

EMERALD

OFF-THE-ROAD TYRE SOLUTIONS





EMERALD

Emerald is committed to provide Total Tyre-Wheel assembly solutions for the Material Handling Industry.

Emerald – the market leader from India offers the following unique advantages:

- Complete Product range for tyre-wheel solutions in Material Handling & Skid Steer segment
- Comprehensive size range to cover all popular Material Handling applications in the globe
- Customised solutions through application oriented approach
- Value added solutions through customer centric approach

Emerald's commitment to customer focus remains the driving force for its continual success over the years. This makes Emerald an emerging global player with its reach in more than 70 countries around the globe over the last decade.

The company serves its customer from its dedicated sales-warehouse facility from Belgium for the European market and from Dubai for the Middle East & African markets. Emerald successful foray in Material Handling Equipment Industry is now being extended to Construction, Mining & Agricultural segment.

SOLID RESILIENT TYRES

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INDUSTRIAL PNEUMATIC TYRES & BUTYL TUBES

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WHEEL RIMS, POLYURETHANE WHEELS & FITMENT PRESS

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SOLID RESILIENTS



FEATURES

- Unique tread design for improved traction & low rolling resistance
- Soft-Resilio layers for increased driving comfort and reduced equipment maintenance
- High durometer hard base compound for lower deflection and excellent stability
- Optimum interference fit base for secure fitment
- Available in FRRC & Bead Wire base and also in Lip / Click / Easy Fit (EF) versions
- Specialty versions include Non-Markers, Heat-Resistant, Oil-Resistant, Anti-Static, Aqua-Grip, Sub-Zero, Cut-Resistant, Anti-Abrasive, Anti-Skid tyres, etc.,
- Tyres designed as per T&RA & ETRTO standards
- Resilients available in SUPERSTAR-Premium, GRECKSTER-Standard and SOLIDPLUS-Budget versions

KEY APPLICATIONS

- FORK LIFTS
- SKIDSTEER
- GROUND SUPPORT EQUIPMENT
- PORT TRAILERS
- INDUSTRIAL TRAILERS/PLATFORM TRUCKS
- REACH STACKERS
- EMPTY CONTAINER HANDLERS
- ACCESS / WAREHOUSE EQUIPMENT
- OTHER MATERIAL HANDLING APPLICATIONS

EMPOWER SUPER PREMIUM

Highly recommended for round the clock applications operating in strenuous work environment



Top notch product of Emerald with unique tread design for improved traction & excellent braking both in wet and dry conditions

Wider tread profile for improved foot print and stability

High lug to void ratio for reduced tread strain and extended life

Heavy duty compound for exceptional life & performance

Heavy duty compound for excellent life & performance

Wider foot print tread design with center wear bar for excellent stability and even wear

Interlocked wider lug with rib design for excellent traction and water channeling

Optimum resilient layers for equipment care and increased driver comfort

GRECKSTER GOLD PREMIUM

Highly recommended for round the clock operations



GRECKSTER STANDARD

High quality performance in standard working condition and operating environment



Signature product of Emerald with classic Y-Lug design

High Natural rubber based tread compound that guarantees optimum life & performance

Optimum interference fit for secure fitment

Soft resilio layers for excellent shock absorption property

Two layer construction

Classic Y-Lug design

Tread compound optimized for improved life

Available from 8 inches to 16 inches tyre ID profile

SOLID PLUS ECONOMY

Value for money product for low hours usage applications operating in standard work environment



SPECIALITY COMPOUNDS

No single compound can provide solutions for varying application demands of Material Handling Industry. Emerald has recognized this fact and has pioneered in providing application based customized solutions. Some of the popular versions are given here and more versions available on demand.

VERSION	ENVIRONMENT	FOCUS INDUSTRY
 NON-MARKERS	CLEAN FLOOR, EPOXY COATED	PHARMA, FOOD & BEVERAGE
 HEAT-RESISTANT	HIGH AMBIENT TEMPERATURE	FOUNDRY, SMELTER PLANT
 OIL-RESISTANT	OILY	PETROCHEMICAL, EDIBLE OIL PLANT
 CUT-RESISTANT	SHARP-EDGED WORKPLACE HAZARD	BOTTLING, GLASS, IRON & STEEL PLANT
 ANTI-STATIC	ELECTRICALLY CONDUCTING	DEFENCE, CHEMICAL
 AQUA-GRIP	WET, SNOW, SLIPPERY	GENERAL
 ANTI-ABRASIVE	RIBBED, CONCRETE FLOOR	GENERAL
 ANTI-SKID	INCLINED SURFACE, ACCESS RAMP	GENERAL

Caution: Non-Marker should always be used with Earthing Strips to avoid static electricity build up.

TYRE SELECTION CHART

KEY DETERMINING FACTORS	SOLID PLUS Economy	GRECKSTER Standard	GRECKSTER GOLD Premium	EMPOWER Super Premium
Surface condition	NORMAL	NORMAL	TOUGH	TOUGH
Speed (Heavy duty cycle)	< 25 kmph	< 25 kmph	< 25 kmph	< 25 kmph
Usage	SHORT HAUL	STANDARD	ROUND THE CLOCK	ROUND THE CLOCK
Load carrying capacity (Heavy duty cycle)	••••	••••	•••••	•••••
Life	••••	••••	•••••	•••••
Special application requirements*	•••	•••	••••	•••••

•••• AVERAGE ••••• GOOD •••••• EXCELLENT

*Equipment used in abnormal surface condition and working environment

BASE CONSTRUCTION

FRRC BASE



BEAD WIRE BASE



SKIDSTEER SOLID



SKS



SMOOTH

TREAD PATTERN

R RIB



W LUG



G LUG



Y LUG



SIZE	RIM SIZE	PNEUMATIC EQUIVALENT TYRE SIZE	TREAD PATTERN	
			SKS	SMOOTH
30x 9-16	6.00-16	10x16.5	•	•
30x10-16	6.00-16	10x16.5	•	•
30x10-20	7.50-20	10x16.5	•	•
31x10-20	7.50-20	10x16.5	•	•
33x12-16	6.00-16	12x16.5	•	•
33x12-20	7.50-20	12x16.5	•	•

TECHNICAL SPECIFICATION

SIZE	RIM WIDTH (inch)	LUG PROFILE				NOMINAL		LOAD CAPACITY#	
		SOLID PLUS ECONOMY	GRECKSTER STANDARD	GRECKSTER GOLD PREMIUM	EMPOWER SUPER PREMIUM	OD (inch)	SW (inch)	LOAD WHEEL	STEER WHEEL
3.50 x 4	2.50		•			10.00	3.50	260	195
4.00 x 4	2.50		•			11.80	3.60	525	410
300 x 100	2.75		•			12.00	4.05		
4.00 x 8	3.00 / 3.75		•			16.00	3.90	950	730
5.00 x 8	3.00 / 4.50	•	•	•	•	17.90	4.90	1420	1090
140 / 55 - 9	4.00		•			15.40	5.60		
6.00 x 9	4.00	•	•	•	•	20.60	5.60	1885	1390
15 x 4 ½ x 8 (125/75 - 8)	3.00 / 3.25		•	•	•	15.20	4.50	1040	800
16 x 6 - 8 (150/75 - 8)	4.33		•	•	•	16.00	6.40	1270	975
18 x 7 - 8 (180/70 - 8)	4.33		•	•	•	18.00	5.90	2145	1650
18 x 9 - 8	7.00		•			18.00	8.00	2470	1900
21 x 8 - 9 (200/75 - 9)	6.00		•	•	•	20.70	7.60	2760	2120
20 x 6 - 9	4.00		•			19.45	5.50		
20 x 8 x 9	6.00		•			19.45	7.50		
4.00 x 9.75	3.75		•			16.80	4.80		
200 / 50 - 10	6.50		•	•	•	17.80	7.40	2470	1900
23 x 9 - 10 (225/75 - 10)	6.50		•	•	•	22.50	8.30	3160	2430
6.50 x 10	5.00 / 5.50	•	•	•	•	22.70	6.30	2340	1800
7.50 x 10	5.50		•			25.70	7.10	3070	2360
560 x 165 x 11	5.00		•			21.70	6.44		
23 x 10 - 12 (250/60 - 12)	8.00		•	•	•	23.30	9.65	3770	2900
7.00 x 12	5.00	•	•	•	•	25.40	6.90	2920	2182
27 x 10 - 12 (250/75 - 12)	8.00		•	•	•	25.60	9.80	3900	3000
28 x 12.5 x 15 (345/45 - 15)	9.75		•	•	•	27.10	12.40	5034	4082
32 x 12.1 x 15 (355/65 - 15) (350 - 15)	9.75		•	•	•	32.28	11.80	7085	5450
250 x 15 (250/70 - 15)	7.00 / 7.50		•	•	•	28.90	10.40	4362	3157
300 x 15 (315/70 - 15)	8.00		•	•	•	32.30	10.20	5735	4333
6.00 x 15	4.50		•			27.40	5.90	2455	1820
7.00 x 15	5.50 / 6.00 / 6.50	•	•	•	•	27.60	7.50	3545	2725
7.50 x 15	5.50 / 6.00 / 6.50	•	•	•	•	28.30	7.50	3900	3000
8.15 x 15 (225/75 - 15) (28 x 9 - 15)	7.00	•	•	•	•	27.10	8.40	3445	2650
8.25 x 15	5.50 / 6.50		•	•	•	30.70	7.90	4000	3000
7.50 x 16	5.50 / 6.00		•	•		30.80	7.90	3908	2831
8.00 x 16	5.50		•					3965	3050
8.25 x 16	6.00		•			30.75	8.00		
7.50 x 20	6.00		•			34.75	7.05	3840	3200
8.25 x 20	6.50 / 7.00		•			38.90	9.10	4400	3675
9.00 x 20	7.00 / 7.50 / 8.00		•			40.40	9.50	5340	4450
10.00 x 20	7.50 / 8.00		•	•	•	40.40	9.50	6000	5000
11.00 x 20	7.50 / 8.00		•			41.40	10.35	6510	5425
12.00 x 20 - 42	8.00		•			41.40	10.35	6510	5425
12.00 x 20 - 43	8.00 / 8.50		•	•	•	43.40	11.60	7500	6250
12.00 x 24	8.50 / 10.00		•			47.00	11.80	7980	6650
14.00 x 24	10.00		•			51.20	13.20	11000	9175

*TREAD PATTERN R - Rib / S - Smooth / Y - Y Lug / G-G Lug / W - W Lug #LOAD CAPACITY in kg for Forklift Truck upto 25 kmph

PRESS-ON BAND

FEATURES

- Wear resistant tread compound for extended life
- Wider tread profile for reduced work load
- Low rolling resistance design for higher energy efficiency
- Superior bonding technology for trouble free running
- Wider range covering all popular sizes
- Tread in Smooth & Lug patterns
- Available in Non-Marker and Polyurethane versions
- Customised compounds available on request



**GRECKSTER
STANDARD**



**GRECKSTER
PREMIUM**



TRACTION - J

SMOOTH - S

LUG - L

TECHNICAL SPECIFICATION

NOMINAL DIMENSIONS (inch)	S	L	R*	J	NOMINAL DIMENSIONS (mm)	UPTO 10 kmph		UPTO 16 kmph		UPTO 25 kmph		OTHER VEHICLES <16kmph
						LOAD WHEEL (kg)	STEER WHEEL (kg)	LOAD WHEEL (kg)	STEER WHEEL (kg)	LOAD WHEEL (kg)	STEER WHEEL (kg)	
8.5 x 4 x 4	•											
10 x 4 x 6 ¼		•				785	640	699	582	565	461	
10 x 5 x 5		•				1100	900	980	825	800	655	
10 x 5 x 6												
10 x 5 x 6 ¼	•	•			254 x 127 x 158.8	1030	840	915	770	745	610	730
	•				250 x 130 x 140	1065	870	948	792	767	626	
	•				250 x 130 x 145	1065	870	948	792	767	626	
	•				250 x 90 x 170	695	570	619	518	500	410	
	•				300 x 100 x 203	925	755	823	687	666	544	
10 x 5 x 6 ½	•	•				1010	830	905	760	735	605	
12 x 5 x 8	•					1190	980	1065	890	865	710	
13 x 3 x 8	•					785	645	705	590	570	470	
13 x 3 ½ x 8		•				870	710	774	646	626	511	
13 x 4 ½ x 8		•			330 x 114 x 203.2	1120	920	1000	840	815	670	800
13 x 5 ½ x 8		•			343 x 140 x 203.2			1345	1130			
13 ½ x 5 x 8	•					1290	1055	1148	960	929	760	
14 x 4 ½ x 8	•	•			356 x 114 x 203.2	1170	960	1045	875	850	695	830
14 x 5 x 10	•					1335	1090	1188	992	961	785	
15 ½ x 5 x 10	•	•			394 x 152 x 254	1870	1530	1665	1400	1355	1110	1330
		•			405 x 100 x 305	1160	950	1032	865	835	684	
		•			450 x 300 x 305	4656	3815	4144	3472	3352	2747	
		•			400 x 100 x 310			1000	800			
		•			430 x 160 x 320							
		•			405 x 120 x 305			1300	875			
16 x 5 x 10 ½	•	•		•	406 x 127 x 266.7	1510	1240	1345	1130	1095	895	1080
16 x 6 x 10 ½	•	•		•	406 x 152 x 266.7	1910	1570	1710	1435	1390	1140	1360
	•				470 x 270							
	•				500 x 280							
16 x 7 x 10 ½		•				2325	1910	2070	1740	1685	1380	
15 x 5 x 11 ¼	•					1390	1140	1240	1040	1010	830	
15 x 6 x 11 ¼	•					1715	1410	1530	1285	1245	1020	
16 x 6 x 11 ½		•			406 x 152 x 295			1600	1400			
16 ¼ x 5 x 11 ¼	•	•		•	413 x 127 x 285.8	1530	1250	1360	1145	1105	905	1090
16 ¼ x 6 x 11 ¼	•	•		•	413 x 152 x 285.8	1920	1580	1715	1440	1395	1140	1370

*R - Rib

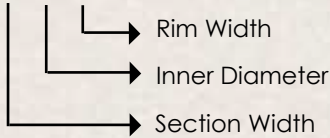
NOMINAL DIMENSIONS (inch)	S	L	R	J	NOMINAL DIMENSIONS (mm)	UPTO 10 kmph		UPTO 16 kmph		UPTO 25 kmph		OTHER VEHICLES <16kmph
						LOAD WHEEL (kg)	STEER WHEEL (kg)	LOAD WHEEL (kg)	STEER WHEEL (kg)	LOAD WHEEL (kg)	STEER WHEEL (kg)	
16¼ x 7 x 11¼	•	•				2325	1900	2060	1735	1680	1380	
17 x 5 x 12 ½		•			432 x 127 x 308			1400	1180			
17¼ x 5 x 11¼		•			438 x 127 x 285.8			1500	1250			
		•			450 x 130 x 320			1300	1100			
		•			450 x 160 x 320			1600	1350			
18 x 5 x 12 ½	•	•		•	457 x 127 x 308	1640	1350	1470	1230	1195	980	1170
18 x 6 x 12 ½	•	•		•	457 x 152 x 308	2100	1720	1870	1575	1525	1250	1500
18 x 7 x 12 ½	•	•		•	457 x 178 x 308	2550	2100	2280	1910	1855	1520	1820
18 x 8 x 12 ½	•	•		•	457 x 203 x 308	3000	2475	2680	2250	2180	1790	2150
18 x 9 x 12 ½	•	•		•	457 x 229 x 308	3450	2850	3090	2600	2510	2060	2475
		•			500 x 160 x 370							
21 x 5 x 15		•			533 x 127 x 381			1640	1385			
21 x 6 x 15		•				2185	1790	1945	1629	1573	1289	
21 x 7 x 15	•	•		•	533 x 178 x 381	2875	2350	2560	2150	2085	1710	2050
21 x 8 x 15	•	•			533 x 203 x 381	3375	2775	3025	2540	2455	2015	2425
21 x 9 x 15		•		•	533 x 229 x 381	3900	3200	3475	2920	2830	2320	2775
20 x 4 x 16			•			1505	1230	1339	1119	1084	886	
20 x 6 x 16	•	•	•		508 x 152 x 406.4			2010	1690			
20 x 8 x 16	•	•	•		508 x 203 x 406.4	3010	2470	2685	2255	2185	1790	2150
20 x 9 x 16			•			3445	2820	3066	2566	2480	2030	
22 x 6 x 16		•		•	559 x 152 x 406.4	2450	2000	2180	1830	1770	1450	1740
22 x 7 x 16		•			559 x 178 x 406.4	2975	2450	2650	2230	2160	1770	2125
22 x 8 x 16	•	•		•	559 x 203 x 406.4	3500	2875	3130	2625	2545	2085	2500
22 x 9 x 16	•	•		•	559 x 229 x 406.4	4050	3325	3600	3025	2930	2400	2875
22 x 10 x 16		•				4570	3745	4067	3408	3290	2696	
22 x 12 x 16		•			559 x 305 x 406	5640	4620	5020	4204	4061	3326	
22 x 12 x 17 ¾	•	•			559 x 305 x 451			4300	3610			
22 x 14 x 16	•	•			559 x 356 x 406	6710	5500	5972	5005	4831	3960	
22 x 16 x 16	•	•				7760	6360	6906	5788	5587	4579	
		•			580 x 340 x 406			6000	5100			
	•				550 x 160 x 410							
		•			645 x 350 x 410							
		•			630 x 200 x 480	3525	2885	3137	2625	2538	2077	
		•			630 x 220 x 480			3500	2950			
	•				645 x 250 x 480	4670	3825	4156	3481	3362	2754	
	•				660 x 200 x 480							
	•				660 x 250 x 480							
26 x 10 x 19	•											
26 x 6 x 20		•				2755	2255	2452	2052	1984	1624	
26 x 7 x 20		•			660 x 178 x 508			2880	2420			
26 x 8 x 20		•				3965	3250	3529	2958	2855	2340	
28 x 12 x 22	•	•			711 x 305 x 559	6750	5530	6008	5032	4860	3982	4800
28 x 15 x 22	•	•			711 x 381 x 559	8700	7130	7743	6488	6264	5134	
28 x 16 x 22	•					9280	7600	8259	6916	6682	5472	
	•				920 x 240 x 670	5045	4145	4500	3780	3660	3000	
	•				920 x 400 x 670							

READING SIZES

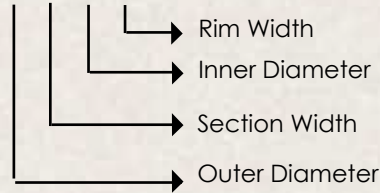
Resilient and Press-on sizes are represented in different nomenclature.

Rim width is always shown separately. All Dimensions are nominal.

6.50 x 10 / 5.00 (Resilient)



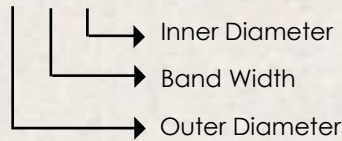
23 x 9 - 10 / 6.50 (Resilient)



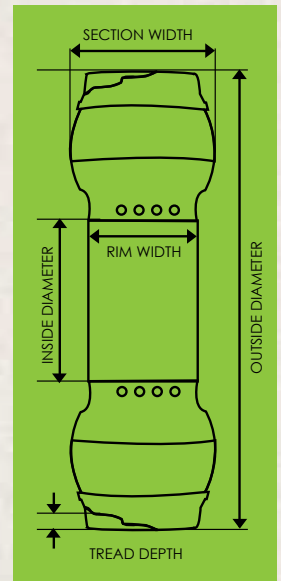
225 / 75 - 10 (6.50) (Resilient)



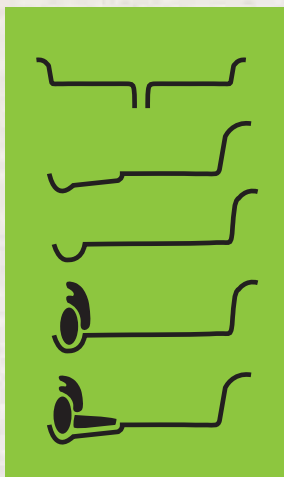
18 x 8 x 12 1/8 (Press-on)



Measurements unspecified above are in Inches

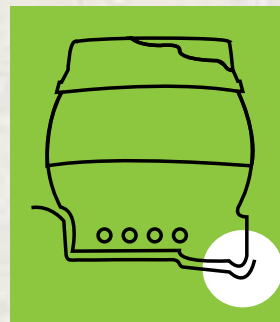


WHEEL RIM TYPES



- Two piece Split rim
- Taper - Base rim for Lip tyre
- Flat based rim for Lip tyre
- Three piece rim - End ring, Lock ring
- Four piece taper - Base Rim - End ring, Lock ring, Band

LIP TYRES



Lip tyre also called Click, Clip or Easy fit tyre eliminates the usage of end ring and lock ring

Lip tyre base is profiled for firm seating on the circumferential ridge of the rim

Lip and regular base tyre are not inter changeable

RECOMMENDATIONS

- All tyre specifications are in accordance with the nominal dimensions of T&RA / ETRTO International Standards
- International standards recommend the maximum speed of 25KMPH for forklift trucks and a maximum distance coverage of 2 Kms at a stretch and tyres are designed to conform to these requirements
- International standards specify the nominal overall dia and section width(maximum) of the tyre with corresponding Load rating at differential speeds for varying applications
- The speeds given are the maximum speed in unloaded condition. Higher load at lower speed is not permissible
- Wheel rims to be checked for its correctness of its dimension, profile, load, compatibility with the tyre
- Wheel rims to be checked for Its suitability of usage – bereft of cracks, damages, presence of foreign materials to ensure safe operations
- Tyres to be fitted using proper fitment gadgets
- Strict adherence to fitment procedures to be followed for easy, safe and secure fitment
- Tyres should be stored in Dry, Ventilated & Clean conditions
- Exposure to oil / lubricants & Electric currents to be avoided

INDUSTRIAL PNEUMATIC

IND01

FEATURES

- Heavy duty design for tough applications
- Special tread compound for cooler running & wear resistance
- Wider tread profile for improved traction & stability
- Reinforced nylon casing for higher load rating
- Reinforced sidewall for reduced deflection & improved protection
- Rim-guard protector for rim flange area



IND04



SKT01



SKT05

TECHNICAL SPECIFICATION

FORKLIFT - IND01

SIZE	RIM (inch)	ALTERNATE RIM (inch)	INFLATED DIMENSIONS (mm) +/-2%		NSD		PLY RATING	INFLATION PRESSURE		LOAD CAPACITY (kg) FORK LIFT - upto 25 kmph		
			OD	CROSS SW	(mm)	(32 nd of inch)		bar	psi	LOAD WHEEL	STEER WHEEL	SIDE LOADERS
5.00-8	3.00	--	470	145	13.00	16.5/32	8	8.25	117	1235	950	1435
							10	10.00	142	1415	1090	1645
16x6-8	4.33	--	420	158	12.50	15.5/32	18	10.50	150	1540	1185	1790
18x7-8	4.33	--	462	170	17.00	21.5/32	14	9.00	128	1910	1460	2400
							16	10.00	142	2145	1650	2490
							18	10.50	150	2210	1700	2565
21x8-9	6.00	7.00	535	210	18.00	22.5/32	16	10.00	142	2755	2120	3200
6.00-9	4.00	--	540	165	15.50	19.5/32	10	8.50	120	1715	1320	1990
							12	10.00	142	1885	1450	2190
6.50-10	5.00	5.50	598	190	15.50	19.5/32	10	7.75	110	1950	1500	2260
							12	9.00	128	2145	1650	2490
							14	10.00	142	2340	1800	2650
7.00-12	5.00	--	680	196	15.50	19.5/32	12	8.50	120	2680	2060	3110
							14	9.00	128	2755	2120	3200
							16	10.00	142	2910	2240	3400
23x9 -10	7.00	--	590	235	18.50	23.5/32	18	9.00	128	3160	2430	3670
							20	10.00	142	3445	2650	4000
27x10-12	8.00	--	692	252	21.50	27.0/32	12	7.25	103	3250	2470	4275
							16	8.00	114	3900	3000	4530
23x10-12	8.00	--	605	260	15.50	19.5/32	18	9.00	128	3385	2605	3935
7.00-15	5.50	--	750	200	18.00	22.5/32	12	8.25	117	3070	2360	3565
							14	9.25	132	3280	2525	3810
							16	10.00	142	3545	2725	3990
7.50-15	6.00	5.50,6.50	780	218	18.00	22.5/32	14	9.25	132	3640	2800	4230
							16	10.00	142	3810	2930	4425
8.15-15	7.00	--	725	219	18.00	22.5/32	12	8.25	117	3445	2650	4000
							14	10.00	142	3900	3000	4530
							16	10.50	150	4010	3085	4660
250-15	7.00	7.50	747	250	18.00	22.5/32	16	8.25	117	4355	3350	5060
300 -15	8.00	--	840	300	22.00	27.5/32	16	6.00	85	5130	3945	5955
							18	7.50	107	5845	4495	6785
							20	9.00	128	6500	5000	7550
8.25-15	6.50	6.00/7.00	840	235	21.00	26.5/32	14	8.00	114	4225	3250	4910
							16	9.25	132	4615	3550	5345

FORKLIFT - IND04

SIZE	RIM (inch)	ALTERNATE RIM (inch)	INFLATED DIMENSIONS (MM) +/-2%		NSD		PLY RATING	INFLATION PRESSURE		LOAD CAPACITY (KG) FORK LIFT - UPTO 25 KMPH		
			OD	CROSS SW	(mm)	(32 nd of inch)		bar	psi	LOAD WHEEL	STEER WHEEL	SIDE LOADERS
5.00 - 8	3.00	--	473	135	12.50	16/32	8	8.25	117	1235	950	1435
6.90/6.00 - 9	4.00	--	540	160	14.00	17.5/32	10	8.50	121	1715	1320	1990
6.50 - 10	5.00	5.50	600	185	15.50	19.50/32	10	7.75	110	1950	1500	2260
7.00 - 12	5.00	--	685	195	16.80	21/32	14	9.00	128	2755	2120	3200
8.15 - 15	7.00	--	715	219	18.50	23/32	14	10.00	142	3900	3000	4530
8.25 - 15	6.50	6.00/7.00	845	240	18.00	22.50/32	14	8.00	114	4225	3250	4910



SKID STEER - SKT01

- Open self-cleaning lug profile
- Specially designed tread pattern for higher torque
- Deep tread lugs assure maximum tyre life
- Robust sidewall protects against damages
- Low heat build up compound for cooler running

SIZE	TYPE	RIM (inch)	INFLATED DIMENSIONS (MM) +/- 2%		NSD		PLY RATING	INFLATION PRESSURE		LOAD CAPACITY (kg)	
			OD	CSW	mm	(32nd of Inch)		bar	psi	8 kmph SPEED	16 kmph SPEED
23 x 8.50 - 12	TL	7.00	575	215	12.50	16/32	12	6.6	90	1195	940
10 - 16.5	TL	8.25	775	275	17.00	21.5/32	8	4.1	60	1875	1480
							10	5.2	72	2140	1690
12 - 16.5	TL	9.75	835	320	20.00	25/32	10	4.1	60	2425	1920
							12	4.8	70	2655	2100



SKID STEER - SKT05 (L5)

- SKT05-L5 – Built tough to last longer
- Deep lug & heavy duty tread compound for extended life
- Abrasive resistant tread resists puncture & cut damages
- Reinforced carcass construction for better load capacity
- Rim guard protector to avoid tyre-wheel damage

SIZE	TYPE	RIM (inch)	INFLATED DIMENSIONS (MM) +/- 2%		NSD		PLY RATING	INFLATION PRESSURE		LOAD CAPACITY (kg)	
			OD	CSW	mm	(32nd of Inch)		bar	psi	8 kmph SPEED	16 kmph SPEED
10 - 16.5	TL	8.25	802	262	37	47/32	14	6.3	90	2375	1875
12 - 16.5	TL	9.75	852	305	37	47/32	14	6.3	90	3120	2465



SKID STEER - IND01

- Heavy duty design for tough applications
- Wider tread profile for improved traction & stability
- Unique sipes in shoulder area for enhanced heat dissipation

SIZE	TYPE	RIM (inch)	INFLATED DIMENSIONS (MM) +/- 2%		NSD		PLY RATING	INFLATION PRESSURE		LOAD CAPACITY (kg)	
			OD	CSW	mm	(32nd of Inch)		bar	psi	8 kmph SPEED	16 kmph SPEED
10 - 16.5	TL	8.25	796	265	33	41.5/32	10	5.2	73	2140	1690
12 - 16.5	TL	9.75	865	320	33.5	42/32	12	4.8	70	2655	2100



LAWN AND GARDEN

- Specially designed tread pattern for maximum traction
- Deep tread depth provides longer life
- Reinforced casing gives increased puncture resistance

SIZE	TYPE	RIM (inch)	INFLATED DIMENSIONS (mm) +/-2%			LOAD CAPACITY (kg)	SPEED (kmph)	IP (bar)
			OD	CSW	PLY RATING			
26 x 12.00 - 12 TRACTION	TL	10.50	660	310	12	1550	15.0	4.1



AGRICULTURAL IMPLEMENT

- Designed with low section profile for lesser soil compaction
- Specially designed for drive and free rolling wheels
- Strengthened casing for higher load capacity

SIZE	TYPE	RIM (inch)	INFLATED DIMENSIONS (mm) +/-2%			LOAD CAPACITY (kg) FOR FREE ROLLING WHEEL			
						30 kmph with HLV		40 kmph with HLV	
			OD	CSW	PLY RATING	LOAD CAPACITY	IP (bar)	LOAD CAPACITY	IP (bar)
10.0/80 -12	TL	9.00	710	270	8	1500	4.2	1250	4.0
10.0 / 75 - 15.3	TL	9.00	760	264	10	1800	5	1550	5.1
11.5 / 80 - 15.3	TL	9.00	850	290	12	2575	5.5	2180	5.3
12.5 / 80 - 15.3	TL	9.00	890	305	14	3075	5.7	2650	5.6



TRACTOR

- Special tread compound for high wear resistance
- Reinforced nylon casing for higher load rating
- Reinforced sidewall for improved protection

SIZE	TYPE	RIM (inch)	APPLICATION	INFLATED DIMENSIONS (MM) +/- 2%		PLY RATING	LOAD CAPACITY (kg) @ 30 kmph	IP(Bar)
				OD	CSW			
7.50 - 16	TT	6.00	TRACTOR TRAILER (TT)	804	216	16	2000	7.6
9.00 - 16	TT	6.00	TT / BACKHOE LOADER	910	240	16	2290	7.4
6.00 - 16	TT	4.50	TRACTOR FRONT	730	163	8	675	4.5

LOAD CAPACITY AT VARYING INFLATION PRESSURE

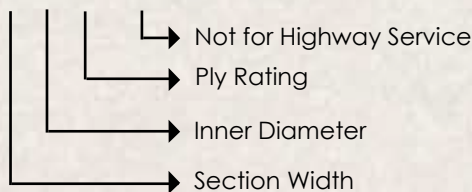
SIZE	PLY RATING	STANDARD INFLATION PRESSURE (psi)	LOAD WHEEL UPTO 25KMPH										
			STD PSI	90 PSI	100 PSI	110 PSI	120 PSI	130 PSI	140 PSI	150 PSI	STD PSI	90 PSI	100 PSI
			5.00-8	8	120	1235	1044	1110	1174	1235	1294	--	--
	10	140	1415	1093	1162	1229	1293	1355	1415	1473	1090	842	895
16x6-8	18	150	1540	1142	1215	1284	1352	1416	1479	1540	1185	879	935
18x7-8	14	130	1910	1540	1638	1732	1823	1910	1995	--	1460	1177	1252
	16	140	2145	1656	1762	1863	1960	2054	2145	2233	1650	1274	1355
	18	150	2210	1639	1743	1843	1940	2033	2123	2210	1700	1261	1341
21x8-9	16	140	2755	2127	2263	2392	2517	2638	2755	2868	2120	1637	1741
6.00-9	10	120	1715	1449	1541	1630	1715	1797	--	--	1320	1116	1186
	12	140	1885	1456	1548	1637	1722	1805	1885	1963	1450	1120	1191
6.50-10	10	110	1950	1734	1844	1950	2052	--	--	--	1500	1334	1419
	12	130	2145	1730	1840	1945	2047	2145	2240	--	1650	1331	1415
	14	140	2340	1807	1922	2032	2138	2241	2340	2436	1800	1390	1478
7.00-12	12	120	2680	2265	2409	2547	2680	2808	--	--	2060	1741	1852
	14	130	2755	2222	2363	2499	2629	2755	2877	--	2120	1710	1818
	16	140	2910	2247	2390	2527	2659	2787	2910	3030	2240	1730	1840
23x9 -10	18	130	3160	2548	2710	2866	3015	3160	3300	--	2430	1960	2084
	20	140	3445	2660	2829	2992	3148	3299	3445	3587	2650	2046	2177
27x10-12	12	105	3250	2970	3159	3340	3514	--	--	--	2470	2257	2400
	16	115	3900	3379	3594	3800	3998	4190	--	--	3000	2599	2764
23x10-12	18	130	3385	2730	2903	3070	3230	3385	3535	--	2605	2101	2234
7.00-15	12	120	3070	2594	2759	2918	3070	3217	--	--	2360	1994	2121
	14	130	3280	2645	2813	2975	3130	3280	3425	--	2525	2036	2166
	16	140	3545	2738	2912	3079	3239	3395	3545	3691	2725	2104	2238
7.50-15	14	130	3640	2935	3122	3301	3473	3640	3801	--	2800	2258	2402
	16	140	3810	2942	3129	3309	3481	3648	3810	3967	2930	2263	2406
8.15-15	12	120	3445	2911	3096	3274	3445	3610	--	--	2650	2240	2382
	14	140	3900	3012	3203	3387	3564	3735	3900	4061	3000	2317	2464
	16	150	4010	2974	3163	3345	3519	3688	3851	4010	3085	2288	2434
250-15	16	120	4355	3680	3914	4139	4355	4564	--	--	3350	2831	3011
300 -15	16	85	5130	5304	5642	--	--	--	--	--	3945	4079	4338
	18	110	5845	5198	5528	5845	6150	--	--	--	4495	3997	4251
	20	128	6500	5290	5626	5949	6259	6559	--	--	5000	4069	4328
8.25-15	14	115	4225	3661	3893	4117	4332	--	--	--	3250	2816	2995
	16	130	4615	3722	3958	4185	4404	4615	4819	--	3550	2863	3045

READING SIZES

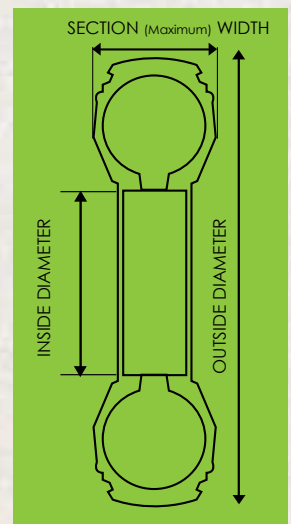
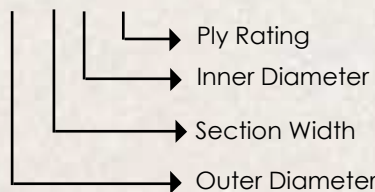
Industrial Pneumatics are represented in the following nomenclature

Rim width is always shown seperately. All Dimensions are nominal and given in inches

6.50 x 10 - 14PR NHS



18 x 7 - 8 - 10PR



LOAD CAPACITY (kg) FORK LIFT - upto 25 kmph												
STEER WHEEL UPTO 25KMPH					SIDE LOADERS AT STATIC							
110 PSI	120 PSI	130 PSI	140 PSI	150 PSI	STD PSI	90 PSI	100 PSI	110 PSI	120 PSI	130 PSI	140 PSI	150 PSI
903	950	996	--	--	1435	1213	1290	1364	1435	1504	--	--
947	996	1044	1090	1135	1645	1270	1351	1429	1503	1575	1645	1713
988	1040	1090	1138	1185	1790	1328	1412	1493	1571	1646	1719	1790
1324	1393	1460	1525	--	2400	1935	2059	2177	2290	2400	2506	--
1433	1508	1580	1650	1718	2490	1923	2045	2162	2275	2384	2490	2593
1418	1492	1563	1633	1700	2565	1902	2023	2139	2251	2359	2464	2565
1841	1937	2030	2120	2207	3200	2471	2628	2779	2924	3064	3200	3332
1254	1320	1383	--	--	1990	1682	1789	1891	1990	2085	--	--
1259	1325	1388	1450	1510	2190	1691	1799	1902	2001	2097	2190	2280
1500	1578	--	--	--	2260	2010	2137	2260	2378	--	--	--
1496	1575	1650	1723	--	2490	2008	2136	2258	2376	2490	2600	2707
1563	1645	1724	1800	1874	2650	2046	2177	2301	2421	2538	2650	2759
1958	2060	2159	--	--	3110	2628	2795	2956	3110	3259	--	--
1923	2023	2120	2214	--	3200	2581	2745	2902	3054	3200	3342	--
1945	2047	2145	2240	2332	3400	2626	2793	2953	3107	3256	3400	3540
2204	2319	2430	2538	--	3670	2960	3148	3328	3502	3670	3833	--
2301	2421	2538	2650	2759	4000	3089	3285	3474	3655	3830	4000	4165
2538	2671	--	--	--	4275	3906	4155	4393	4622	--	--	--
2923	3076	3223	--	--	4530	3925	4174	4414	4644	4867	--	--
2362	2486	2605	2720	--	3935	3173	3375	3569	3755	3935	4109	--
2243	2360	2473	--	--	3565	3013	3204	3388	3565	3736	--	--
2290	2409	2525	2637	--	3810	3073	3268	3455	3636	3810	3979	--
2366	2490	2609	2725	2837	3990	3081	3277	3465	3646	3821	3990	4154
2539	2672	2800	2924	--	4230	3411	3628	3836	4036	4230	4417	--
2544	2677	2806	2930	3051	4425	3417	3634	3843	4043	4237	4425	4607
2518	2650	2777	--	--	4000	3380	3595	3801	4000	4192	--	--
2605	2741	2873	3000	3124	4530	3498	3721	3934	4139	4338	4530	4717
2573	2707	2837	2963	3085	4660	3456	3676	3887	4090	4286	4476	4660
3184	3350	3511	--	--	5060	4276	4548	4809	5060	5303	--	--
--	--	--	--	--	5955	6157	6549	--	--	--	--	--
4495	4730	--	--	--	6785	6033	6417	6785	7139	--	--	--
4576	4815	5046	--	--	7550	6144	6535	6909	7270	7619	--	--
3167	3332	--	--	--	4910	4254	4525	4784	5034	--	--	--
3219	3388	3550	3707	--	5345	4310	4584	4847	5100	5345	5582	--

RECOMMENDATIONS

- All tyre specifications are in accordance with the nominal dimensions of the T&RA /ETRTO International Standards
- International standards recommend the maximum speed of 25KMPH for forklift trucks and a maximum distance coverage of 2 Kms at a stretch and tyres meant for this application are designed to conform to these requirements
- The speeds given are the maximum speed in unloaded condition. Higher load at lower speed is not permissible
- Inflation pressure should be checked and maintained as per the recommendations of the manufacturer
- Over or under inflation would cause premature failure of tyres, high fuel consumption and pose safety related hazards besides high cost of operation
- Tyre removal process should be carried out only in deflated condition by removing the valve insert pin
- Tyres should be stored in Dry, Ventilated & Clean conditions and stacked in vertical position
- Exposure to oil/lubricants & Electric currents should be avoided
- The tyres are not intended for highway service (NHS)

BUTYL TUBES & FLAPS



FEATURES

- High Quality Butyl Rubber
- Exceptional Air Retention
- Preferred Fitment in Radial Tyres
- Good and Strong Splicing
- 100% Defect-free Tube
- High Quality Valves

PRODUCT SEGMENT

- Two & Three Wheeler
- Passenger Car - Conventional & Radial
- Light & Heavy Commercial Vehicle
- Tractor, Forklift & Industrial Vehicle
- Off-The-Road Vehicle (OTR)
- Animal Driven Vehicle (ADV)

TECHNICAL SPECIFICATION

TYPE	TUBE SIZE	VALVE	TYPE	TUBE SIZE	VALVE
TWO WHEELER	2.25/2.50-16	TR29	TRACTOR	10.5-18	TR218A
	2.75/3.00-10	V1.08.1		12.5-18	TR218A
	3.50-10	V1.08.1		12.4-24	TR218A
	2.75/3.00-14	TR29		14.00-24	TR218A
	2.75/3.00-16	TR29		11.2 / 12.4-28	TR218A
	3.25/3.50-16	TR29		13/14.9-28	TR218A
	2.25/2.50-17	TR29			
	2.75/3.00-17	TR29	OTR	14.00-20	TR179A
	100/90-17	TR29		11.00/12.00-24	TR78A / V3.02.14 / V3.04.5
	100/90-18	TR29		12.00/13.00-24	TR78A / V3.02.14 / V3.04.5
	2.50/2.75-18	TR29			
	2.75/3.00-18	TR29			
	3.50-18	TR29			
	3.25/3.50-19	TR29			
THREE WHEELER	3.50-8	V1.08.3	ADV	6.00-19	TR14, TR 15
	4.00-8	V1.08.3		7.00-19	TR 14, TR 15
	4.50-10	TR 13		9.00-16 / 12x16-5	TR75A / TR76A / TR177A
PASSENGER CAR / TRUCK	4.00 / 4.50-12	TR13	FORKLIFT / INDUSTRIAL VEHICLE	5.00-8	JS2
	5.00 / 6.00-12	TR13		18x7-8	JS2
	6.00-14	TR13		16x6-8	JS2
	H78-15 / L78-15	TR13 / TR15		6.00-9	JS2 / TR274A
	6.50-15	TR 13		21x8-9	JS2
	5.50/6.00-16	TR15 / TR13		6.50-10	JS2 / TR 274 A
	6.00/6.50-16	TR15 / TR75A		23x9-10	JS2 / TR15 / TR75A
	135/145/155-12	TR13		6.00-12	TR13
	8.15-15	TR 76A, TR 75A		7.00-12	TR75A / JS2
	135/145/155-13	TR13		7.00-15	AB 1582
	155/165/560-13	TR13		23x10-12	TR75A
	175/185/650-13	TR13		27x10-12	TR75A
	175/185/195/650-14	TR13		28x9-15	TR75A
	195/205/215/225-15	TR13		250-15	TR75A
		300-15	TR75A		
LCV	7.00/7.50/8.15/7.00R15	TR75A / TR76A	FLAPS	3.50 / 4.00 / 5.00 / 5.70-8 / 18x7-8	
	8.25-15	TR177A / TR13		6.00 / 6.90 -9 / 21x8-9	
	7.00-16	TR15 / TR75A		23x9-10, 6.50 / 7.50 - 10	
	7.50-16 / 7.50R-16	TR15 / TR75A		6.50 / 7.00 / 8.25 - 12, 23x10-12 / 27x10-12	
	8.25-16	TR75A / TR76A		6.50 / 7.00 / 7.50 -15, 8.15 / 8.25 / 9.00-15	
HCV	7.50-20	TR175A / TR177A		250 / 300-15, 7.00 / 7.50 / 9.00 -16, 7.50 / 8.25 - 20	
	7.50/8.25-20	TR175A / TR177A		9.00 / 10.00 -20	
	9.00-20 R	TR175A		11.00 / 12.00 - 20	
	10.00-20	TR78A		10.00 / 11.00 / 12.00 - 22	
	11.00-20 R	TR78A		11.00 / 12.00 / 13.00 - 24	
	12.00-20 / 12.00R-20	TR78A		13.00 / 14.00 -24/25, 16.00 / 24/25	
	8.25-20 R	TR78A		18.00 - 24/25	

* For customised requirement please get in touch with our sales team

GSE TYRES & WHEELS

FEATURES

- Size range covering all popular sizes in GSE segment both in Solid and Pneumatics
- Two-stage & Three-stage Construction in Solids
- Resilio Layers for soft ride
- Applications include Baggage & Pallet Trolley, Container / Pallet Dolly
- 4.00 - 8 Supplied as TYRE-WHEEL assembly
- 4.00 x 8 available in rim width 2.50/2.75/3.00/3.25/3.75 (inch)



TECHNICAL SPECIFICATION

PNEUMATIC TYRES

SIZE	TYPE	RIM WIDTH (inch)	INFLATED DIMENSIONS (mm)+/-2%		NSD		PLY RATING	INFLATION PRESSURE		LOAD CAPACITY (kg)
			OUTER DIAMETER	SECTION WIDTH	mm	(32nd of Inch)		bar	psi	
6.90-9	TT	4.00	552	173	15.50	19.5/32	10	8.8	125	1010
6.50-10	TT	5.00	605	195	16.00	20/32	12	9.9	140	1290
8.00-16.5	TL	6.75	740	220	13.30	17/32	8	4.6	65	925
8.75-16.5	TL	6.75	765	228	18.00	22.5/32	10	5.6	80	1215
8.75-16.5 M+S	TL	6.75	765	230	18.00	22.5/32	10	5.6	80	1215
165-13	TL	4.50	590	161	16.50	21/32	8	4.6	65	625
7.00-15	TT	6.00	750	198	17.50	22/32	12	5.3	75	1500

SOLID TYRES

SIZE	RIM WIDTH (inch)	TREAD*	OUTER DIAMETER (inch)	SECTION WIDTH (inch)	CAPACITY (kg)
400 x 8	2.50	R	16.00	5.15	878
400 x 8	2.50	L	16.00	4.15	792
400 x 8	3.00	R	16.00	5.15	1053
400 x 8	3.75	R	16.00	5.15	1314
400 x 9.75	3.75	R	16.80	4.50	
500 x 8	3.00	L	18.00	5.15	1208
500 x 8	3.25	L	18.00	5.15	1312
500 x 8	3.50	L	18.00	5.15	1412
500 x 8	3.75	L	18.00	5.15	1511
600 x 9	4.00	L	21.50	5.75	1914
650 x 10	5.00	L	23.50	6.90	2629

*TREAD PATTERN R - Rib / S - Smooth / L - Lug

SPLIT RIMS

RIM SIZE	RIM WIDTH (inch)	OUTER DIAMETER (inch)	SUITABLE TYRE SIZE
2.50-8	2.50	8	3.00 x 8 / 4.00 x 8
3.00-8	3.00	8	4.00 x 8 / 5.00 x 8
3.25-8	3.25	8	4.00 x 8 / 5.00 x 8
3.50-8	3.50	8	5.00 x 8
3.75-8	3.75	8	4.00 x 8 / 5.00 x 8
4.25-8	4.25	8	16 x 5 x 8
4.00-9	4.00	9	6.00 x 9
3.75-9.75	3.75	9.75	4.00 x 9.75
5.00-10	5.00	10	6.50 x 10

More sizes available on request

PORT TRAILER TYRES

FEATURES

- Range of sizes for port terminal and industrial trailer applications
- Cut-Wear Resistant Cooler tread for round the clock operations
- Resilio layers for cushion ride
- Concave sidewall profile to reduce sidewall damages
- High Durometer, Interference-fit hardbase for excellent stability and secure fitment
- 10.00 x 20 - Available in Lug and Slick (Plain) pattern
- 14.00 x 24 & 14.00 x 25 - High profile version are available



SIZE (inch)	RIM WIDTH (inch)	OD (mm)	SW (mm)	# LOAD RATING (kg)			
				LOAD WHEEL	STEER WHEEL	LUG	SMOOTH
8.25 x 20	6.50/7.00/7.50	965	225	4400	2675	•	
9.00 x 20	6.50/7.00/7.50	985	225	5340	4450	•	
10.00 x 20 - 40	6.50/7.00/7.50	1026	242	5620	4650	•	•
11.00 x 20	7.50 / 8.00	1060	263	6510	5425	•	
12.00 x 20 - 42	7.50 / 8.00	1060	263	6510	5425	•	
12.00 x 20 - 42	8.00 / 8.50	1102	295	7500	6113	•	
12.00 x 20	10.00	1102	295	7500	6113	•	
12.00 x 24	8.50	1190	288	7980	6650	•	
12.00 x 24	10.00	1190	325	9000	7500	•	
14.00 x 24	10.00	1320	332	11000	9175	•	
14.00 x 25	11.25	1345	405	12480	10400	•	

OD - Overall Diameter SW - Section or Maximum Width #LOAD CAPACITY upto 25 kmph

FITMENT PRESS & FIXTURES



FEATURES

- Emerald offers Industrial Fitment Press for mounting and demounting of Solid Resilients from 16" to 53" OD and Press-ons from 10" to 28" OD
- Offered with a complete set of fitment fixture to ensure Easy, Safe & Secure Fitment of tyres on the rims
- Fixtures for fitment include a set of Taper Cone, Pressing Cage & Base Plate for every ID profile in Solids & Press-ons
- Available in 80/100/120/200 Tons
- Compatible to fit all popular sizes in both Solid Resilient and Press on tyres

PARAMETERS	120T FITMENT PRESS	80T FITMENT PRESS
Capacity	120 T	80 T
Construction	Fabricated H frame	Fabricated H frame
Cylinder	ø250 mm x ø150 mm x 520 mm	ø220 mm x ø150 mm x 520 mm
No. of cylinders	1	1
Stroke	400 mm	400 mm
Day light gap	820 mm	820 mm
Over all width	1650 mm	1650 mm
Table size	ø950 mm	ø950 mm
Moving plate	ø950 mm	ø950 mm
Motor	3 Phase, 7.5 HP, 415 v AC, 50 Hz	3 Phase, 5.0 HP, 415 v AC, 50 Hz
Load @ Max. Pr.	222 T	150 T
Safety	Fixed fencing at the back & Door type fencing at the front	Fixed fencing at the back & Door type fencing at the front

FITMENT FIXTURES FOR SOLID RESILIENTS



BASE PLATE



PRESSING CAGE



TAPER CONE

INDUSTRIAL WHEEL RIMS

FEATURES

- Manufactured as per ETRTO & TRA international standards for dimensions and load rating
- High quality Mild Steel - HRPO for improved processability and high quality performance
- Wheel mounting hole profile designed for high precision
- Stringent process and quality control for 100% defect-free product



SPLIT / DIVIDED / TWO-PIECE RIM



SIZE RANGE					
8	9	9.75	10	12	15
3.00D-8	4.00E-9	3.75-9.75	5.00F-10	5.00S-12	5.50-15
3.75-8			5.50F-10		6.0-15
4.33R-8					6.50-15
					7.00-15
					8.00-15

MULTI-PIECE RIM



SIZE RANGE			
15	16	20	24
5.50 - 15	5.50 - 16	6.00 - 20	8.50 - 24
6.00 - 15	6.00 - 16	7.00 - 20	
6.50 - 15		7.50 - 20	
7.00 - 15		8.00 - 20	
8.00 - 15			

WHEEL AND HUB TYPE – PRODUCT RANGE

Emrald manufactures the following types of wheels to cater to the varying tyre wheel assembly requirements of its customers

- Split rim – Zero Offset
- Split rim – Offset
- Split rim – Bearing Housing
- Wheel Hub for Press-on Tyre
- Base wheel for Direct Bonded Wheel



PRESS ON HUB



DIRECT BONDING WHEEL

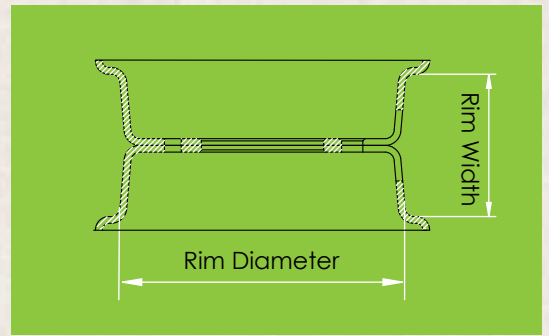
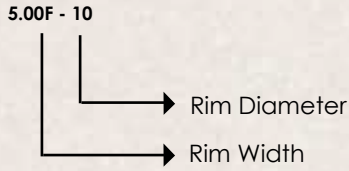
RECOMMENDATIONS

- Compatibility of Tyre & Wheel to be checked before fitment
- Wheel studs and nut to be torqued to the recommended setting and checked periodically
- Wheel rims to be checked for its deformity, damage, cracks, corrosion
- In case of Pneumatics - Tyres should be fully deflated before demounting the wheel rim
- Fitment of wheel rims to be done by trained personnel using proper fitment tools & gadgets

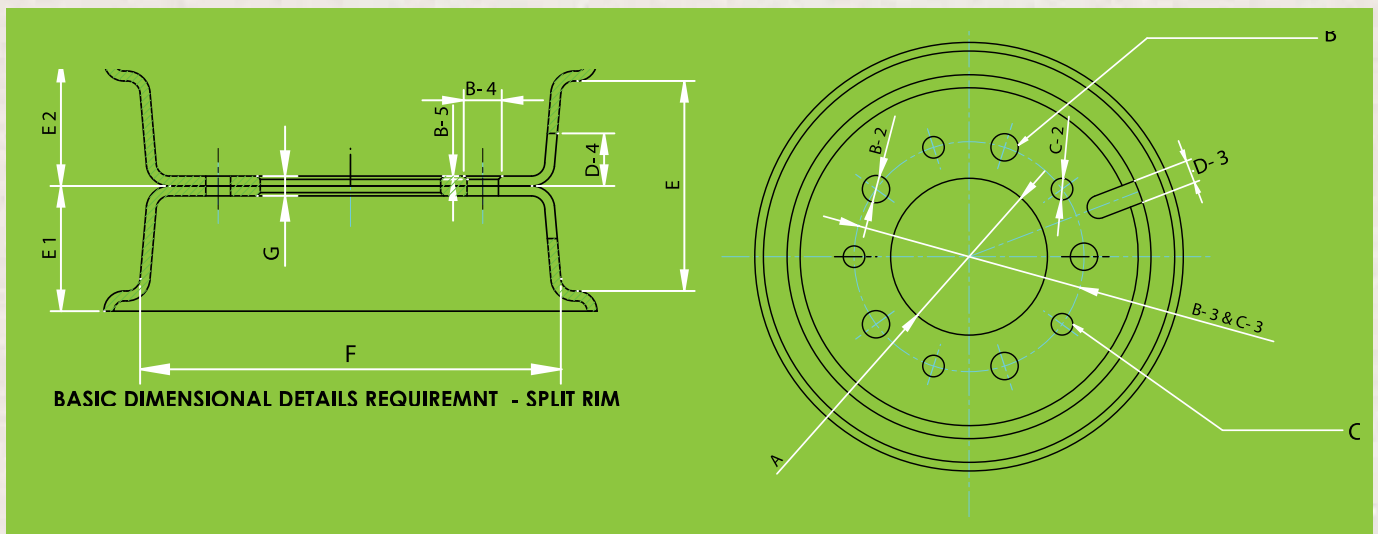
READING SIZES

Split Rim sizes are represented as follows

All Dimensions are in Inches



SPLIT RIM MEASUREMENTS



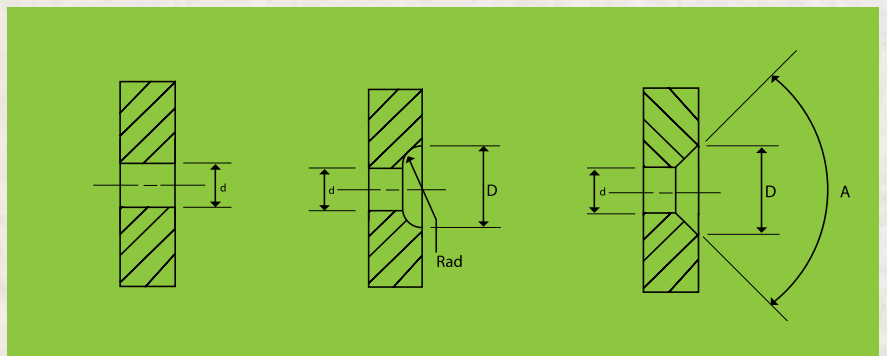
BASIC DIMENSIONAL DETAILS REQUIREMNT - SPLIT RIM

- | | | |
|-----------------------------------|---------------------------------------|--|
| A - BORE DIAMETER | B- 1) No. OF STUD HOLES | D- 1) VALVE SLOT - INNER (HUB SIDE) CUP |
| B - STUD or HUB HOLES | B- 2) STUD HOLE DIAMETER | D- 2) VALVE SLOT - OUTER CUP |
| C - WHEEL BOLT HOLES | B- 3) STUD HOLES PCD | D- 3) VALVE SLOT WIDTH |
| D - VALVE SLOT | B- 4) COUNTER SUNK OUTER DIA | D- 4) VALVE SLOT DEPTH |
| E - RIM WIDTH | B- 5) COUNTER SUNK DEPTH | |
| F - RIM OD | C- 1) No. OF WHEEL BOLT HOLES | E- 1) OFFSET - INNER (HUB SIDE) CUP |
| G - CENTRE PLATE THICKNESS | C- 2) WHEEL BOLT HOLE DIAMETER | E- 2) OFFSET - OUTER CUP |
| H - SHEET THICKNESS | C- 3) WHEEL BOLT HOLES PCD | |

SPLIT RIM HOLE TYPE

Types of commonly used Stud Holes

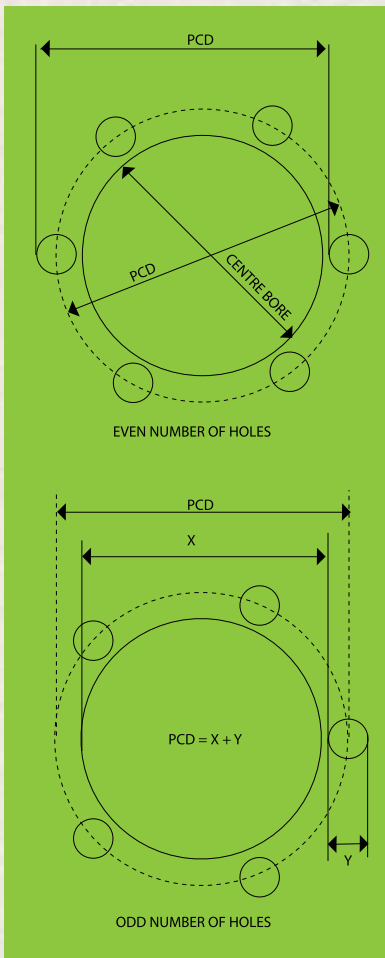
- Through or Straight Hole
- Countersunk holes – Spherical
- Countersunk holes – Conical



Through or Straight Hole

Countersunk holes (Spherical)

Countersunk holes (Conical)



Centre Bore and PCD Measurements

- **Centre Bore** is to locate the hub pilot in a spigot mount wheels (without countersink holes)
- **Stud Holes** are meant to locate the studs in the hub
- **Clamping Bolt Holes** are meant to fasten the two halves of the split rim
- **PCD (Pitch Circle Diameter)** is the imaginary circle that passes through the centre of the stud holes or the clamping bolt holes
- The holes may be **EVEN** or **ODD** in numbers

How to measure Centre bore diameter & Pitch Circle Diameter (PCD)

- **Centre Bore Diameter** is the distance between the inside edges of the centre bore passing through the centre line
- In case of **EVEN** number of holes, the measurement is to be taken from the outside edge of the hole to the inside edge of the opposite hole passing through the centre
- In case of **ODD** number of holes, two measurements are to be taken and added to arrive at the **PCD**
- Measurement '**X**' is taken from the inside edge of the centre bore to the inside edge of the opposite hole passing through the centre line
- Measurement '**Y**' is taken from the the inside edge of the centre bore to the outer edge of the nearby hole passing through the centre line

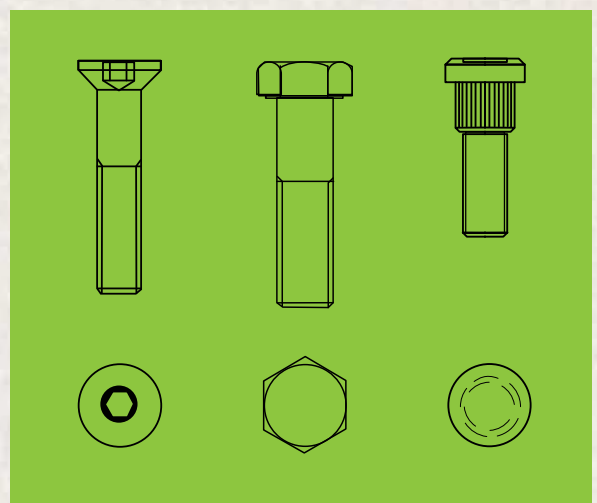
Types of commonly used Fasteners for clamping Split rim halves

- Standard Hexagon Bolt with Hexagon Nut
- Standard Hexagon Bolt with Nyloc Nut
- Countersunk Bolt with Nyloc Nut
- Knurled Wheel bolt with Flange Nut

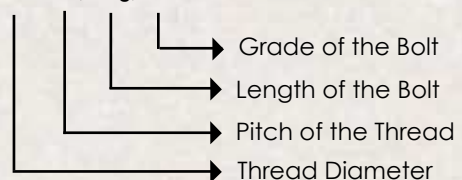
A typical fastener size provides the following details

- Thread Diameter (in Metric or Inches)
- Pitch of the Thread (in Metric or Inches)
- Length of the Bolt (in Metric or Inches)
- Grade of the Bolt
- Type of Bolt
- Plating Requirement (Dry, oiled, Zinc, Dacromet, etc.,)

Countersunk Bolt Hexagon Bolt Knurled Wheel Bolt



M12 x 1.5P, 30Lg, 10.9



POLYURETHANE WHEELS & CUSTOM MOULDED PRODUCTS

FEATURES

- High tensile compound designed for enhanced performance
- Optimum PU Hardness – 80-95 Degree Shore A
- Unique process technology for enhanced bonding property
- PU wheel core in Mild steel, Cast iron & Aluminium versions
- More customized PU based products available on demand



READING SIZES



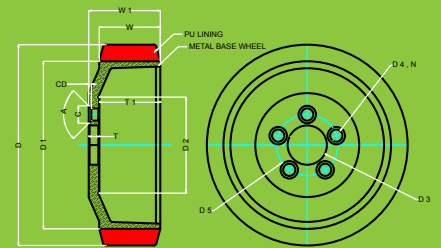
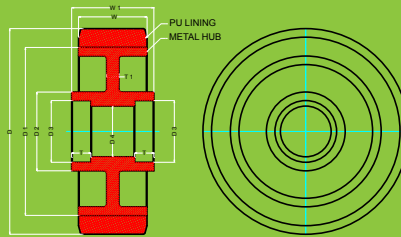
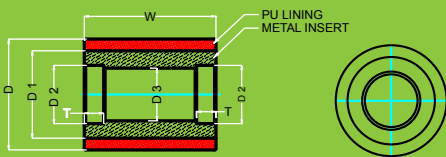
LOAD ROLL



TROLLEY WHEEL



DRIVE WHEEL



- W - PU lining / Base wheel width
- D - Maximum outside diameter
- D1 - Base wheel diameter
- D2 - Bearing seating diameter
- D3 - Centre bore diameter
- T - Bearing seating depth

- W - PU lining width
- W1 - Base wheel width
- D - Maximum outside diameter
- D1 - Base wheel diameter
- D2 - Hub outside diameter
- D3 - Bearing seating diameter
- D4 - Centre bore diameter
- T - Bearing seating depth
- T1 - Middle wall thickness

- W - PU lining width
- W1 - Base wheel width
- D - Maximum outside diameter
- D1 - Base wheel outside diameter
- D2 - Hub butting face diameter
- D3 - Centre bore diameter
- D4 - Stud hole diameter
- D5 - Stud hole PCD
- N - Number of stud holes
- CD - Counter sunk depth
- A - Stud hole counter sunk diameter
- T - Rib thickness
- T1 - Rib offset

PRODUCT LINE	SIZE RANGE
LOAD ROLLS	82 X 70 / 47 X 14
	82 X 75 / 47 X 14
	82 X 100 / 47 X 14
	82 X 79 / 52 X 18
	82 X 110 / 55 X 20
	85 X 75 / 47 X 14
	85 X 100 / 47 X 14
	85 X 60 / 55 X 20
	85 X 100 / 55 X 20
	90 X 50 / 55 X 20

TROLLEY WHEELS	150 X 50 / 47 X 14 / 65
	150 X 50 / 47 X 14 / 59
	152 X 50 / 47 X 14 / 45
	175 X 50 / 52 X 18 / 65
	180 X 50 / 52 X 18 / 65
DRIVE WHEELS	200 X 50 / 52 X 18 / 65
	230 X 70
	230 X 75
	343 X 114
	343 X 152
	250 X 75
300 X 100	

The Size list given here is not exhaustive and covers only the popular sizes. More sizes are available on demand

PRODUCT LINE	PRODUCT RANGE
WHEELS FOR OFF THE ROAD VEHICLES	Trolley wheel, load wheel, press-on band wheel, drive wheel, welding rotator
CUSTOM MOULDED PRODUCTS	Round rod, tube, sheet, stripper bush, square rod
	Pad for Auto assembly lines

EMERALD'S USP

EMERALD'S UNIQUE APPROACH IN EVERY CUSTOMER RELATED ACTIVITY MAKES IT THE FASTEST EMERGING PLAYER IN THE INDUSTRY

PRODUCT RANGE

TOTAL INDUSTRIAL TYRE-WHEEL SOLUTIONS

Offers integrated product mix for complete solutions under one roof

SIZE RANGE

COMPREHENSIVE IN INDEPENDENT PRODUCT SEGMENT

Meets the requirements of all popular Material Handling Applications in the globe in Industrial Tyre segment

R & D

INNOVATION AT ITS BEST

Constant upgradation of product range

Offers economical & environmental friendly solutions

Meets the emerging demands of Material Handling Industry

EMERALD is committed to '**GREEN TYRE REVOLUTION**' – a concept aimed to offer Eco-friendly products that conforms to **REACH** norms

CUSTOMISED SOLUTIONS

APPLICATION ORIENTED APPROACH

Offers Products / Compounds / Size options to meet every special application requirement of the Material Handling Industry

VALUE ADDED SOLUTIONS

CUSTOMER CENTRIC APPROACH

Strives to exceed the expectations everytime in all customer related activity

CUSTOMER FOCUS

CORE TO OUR CONTINUAL SUCCESS

Expanded capacity to meet the ever growing demands of customers

Own Mold Shop to develop new size requirements

In-house Development Program for Compounding, Bands & Beadwires, Tubes & Flaps for tighter control on Quality

TYRE - WHEEL SOLUTIONS

Emrald as part of value added support to its customers offers tyre wheel assembly solutions in the following segment

- Split rim – Solid Resilient tyres
- Split rim – Industrial Pneumatic tyres
- Wheel Hub - Press-on
- Multi piece rim* – Solid Resilient tyres
- Multi piece rim* – Industrial Pneumatic tyres

*For selecte sizes only



DO'S & DONT'S

FOR OPTIMAL PERFORMANCE OF INDUSTRIAL TYRES AND WHEELS

Strict adherence to the below recommended parameters will optimize the performance, save cost & ensure safety associated with the equipment, product & working personnel

✓ DO'S

- Select the right tyre & rim combination which would fit the equipment and meet the application requirements
- Study the application aspects – work environment & operating conditions thoroughly
- Confirm the Tyre size, Rim width, Tread pattern (Smooth/lug/Rib), Base type (Regular or lip) & PR of the tyre - as applicable
- Know the wheel rim type – Split/Single piece/ Multipiece
- Select the correct version which is 'application specific'
- Follow Proper fitment procedures
- Use proper fitment press; Tools & Accessories for fitment of Solids & Press ons
- Invest in Tyre Fitment press. Get it fitted with experienced tyre men
- Tighten fasteners to the required torque
- Look out for sharp edges , burrs on wheel rim which could damage the Tyre ID during fitment process
- Ensure proper radius in the entry point of the rim to facilitate fitment
- Use only Non-detergent Soap solutions in the ID of the tyre to facilitate fitment process
- Fitment fixtures to be seated on the band (metal) surface only and not on the rubberised portion in the sidewall during fitment of Press ons
- Rust oil to be applied on the band inner surfaces (only in the metal surface) in Press ons - if stored for long period of time to avoid corrosion
- All bolt/stud holes in a wheel rim should be fastened and no holes/studs should be left without fasteners
- Ensure sufficient ground & deck clearance for the tyre
- Ensure clearance between tyres in case of dual fitment
- Adhere to Equipment Maintenance Program
- Lubricate vehicle to ensure free-rolling
- Check wheel and axle alignment periodically
- Select proper equipment based on the loading & usage requirements
- Instruct operators to follow Good Driving Practices (GDP)
- Ensure to run on clean roads and gangways /aisles earmarked for equipment movement
- Look out for obstacles and follow route sign
- Ensure to work within the recommended speed & distance coverage factors
- Inspect tyres regularly for damages / injuries, stone / debris entrapment which would onset premature failure
- Attend to any abnormality seen in the wear or in the product immediately to avoid its premature failure
- Follow Dry, Ventilated, Dark, Cool (DVDC) storage practices
- Provide comprehensive information about the product requirements to the manufacturer to get their recommendations

✗ DONT'S

- Avoid Over speeding & Overloading
- Avoid long distance coverage at a stretch (< 2000 meters)
- Avoid bumps/Rails & work place floor hazards
- Avoid contact with oil/grease/chemical/ lubricants/acid etc.
- Avoid contact with sharp edged objects, Pallets, Girders etc.
- Avoid standing loads for long duration
- Avoid exposure to extreme temperatures
- Avoid sharp turns, skidding, rapid acceleration, harsh braking
- Avoid over-lubrication as spilled over oil on the floor or tyre is detrimental to the product's performance
- Avoid usage of oil, grease, lubricants to facilitate fitment process
- Avoid exposure to Sunlight/UV rays in general
- Avoid tampering base region of the tyre
- Avoid improper fitment practices
- Avoid rework of damaged rims. Suggest new replacement
- Avoid exposure of tyre to welding or heat spot both in fitted / unfitted condition with the rim



emraldtyres.com

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