218	7.560	6.300	6.300	6.865	7.560
	12.00-20	E3	10.0-20	303	1.099	255	7.800	6.500	6.500	7.085	7.800
	12.00-24	E3	8.5-24	281	1.183	239	8.040	6.700	6.700	7.305	8.040
	14.00-24	E3	10.0-24	353	1.300	387	11.100	9.250	9.250	10.085	11.100
				-555							

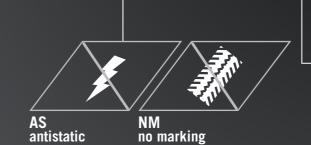
Sizes are intended for tyres not fitted on rims;
 Capacity values indicated are in reference to ELTOR tyres mounted on vehicles whose speed with no cargo is less than 25 km/h (according to E.T.R.T.O. standards);
 Only for interior courses inferior to 2.000 metres; if otherwise, contact dealer (according to E.T.R.T.O. standards).

PREMIUM

SUPER-ELASTIC

ELTOR ES ELTOR ES NO MARKING





- 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.

Ø	TYRE SIZE (inches)	PROFILE		DIMENS	RE IONS (1) D (mm)	WEIGHT (kg)	LOA CARRYING WHEEL	D CAPACITY (STEERING WHEEL	` /	SPEED (KM/F TRAILERS (3)	,
				± 2%	± 2%	± 2%	25 km/h	25 km/h	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

Sizes are intended for tyres not fitted on rims;
 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);
 Only for interior courses inferior to 2.000 metres; if otherwise, contact dealer (according to E.T.R.T.O. standards).



	•	Smooth	tread	suitable	for	dry	floor

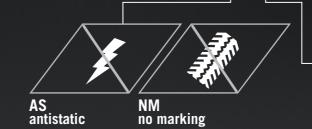
- Excellent comfort thanks to low rolling noise.
- Greater protection against damage.

Ø	TYRE SIZE (inches)	PROFILE	RIM SIZE	DIMENS	'RE SIONS (1) D (mm)	WEIGHT (kg)	LOA CARRYING WHEEL	D CAPACITY (STEERING WHEEL	(KG) AT MAX	SPEED (KM/H TRAILERS (3)	
				± 2%	± 2%	± 2%	25 km/h	25 km/h	25 km/h	10 km/h	6 km/h
8"	15x4½-8 (125/75-8)*	EL	3.00D-8	-	-	-	1.040	800	800	945	1.040
	15x4½-8 (125/75-8)*	EL FIX	3.00D-8	-	-		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	1.800	1.380	1.380	1.640	1.800
	18x7-8 (180/70-8)	EL	4.33R-8	147	448	21	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	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	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"	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	7.560	6.300	6.300	6.865	7.560
	12.00-20	EL	10.0-20	312	1.102	262	7.800	6.500	6.500	7.085	7.800
	355/50-20	EL	10.0-20	320	845	122	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
24"	12.00-24	EL	8.5-24	292	1.180	256	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

AS antistatic

NM no marking

SUPER-ELASTIC **PREMIUM ELTOR ER** ELTOR ER NO MARKING



- 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.

Ø	TYRE SIZE (inches)	PROFILE	RIM SIZE		RE SIONS (1)	WEIGHT (kg)	LOA CARRYING	D CAPACITY (STEERING	KG) AT MAX	SPEED (KM/H TRAILERS (3)	,
	(_	D (mm) ± 2%	(3)	WHEEL 25 km/h	WHEEL 25 km/h	25 km/h	10 km/h	6 km/h
4"	3.00-4	ER	2.10-4	86	253	3,8	260	195	195	235	260
	4.00-4	ER	2.50C-4	102	303	6,8	535	412	412	485	535
8"	15x4½-8 (125/75-8)	ER	2.50D-8	103	375	8,8	1.040	800	800	945	1.040
	15x4½-8 (125/75-8)	ER	3.00D-8	103	375	9	1.040	800	800	945	1.040
	15x4½-8 (125/75-8)	ER FIX	3.00D-8	103	375	9,3	1.040	800	800	945	1.040
9"	140/55-9	ER	4.00E-9	130	380	10	1.170	900	900	1.060	1.170
	140/55-9	ER FIX	4.00E-9	130	380	10,3	1.170	900	900	1.060	1.170

- Sizes are intended for tyres not fitted on rims;
 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);
 Only for interior courses inferior to 2.000 metres; if otherwise, contact dealer (according to E.T.R.T.O. standards).

QUALITY

SUPER-ELASTIC

FORZA

FORZA NO MARKING







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



SUPER-ELASTIC FORZA

QUALITY

										QUA	LIIY
Ø	TYRE SIZE (inches)	PROFILE	RIM SIZE	DIMENS	TRE SIONS (1)	WEIGHT (kg)	LOA CARRYING WHEEL	D CAPACITY STEERING WHEEL	(KG) AT MAX	SPEED (KM/F TRAILERS (3)	
				± 2%		± 2%	25 km/h	25 km/h	25 km/h	10 km/h	6 km/h
B"	4.00-8*	F1	3.00D-8		-	-	950	730	730	860	950
	4.00-8*	FIX F1	3.00D-8	-	-		950	730	730	860	950
	15x4½-8 (125/75-8)	F1	3.00D8	108	372,5	9	1.040	800	800	945	1.040
	15x4½-8 (125/75-8)	FIX F1	3.00D8	108	372,5	9,2	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
)"	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	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
0"	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
2"	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
 5"	8.25-15	F1	6.5-15	205	814	84,6	4.750	3.650	3.650	4.300	4.750
Ŭ	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	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
	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	5.690	4.375	4.375	5.165	5.690
	28x12½-15 (355/45-15)	FIX F1	9.75-15	275	706	85	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
<u>በ"</u>	10.00-20	F1	7.0-20	230	1018	151,7	6.000	5.000	5.000	5.450	6.000
U	10.00-20	F1	7.0-20	230	1018	151,7	6.000	5.000	5.000	5.450	6.000
	10.00-20	F1	8.0-20	230	1018	158,5	6.000	5.000	5.000	5.450	6.000
	12.00-20	F1	8.0-20	230	1110	193	7.560	6.300	6.300	6.865	7.560
	12.00-20	F1	8.5-20	230	1110	199	7.560	6.300	6.300	6.865	7.560

^{*} In preparation
(1) Sizes are intended for tyres not fitted on rims;
(2) Capacity values indicated are in reference to FORZA 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).

BUDGET

SUPER-ELASTIC

JUMBO JUMBO NO MARKING







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



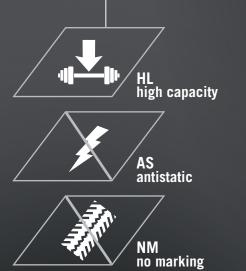
SUPER-ELASTIC JUMBO

RUDGET

										BUD	GET
Ø	TYRE SIZE (inches)	PROFILE	RIM SIZE	DIMENS W (mm)	RE SIONS (1) D (mm)	WEIGHT (kg)	LOAI CARRYING WHEEL	STEERING WHEEL		SPEED (KM/F TRAILERS (3)	í I
				± 2%	± 2%	± 2%	25 km/h	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	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	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	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	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	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
	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	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		5.5-15	178	723	56,2	3.545	2.725	2.725	3.215	3.545
	7.50-15	J2	6.0-15	205,5	752	73	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	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	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
	000 10 (013/10 13)		9.75-15	308,1	828	135	7.800	6.000	5.450	6.430	7.085
	355/65-15 (350-15)	D			W/4.0		7.000	0.000	J. 1JU	0.700	1.000
	355/65-15 (350-15) 355/65-15 (350-15)	J2 I2 BL OCK						6 000	5 450		7.085
20"	355/65-15 (350-15) 355/65-15 (350-15) 10.00-20	J2 BLOCK J1	9.75-15 9.75-20	308,1	828 1017	135,4 148,1	7.800 6.000	6.000 5.000	5.450 5.000	6.430 5.450	7.085 6.000

Sizes are intended for tyres not fitted on rims;
 Capacity values indicated are in reference to JUMB0 tyres mounted on vehicles whose speed with no cargo is less than 25 km/h (according to E.T.R.T.O. standards);
 Only for interior courses inferior to 2.000 metres; if otherwise, contact dealer (according to E.T.R.T.O. standards).





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

BSC

• Tread with optimal traction and • Smooth tread with wider minimal deformation during the transport of loads.

footprint for maximum stability and no vibrations.

• Tread offering the best balance between stability and traction.



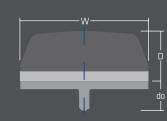
	TVDE CIZE	DDOCU E	L TVDE CIZE	WEIGHT	LICADICA	DACITY (VC		ICLES AT T	HE MANY OR	EEDC OF	LIOADO	ADACITY.	
	TYRE SIZE D W do	PROFILE	TYRE SIZE D W do	WEIGHT (kg)	LUAD CA 10 k		i) FUR VEH 16 k	ICLES AT TI km/h		KM/h		APACITY HICLES	COMPOUND
	(inches)		(mm)	(3)	CARRYING	STEERING	CARRYING	STEERING	CARRYING	STEERING	MANUAL	MAX SPEED	
					WHEEL	WHEEL	WHEEL	WHEEL	WHEEL	WHEEL	TRACTION	(16 km/h)	
•	-	BL	200x90x120	5	-	-	-		-	-	725	435	
2	-	BL	250x130x140	8	1.065	875	955	800	775	635		765	
3	-	BL	250x90x150	5	-	-	-	-	-	-	870	525	
4	10x5x6½	BL	254x127x165,1	11	1.015	835	905	765	735	605	-	725	
5	10½x3½x6½	BL	267x89x165,1	9	-	-	-	-	-	-	900	540	
6	10½x5x6½	BS	267x127x165,1	11	1.080	885	965	810	785	645	-	770	
7	-	BS	300x100x203,2	7	870	715	775	655	635	520	-	620	
8	12x3½x8	BL	305x89x203,2	7	-	-	-	•	-		995	595	
9	12x4½x8	BL	305x114x203,2	9	1.045	855	935	785	760	625	-	745	•
10	13x4½x8	BS	330x114x203,2	9	1.120	920	1.000	840	815	665		800	•
	13x5x8	BS	330x127x203,2	10	1.290	1.060	1.155	970	935	770		925	•
	13x6x8	BS	330x152x203,2	13	1.620	1.330	1.445	1.215	1.175	965		1.155	•
	14x4½x8	BS	356x114x203,2	11	1.165	960	1.045	875	845	695	-	835	•
14	15½x5x10	BSC	394x127x254	16	1.475	1.210	1.315	1.105	1.070	880	-	1.055	•
	15½x6x10	BSC	394x152x254	18	1.865	1.535	1.665	1.400	1.355	1.110	-	1.335	٠
16	16x5x10½	BS	406x127x266,7	15	1.510	1.240	1.345	1.130	1.095	900	-	1.080	•
	16x6x10½	BSC	406x152x266,7	18	1.905	1.565	1.705	1.430	1.385	1.135	-	1.365	•
18	15x5x11¼	BL	381x127x285,8	15	1.395	1.145	1.245	1.045	1.015	830	-	995	•
	15x5x11¼	BS	381x127x285,8	14	1.395	1.145	1.245	1.045	1.015	830		995	•
20	15x6x11¼	BL	381x152x285,8	14	1.720	1.415	1.535	1.290	1.250	1.025		1.230	•
	16¼x5x11¼	BS	413x127x285,8	16	1.525	1.255	1.365	1.145	1.110	910	-	1.090	•
22	16¼x6x11¼	BSC	413x152x285,8	19	1.915	1.575	1.710	1.435	1.395	1.140		1.370	
23	161/4x7x111/4	BS	413x178x285,8	22	2.320	1.905	2.075	1.740	1.685	1.385	-	1.660	•
24	16x4x121/8	BL	406x102x308	11	1.120	920	1.000	1.025	815	670	-	800	•
25 26	17x4½x12⅓ 17x5x12⅓	BS BS	432x114x308	13 15	1.370	1.125 1.290	1.225 1.400	1.025 1.180	995 1.145	815 935	-	980 1.120	•
	17x5x12 ⁷⁸	BS	432x127x308 432x152x308	18	1.570 1.980	1.630	1.770	1.485	1.145	1.180		1.410	•
28	18x5x121/8	BL	457x127x308	19	1.640	1.350	1.470	1.230	1.433	980	-	1.410	•
	18x6x121/8	BL	457x152x308	23	2.100	1.720	1.870	1.575	1.525	1.250		1.500	•
	18x6x121/8	BSC	457x152x308	21	2.100	1.720	1.870	1.575	1.525	1.250		1.500	•
	18x7x121/8	BSC	457x178x308	24	2.550	2.100	2.280	1.910	1.855	1.520		1.820	•
	18x8x121/8	BS	457x203x308	28	3.000	2.475	2.680	2.255	2.180	1.790	-	2.150	•
	18x9x121/8	BS	457x229x308	32	3.450	2.850	3.090	2.600	2.510	2.060	-	2.475	•
	19x8½x13½	BS	483x216x333,7	35	3.375	2.770	3.010	2.530	2.450	2.010	-	2.410	•
	18x51/8x14	BL	455x130x356	21	1.645	1.355	1.470	1.235	1.195	980	-	1.175	•
	21x6x15	BSC	533x152x381	28	2.350	1.930	2.100	1.765	1.710	1.400	-	1.680	•
	21x7x15	BSC	533x178x381	30	2.875	2.350	2.560	2.150	2.085	1.710	-	2.050	•
	21x8x15	BS	533x203x381	38	3.375	2.775	3.025	2.540	2.455	2.015		2.425	•
	21x9x15	BS	533x229x381	40	3.900	3.200	3.475	2.920	2.830	2.320		2.775	•
	22x6x16	BL	559x152x406,4	31	2.450	2.000	2.180	1.830	1.770	1.450	-	1.740	•
	22x7x16	BS	559x178x406,4	36	2.975	2.450	2.650	2.230	2.160	1.770		2.125	•
	22x8x16	BS	559x203x406,4	37	3.500	2.875	3.130	2.625	2.545	2.085	-	2.500	•
	22x8x16	BL	559x203x406,4	39	3.500	2.875	3.130	2.625	2.545	2.085	-	2.500	•
- 1	22x9x16	BS	559x229x406,4	44	4.050	3.325	3.600	3.025	2.930	2.400		2.875	•
	22x9x16	BL	559x229x406,4	47	4.050	3.325	3.600	3.025	2.930	2.400		2.875	•

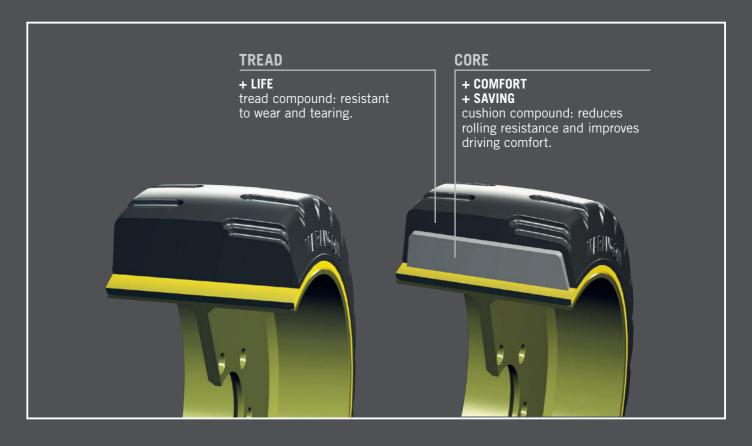




Г	TYRE SIZE D W do (inches)	PROFILE	TYRE SIZE D W do (mm)	WEIGHT (kg)		APACITY (KG km/h Steering Wheel	,	ICLES AT TI m/h STEERING WHEEL		PEEDS OF km/h Steering Wheel	FOR VE	APACITY EHICLES MAX SPEED (16 km/h)	2 COMPOUND
==	22x10x16	BS	559x254x406,4	49	4.575	3.750	4.080	3.425	3.315	2.720	-	3.250	•
47	22x10x16	BL	559x254x406,4	52	4.575	3.750	4.080	3.425	3.315	2.720	-	3.250	•
48	22x12x16	BS	559x305x406,4	58	5.625	4.625	5.030	4.225	4.090	3.350	-	4.025	•
49	22x12x16	BL	559x305x406,4	64	5.625	4.625	5.030	4.225	4.090	3.350	-	4.025	•
50		BL	550x100x455	18	1.370	1.125	1.225	1.025	995	815		980	•
51	-	BL	710x180x485	56	3.595	2.950	3.210	2.695	2.610	2.140		2.565	
52	28x8x19	BL	710x200x485	63	4.180	3.435	3.735	3.135	3.035	2.490		2.985	•
53	26x10x20	BS	660x254x508	60	5.175	4.250	4.620	3.880	3.760	3.080		3.695	
54	28x10x22	BL	711x254x559	72	5.470	4.490	4.880	4.100	3.970	3.255		3.905	
55	28x10x22	BS	711x254x559	68	5.470	4.490	4.880	4.100	3.970	3.255		3.905	
56	28x12x22	BL	711x305x559	90	6.740	5.540	6.020	5.060	4.900	4.015		4.820	
57	28x12x22	BS	711x305x559	93	6.740	5.540	6.020	5.060	4.900	4.015	-	4.820	
58		BL	711x360x559	100	8.160	6.705	7.285	6.120	5.925	4.860		5.830	
59	28x16x22	BL	711x406x559	120	9.270	7.620	8.280	6.950	6.730	5.520	-	6.620	

D = External diameter W = Width do = Internal diameter







- 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 are TT (Tube Type) models for which complete assembly of tube and flap is recommended.





CONVENTIONAL INDUSTRIAL TYRES

	TYRE SIZE	PROFILE	PR	TYPE	RIM WIDTH	INFLATION PRESSURE	OVERALL DIAMETER	SECTION	REFERENCE LOAD (kg)	STATIC LOAD CAPACITY	SET WEIGHT
						ETRTO (bar)	(mm) ±2%	WIDTH (mm) ±2%	25 km/h	ETRTO (kg)	(kg)
1	4.00-8*	YA	6	TT	3.00D-8	4,25	420	110	600	905	3,90
2	5.00-8	SW	8	TT	3.00D; 3.75L-8	8,25	485	150	950	1.435	8,10
3	15x4.5-8 (125/75-8)*	LT	12	TT	3.25L-8	9,00	385	122	800	1.210	4,25
4	16x6-8 (150/75-8)	SW	18	TT	4.33R-8	10,50	420	155	1.180	1.780	9,00
5	18x7-8 (180/70-8)	SW	16	TT	4.33R-8	10,00	465	175	1.650	2.490	12,30
6	6.00-9	SW	14	TT	4.00E-9	10,50	540	170	1.495	2.260	13,05
7	21x8-9 (200/75-9)	SW	16	TT	6.00E-9	10,00	530	215	2.120	3.200	21,25
8	6.50-10	SW	14	TT	5.00; 5.50F-10	10,00	590	190	1.800	2.720	16,10
9	23x9-10 (225/75-10)	SW	20	TT	7.00F-10	10,00	585	230	2.650	4.000	23,35
10	7.00-12	SW	16	TT	5.00S-12	10,00	675	200	2.240	3.380	22,35
11	23x10-12 (250/60-12)	SW	22	TT	8.00G-12	10,50	600	260	2.985	4.510	30,35
12	27x10-12 (250/75-12)	SW	20	ТΤ	8.00G-12	10,00	695	270	3.550	5.360	33,65
13	7.00-15	SW	16	TT	5.00; 5.50-15	10,00	740	205	2.725	4.115	24,55
14	7.50-15	SW	16	TT	5.00; 6.00; 6.50-15	10,00	785	225	3.000	4.530	27,75
15	28x9-15 (225/75-15)	SW	16	TT	7.0-15	10,50	715	220	3.090	4.665	27,10
16	32x12.1-15	SW	24	TT	9.75-15	10,30	810	325	4.835	7.300	64,70
17	8.25-15	SW	18	TT	6.0; 6.5; 7.0-15	9,25	840	255	3.650	5.510	43,20
18	250-15 (250/70-15)	SW	20	TT	7.0; 7.5-15	10,00	735	245	3.875	5.850	36,45
19	300-15 (315/70-15)	SW	20	TT	8.0-15	9,00	820	280	5.000	7.550	56,55
20	28x12½-15 (355/45-15)	SW	24	ТΤ	9.75-15	10,50	710	305	3730	5630	45,40
22	9.00-20	LT	14	ΤΤ	7.00-20	7,60	1.034	259	4.500	6.795	48,50
23	10.00-20	SW	20	TT	7.0; 7.50; 8.0-20	10,00	1.070	290	5.320	8.035	103,50
24	12.00-20	SW	20	TT	8.00; 8.50; 9.00-20	10,00	1.145	320	6.900	10.420	103,50

^{*} Only tyre and tube without flap.

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Reinforced Sizes for Industrial Application on Hard Improved Surfaces Coefficients to be used for tyres in next table

MAXIMUM SPEED (km/h) (1)	VARIATION IN LOAD CAPACITY (%)					
	Steer positions Counter Balanced Lift Truck and Other Vehicles (2)	Drive positions Counter Balanced Lift Truck (2)				
Static (4)	+44	+80				
Creep (3) (4)	+28	+60				
5	+16	+45				
10	+8	+35				
15	+4	+30				
20	+2	+27				
25	0	+25				
30	-3	+22				

This table applies up to rim code up to 35 including wide base tyres. For larger sizes consult tyre manufactures.

(1) For speeds between 5 km/h and creep, interpolations are permitted.

(2) These coefficients do not apply to all tread patterns, consult the tyre Manufactures.

(3) creep means a movement of equipment at a very low speed (commonly not over 120 m. in 60 minutes)

(4) Important: creep and static conditions are extremely demanding for the tyre/rim assembly, so before using this load capacities you must consult the tyre, rim and wheel manufactures.

CONVENTIONAL SKID STEER TYRES FOR SMALL-SIZED MACHINES

SD SKZ+ HA-SKZ



- Standard tread with sidewall properties.Good traction.

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

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

- HA SKZExtra deep and non-directional tread.
- Average block/space ratio: long life and good traction on all road surfaces.
 Excellent compound.
 Square profile.

	TYRE SIZE	PROFILE	PR	TYPE	RIM WIDTH	INFLATION PRESSURE ETRTO (bar)	OVERALL DIAMETER (mm) ±2%	OVERALL SECTION WIDTH (mm) ±2%	LO, CAPACI 8 km/h		WEIGHT (kg)		
						(bai)	(11111) == 70	(11111) == 70	O Itili/II	10 1411/11	(119)		
1	5.70-12	SD	6	TL	4.50	4,10	570	146	660	520	7,90		
2	23x8.50-12	SS	6	TL	7.0	3,40	575	215	820	650	12,70		
3	27x8.50-15	SS	8	TL	7.0	4,80	680	210	1.250	990	15,25		
4	27X10.50-15	SS	8	TL	8.5	3,50	700	260	1.280	1.010	18,10		
5	10x16.5	SD	10	TL	8.25	5,20	773	264	1.685	1.560	20,20		
6	10x16.5	SS	10	TL	8.25	5,10	775	280	1.685	2.135	22,70		
7	10x16.5	SKZ+	10	TL	8.25	5,20	800	279	1.685	2.135	20,20		
8	10x16.5	HA SKZ	10	TL	8.25	5,20	773	264	1.685	2.135	31,80		
9	12x16.5	SD	12	TL	9.75	5,50	831	307	2.890	2.285	24,30		
10	12x16.5	SS	12	TL	9.75	5,60	845	330	2.890	2.285	36,60		
11	12x16.5	SKZ+	12	TL	9.75	5,50	838	325	2.890	2.285	40,25		
12	12x16.5	HA SKZ	12	TL	9.75	5,50	840	310	2.890	2.285	39,35		
13	14x17.5	SD	14	TL	10.5	5.60	945	360	3.875	3.060	42,10		
14	15x19 5	SD	14	TI	11 75	5 60	1 020	415	4 565	3 605	56 00		

CONVENTIONAL TYRES FOR INDUSTRIAL TRACTORS FOR CONSTRUCTION AND ROAD WORKS

TI09 IM54



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) 40 km/h	WEIGHT (kg)
1	15.5/80-24	IM54	16	TL	W12	4,00	1.260	415	4.680	70.50
2	18.4-26	TI09	12	TL	16.00	2,50	1.420	490	4.000	93,50

MULTI-PURPOSE CONVENTIONAL TYRES FOR MANUFACTURING MACHINES

MT63 MT45 MT54





MT63

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

Applications:
Municipality vehicles used

Agricultural vehicles.
Special service vehicles.

MT45

on roads.

- 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 selfcleaning properties.

MT90

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

MT72

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





	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)
1	10.5/80-18	MT45	10	TL	9.00	3,70	910	280	1.950	31,90
2	12.5/80-18	MT45	12	TL	W9	3,70	990	310	2.650	42,10
3	18-19.5	MT63	18	TL	14.00	6,75	1.090	455	5.605	75,00
4	10.5-20	MT54	10	TL	9.00	3,75	960	275	2.070	31,80
5	12.5-20	MT54	12	TL	11.00	3,50	1.055	330	2.300	48,80
6	14.5-20	MT54	14	TL	11.00	3,50	1.095	355	2.795	58,40
7	405/70-20	MT54	14	TL	13.00	3,50	1.090	385	3.335	60,50
8	405/70-20	MT72	14	TL	13.00	3.50	1.150	405	3.335	67,20
9	18-22.5	MT90	18	TL	14.00	6,75	1.185	477	6.095	95,00
10	405/70-24	MT54	14	TL	13.00	3,50	1.190	415	3.620	76,00
11	405/70-24	MT72	14	TL	13.00	3,50	1.200	420	3.620	78,30

MULTI-PURPOSE CONVENTIONAL TYRES FOR MANUFACTURING MACHINES

MT50 MT54



- 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)
1	8.25-20	MT50	14	TT	6.5-20	6.90	970	232	2.180	35,00
2	8.25-20	MT54	14	TT	6.5-20	6,75	970	232	2.180	35,00
3	9.00-20	MT50	14	TT	7.0-20	7,20	1.012	256	2.650	43,00
4	9.00-20	MT54	14	TT	7.0-20	7,00	1.012	256	2.650	43,00
5	10.00-20	MT50	16	TT	7.5-20	7,60	1.050	282	3.190	50,00
6	10.00-20	MT54	16	TT	7.5-20	7,50	1.050	280	3.190	50,00

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: reability, 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 off-set 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:

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

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

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:

 $D_{worn} = 2/3 (D_{new} - D_{rim}) + D_{rim}$ Press-on-band and conical base tyres: $D_{worn} = 2/3 (D_{new} - D_{rim} - 20) + (D_{rim} + 20)$

Notes:

a) All dimensions are measured in millimetres.

b) The outside diameter of the tyre ^Dworn and ^Dnew may be calculated by measuring the circumference of the tyre with a flexible tape, and calculating the diameter from the formula:

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

TREAD WEAR INDICATOR (TWI) Marangoni 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 recommends to replace the tyres for safety reasons when 10% of the original tread is worn.

General conditions of sales available on marangoni.com



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