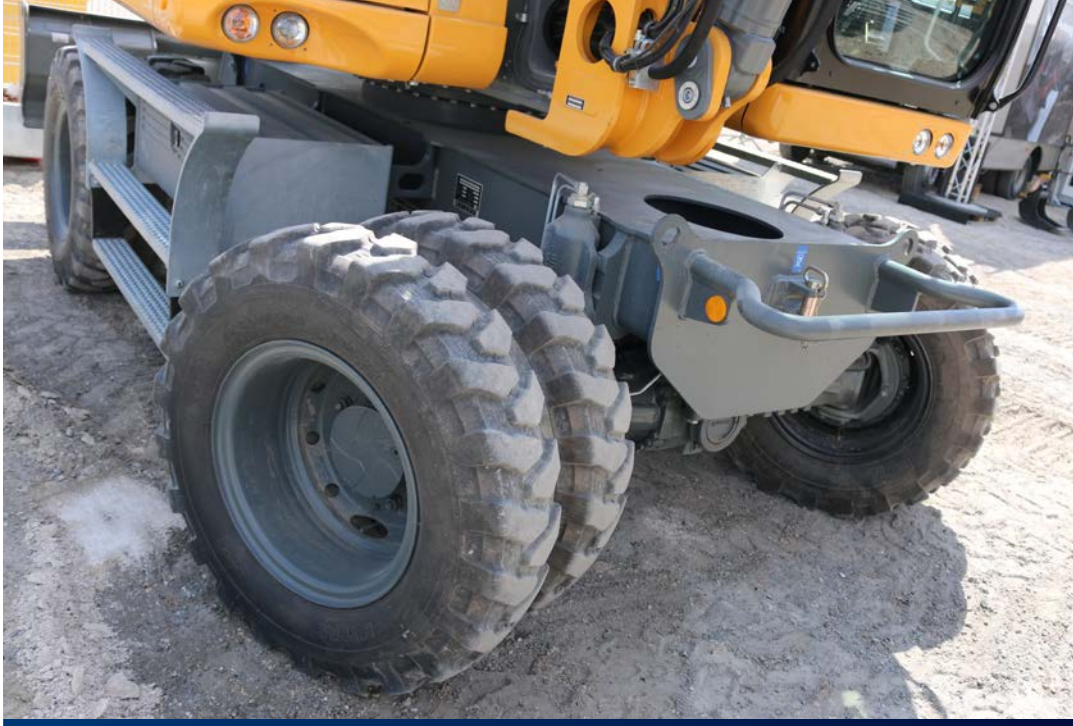
Construction & Material Handling Tires
Technical Catalog

Edition 2021

mitas-tires.com

Mitas



Mitas Technical Catalog for Construction & Material Handling Tires – Edition 2021

The extensive technical data and other information relating to tires and accessories on the following pages has been compiled to reflect as accurately and completely as possible the current state of development. Due to changes in our product range the tire sizes given in this guide are not always identical to our available range.

Mitas, part of Trelleborg group, is one of Europe´s leading tire brands for agricultural machines, construction vehicles, material handling equipment, motorcycles and other specialty segments. Mitas tires are being produced in the Czech Republic, the United States, Serbia, Slovenia, Sri Lanka and promoted through a global sales and distribution network.

For more information, including addresses of our sales organizations, please visit **mitas-tires.com**

Contents

Legend:

Earthmover Tires Page 12 | Crane Tires Page 44 | Multipurpose Tires Page 48

Tractor Industrial Tires Page 58

Skid Steer Tires Page 74

Material Handling Tires Page 80

List of tire sizes

Size (inch)	Tire size (Alternative tire size)	Tread pattern	Page
EM Radial Tires			
18"	335/80 R 18 (12.5 R 18)	EM-02	14
	365/70 R 18	EM-01	14
	405/70 R 18 (16/70 R 18)	EM-01	14
20"	335/80 R 20 (12.5 R 20)	EM-01	14
	365/80 R 20 (14.5 R 20)	EM-01	14
	405/70 R 20 (16/70 R 20)	EM-01	14
24"	405/70 R 24 (16/70 R 24)	EM-01	16
	440/70 R 24 (17.5L R 24)	EM-02	16
	500/70 R 24	EM-01	16
EM Bias Tires			
24"	20 - 24 (22/70 - 24)	EM-70	20
25"	15.5 - 25	EM-20	20
	15.5 - 25	EM-60	20
	15.5 - 25	EM-80	20
	17.5 - 25	EM-20	20
	17.5 - 25	EM-30	20
	17.5 - 25	EM-60	20
	18.00 - 25	NB 38	22
	20.5 - 25	EM-20	22
	20.5 - 25	EM-30	22
	20.5 - 25	EM-60	22
	23.5 - 25	EM-20	22
	23.5 - 25	EM-30	22
	23.5 - 25	EM-60	22
	26.5 - 25	EM-30	24
	26.5 - 25	EM-60	24
29"	26.5 - 29	NB-57	24
Light Equipment Bias Tires			
18"	280/80 - 18 (10.5-18)	MPT-01	28
	10.5 - 18	MPT-02	28
	340/80 - 18 (12.5-18)	MPT-01	28
19.5"	18 - 19.5	MPT-02	28
	18 - 19.5	MPT-03	30
	18 - 19.5	MPT-06	30
	18 - 19.5	MPT-08	30
20"	10.5 - 20	MPT-04	30
	340/80 - 20 (12.5-20)	MPT-01	30
	16/70 - 20 (405/70-20)	MPT-02	30
	405/70 - 20 (16/70-20)	MPT-01	32
24"	405/70 - 24 (16/70-24)	MPT-01	32
	405/70 - 24	MPT-04	32
Excavator Tires			
20"	8.25 - 20	NB 38	36
	8.25 - 20	NB 38 Extra ML	36
	9.00 - 20	NB 38	36
	9.00 - 20	NB 38 Extra ML	36
	9.00 - 20	EM-22	36
	10.00 - 20	NB 38	36
	10.00 - 20	NB 38 Extra ML	36
	10.00 - 20	EM-22	36
	10.00 - 20	EM-23	36
	11.00 - 20	NB 38	36
	11.00 - 20	EM-22	36
	500/45 - 20	TI-12	36
22.5"	315/80 R 22.5	EX-01	36
	500/60 - 22.5	TI-12	36
	600/40 - 22.5	TI-12	36
Roller & Tractor Grader Tires			
15"	9.5/65 - 15	COMPACTOR	40
16"	10.5/80 - 16	COMPACTOR	40
	11.00 - 20	COMPACTOR	40
	11.00 - 20	COMP. EXTRA	40
	11.00 - 20	COMP. SMOOTH	40
	11.00 R 20	COMPACTOR	40
	13/80 R 20	COMPACTOR	40
24"	13.00 - 24	TG-02	42
	14.00 - 24	TG-02	42
	14.9 - 24 IND	UK 5	42
	16.9 - 24 IND	UK 10	42
26"	23.1 - 26 IND	UK 5	42
	23.1 - 26 IND	UK 10	42
Crane Radial Tires			
25"	335/95 R 25	CR-01	46
	445/95 R 25	CR-01	46
	445/95 R 25	CR-02	46
	525/80 R 25	CR-01	46
Multipurpose Radial Tires			
18"	335/80 R 18 (12.5 R 18)	EM-02	50
20"	335/80 R 20 (12.5 R 20)	MPT-20	50
	335/80 R 20 (12.5 R 20)	MPT-21	50
	365/80 R 20 (14.5 R 20)	MPT-20	50
	365/80 R 20 (14.5 R 20)	MPT-21	50
	405/70 R 20 (16/70 R 20)	MPT-21	50
22.5"	275/90 R 22.5	SRT2	52
	375/75 R 22.5	MPT-23	52
24"	405/70 R 24 (16/70 R 24)	MPT-21	52
	445/70 R 24 (17.5L R 24)	MPT-22	52
Multipurpose Bias Tires			
18"	12.5 - 18	MPT-03	56
20"	10.5 - 20	MPT-05	56
	10.5 - 20	MPT-07	56
	12.5 - 20	MPT-03	56
	12.5 - 20	MPT-05	56
	14.5 - 20	MPT-03	56
	14.5 - 20	MPT-05	56
	16/70 - 20 (405/70 - 20)	MPT-05	56
	405/70 - 20 (16/70 - 20)	MPT-03	56

Size (inch)	Tire size (Alternative tire size)	Tread pattern	Page
Tractor Industrial Radial Tires			
18"	340/80 R 18 IND	TI-20	60
24"	460/70 R 24 IND (17.5L R 24)	TI-22	60
26"	480/80 R 26 IND	TI-20	60
28"	440/80 R 28 IND	TI-20	60
Construction Applications Bias Tires			
18"	320/80 - 18 IND (12.5/80-18)	TR-09	64
	340/80 - 18 IND (12.5-18)	MPT-04	66
20"	280/80 - 20 IND (10.5-20)	MPT-04	66
	340/80 - 20 IND (12.5-20)	MPT-04	66
	360/85 - 20 IND (14.5-20)	MPT-04	66
	400/70 - 20 IND (16.0/70-20)	MPT-04	66
	400/75 - 20 IND (16.0/70-20)	TR-09	64
22.5"	480/65 - 22.5 IND (18-22.5)	MPT-06	66
24"	400/70 - 24 IND	MPT-04	68
	400/80 - 24 IND (15.5/80-24)	TI-05	68
	16.9 - 24 IND	TI-04	68
	16.9 - 24	TG-01	68
	17.5L - 24 IND	TI-02	68
	460/70 - 24 IND (17.5L-24)	TI-05	70
	19.5L - 24 IND	TI-05	70
	19.5L - 24 IND	GRIP-n-RIDE	70
	500/70 - 24 IND (19.5L-24)	TI-05	70
	21L - 24 IND	GRIP-n-RIDE	70
26"	18.4 - 26 IND	TI-06	70
28"	16.9 - 28 IND	TI-06	70
	16.9 - 28	TG-01	70
30"	440/80 - 30 IND (16.9-30)	TI-09	72
Skid Steer Bias Tires			
12"	23×8.50 - 12	SK-02	76
15"	27×8.50 - 15	SK-02	76
	27×10.50 - 15	SK-02	76
	31×15.50 - 15	SK-02	76
15.3"	10.0/75 - 15.3	SK-01	76
16.5"	10 - 16.5	SK-02	76
	10 - 16.5	SK-05	76
	10 - 16.5	BIG BOY	76
	12 - 16.5	SK-02	78
	12 - 16.5	SK-05	78
	12 - 16.5	BIG BOY	78
17.5"	14 - 17.5 IND	TR-10	78
18"	10.5/80 - 18	BIG BOY	78
	12.5/80 - 18	BIG BOY	78

Size (inch)	Tire size (Alternative tire size)	Tread pattern	Page
Material Handling Bias Tires			
8"	4.00 - 8	FL-03	86
	4.00 - 8	FL-08	82
	15×4.5 - 8	FL-08	82
	5.00 - 8	FL-03	86
	5.00 - 8	FL-08	82
	16×6 - 8 (150/75-8)	FL-08	82
	18×7 - 8 (180/70-8)	FL-08	82
9"	6.00 - 9	FL-08	82
	21×8 - 9 (200/75-9)	FL-08	82
10"	6.50 - 10	FL-08	82
	7.50 - 10	FL-08	82
	23×9 - 10 (225/75-10)	FL-08	82
12"	7.00 - 12	FL-08	82
	23×10 - 12	FL-08	82
	27×10 - 12 (250/75-12)	FL-08	82
13"	23 × 5	FL-07	86
15"	7.00 - 15	FL-08	82
	7.50 - 15	FL-08	82
	8.15 - 15 (28×9-15)	FL-08	82
	8.25 - 15	FL-08	82
	250 - 15 (250/70-15)	FL-08	82
	28×12.5 - 15	FL-08	82
	300 - 15 (315/70-15)	FL-08	82

Tire size marking

440/70 R 24	
440	Nominal section width (in mm)
70	Aspect ratio H/SW (in %)
R	Radial construction
24	Nominal rim diameter (in inches)

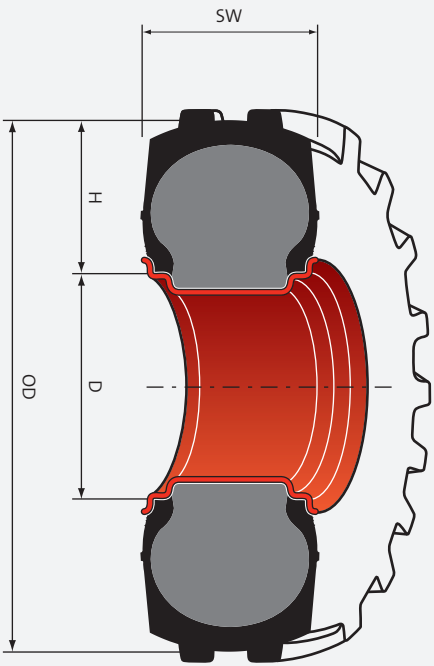
16/70 - 20	
16	Nominal section width (in inches)
70	Aspect ratio H/SW (in %)
–	Bias construction
20	Nominal rim diameter (in inches)

27 × 8.50 - 12	
27	Overall diameter (in inches)
8.5	Nominal section width (in inches)
–	Bias construction
12	Nominal rim diameter (in inches)

17.5 L – 24	
17.5	Nominal section width (in inches)
L	Reduced aspect ratio
–	Bias construction
24	Nominal rim diameter (in inches)

12.5 - 18	
12.5	Nominal section width (in inches)
–	Bias construction
18	Nominal rim diameter (in inches)

23 × 5	
23	Overall diameter (in inches)
5	Nominal section width (in inches)



SW **Section width**
OD **Overall diameter**
H **Section height**
D **Rim diameter**

Speed symbols and conversion tables

Speed category

Speed symbol	A1	A2	A3	A4	A5	A6	A7	A8	B	C	D	E	F	G	J	K
Speed (mph)	3	6	9	12	16	19	22	25	31	35	40	44	50	56	62	68
Speed (km/h)	5	10	15	20	25	30	35	40	50	60	65	70	80	90	100	110

Pressure units conversion table

psi	15	22	29	36	44	51	58	65	73	80
kPa	100	150	200	250	300	350	400	450	500	550
bar	1.0	1.5	2.0	2.5	3.0	3.5	4.0	4.5	5.0	5.5

psi	87	94	102	109	116	123	131	138	145	152
kPa	600	650	700	750	800	850	900	950	1 000	1 050
bar	6.0	6.5	7.0	7.5	8.0	8.5	9.0	9.5	10.0	10.5

Units conversion table

Length
1 centimeter (cm) = 0.3937"
1 inch (in) = 2.54 cm
1 meter (m) = 3.281 ft
1 foot (ft) = 0.3048 m
1 kilometer (km) = 0.6214 mile
1 mile = 1,609 m = 1.609 km

Mass
1 pound (lbs) = 0.4536 kg
1 kilogram (kg) = 2.205 pounds
1 kilogram (kg) = 1 da N (decanewton)

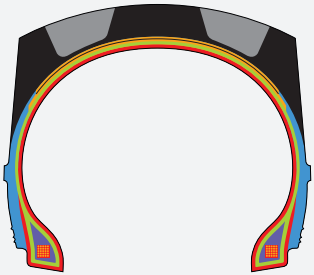
Volume
1 litre (l) = 0.264 US gallon
1 US gallon (gal) = 3.785 l

Pressure
1 psi (lbs/in^2) = 6.895 kPa
1 bar = 14.484 p.s.i.
1 bar = 100 kPa (kilo pascal)

Tire sidewall marking

Sign	Meaning
MITAS	Trade Mark of producer
440/70 R 24	Tire Size marking
17.5 L R 24	Alternative Tire Size marking
EM-02	Tread Pattern Code
147	Load Index (LI 147=6,780 lbs)
B	Speed Symbol (B=31mph)
164	Load Index (LI 164=11,025 lbs)
A2	Speed Symbol (A2=6 mph)
TUBELESS	Tubeless tire
	Direction of rotation

Tire structure



- Tread Pattern
- Breaker Cord
- Inner Liner
- Casing Cord
- Sidewall
- Apex
- Bead Wire

BIAS (DIAGONAL, CROSS-PLY) TIRE

A pneumatic tire in which the ply cords extend to the beads and are laid substantially at alternate angles less than 90° to the center line of the tread.

RADIAL PLY TIRE

A pneumatic tire in which the ply cords extend to the beads and are laid substantially at 90° to the center line of the tread, the casing being stabilized by an essentially inextensible circumferential belt.

Load index

LI	lbs	kg
80	990	450
81	1,020	462
82	1,050	475
83	1,070	487
84	1,100	500
85	1,140	515
86	1,170	530
87	1,200	545
88	1,230	560
89	1,280	580
90	1,320	600
91	1,360	615
92	1,390	630
93	1,430	650
94	1,480	670
95	1,520	690
96	1,570	710
97	1,610	730
98	1,650	750
99	1,710	775
100	1,760	800
101	1,820	825
102	1,870	850
103	1,930	875
104	1,980	900
105	2,040	925
106	2,090	950
107	2,150	975
108	2,200	1,000
109	2,270	1,030
110	2,340	1,060
111	2,400	1,090
112	2,470	1,120
113	2,540	1,150

LI	lbs	kg
114	2,600	1,180
115	2,680	1,215
116	2,760	1,250
117	2,830	1,285
118	2,910	1,320
119	3,000	1,360
120	3,080	1,400
121	3,200	1,450
122	3,300	1,500
123	3,420	1,550
124	3,520	1,600
125	3,640	1,650
126	3,740	1,700
127	3,860	1,750
128	3,960	1,800
129	4,080	1,850
130	4,180	1,900
131	4,300	1,950
132	4,400	2,000
133	4,540	2,060
134	4,680	2,120
135	4,800	2,180
136	4,940	2,240
137	5,080	2,300
138	5,200	2,360
139	5,360	2,430
140	5,520	2,500
141	5,680	2,575
142	5,840	2,650
143	6,000	2,725
144	6,150	2,800
145	6,400	2,900
146	6,600	3,000
147	6,800	3,075

LI	lbs	kg
148	6,950	3,150
149	7,150	3,250
150	7,400	3,350
151	7,600	3,450
152	7,850	3,550
153	8,050	3,650
154	8,250	3,750
155	8,550	3,875
156	8,800	4,000
157	9,100	4,125
158	9,350	4,250
159	9,650	4,375
160	9,900	4,500
161	10,200	4,625
162	10,500	4,750
163	10,700	4,875
164	11,000	5,000
165	11,400	5,150
166	11,700	5,300
167	12,000	5,450
168	12,300	5,600
169	12,800	5,800
170	13,200	6,000
171	13,600	6,150
172	13,900	6,300
173	14,300	6,500
174	14,800	6,700
175	15,200	6,900
176	15,700	7,100
177	16,100	7,300
178	16,500	7,500
179	17,100	7,750
180	17,600	8,000
181	18,200	8,250

LI	lbs	kg
182	18,700	8,500
183	19,300	8,750
184	19,800	9,000
185	20,400	9,250
186	20,900	9,500
187	21,500	9,750
188	22,000	10,000
189	22,700	10,300
190	23,400	10,600
191	24,000	10,900
192	24,700	11,200
193	25,400	11,500
194	26,000	11,800
195	26,800	12,150
196	27,600	12,500
197	28,300	12,850
198	29,100	13,200
199	30,000	13,600
200	30,900	14,000
201	32,000	14,500
202	33,100	15,000
203	34,200	15,500
204	35,300	16,000
205	36,400	16,500
206	37,500	17,000
207	38,600	17,500
208	39,700	18,000
209	40,800	18,500
210	41,900	19,000

Universal application

EM-01

TRACTION	■■■■□
SERVICE LIFE	■■■■■
RESISTANCE	■■■■■
RIDING COMFORT	■■■■■
RETRETHREADING	■■■■□

Excellent traction

EM-02

TRACTION	■■■■■
SERVICE LIFE	■■■■□
RESISTANCE	■■■■□
RIDING COMFORT	■■■■■
RETRETHREADING	■■■■■

EM radial series
Ready to move the Earth

EM-01

Non-directional tread pattern for **all around applications**.

Suitable above all for front loaders, telescopic loaders, backhoe loaders, dumpers and similar vehicles **for light earthmoving work**.

All-steel radial construction.

Tire size	EM-01	EM-02
335/80 R 18 (12.5 R 18)		•
365/70 R 18	•	
405/70 R 18 (16/70 R 18)	•	
335/80 R 20 (12.5 R 20)	•	
365/80 R 20 (14.5 R 20)	•	
405/70 R 20 (16/70 R 20)	•	
405/70 R 24 (16/70 R 24)	•	
440/70 R 24 (17.5 L R 24)		•
500/70 R 24 IND	•	

EM-02

Tread pattern with **good traction** properties.

Excellent durability.

Suitable above all for backhoe loaders, wheeled loaders, telescopic handlers and similar vehicles for **light service**.

Also suitable for **agricultural applications**.

EM radial series

Technical data and load capacities

Tire size	Tread pattern Type	Rim (permitted)	New		Max. in service		Static loaded radius (inch)	Rolling circum-ference (inch)	Tread depth (32nd)	Tire weight (lbs)	
			Outer diameter (inch)	Section width (inch)	Outer diameter (inch)	Section width (inch)					
335/80 R 18 (12.5 R 18)	EM-02 TL	11×18	39.1	13.4	40.4	13.9	17.7	117.8	28	103	
365/70 R 18	EM-01 TL	11×18 (12×18)	38.2	14.2	39.4	15.8	17.2	114.9	25	126	
405/70 R 18 (16/70 R 18)	EM-01 TL	13×18	40.4	16.0	42.2	17.8	18.2	121.5	25	141	
335/80 R 20 (12.5 R 20)	EM-01 TL	11×20 (12×20)	41.1	13.4	42.4	14.4	18.5	123.7	25	130	
365/80 R 20 (14.5 R 20)	EM-01 TL	11×20 (12×20)	43.0	14.2	44.4	15.8	19.3	129.4	25	143	
405/70 R 20 (16/70 R 20)	EM-01 TL	13×20 (11;12×20)	42.4	16.0	44.2	17.8	19.2	127.7	25	152	

Service description LI/SS	Tire load (lbs) at speed (mph)						Tire pressure (psi)
	Static	6	12	19	25	31	
	5,570	3,480	3,020	2,770	2,510	2,420	20
	7,380	4,610	4,010	3,660	3,320	3,200	29
	8,570	5,360	4,630	4,250	3,850	3,710	35
	10,270	6,420	5,610	5,110	4,650	4,470	44
139 B (151 A2)	12,170	**7,600**	6,690	6,090	5,600	**5,360**	**55**
	5,280	3,340	2,690	2,590	2,510	2,450	22
	6,590	4,160	3,350	3,230	3,120	3,040	29
	7,590	4,710	3,720	3,590	3,460	3,380	36
	8,750	5,450	4,320	4,160	4,010	3,920	44
	9,930	6,160	4,900	4,720	4,560	4,450	51
135 B (146 A2)	10,580	**6,600**	5,290	5,100	4,960	**4,800**	**54**
	6,050	3,760	2,900	2,790	2,730	2,630	22
	7,650	4,770	3,720	3,590	3,480	3,380	29
	9,190	5,710	4,450	4,290	4,170	4,050	36
	10,690	6,650	5,170	4,980	4,840	4,700	44
	12,170	7,560	5,850	5,630	5,490	5,310	51
141 B (153 A2)	12,900	**8,050**	6,250	6,020	5,840	**5,680**	**54**
	13,090	8,180	6,380	6,150	5,990	5,800	58
	14,620	9,150	7,190	6,930	6,740	6,540	65
	16,020	10,030	7,880	7,600	7,400	7,170	73
	17,290	10,830	8,510	8,200	7,980	7,740	80
	18,420	11,520	9,000	8,670	8,450	8,180	87
156 B (168 A2)	19,730	**12,300**	9,700	9,350	9,100	**8,800**	**94**
	5,230	3,270	2,620	2,520	2,450	2,380	22
	6,550	4,000	3,260	3,140	3,060	2,970	29
	7,810	4,870	3,890	3,750	3,640	3,540	36
	9,040	5,490	4,480	4,310	4,210	4,070	44
	10,250	6,350	5,120	4,930	4,780	4,650	51
136 B (147 A2)	10,860	**6,800**	5,430	5,240	5,070	**4,940**	**54**
	6,060	3,770	2,890	2,780	2,700	2,620	22
	7,650	4,820	3,710	3,580	3,470	3,370	29
	9,150	5,760	4,410	4,250	4,110	4,010	36
	10,670	6,680	5,150	4,970	4,840	4,690	44
	12,140	7,590	5,870	5,660	5,470	5,340	51
141 B (153 A2)	12,900	**8,050**	6,250	6,020	5,840	**5,680**	**54**
	6,410	3,970	3,020	2,910	2,820	2,750	22
	8,170	5,130	3,910	3,760	3,640	3,550	29
	9,820	6,150	4,690	4,520	4,400	4,270	36
	11,390	7,120	5,450	5,250	5,060	4,950	44
	12,970	8,090	6,220	6,000	5,810	5,660	51
143 B (155 A2)	13,670	**8,550**	6,610	6,370	6,170	**6,000**	**54**

EM radial series (continued)

Technical data and load capacities

Tire size	Tread pattern Type	Rim (permitted)	New		Max. in service		Static loaded radius (inch)	Rolling circum-ference (inch)	Tread depth (32nd)	Tire weight (lbs)	
			Outer diameter (inch)	Section width (inch)	Outer diameter (inch)	Section width (inch)					
405/70 R 24 (16/70 R 24)	EM-01 TL	13×24	46.4	16.0	48.2	17.8	21.0	139.7	25	173	
440/70 R 24 (17.5L R 24)	EM-02 TL	W 15 L×24	49.3	18.3	51.2	19.3	22.2	147.8	48	193	
500/70 R 24 IND	EM-01	DW16L×24 DW15L×24	51.6	19.8	52.7	20.8	23.0	155.4	35	310	

	Service description LI/SS	Tire load (lbs) at speed (mph)						Tire pressure (psi)
		Static	6	12	19	25	31	
		6,960	4,290	3,340	3,210	3,110	3,030	22
		8,790	5,450	4,210	4,060	3,950	3,830	29
		10,660	6,600	5,090	4,910	4,770	4,630	36
		12,410	7,720	5,990	5,770	5,590	5,450	44
		14,200	8,790	6,840	6,590	6,460	6,220	51
	146 B (158 A2)	14,990	**9,350**	7,280	7,010	6,840	**6,600**	**54**
		9,350	5,840	5,490	5,290	5,140	4,990	20
		14,290	8,930	6,020	5,800	5,950	5,470	29
		15,590	9,750	6,570	6,330	6,500	5,980	35
		17,150	10,720	7,200	6,940	7,140	6,550	44
	147 B (164 A2)	17,710	**11,000**	7,460	7,190	7,390	**6,800**	**46**
		9,920	6,460	6,060	5,640	5,200	5,200	23
		12,130	7,900	7,170	6,670	6,170	6,170	29
		14,330	9,350	8,250	7,700	7,140	7,140	35
		17,640	11,510	9,920	9,240	8,610	8,610	44
		20,950	13,670	11,470	10,770	10,050	10,050	52
	164 A8 (164 B)	23,150	15,100	12,570	11,800	**11,000**	**11,000**	**58**

Excellent traction

EM-20 (NB 38) (L-2)

Tread pattern with excellent traction and self-cleaning properties. Tubeless tire for construction machinery.

Longer service life

EM-30 (NB 57) (L-3)

Tread pattern with excellent durability and puncture resistance. Suitable for loaders in hard operating conditions.

Universal application

EM-60 (L-3)

Tread pattern designed mainly for heavy construction site machines and other machinery operating in combined conditions. Very good self-cleaning properties.

Excellent traction

EM-70 (E-2/L-2)

Tread pattern with good traction and minimal wheel slip, excellent cushioning, dumping and self-cleaning properties.

Excellent traction

EM-80 (L-2/G-2)

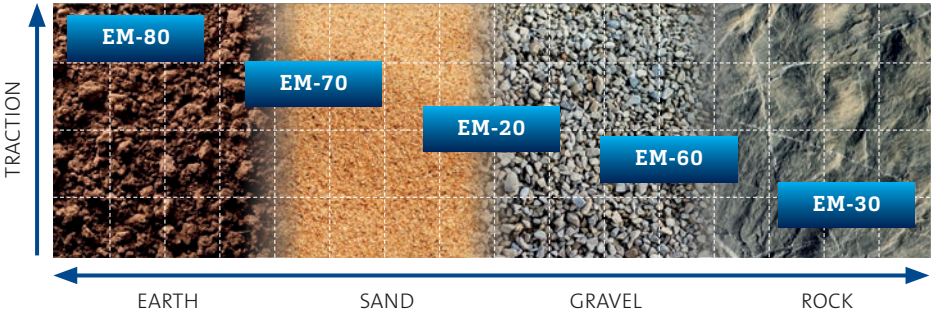
Excellent traction and self-cleaning perfomances. Suitable for telescopic handlers, graders and loaders.

EM bias series

Reliable tires for demanding earthmoving work

Tire size	EM-20	EM-30	EM-60	EM-70	EM-80
20 - 24 (22/70 - 24)				•	
15.5 - 25	•		•		•
17.5 - 25	•	•	•		
20.5 - 25	•	•	•		
23.5 - 25	•	•	•		
26.5 - 25		•	•		
26.5 - 29		•			
18.00 - 25	•				

Surface suitability chart – EM series



EM bias series

Technical data and load capacities

Tire size	Tread pattern Type	Rim (permitted)	New		Max. in service		Static loaded radius (inch)	Rolling circum-ference (inch)	Tread width (inch)	Tread depth (32nd)	Tire weight (lbs)	
			Outer dia-meter (inch)	Section width (inch)	Outer dia-meter (inch)	Section width (inch)						
20 - 24 (22/70 - 24)	EM-70 TL	16.00T-24 SDC	54.8	21.5	57.2	23.0	24.9	164.3	18.1	36	307 (12 PR)	
15.5 - 25	EM-20 TL	12.00/1.3-25 (13.00/1.4-25)	50.3	15.5	52.3	17.2	23.2	152.0	12.8	35	232 (12 PR)	
	EM-60 TL	12.00/1.3-25 (13.00/1.4-25)	50.3	15.5	52.3	17.2	23.2	152.0	14.0	35	225 (12 PR)	
15.5 - 25	EM-80 TL	12.00/1.3-25	50.3	15.5	52.3	17.2	21.7	148.8	13.9	32	220 (16 PR)	
17.5 - 25	EM-20 TL	14.00/1.5-25	53.1	17.5	55.4	19.5	24.4	160.1	14.6	38	274 (16 PR) 303 (22 PR)	
	EM-30 TL	14.00/1.5-25	53.1	17.5	55.4	19.5	24.4	160.1	14.6	38	287 (16 PR)	
	EM-60 TL	14.00/1.5-25	53.1	17.5	55.4	19.5	24.4	160.1	15.4	35	282 (16 PR) 311 (22 PR)	


EM-20 (NB 38)


EM-30 (NB 57)


EM-60


EM-70


EM-80

Tread pattern	Service description LI/SS	Ply rating PR	Tire load (lbs) at speed (mph)			Tire pressure (psi)
			Static	3	6	
EM-70	173 A2 (158 B)	12 PR	15,170	10,710	9,480	22
			16,580	11,710	10,360	25
			17,990	12,710	11,250	29
			19,230	13,580	12,020	33
			20,460	14,450	12,790	36
			21,700	15,320	13,560	40
			22,930	16,200	**14,300**	**44**
EM-20 EM-60	168 A2 (149 B)	12 PR	14,990	10,590	9,370	36
			15,790	11,150	9,870	40
			16,490	11,650	10,310	44
			17,200	12,150	10,750	47
			17,990	12,710	11,250	51
			18,870	13,330	11,800	54
			19,760	13,950	**12,300**	**58**
EM-80	174 A2 (151 A8)	16 PR	14,990	10,590	9,370	36
			15,790	11,150	9,870	40
			16,490	11,650	10,310	44
			17,200	12,150	10,750	47
			17,990	12,710	11,250	51
			18,870	13,330	11,800	54
			19,760	13,950	12,350	58
			20,410	14,410	12,760	62
			21,040	14,860	13,150	65
			21,700	15,320	13,560	69
			22,350	15,780	13,970	73
			22,980	16,230	14,370	76
			23,640	16,690	**14,800**	**80**
EM-20 EM-30 EM-60	177 A2 (158 B)	16 PR	22,580	15,950	14,110	54
			23,460	16,570	14,660	58
			24,340	17,190	15,210	62
			25,050	17,690	15,660	65
			25,750	18,190	**16,100**	**69**
EM-20 EM-60	188 A2 (171 B)	22 PR	32,020	22,610	20,010	94
			33,690	23,800	21,060	98
			35,280	24,920	**22,000**	**102**

EM bias series (continued)

Technical data and load capacities

Tire size	Tread pattern Type	Rim (permitted)	New		Max. in service		Static loaded radius (inch)	Rolling circum-ference (inch)	Tread width (inch)	Tread depth (32nd)	Tire weight (lbs)	
			Outer dia-meter (inch)	Section width (inch)	Outer dia-meter (inch)	Section width (inch)						
18.00 - 25 *	NB 38 TL	13.00/2.5-25 (15.00/2.5-25)	63.6	19.6	66.7	21.8	28.9	190.7	15.9	48	441 (28 PR)	
20.5 - 25	EM-20 TL	17.00/2.0-25 (17.00/1.7-25)	58.8	20.5	61.5	22.7	26.9	176.7	17.7	48	384 (16 PR)	
	EM-30 TL	17.00/2.0-25 (17.00/1.7-25)	58.8	20.5	61.5	22.7	26.9	176.7	17.7	48	421 (16 PR)	
	EM-60 TL	17.00/2.0-25 (17.00/1.7-25)	58.8	20.5	61.5	22.7	26.9	176.7	18.5	40	410 (16 PR) 411 (20 PR) 413 (24 PR)	
23.5 - 25	EM-20 TL	19.50/2.5-25	63.7	23.5	66.8	26.1	28.9	190.8	20.9	50	531 (20 PR) 575 (28 PR)	
	EM-30 TL	19.50/2.5-25	63.7	23.5	66.8	26.1	28.9	190.8	20.9	50	582 (20 PR) 630 (28 PR)	
	EM-60 TL	19.50/2.5-25	63.7	23.5	66.8	26.1	28.9	190.8	21.3	50	565 (20 PR) 610 (28 PR)	

Consult the tire manufacturer for information on other applications of L-2 and L-3 tires than on wheel loaders, grades, telescopic handlers or dozers.
* 18.00 - 25 40 PR EM-30 TL - do not use for container handlers and port applications


EM-20 (NB 38)


EM-30 (NB 57)


EM-60

Tread pattern	Service description LI/SS	Ply rating PR	Tire load (lbs) at speed (mph)			Tire pressure (psi)
			Static	3	6	
NB 38	199 A2 (180 B)	28 PR	38,100	26,910	23,810	62
			40,570	28,650	25,360	69
			41,630	29,400	26,020	73
			44,100	31,150	27,560	80
			45,160	31,890	28,220	83
			46,220	32,640	28,890	87
			47,980	33,890	**30,000**	**94**
EM-20 EM-30 EM-60	181 A2 (167 B)	16 PR	19,230	13,580	12,020	25
			20,820	14,700	13,010	29
			22,230	15,700	13,890	33
			23,640	16,690	14,770	36
			25,050	17,690	15,660	40
			26,460	18,690	16,540	44
			27,870	19,680	17,420	47
			29,110	20,560	**18,200**	**51**
EM-60	186 A2 (170 B)	20 PR	30,340	21,430	18,960	54
			31,400	22,180	19,620	58
			32,460	22,920	20,290	62
			33,520	23,670	**20,900**	**65**
	189 A2 (174 B)	24 PR	34,430	24,320	21,520	69
			35,350	24,970	22,090	73
			36,340	25,660	**22,700**	**76**
EM-20 EM-30 EM-60	191 A2 (177 B)	20 PR	28,220	19,930	17,640	33
			29,990	21,180	18,740	36
			31,750	22,420	19,850	40
			33,520	23,670	20,950	44
			35,280	24,920	22,050	47
			37,040	26,160	23,150	51
			38,460	27,160	**24,000**	**54**
	199 A2 (183 B)	28 PR	43,220	30,520	27,010	73
			45,510	32,140	28,440	76
			47,980	33,890	**30,000**	**80**

EM bias series (continued)

Technical data and load capacities

Tire size	Tread pattern Type	Rim (permitted)	New		Max. in service		Static loaded radius (inch)	Rolling circum-ference (inch)	Tread width (inch)	Tread depth (32nd)	Tire weight (lbs)	
			Outer dia-meter (inch)	Section width (inch)	Outer dia-meter (inch)	Section width (inch)						
26.5 - 25	EM-30 TL	22.00/3.0-25	69.0	26.5	72.5	29.4	31.2	206.1	23.8	57	817 (28 PR) 820 (32 PR)	
	EM-60 TL	22.00/3.0-25	69.0	26.5	72.5	29.4	31.2	206.1	23.8	57	781 (28 PR) 782 (32 PR)	
26.5 - 29	NB 57 TL	22.00/3.0-29 (24.00/3.0-29)	72.9	26.5	76.4	29.4	32.9	217.7	23.6	57	897 (26 PR)	

Variation in load capacity with speed dependence

Speed (mph)	0	1	3	6	9	12	16
Load capacity	+60 %	+30 %	+13 %	(0)	−7 %	−12 %	−15 %


EM-30
(NB 57)


EM-60

	Tread pattern	Service description LI/SS	Ply rating PR	Tire load (lbs) at speed (mph)			Tire pressure (psi)
				Static	3	6	
	EM-30 EM-60	203 A2 (188 B)	28 PR	44,810	31,640	28,000	47
				46,570	32,890	29,110	51
				47,980	33,890	29,990	54
				49,390	34,880	30,870	58
				51,160	36,130	31,970	62
				52,920	37,370	33,080	65
				54,680	38,620	**34,200**	**69**
		206 A2 (192 B)	32 PR	56,450	39,870	35,280	73
				58,210	41,110	36,380	76
				59,980	42,360	**37,500**	**80**
	NB 57	204 A2 (189 B)	26 PR	51,160	36,130	31,970	54
				52,920	37,370	33,080	58
				54,680	38,620	34,180	62
				56,450	39,870	**35,300**	**65**

Dimensions of “O” rings (inch)

Tire size	Inside diameter	Section diameter	Circumference
15.5 - 25 **17.5 - 25**	22.89 ± 0.08	0.26 ± 0.02	71.91 ± 0.24
18.0 - 25 **20.5 - 25** **23.5 - 25** **26.5 - 25**	22.38 ± 0.08	0.39 ± 0.02	70.29 ± 0.24
26.5 - 29	25.81 ± 0.08	0.39 ± 0.02	81.09 ± 0.24

Excellent traction

MPT-01

Tread pattern with very good traction and self-cleaning properties. Suitable above all for loader applications.

Universal application

MPT-02

Universal tread pattern for various applications with good traction and self-cleaning properties.

Universal application

MPT-03

Universal tread pattern for on- and off-road applications with good traction. Suitable for municipal, on-road service, agricultural and other special service vehicles.

Effective self-cleaning

MPT-04

Tread pattern with excellent treadwear and durability. Maximum traction capabilities in soft soil.

Enhanced lateral stability

MPT-06

Tread pattern with excellent traction properties and enhanced stability. Especially suitable for telescopic handlers and excavators.

Excellent traction

MPT-08

Robust tread pattern with good traction and perfect stability. Designed especially for excavators and telescopic handlers in hard terrain.

Light equipment bias tires
Proven tread patterns for lighter machinery

Tire size	MPT-01	MPT-02	MPT-03	MPT-04	MPT-06	MPT-08
280/80-18 (10.5-18)	•					
10.5-18		•				
340/80-18 (12.5-18)	•					
18-19.5		•	•		•	•
10.5-20				•		
340/80-20 (12.5-20)	•					
16/70-20 (405/70-20)		•				
405/70-20 (16/70-20)	•					
405/70-24 (16/70-24)	•					
405/70-24				•		

Light equipment series
Technical data and load capacities

Tire size	Tread pattern Type	Rim (permitted)	Tube Flap	New		Max. in service		Static loaded radius (inch)	Rolling circum-ference (inch)	Tread depth (inch)	Tire weight (lbs)	
				Outer dia-meter (inch)	Sec-tion width (inch)	Outer dia-meter (inch)	Sec-tion width (inch)					
280/80 - 18 (10.5 - 18)	MPT-01 TL	9×18	10-18	35.7	10.6	36.5	11.5	16.5	104.8	28	64 (130 B) 69 (130 B)	
10.5 - 18	MPT-02 TL	9×18	10-18	35.7	10.6	36.5	11.5	16.5	104.8	25	67 (10 PR)	
340/80 - 18 (12.5 - 18)	MPT-01 TL	11×18 (9×18)	12.5-18 12-18HS	39.0	12.8	40.1	13.8	17.9	114.7	32	97 (132 B) 98 (135 B) 99 (145 B)	
18 - 19.5	MPT-02 TL	14.00×19.5 (13.00×19.5)	–	42.6	18.0	44.2	19.5	19.3	123.7	38	152 (16 PR)	

Tread pattern	Service description LI/SS	Ply rating PR	Tire load (lbs) at speed (mph)								Tire pressure (psi)
			Static	6	12	19	25	31	37	40	
MPT-01	130 B		7,210	5,220	4,050	3,720	3,590	3,260			33
			7,500	5,430	4,210	3,870	3,740	3,400			36
			7,850	5,680	4,400	4,050	3,910	3,550			40
			8,280	6,000	4,650	4,270	4,120	3,750			44
			8,670	6,280	4,870	4,470	4,320	3,920			47
			8,990	6,510	5,040	4,640	4,480	4,070			51
			9,260	6,700	5,190	4,780	4,610	**4,180**			**54**
	140 B		9,990	7,230	5,600	5,140	4,960	4,520			65
			10,720	7,760	6,000	5,510	5,340	4,850			73
			11,440	8,290	6,420	5,890	5,690	5,180			80
			12,180	8,820	6,840	6,280	6,060	**5,520**			**87**
MPT-02	129 D	10 PR	7,770	5,130	4,040	3,580	3,300	3,230	3,140	3,110	33
			8,160	5,380	4,240	3,750	3,460	3,390	3,300	3,260	36
			8,600	5,680	4,470	3,960	3,650	3,580	3,470	3,440	40
			9,100	6,000	4,730	4,180	3,860	3,780	3,670	3,640	44
			9,370	6,190	4,870	4,310	3,970	3,900	3,790	3,750	47
			9,810	6,480	5,100	4,510	4,160	4,080	3,960	3,920	51
			10,200	6,730	5,300	4,690	4,320	4,240	4,120	**4,080**	**54**
MPT-01	132 B		7,360	5,330	4,130	3,800	3,660	3,330			25
			7,940	5,750	4,460	4,100	3,950	3,590			29
			8,480	6,140	4,760	4,370	4,220	3,840			33
			9,060	6,560	5,090	4,680	4,510	4,100			36
			9,450	6,840	5,300	4,880	4,710	4,280			40
			9,890	7,160	5,550	5,100	4,920	**4,400**			**44**
	135 B		10,260	7,430	5,760	5,290	5,110	4,640			47
			10,620	7,690	5,960	5,480	5,290	**4,800**			**51**
	145 B		11,800	8,540	6,620	6,090	5,870	5,340			58
			12,950	9,380	7,280	6,680	6,450	5,870			65
			14,130	10,230	7,930	7,280	7,030	**6,400**			**73**
MPT-02	156 B	16 PR	13,520	9,790	7,590	6,980	6,730	6,120			40
			14,500	10,500	8,130	7,480	7,220	6,560			44
			15,350	11,110	8,610	7,920	7,640	6,950			47
			16,200	11,730	9,090	8,360	8,060	7,330			51
			17,060	12,350	9,570	8,800	8,490	7,720			54
			17,910	12,970	10,050	9,240	8,910	8,100			58
			18,760	13,580	10,530	9,680	9,340	8,490			62
			19,490	14,110	10,940	10,050	9,700	**8,800**			**65**

Light equipment series (continued)

Technical data and load capacities

Tire size	Tread pattern Type	Rim (permitted)	Tube Flap	New		Max. in service		Static loaded radius (inch)	Rolling circum-ference (inch)	Tread depth (inch)	Tire weight (lbs)	
				Outer dia-meter (inch)	Sec-tion width (inch)	Outer dia-meter (inch)	Sec-tion width (inch)					
18 - 19.5	MPT-03 TL	14.00×19.5 (13.00×19.5)	–	42.6	18.0	44.2	19.5	19.3	123.7	30	162 (16 PR)	
18 - 19.5	MPT-06 TL	14.00×19.5 (13.00×19.5)	–	43.3	18.5	44.5	19.9	20.0	129.2	38	190 (16 PR) 190 (166 A8)	
	MPT-08 TL	14.00×19.5 (13.00×19.5)	–	43.3	18.5	44.5	19.9	20.0	129.2	42	204 (16 PR)	
10.5 - 20	MPT-04 TL	9×20 (9-20SDC)	10.5-20	37.6	10.6	38.5	11.5	17.3	110.7	26	72 (10 PR)	
340/80 - 20 (12.5 - 20)	MPT-01 TL	11×20 (11;12-20SDC)	–	41.0	12.8	42.0	13.8	18.9	120.6	32	109 (133 B) 109 (136 B)	
16/70 - 20 (405/70 - 20)	MPT-02 TL	13×20 (13-20SDC)	–	42.4	16.0	44.0	17.3	19.5	124.7	35	126 (14 PR)	

Tread pattern	Service description LI/SS	Ply rating PR	Tire load (lbs) at speed (mph)								Tire pressure (psi)
			Static	6	12	19	25	31	37	40	
MPT-03	156 D	16 PR	14,070	10,100	7,950	7,040	6,490	6,360	6,180	6,120	40
			15,090	10,820	8,530	7,540	6,950	6,820	6,630	6,560	44
			15,980	11,460	9,030	7,990	7,360	7,220	7,020	6,950	47
			16,860	12,100	9,530	8,430	7,770	7,620	7,400	7,330	51
			17,750	12,730	10,030	8,880	8,180	8,030	7,790	7,720	54
			18,640	13,370	10,530	9,320	8,590	8,430	8,180	8,100	58
			19,530	14,010	11,040	9,760	9,000	8,830	8,570	8,490	62
			20,290	14,550	11,470	10,140	9,350	9,170	8,910	**8,800**	**65**
MPT-06 MPT-08	160 A8	16 PR	8,200	6,880	6,140	5,820	5,290				25
			9,060	7,600	6,780	6,430	5,840				29
			9,740	8,170	7,290	6,910	6,280				33
			10,420	8,740	7,800	7,400	6,730				36
			11,110	9,320	8,310	7,880	7,170				40
			11,790	9,890	8,820	8,370	7,610				44
			12,410	10,410	9,280	8,800	8,000				47
			12,990	10,890	9,720	9,220	8,380				51
			13,590	11,390	10,170	9,640	8,760				54
			14,180	11,900	10,610	10,070	9,150				58
			14,780	12,400	11,060	10,490	9,540				62
			15,380	12,900	11,510	10,910	**9,900**				**65**
MPT-06	166 A8	–	16,230	13,620	12,150	11,520	10,470				69
			16,750	14,050	12,530	11,880	10,800				73
			17,430	14,620	13,040	12,370	11,250				76
			18,110	15,190	13,560	12,860	**11,700**				**87**
MPT-04	131 D	10 PR	7,300	5,240	4,130	3,650	3,370	3,300	3,210	3,180	33
			7,710	5,530	4,360	3,850	3,550	3,490	3,390	3,350	36
			8,110	5,820	4,590	4,060	3,740	3,670	3,560	3,530	40
			8,520	6,110	4,820	4,260	3,930	3,850	3,740	3,700	44
			8,980	6,440	5,070	4,490	4,140	4,060	3,940	3,900	47
			9,430	6,770	5,330	4,720	4,350	4,270	4,140	4,100	51
			9,890	7,090	5,590	4,940	4,560	4,470	4,340	**4,300**	**54**
MPT-01	133 B		9,790	7,090	5,500	5,050	4,880	4,430			40
			10,180	7,370	5,710	5,250	5,070	**4,540**			**44**
	136 B		10,620	7,690	5,960	5,480	5,290	4,810			47
			11,010	7,970	6,180	5,680	5,480	**4,940**			**51**
MPT-02	148 D	14 PR	11,820	8,480	6,680	5,910	5,450	5,340	5,190	5,140	33
			12,650	9,080	7,150	6,330	5,830	5,720	5,560	5,500	36
			14,300	10,260	8,080	7,150	6,590	6,470	6,280	6,220	44
			15,140	10,860	8,560	7,570	6,980	6,850	6,650	6,580	47
			15,980	11,460	9,030	7,990	7,360	7,220	7,020	**6,950**	**51**

Light equipment series (continued)
Technical data and load capacities

Tire size	Tread pattern Type	Rim (permitted)	Tube Flap	New		Max. in service		Static loaded radius (inch)	Rolling circum-ference (inch)	Tread depth (inch)	Tire weight (lbs)	
				Outer dia-meter (inch)	Sec-tion width (inch)	Outer dia-meter (inch)	Sec-tion width (inch)					
405/70 - 20 (16/70 - 20)	MPT-01 TL	13×20 (13-20SDC)	–	42.4	16.0	44.0	17.3	19.5	124.7	44	148 (14 PR) 148 (16 PR)	
405/70 - 24 (16/70 - 24)	MPT-01 TL	13×24 (13-24SDC)	16/70-24	46.4	16.0	48.0	17.3	21.5	136.5	44	176 (14 PR)	
405/70 - 24	MPT-04 TL	13×24 (13-24SDC)	16/70-24	46.4	16.0	48.0	17.3	21.5	136.5	38	176 (14 PR) 177 (156 B)	

Variation in load capacity with speed dependence

Speed (mph)		0	6	12	19	25	31	37	40
Tire speed category	A8	+55%	+30%	+16%	+10%	(0)	–	–	–
	B	+121%	+60%	+24%	+14%	+10%	(0)	–	–
	D	+130%	+65%	+30%	+15%	+6%	+4%	+1%	(0)

	Tread pattern	Service description LI/SS	Ply rating PR	Tire load (lbs) at speed (mph)								Tire pressure (psi)
				Static	6	12	19	25	31	37	40	
	MPT-01	149 B	14 PR	11,700	8,470	6,560	6,030	5,820	5,290			33
				12,550	9,080	7,040	6,470	6,250	5,680			36
				14,180	10,270	7,960	7,310	7,060	6,420			44
				15,010	10,870	8,420	7,740	7,470	6,790			47
				15,840	11,470	8,890	8,170	7,880	**7,150**			**51**
		152 B	16 PR	16,570	12,000	9,300	8,550	8,250	7,500			54
				17,300	12,520	9,710	8,920	8,610	**7,850**			**58**
	MPT-01	152 B	14 PR	16,320	11,820	9,160	8,420	8,130	7,390			54
				17,300	12,520	9,710	8,920	8,610	**7,850**			**58**
	MPT-04	152 B	14 PR	13,480	9,760	7,560	6,960	6,710	6,100			29
				13,950	10,100	7,830	7,190	6,950	6,310			36
				14,350	10,400	8,060	7,410	7,140	6,490			44
				15,480	11,200	8,690	7,980	7,710	7,000			51
				17,500	12,520	9,710	8,930	8,610	7,850			58
		156 B	–	19,490	14,110	10,940	10,050	9,700	**8,800**			**65**

Excellent traction

EM-22

New generation of tire for excavators. Modified tread pattern NB 38, giving excellent traction and self-cleaning properties. Wider by about 7 % in comparison with NB 38. Suitable above all for high power modern excavators.

Designed for rocky terrain

EM-23

Higher resistance to puncture and tread wear due to higher filling of tread area. Special tread pattern for stony and hard terrain.

Classic design

NB 38

Classic tread pattern profile for universal application with good traction and self-cleaning properties.

Excellent traction

NB 38 Extra ML

Wider tread area in comparison with NB 38 by about 23–25 %. Better stability due to wider tread area.

Universal application

EX-01

Non-directional tread pattern for excavators.

Reinforced sidewall specially designed for double mounting.

All-steel radial construction.

Excellent traction

TI-12

Tread pattern with excellent traction for flotation tires, designed above all for powered wheels of agricultural and industrial machines. Applicable for trailed wheels as well.

Excavator tires – wide range of patterns for various conditions

Tire size	EM-22	EM-23	NB 38	NB 38 Extra ML	TI-12	EX-01
8.25 - 20			•	•		
9.00 - 20	•		•	•		
10.00 - 20	•	•	•	•		
11.00 - 20	•		•			
500/45 - 20					•	
315/80 - 22.5						•
500/60 - 22.5					•	
600/40 - 22.5					•	

Surface suitability chart – excavator tires

	Crushed Rock	Gravel	Road	Sand	Loam	Mud
EM-23						
EX-01						
EM-22						
NB 38						
NB 38 Extra ML						
TI-12						

Variation in load capacity with speed dependence – TI-12

500/45 – 20, 500/60 – 22.5, 600/40 – 22.5

Speed (mph)	0	6	9	12	16	19	22	25	28	31
Load capacity	+65 %	+40 %	+33 %	+26 %	+19 %	+12 %	+5 %	(0)	–5 %	–10 %

Excavator

Technical data and load capacities

Tire size	Tread pattern Type	Rim (permitted)	Tube Flap	New		Max. in service		Static loaded radius (inch	Rolling circumference (inch)	Tread width (inch)	
				Outer diameter (inch)	Section width (inch)	Outer diameter (inch)	Section width (inch)				
8.25 - 20	NB 38 TT	6.5-20 (6.0;7.0-20)	8.25-20 20/1 eHD	38.2	9.2	39.1	10.0	18.2	115.8	7.3	
	NB 38 Extra ML TT	6.5-20 (6.0;7.0-20)	8.25-20 20/1 eHD	38.2	9.2	39.1	10.0	18.2	115.8	8.7	
9.00 - 20	NB 38 TT	7.0-20 (6.5;7.5-20)	9.00-20 20/1 eHD	39.9	10.1	40.9	10.9	19.0	121.0	7.5	
	NB 38 Extra ML TT	7.0-20 (6.5;7.5-20)	9.00-20 20/1 eHD	39.9	10.1	40.9	10.9	19.0	121.0	9.2	
	EM-22 TT	7.0-20 (6.5;7.5-20)	9.00-20 20/1 eHD	39.9	10.1	40.9	10.9	19.0	121.0	8.0	
10.00 - 20	NB 38 TT	7.5-20 (7.0;8.0-20)	10.00-20 20/2 eHD	41.4	10.8	42.4	11.7	19.6	125.3	8.5	
	NB 38 Extra ML TT	7.5-20 (7.0;8.0-20)	10.00-20 20/2 eHD	41.4	10.8	42.4	11.7	19.6	125.3	10.4	
	EM-22	7.5-20 (7.0;8.0-20)	10.00-20 20/2 eHD	41.4	10.8	42.4	11.7	19.6	125.3	9.1	
	EM-23	7.5-20 (7.0;8.0-20)	10.00-20 20/2 eHD	41.4	10.8	42.4	11.7	19.6	125.3	9.1	
11.00 - 20	NB 38 TT	8.0-20 (7.5-20)	11.00-20 20/2 eHD	42.6	11.5	43.7	12.4	20.1	129.0	9.5	
	EM-22 TT	8.0-20 (7.5-20)	11.00-20 20/2 eHD	42.6	11.5	43.7	12.4	20.1	129.0	10.0	
500/45 - 20 IND	TI-12 TL	16.00x20DC	–	38.6	19.3	40.6	20.9	17.5	114.7	–	
315/80 R 22.5	EX-01 TL	9.00 x 22.5	–	43.5	12.8	44.5	13.6	19.9	134.0	11.8	
500/60 - 22.5 IND	TI-12 TL	16.00x22.5DC	–	47.0	19.8	48.6	21.4	20.4	138.1	–	
600/40 - 22.5 IND	TI-12 TL	20.00x22.5DC	–	41.4	23.6	43.6	25.3	18.6	124.0	–	

Tread depth (32nd)	Tire weight (lbs)	Tread pattern	Service description LI/SS	Ply rating PR	Tire load (lbs) at speed (mph)						Tire pressure (psi)
					Static	6	12	19	25	31	
23	73	NB 38 NB 38 Extra ML	122 B	14 PR	6,230 6,420	4,980 5,140	4,160 4,280	3,400 3,500	3,210 3,300	3,120 3,210	87 94
23	76				6,620	5,290	4,410	3,610	3,410	**3,300**	**98**
25	88	NB 38 NB 38 Extra ML EM-22	140 B	14 PR	10,390 10,690	8,310 8,560	7,060 7,280	5,670 5,840	5,360 5,520	5,200 5,360	94 98
25	88				11,030	8,820	7,500	6,010	5,680	**5,520**	**102**
25	88										
25	106	NB 38 Extra ML	145 B	14 PR	14,070 14,500	10,130 10,440	8,450 8,700	6,870 7,080	6,500 6,690	6,310 **6,400**	87 **94**
28	114	NB 38 NB 38 Extra ML EM-22 EM-23	146 B	16 PR	14,970 15,440	10,690 11,030	8,560 8,820	6,990 7,210	6,610 6,810	6,420 **6,600**	105 **109**
25	106										
23	112										
32	113	NB 38 EM-22	148 B	16 PR	14,880 15,410	10,800 11,140	8,910 9,220	7,230 7,470	6,830 7,060	6,630 6,860	94 102
32	112				15,880	11,470	9,480	7,690	7,270	**6,950**	**105**
40	140	TI-12	160 A8	–	15,060 15,720 16,370	12,780 13,340 13,890	11,500 12,000 12,500	10,230 10,670 11,110	9,130 9,530 **9,900**	8,210 8,580 8,930	75 81 **87**
29	170	EX-01	154 A8	–	17,130 18,280 19,430	10,210 10,890 11,580	9,190 9,790 10,430	8,160 8,710 9,260	7,300 7,780 **8,250**	6,570 6,990 7,450	109 116 **123**
44	196	TI-12	152 A8	–	11,610 12,080 12,550 12,920	9,850 10,250 10,650 10,960	8,860 9,220 9,590 9,860	7,880 8,200 8,520 8,770	7,030 7,320 7,610 **7,850**	6,330 6,590 6,850 7,040	41 44 46 **52**
44	195	TI-12	169 A8	–	7,060 7,930 8,800 9,640 9,910 10,730 11,460 17,830 18,520 19,170 19,830 20,480 21,100	5,990 6,730 7,470 8,180 8,410 9,110 9,720 15,130 15,710 16,270 16,820 17,380 17,900	5,390 6,050 6,730 7,360 7,570 8,190 8,750 13,620 14,150 14,640 15,140 15,640 16,120	4,800 5,380 5,980 6,550 6,730 7,290 7,780 12,110 12,570 13,010 13,460 13,900 14,320	4,280 4,810 5,340 5,840 6,010 6,500 6,950 10,800 11,220 11,620 12,020 12,410 **12,800**	3,850 4,320 4,810 5,260 5,410 5,850 6,250 9,720 10,100 10,460 10,820 11,170 11,510	17 22 26 30 32 36 41 65 70 74 78 83 **87**

COMPACTOR (C-1)

Special tire for rollers. The same tread pattern for Compactor, Compactor Extra and Compactor Smooth.

Effective self-cleaning

TG-02 (R-4)

Tread pattern with good traction and self-cleaning properties.

Directional stability

UK 5 (R-3)

Tread pattern suitable for industrial and road construction equipment.

Directional stability

UK 10 (R-3)

Tread pattern suitable for industrial and road construction equipment.

Roller & Tractor Grader tires
Road work specialists

Tire size	COMP.	TG-02	UK 5	UK 10
9.5/65 - 15	•			
10.5/80 - 16	•			
11.00 - 20	•			
11.00 R 20	•			
13/80 R 20	•			
13.00 - 24		•		
14.00 - 24		•		
14.9 - 24 IND			•	
16.9 - 24 IND				•
23.1 - 26 IND			•	•

Roller & Tractor Grader

Technical data and load capacities

Tire size	Tread pattern Type	Rim (permitted)	Tube Flap	New		Max. in service		Static loaded radius (inch)	Rolling circum-ference (inch)	Mini-mal dual spacing (inch)	
				Outer diameter (inch)	Section width (inch)	Outer diameter (inch)	Section width (inch)				
9.5/65 - 15	COMPACTOR TL	15 × 7 JA	–	26.4	9.6	27.0	10.4	13.1	79.5	11.0	
10.5/80 - 16	COMPACTOR TL	16 × 8 LB	–	32.0	11.2	32.7	12.1	14.7	95.7	13.0	
11.00 - 20	COMPACTOR TT	8.0-20 (7.5-20)	11.00-20 20/2 eHD	41.0	11.4	41.8	12.4	19.4	124.1	13.2	
11.00 - 20	COMPACTOR EXTRA TT	8.0-20 (8.5-20)	11.00-20 20/2 eHD	41.9	11.6	42.8	12.4	19.9	127.1	13.4	
11.00 - 20	COMPACTOR SMOOTH TT	8.0-20 (8.5-20)	11.00-20 20/2 eHD	42.2	11.5	43.0	12.4	20.0	127.7	13.2	
11.00 R 20 *	COMPACTOR TT	8.0-20	11.00-20 20/2 eHD	42.1	11.5	43.2	12.5	–	126.5	13.9	
13/80 R 20 *	COMPACTOR TT	9.0-20	13/80-20	41.4	12.7	42.2	13.7	–	124.1	15.2	

* All-steel radial construction

	Tire weight (lbs)	Service description LI / SS	Ply rating PR	Tire load (lbs) at speed (mph)						Tire pressure (psi)
				Static	3	5	6	9	16	
	47		6 PR	3,750 4,340 4,630	2,650 3,090 3,310		2,340 2,710 **2,900**			36 44 **47**
	74		6 PR	4,760 5,730 6,620	3,400 4,080 4,720		2,980 3,570 **4,130**			29 36 **44**
	123	164 A3	16 PR			3,090 4,450 5,820 7,140 8,380 9,590 10,800 12,080 13,230		2,980 4,190 5,470 6,620 7,720 8,820 9,920 **11,000**		29 44 58 73 87 102 116 **131** 145
	125	170 A2	18 PR	17,600 18,240 18,720 19,210 19,850 20,320 21,170			11,000 11,400 11,700 12,010 12,400 12,700 **13,200**			91 95 100 105 110 116 **120**
	155	156 A5	18 PR	13,470 13,920 14,260 14,610 16,230			8,420 8,700 8,910 9,130 10,140		7,320 7,560 7,750 7,940 **8,800**	105 110 116 120 **145**
	137	157 A3	–				3,310 4,190 4,960 5,790 6,500 7,280 8,650 10,030 11,360	2,650 3,360 3,970 4,630 5,240 5,790 6,950 8,050 **9,100**		22 29 36 44 51 58 73 87 **102**
	135	164 A3	–				5,560 6,840 8,070 9,390 10,670 11,950 12,590 13,230	4,940 6,090 7,190 8,360 9,500 10,630 **11,000**		44 58 73 87 102 116 **123** 131

Roller & Tractor Grader (continued)

Technical data and load capacities

Tire size	Tread pattern Type	Rim (permitted)	Tube Flap	New		Max. in service		Static loaded radius (inch)	Rolling circum-ference (inch)	Tread depth (32nd)	
				Outer diameter (inch)	Section width (inch)	Outer diameter (inch)	Section width (inch)				
13.00 - 24	TG-02 TL	8.00TG SDC (9.00/1.5 (DC))	13.00-24	50.4	13.1	51.9	14.2	22.8	148.5	32	
14.00 - 24	TG-02 TL	8.00TG SDC (10.00 VA SDC)	14.00-24	53.1	14.3	54.8	15.4	24.0	156.6	32	

Tire size	Tread pattern Type	Rim (permitted)	New		Max. in service		Static loaded radius (inch)	Rolling circum-ference (inch)	Tread depth (32nd)	
			Outer diameter (inch)	Section width (inch)	Outer diameter (inch)	Section width (inch)				
14.9 - 24 IND	UK 5 TL	W13×24	49.3	15.6	50.6	16.7	22.9	146.2	23	
16.9 - 24 IND	UK 10 TL	W15L×24	51.5	17.4	52.6	18.3	22.8	146.9	28	
23.1 - 26 IND	UK 5 TL	DW20A×26	62.3	23.1	64.4	25.0	29.6	183.6	25	
	UK 10 TL	DW20A×26	62.3	23.1	64.4	25.0	29.6	183.6	38	


TG-02


UK 5


UK 10

Tire weight (lbs)	Service description LI / SS	Ply rating PR	Tire load (lbs) at speed (mph)					Tire pressure (psi)
			3	6	9	16	25	
166			7,720	6,810	6,090	5,040	4,540	29
			8,850	7,810	6,970	5,780	5,200	36
	143 A8	12 PR	10,210	9,010	8,050	6,670	**6,000**	**44**
201			11,130	9,820	8,780	7,270	6,550	47
			12,460	11,000	9,820	8,140	7,330	51
	153 A8	16 PR	13,680	12,070	10,780	8,930	**8,050**	**54**

Tire weight (lbs)	Tread pattern	Service descrip-tion LI / SS	Ply rating PR	Tire load (lbs) at speed (mph)							Tire pressure (psi)
				Static	6	6 Cyclic	12	19	25	31	
125 (8 PR)	UK 5			7,200	3,910	4,700	4,270	3,260	3,130	2,850	17
				7,860	4,270	5,130	4,660	3,550	3,420	3,110	20
				8,520	4,630	5,560	5,050	3,850	3,700	3,370	23
		128 A8	8 PR	9,130	4,960	5,950	5,410	4,130	**3,960**	3,610	**26**
145 (8 PR)	UK 10			9,130	4,960	5,950	4,760	4,240	3,970	3,620	19
				9,690	5,270	6,320	5,180	4,510	4,210	3,830	22
		129 B	8 PR	10,220	5,560	6,670	5,470	4,750	4,450	**4,080**	**25**
288 (10 PR) 288 (12 PR)	UK 5			17,340	9,430	11,310	8,220	7,840	7,540	6,860	17
				19,020	10,340	12,400	9,020	8,600	8,270	7,530	20
273 (12 PR)				20,740	11,280	13,530	9,830	9,380	9,020	8,200	23
		158 A8	10 PR	21,550	11,720	14,060	10,220	9,750	**9,350**	8,530	**25**
	UK 5 UK 10	162 A8	12 PR	24,090	13,100	15,710	11,420	10,890	**10,500**	9,540	**28**

CR-01

TRACTION	▬▬▬▬▬
SERVICE LIFE	▬▬▬▬▬
RESISTANCE	▬▬▬▬▬
SPEED	▬▬▬▬▬
COMFORT	▬▬▬▬▬

CR-02

TRACTION	▬▬▬▬
SERVICE LIFE	▬▬▬▬▬
RESISTANCE	▬▬▬▬▬
SPEED	▬▬▬▬▬
COMFORT	▬▬▬▬▬

CR-01 and CR-02 – new generation of crane tire for improved productivity

CR-01 – Open tread block design for excellent traction and easy self-cleaning in off-road applications. Deepest tread pattern in category.

CR-02 – Better operating economy due to improved rolling resistance compounding.

Better performance due to high maximum **speed up to 52 mph**.

Reduced fuel consumption thanks to all-steel construction with lower rolling resistance.

Improved operator comfort and **low noise emissions** in high speed road service.

Regroovable and suitable for retreading thanks to high durability of casing.

Homologated as M+S and meets requirements for **winter conditions**.

Fully homologated according to EU Directives 92/93, 2001/43 and 2005/11 (noise homologation).

CR series

Technical data and load capacities

Tire size	Tread pattern Type	Rim (permitted)	New		Max. in service		Static loaded radius (inch)	Rolling circum-ference (inch)	Tread depth (32nd)	Tire weight (lbs)	
			Outer dia-meter (inch)	Section width (inch)	Outer dia-meter (inch)	Section width (inch)					
385/95 R 25	CR-01 TL	9.50/1.7 CR-25 (10.00/1.5-25)	53.9	14.9	55.8	16.1	24.9	169.2	29	351	
445/95 R 25	CR-01 TL	11.00/1.7CR-25 (11.25/2.0-25) (11.00/1.7CRx25)	58.3	17.3	61.9	19.0	27.1	177.5	33	441	
	CR-02 TL	11.00/1.7CR-25 (11.25/2.0-25) (11.00/1.7CRx25)	58.0	17.3	61.0	18.7	27.0	177.5	29	397	
525/80 R 25	CR-01 TL	17.00/1.7CR-25 (17.00/2.0-25)	58.1	20.9	60.8	23.2	26.8	175.3	35	499	

Dimensions of “O” rings (inch)

Tire size	Inside diameter	Section diameter	Circumference
385/95 R 25	22.38 ± 0.08	0.39 ± 0.02	70.29 ± 0.24
445/95 R 25			
525/80 R 25			

CR-01 CR-02

	Service description LI / SS	Tire load (lbs) at speed (mph)												Tire pressure (psi)
		Static	3	6	12	19	25	31	37	44	50	53	56	
		21,500	18,060	15,820	12,900	10,750	9,890	9,640	9,460	9,030	8,600			73
		24,810	20,840	18,260	14,880	12,400	11,410	11,110	10,910	10,420	9,920			87
		27,560	23,150	20,290	16,540	13,780	12,680	12,350	12,130	11,580	11,030			102
		30,320	25,470	22,310	18,190	15,160	13,950	13,580	13,340	12,730	12,130			116
	170 F	33,080	27,780	24,340	19,850	16,540	15,210	14,820	14,550	13,890	**13,200**			**131**
		22,920	19,360	16,700	14,020	11,730	10,800	10,530	10,330	9,870	9,390	9,120		73
		26,740	22,610	19,530	16,380	13,700	12,610	12,280	12,060	11,510	10,960	10,630		87
		29,970	25,280	21,800	18,260	15,250	14,030	13,660	13,400	12,800	12,180	11,820		102
		33,430	28,210	24,330	20,410	17,070	15,710	15,300	15,030	14,350	13,660	13,250		116
	174 F	36,930	31,020	26,590	22,160	18,470	16,990	16,550	16,250	15,510	**14,800**	14,330		**131**
		29,550	24,810	20,070	18,520	14,770	13,560	13,230	13,010	12,460	11,800		11,140	73
		33,960	28,550	23,150	20,400	16,980	15,660	15,210	14,990	14,330	13,560		12,790	87
	176 F	39,140	32,960	26,680	23,480	19,620	18,080	17,640	17,310	16,540	**15,700**		14,770	**102**

Longer service life

MPT-20

TRACTION
SERVICE LIFE
RESISTANCE

Universal perennial tread pattern.

On- and off-road applications.

Municipal, military and other special vehicles.

Universal application

MPT-21

TRACTION
SERVICE LIFE
RESISTANCE

Non-directional tread pattern.

Good traction on and off the road.

Effective self-cleaning properties.

Excellent traction

MPT-22 / EM-02

TRACTION
SERVICE LIFE
RESISTANCE

Good traction properties.

Excellent durability.

Also suitable for agricultural applications.

Longer service life

MPT-23

TRACTION
SERVICE LIFE
RESISTANCE

Tread pattern for road applications.

Low noise emission.

Excellent service life.

Rail and road application

SRT2

TRACTION
SERVICE LIFE
RESISTANCE

Rail and Road applications.

Excellent durability.

Longer service life.

Multipurpose radial tires
Universal tires for on- and off-road use

Tire size	MPT-20	MPT-21	MPT-22	MPT-23	EM-02	SRT2
335/80 R 18 (12.5 R 18)					•	
335/80 R 20 (12.5 R 20)	•	•				
365/80 R 20 (14.5 R 20)	•	•				
405/70 R 20 (16/70 R 20)		•				
275/90 R 22.5						•
375/75 R 22.5				•		
405/70 R 24 (16/70 R 24)		•				
445/70 R 24 (17.5 L R 24)			•			

MPT radial series

Technical data and load capacities

Tire size	Tread pattern Type	Rim (permitted)	New		Max. in service		Static loaded radius (inch)	Rolling circum-ference (inch)	Tread depth (32nd)	Tire weight (lbs)	
			Outer diameter (inch)	Section width (inch)	Outer diameter (inch)	Section width (inch)					
335/80 R 18 (12.5 R 18)	EM-02 TL	11×18 (12×18)	39.1	13.4	40.4	13.9	17.7	117.4	28	103	
335/80 R 20 (12.5 R 20)	MPT-20 TL	11×20 (12×20)	41.1	13.4	42.4	13.9	18.9	123.4	22	132	
335/80 R 20 (12.5 R 20)	MPT-21 TL	11×20 (12×20)	41.1	13.4	42.4	13.9	18.7	123.4	25	130	
365/80 R 20 (14.5 R 20)	MPT-20 TL	11×20 (12×20)	43.0	14.5	44.4	14.7	19.5	130.7	24	158	
365/80 R 20 (14.5 R 20)	MPT-21 TL	11×20 (12×20)	43.0	14.2	44.4	14.7	19.4	129.1	25	143	
405/70 R 20 (16/70 R 20)	MPT-21 TL	13×20 (12×20)	42.4	16.0	43.7	16.7	19.4	127.2	25	152	

	Service description LI / SS	Tire load (lbs) at speed (mph)									Tire pressure (psi)
		Static	6	25	31	44	50	56	62	68	
		4,220	2,610	1,960	1,870	1,760	1,750	1,690			15
		6,040	3,730	2,780	2,660	2,510	2,470	2,410			23
		7,170	4,510	3,290	3,180	3,030	2,950	2,870			29
		8,300	5,230	3,780	3,680	3,520	3,420	3,320			35
		9,840	6,260	4,500	4,410	4,200	4,060	3,940			44
	132 G	11,030	7,030	5,070	4,940	4,720	4,590	**4,400**			**51**
		7,280	5,240	3,350	3,260	3,110	3,030	2,970	2,910	2,910	29
		9,920	7,140	4,560	4,450	4,250	4,130	4,050	3,970	3,970	44
		12,350	8,890	5,680	5,530	5,280	5,140	5,040	4,940	4,940	58
		14,470	10,420	6,660	6,480	6,190	6,020	5,900	5,790	5,790	73
		16,400	11,810	7,540	7,350	7,020	6,820	6,690	6,560	6,560	87
	147 K	16,950	12,200	7,800	7,590	7,260	7,050	6,920	6,780	**6,800**	**94**
		5,360	3,340	2,550	2,520	2,380	2,330	2,270	2,250		22
		6,750	4,070	3,190	3,120	2,970	2,900	2,820	2,790		29
		8,050	4,980	3,780	3,730	3,530	3,450	3,370	3,330		36
		9,290	5,630	4,380	4,280	4,070	3,970	3,870	3,830		44
		10,660	6,650	5,070	4,990	4,760	4,640	4,510	4,450		51
		11,770	7,340	5,610	5,520	5,250	5,130	5,010	4,930		58
	139 J	12,900	8,050	6,150	6,000	5,730	5,600	5,470	**5,360**		**65**
		7,970	5,530	3,660	3,570	3,410	3,310	3,250	3,080	3,080	29
		11,030	7,680	5,070	4,940	4,720	4,590	4,500	4,410	4,410	44
		14,200	9,750	6,530	6,360	6,070	5,900	5,790	5,680	5,680	58
		16,540	11,850	7,610	7,410	7,080	6,880	6,750	6,550	6,550	73
		19,020	13,760	8,750	8,520	8,140	7,910	7,760	7,610	7,610	87
	152 K	19,570	14,090	9,000	8,770	8,380	8,140	7,980	7,830	**7,850**	**91**
		6,170	3,850	2,780	2,730	2,610	2,550	2,490	2,440		22
		7,770	4,910	3,570	3,540	3,350	3,280	3,210	3,160		29
		10,750	6,810	4,970	4,900	4,630	4,540	4,440	4,380		44
		13,560	8,360	6,010	5,850	5,580	5,450	5,310	5,230		58
		16,430	10,130	7,330	7,200	6,820	6,670	6,500	6,430		73
		19,070	11,910	8,670	8,460	8,070	7,880	7,680	7,550		87
	152 J	19,730	12,350	9,000	8,770	8,380	8,180	7,980	**7,850**		**91**
		6,130	3,890	2,800	2,750	2,590	2,540	2,490	2,460		22
		9,420	6,040	4,370	4,280	4,040	3,960	3,890	3,830		36
		12,430	7,940	5,780	5,640	5,360	5,260	5,160	5,040		51
		15,500	9,930	7,290	7,170	6,770	6,640	6,520	6,410		65
		18,100	11,550	8,410	8,220	7,780	7,640	7,500	7,340		80
	152 J	19,730	12,350	9,000	8,770	8,380	8,180	7,980	**7,850**		**87**

MPT radial series (continued)

Technical data and load capacities

Tire size	Tread pattern Type	Rim (permitted)	New		Max. in service		Static loaded radius (inch)	Rolling circum-ference (inch)	Tread depth (32nd)	Tire weight (lbs)	
			Outer diameter (inch)	Section width (inch)	Outer diameter (inch)	Section width (inch)					
275/90 R 22.5	SRT TL	8.25×22.5	42.4	10.6	43.3	11.3	19.3	128.5	21	127	
375/75 R 22.5	MPT-23 TL	11.75×22.5	44.9	15.0	45.8	15.5	20.5	141.1	31	215	
405/70 R 24 (16/70 R 24)	MPT-21 TL	13.0×24 (13×24)	46.4	16.0	47.8	16.7	21.2	139.2	25	173	
445/70 R 24 (17.5L R 24)	MPT-22 TL	DW15L×24	49.4	18.3	50.9	18.6	22.6	148.3	48	199	

	Service description LI / SS	Tire load (lbs) at speed (mph)									Tire pressure (psi)
		Static	6	25	31	44	50	56	62	68	
		13,750	10,080	6,380	6,230	5,890	5,720	5,500			80
		14,800	10,820	6,840	6,700	6,340	6,150	5,920			87
		15,840	11,550	7,300	7,170	6,780	6,590	6,340			94
		16,810	12,330	9,180	7,630	7,060	6,990	6,730			102
		17,810	13,090	8,290	8,100	7,620	7,410	7,120			109
		18,960	13,780	8,780	8,560	8,110	7,890	7,590			116
	153 G (163 A5)	20,120	14,490	9,250	9,010	8,610	8,370	**8,050**			**123**
		12,350	8,890	5,680	5,530	5,290	5,140	4,940			44
		16,840	12,120	7,740	7,540	7,210	7,000	6,740			58
		19,370	13,950	8,910	8,680	8,290	8,060	7,750			73
		22,990	16,550	10,570	10,300	9,830	9,560	9,190			87
		25,270	18,190	11,620	11,320	10,820	10,510	10,110			102
	165 G	28,390	20,440	13,050	12,710	12,150	11,810	**11,400**			**116**
		7,110	4,390	3,160	3,040	2,800	2,770	2,750	2,710		22
		9,010	5,570	4,010	3,860	3,680	3,590	3,490	3,450		29
		10,850	6,690	4,850	4,640	4,450	4,340	4,220	4,150		36
		12,680	7,790	5,680	5,480	5,230	5,100	4,970	4,900		44
		14,430	8,960	6,480	6,270	5,990	5,840	5,700	5,600		51
		16,290	10,040	7,310	7,080	6,740	6,570	6,410	6,320		58
		18,000	11,150	8,100	7,880	7,470	7,300	7,120	7,030		65
	152 J	19,730	12,350	9,000	8,770	8,380	8,180	7,980	**7,850**		**73**
		6,620	4,740	3,040	2,960	2,830	2,750	2,650			15
		10,640	7,650	4,900	4,770	4,550	4,430	4,260			29
		14,610	10,520	6,730	6,540	6,250	6,080	5,840			44
		16,590	11,970	7,650	7,430	7,100	6,900	6,640			51
		18,630	13,410	8,560	8,350	7,970	7,750	7,450			58
	151 G	19,020	13,690	8,750	8,520	8,140	7,910	**7,600**			**59**

Universal application

MPT-03

Universal tread pattern for on- and off-road applications with good traction. Suitable for municipal, on-road service, agricultural and other special service vehicles.

Road application

MPT-05

Universal heavy-duty tread pattern for on- and off-road applications. Suitable mainly for municipal, military, on-road service and other special service vehicles.

Universal application

MPT-07

Non-directional tread pattern, suitable for various special service vehicles.

Multipurpose bias
Proven tread patterns for a wide range of applications

Tire size	MPT-03	MPT-05	MPT-07
12.5 - 18	•		
18 - 19.5	•		
10.5 - 20		•	•
12.5 - 20	•	•	
14.5 - 20	•	•	
16/70 - 20		•	
405/70 - 20	•		

MPT bias series

Technical data and load capacities

Tire size	Tread pattern Type	Rim (permitted)	Tube Flap	New		Max. in service		Static loaded radius (inch)	Rolling circum-ference (inch)	Tread depth (32nd)	Tire weight (lbs)
				Outer dia-meter (inch)	Section width (inch)	Outer dia-meter (inch)	Section width (inch)				
12.5 - 18	MPT-03 TL	11×18 (9×18)	12.5-18 12-18 HS	39.0	12.8	40.1	13.8	17.9	114.7	25	99 (10 PR) 99 (12 PR) 99 (16 PR)
10.5 - 20	MPT-05 TL	9×20 (9-20SDC)	10.5-20	37.6	10.6	38.5	11.5	17.3	110.7	20	66
	MPT-07 TT	9×20 (9-20SDC)	10.5-20	37.6	10.6	38.5	11.5	17.3	110.7	23	67
12.5 - 20	MPT-03 TL	11×20 (11;12-20SDC)	–	41.0	12.8	42.0	13.8	18.9	120.6	25	106 (10 PR) 107 (12 PR) 109 (16 PR)
12.5 - 20	MPT-05 TL	11×20 (11;12-20SDC)	12.5-20 (11-20)	41.0	12.8	42.0	13.8	18.9	120.6	23	107
14.5 - 20	MPT-03 TL	11×20 (11;12-20SDC)	14.5-20 (12.5-20)	43.1	14.0	44.3	15.1	19.8	126.9	30	124
	MPT-05 TL	11×20 (11;12-20SDC)	14.5-20 (12.5-20)	43.1	14.0	44.3	15.1	19.8	126.9	25	122
16/70 - 20 (405/70 - 20)	MPT-05 TL	13×20 (13-20SDC)	16-20	42.4	16.0	44.0	17.3	19.5	124.7	28	128
405/70 - 20 (16/70 - 20)	MPT-03 TL	13×20 (13-20SDC)	–	42.4	16.0	44.0	17.3	19.5	124.7	38	137

Variation in load capacity with speed dependence

Speed (mph)	0	6	12	19	25	31	37	40	44	50	56
Load capacity	+150%	+80%	+50%	+25%	+15%	+12%	+10%	+8.5%	+7%	+4%	(0)


MPT-03


MPT-05


MPT-07

Tread pattern	Service description LI/SS	Ply rating PR	Tire load (lbs) at speed (mph)											Tire pressure (psi)
			Static	6	12	19	25	31	37	40	43	50	56	
			7,470	5,380	4,480	3,730	3,440	3,350	3,290	3,240	3,200	3,110	2,990	25
			7,980	5,740	4,790	3,990	3,670	3,570	3,510	3,460	3,410	3,320	3,190	29
			8,540	6,150	5,120	4,270	3,930	3,820	3,760	3,700	3,650	3,550	3,410	33
			9,090	6,550	5,460	4,550	4,180	4,070	4,000	3,950	3,890	3,780	3,640	36
			9,550	6,880	5,730	4,780	4,390	4,280	4,200	4,150	4,090	3,970	3,820	40
MPT-03	128 G	10 PR	9,920	7,140	5,950	4,960	4,560	4,450	4,370	4,300	4,250	4,130	**3,960**	**44**
			10,360	7,460	6,220	5,180	4,770	4,640	4,560	4,500	4,440	4,310	4,150	47
	131 G	12 PR	10,750	7,740	6,450	5,370	4,940	4,820	4,730	4,670	4,600	4,470	**4,300**	**51**
			11,150	8,030	6,690	5,570	5,130	4,990	4,900	4,840	4,770	4,640	4,460	54
			11,550	8,320	6,930	5,770	5,310	5,170	5,080	5,010	4,940	4,800	4,620	58
			11,950	8,600	7,170	5,980	5,500	5,350	5,260	5,190	5,120	4,970	4,780	62
	136 G	16 PR	12,350	8,890	7,410	6,170	5,680	5,530	5,430	5,360	5,280	5,140	**4,940**	**65**
			7,330	5,280	4,400	3,670	3,370	3,280	3,230	3,180	3,140	3,050	2,930	33
			7,720	5,560	4,630	3,860	3,550	3,460	3,400	3,350	3,300	3,210	3,090	36
MPT-05			8,130	5,850	4,880	4,070	3,740	3,640	3,580	3,530	3,480	3,380	3,250	40
MPT-07			8,540	6,150	5,130	4,270	3,930	3,830	3,760	3,710	3,660	3,550	3,420	44
			9,010	6,490	5,410	4,510	4,150	4,040	3,970	3,910	3,860	3,750	3,610	47
			9,450	6,810	5,670	4,730	4,350	4,240	4,160	4,100	4,050	3,930	3,780	51
	128 G	10 PR	9,920	7,140	5,950	4,960	4,560	4,450	4,370	4,310	4,250	4,130	**3,960**	**54**
	129 G	10 PR	9,950	7,160	5,970	4,980	4,580	4,460	4,380	4,320	4,260	4,140	**4,080**	**44**
			10,470	7,540	6,280	5,240	4,820	4,690	4,610	4,550	4,480	4,360	4,190	47
MPT-03	132 G	12 PR	11,030	7,940	6,620	5,510	5,070	4,940	4,850	4,780	4,720	4,590	**4,400**	**51**
			12,680	9,260	7,610	6,240	5,690	5,510						58
			13,300	9,700	7,980	6,530	5,950	5,780						62
	143 B	16 PR	13,830	10,100	8,290	6,790	6,200	**6,000**						**65**
			9,950	7,160	5,970	4,980	4,580	4,460	4,380	4,320	4,260	4,140	3,980	44
MPT-05			10,470	7,540	6,280	5,240	4,820	4,690	4,610	4,550	4,480	4,360	4,190	47
	132 G	12 PR	11,030	7,940	6,620	5,510	5,070	4,940	4,850	4,780	4,720	4,590	**4,400**	**51**
			9,010	6,490	5,410	4,510	4,150	4,040	3,970	3,910	3,860	3,750	3,610	25
			9,650	6,950	5,790	4,820	4,440	4,320	4,240	4,190	4,130	4,010	3,860	29
MPT-03			10,360	7,460	6,220	5,180	4,770	4,640	4,560	4,500	4,440	4,310	4,150	33
MPT-05			11,030	7,940	6,620	5,510	5,070	4,940	4,850	4,780	4,720	4,590	4,410	36
			11,690	8,410	7,010	5,840	5,380	5,240	5,140	5,070	5,000	4,860	4,670	40
	136 G	12 PR	12,350	8,890	7,410	6,170	5,680	5,530	5,430	5,360	5,280	5,140	**4,940**	**44**
			14,440	10,400	8,670	7,220	6,640	6,470	6,350	6,270	6,180	6,010	5,780	44
MPT-05			15,190	10,930	9,110	7,590	6,990	6,800	6,680	6,590	6,500	6,320	6,070	47
	145 G	14 PR	15,990	11,510	9,590	7,990	7,350	7,160	7,030	6,940	6,840	6,650	**6,400**	**51**
			14,440	10,400	8,670	7,220	6,640	6,470	6,350	6,270	6,180	6,010	5,780	44
MPT-03			15,190	10,930	9,110	7,590	6,990	6,800	6,680	6,590	6,500	6,320	6,070	47
	145 G	14 PR	15,990	11,510	9,590	7,990	7,350	7,160	7,030	6,940	6,840	6,650	**6,400**	**51**

Longer service life

TI-20

TRACTION	■■■■■
SERVICE LIFE	■■■■□
RESISTANCE	■■■■□
SELF-CLEANING	■■■■■

Excellent traction

TI-22

TRACTION	■■■■□
SERVICE LIFE	■■■■■
RESISTANCE	■■■■□
SELF-CLEANING	■■■■■

TI series – universal radial tires for industrial and agricultural applications

TI-20

New generation of tread pattern.

Suitable for **construction, road and agricultural work**.

Priority to traction.

Designed for **muddy conditions**.

Very good resistance to damage.

Tire size	TI-20	TI-22
340/80 R 18	•	
460/70 R 24 IND (17.5L R 24)		•
480/80 R 26 IND	•	
440/80 R 28 IND	•	

TI-22

Good traction and effective self-cleaning properties.

Excellent durability.

Suitable for backhoe loaders, wheeled loaders, telescopic handlers and similar vehicles for light service.

Also suitable for agricultural applications.

TI radial series

Technical data and load capacities

Tire size	Tread pattern Type	Rim (permitted)	New		Max. in service		Static loaded radius (inch)	Rolling circum-ference (inch)	Tread depth (32nd)	
			Outer diameter (inch)	Section width (inch)	Outer diameter (inch)	Section width (inch)				
340/80 R 18 IND	TI-20 TL	11×18 (12×18.W10×18. W11×18)	39.4	13.5	40.3	14.2	17.7	117.9	38	
460/70 R 24 IND (17.5L R 24)	TI-22 TL	DW 14 L×24 (DW15L. DW16L. 14.16.W14L)	49.4	17.9	50.4	18.8	22.0	145.8	48	
480/80 R 26 IND	TI-20 TL	DW 15 L×26 (DW16L×26)	56.3	19.7	57.4	20.7	25.2	167.5	43	
440/80 R 28 IND	TI-20 TL	DW 14 L×28 (DW15L×28)	55.8	17.4	56.9	18.4	25.2	166.9	43	

Variation in load capacity with speed dependence

Speed (mph)	0	3	6	9	12	16	19	22	25	28	31
Constant load	+ 130%	+ 45%	+ 25%	+ 13%	+ 9%	+ 6%	+ 4%	+ 2%	(0)	- 4%	- 9%
Cyclic application	+ 130%	+ 67%*	+ 50%**	+ 34%	+ 23%	+ 11%	+ 7%	+ 3%	(0)	- 4%	- 9%

* One way distance 500 ft
** One way distance 2,000 ft


TI-20


TI-22

	Tire weight (lbs)	Service description LI / SS	Tire load (lbs) at speed (mph)							Tire pressure (psi)
			Static	w6	6 Cyclic	12	19	25	31	
			8,290	4,510	5,400	3,920	3,750	3,610	3,460	29
			9,680	5,270	6,320	4,590	4,380	4,210	3,840	36
	121		11,060	6,010	7,210	5,240	5,010	4,810	4,380	44
			12,430	6,750	8,100	5,890	5,620	5,400	4,920	51
		143 A8	13,810	7,510	9,020	6,550	6,250	**6,000**	5,470	**58**
			13,250	7,200	8,640	6,270	5,990	5,760	5,240	29
			15,480	8,410	10,100	7,340	7,000	6,740	6,130	36
	193		17,720	9,620	11,550	8,390	8,020	7,710	7,010	44
			19,960	10,850	13,010	9,460	9,020	8,680	7,890	51
		159 A8	22,190	12,060	14,480	10,520	10,030	**9,650**	8,780	**58**
			15,590	8,480	10,170	7,390	7,050	6,780	6,170	29
			16,990	9,230	11,080	8,050	7,680	7,390	6,720	32
			18,000	9,780	11,740	8,530	8,140	7,830	7,120	35
	272		19,020	10,340	12,400	9,010	8,600	8,270	7,520	38
			20,290	11,030	13,230	9,610	9,170	8,820	8,030	41
			21,550	11,710	14,060	10,210	9,750	9,370	8,530	44
		160 A8	22,820	12,400	14,880	10,820	10,320	**9,900**	9,030	**46**
			14,200	7,720	9,260	6,730	6,420	6,170	5,620	29
			15,210	8,270	9,920	7,210	6,880	6,620	6,020	32
			15,980	8,680	10,420	7,570	7,220	6,950	6,320	35
	237		17,500	9,510	11,410	8,290	7,910	7,610	6,920	38
			18,510	10,060	12,070	8,770	8,370	8,050	7,320	41
			19,650	10,680	12,820	9,310	8,890	8,540	7,780	44
		156 A8	20,290	11,030	13,230	9,610	9,170	**8,800**	8,030	**46**

TI-02 (R-4)

Classic version of tread pattern for industrial use.

Designed for 4×4

TI-04 (R-4)

Industrial tread pattern for use on backhoe loaders with 4×4 axles.

Excellent traction

TI-05 (R-4)

Robust industrial tread pattern with excellent traction properties.

Longer service life

TI-06 (R-4)

Robust industrial pattern with higher resistance to puncture and tread wear.

Excellent traction

TI-09 (R-4)

Tread pattern with very good traction and self-cleaning properties.

Excellent traction

GRIP 'N' RIDE (R-4)

Tread pattern suitable for backhoe loaders and other types of loaders with excellent self-cleaning properties and reinforced sidewall.

TG-01 (R-4)

Robust industrial pattern with higher resistance to puncture and tread wear.

Effective self-cleaning

MPT-04

Tread pattern with excellent treadwear and durability. Maximum traction capabilities in soft soil.

Construction applications bias
Robust and durable tires for construction and road work

Enhanced lateral stability

MPT-06

Tread pattern with excellent traction properties and enhanced stability. Especially suitable for telescopic handlers and excavators.

TR-09 (R-4)

Tread pattern with good traction.

Tire size	TI-02	TI-04	TI-05	TI-06	TI-09	G'n'R	TG-01	MPT-04	MPT-06	TR-09
320/80 - 18 (12.5/80 - 18)										•
340/80 - 18 (12.5 - 18)								•		
280/80 - 20 (10.5 - 20)								•		
340/80 - 20 (12.5 - 20)								•		
360/85 - 20 (14.5 - 20)								•		
400/70 - 20 (16.0/70 - 20)								•		
400/75 - 20 (16.0/70 - 20)										•
480/65 - 22.5 (18 - 22.5)									•	
400/70 - 24								•		
400/80 - 24 (15.5/80 - 24)			•							
16.9 - 24		•					•			
17.5L - 24	•									
460/70 - 24 (17.5L - 24)			•							
19.5L - 24			•			•				
500/70 - 24 (19.5L - 24)			•							
21L - 24						•				
18.4 - 26				•						
16.9 - 28				•			•			
440/80 - 30 (16.9 - 30)					•					

Construction Applications Bias Tires

Technical data and load capacities

Tire size	Tread pattern Type	Rim (permitted)	New		Max. in service		Static loaded radius (inch)	Rolling circum-ference (inch)	Tread depth (32nd)	Tire weight (lbs)	
			Outer diameter (inch)	Section width (inch)	Outer diameter (inch)	Section width (inch)					
320/80 - 18 IND (12.5/80 - 18)	TR-09 TL	11×18 (9×18)	38.9	12.1	40.0	12.7	18.3	114.3	32	98	
400/75 - 20 IND (16.0/70 - 20)	TR-09 TL	13 SDC-20	43.1	16.1	44.3	17.7	19.9	126.9	34	150	

Variation in load capacity with speed dependence – front tires

Speed (mph)			0	6	9	12	16	19	22	25	28	31
Free rolling	A8 (25 mph)	LLV	+ 65%	+ 40%	+ 33%	+ 26%	+ 19%	+ 12%	+ 5%	(0)	- 5%	- 10%
		HLV	+ 98%	+ 68%	+ 60%	+ 51%	+ 43%	+ 34%	+ 26%	+ 20%	+ 14%	+ 8%
Drive wheels	A8 (25 mph)	LLV	+ 135%	+ 40%	+ 33%	+ 26%	+ 19%	+ 12%	+ 5%	(0)	- 5%	- 10%
		HLV	+ 193%	+ 100%	+ 90%	+ 80%	+ 70%	+ 60%	+ 50%	+ 43%	+ 36%	+ 29%

LLV = Low Load Variation
HLV = High Load Variation is where the tire load varies by a factor of 2 or more between loaded and unloaded conditions. The inflation pressure for HLV applications must be increased, consult tire manufacturer. In the case of HLV, the maximum distance should not exceed 0.6 miles. For a longer distance, consult tire manufacturer.

TR-09

	Service description LI / SS	Ply rating PR	Tire load (lbs) – free rolling / drive wheel – at speed (mph)					Tire pressure (psi)
			6	12	19	25	31	
			5,900 / 4,170	5,300 / 3,750	4,720 / 3,330	4,210 / 2,980	3,790 / 2,680	36
			6,320 / 4,440	5,680 / 4,000	5,050 / 3,560	4,510 / 3,180	4,060 / 2,860	41
			6,730 / 4,780	6,050 / 4,310	5,380 / 3,830	4,810 / 3,420	4,320 / 3,080	45
			7,060 / 4,930	6,350 / 4,430	5,640 / 3,950	5,040 / 3,520	4,530 / 3,160	49
	138/125 A8	12 PR	7,290 / 5,090	6,560 / 4,590	5,840 / 4,080	**5,200 / 3,640**	4,690 / 3,270	**54**
			7,560 / 5,420	6,810 / 4,870	6,050 / 4,330	5,400 / 3,870	4,860 / 3,480	29
			8,410 / 6,020	7,570 / 5,410	6,730 / 4,820	6,010 / 4,300	5,400 / 3,870	36
			9,040 / 6,630	8,140 / 5,950	7,230 / 5,290	6,460 / 4,730	5,820 / 4,260	44
	150/138 A8	14 PR	10,340 / 7,290	9,310 / 6,560	8,270 / 5,830	**7,400 / 5,200**	6,650 / 4,690	**51**

Construction Applications Bias Tires (continued)

Technical data and load capacities

Tire size	Tread pattern Type	Rim (permitted)	Tube Flap	New		Max. in service		Static loaded radius (inch)	Rolling circumference (inch)	Tread depth (32nd)	Tire weight (lbs)	
				Outer diameter (inch)	Section width (inch)	Outer diameter (inch)	Section width (inch)					
340/80 - 18 IND (12.5 - 18)	MPT-04 TL	11×18 (9×18)	12.5-18 12-18 HS	39.0	12.8	40.1	13.8	17.9	114.7	32	108 (10 PR) 109 (12 PR) 109 (16 PR)	
280/80 - 20 IND (10.5 - 20)	MPT-04 TL	9×20 (9-20SDC)	10.5 - 20	37.6	10.6	38.5	11.5	17.3	115.8	26	72 (10 PR)	
340/80 - 20 IND (12.5 - 20)	MPT-04 TL	11×20 (11;12-20SDC)	12.5-20 (11-20)	41.0	12.8	42.0	13.8	18.9	120.6	28	114 (10 PR) 115 (12 PR)	
360/85-20 IND (14.5 - 20)	MPT-04 TL	11×20 (11;12-20SDC)	14.5-20 (12.5-20)	43.1	14.0	44.3	15.1	19.8	126.9	32	125 (12 PR) 126 (14 PR)	
400/70-20 IND (16.0/70 - 20)	MPT-04 TL	13×20 (13-20SDC)	–	42.4	16.0	44.0	17.3	19.5	124.7	33	143 (14 PR)	
480/65-22.5 IND (18 - 22.5)	MPT-06 TL	14.00×22.5	–	45.9	18.1	47.2	19.5	21.4	137.1	33	194 (16 PR)	

Tread pattern	Service description LI/SS	Ply rating PR	Tire load (lbs) at speed (mph)								Tire pressure (psi)
			Static	6	12	19	25	31	37	40	
			7,460	5,350	4,210	3,730	3,440	3,370	3,270	3,240	25
			7,960	5,710	4,500	3,980	3,670	3,600	3,500	3,460	29
			8,520	6,110	4,820	4,260	3,930	3,850	3,740	3,700	33
			9,080	6,510	5,130	4,540	4,180	4,100	3,990	3,950	36
			9,530	6,840	5,390	4,770	4,390	4,310	4,190	4,150	40
MPT-04	131 D	10 PR	9,890	7,090	5,590	4,940	4,560	4,470	4,340	**4,300**	**44**
			10,350	7,420	5,850	5,170	4,770	4,680	4,540	4,500	47
	134 D	12 PR	10,750	7,710	6,080	5,380	4,960	4,860	4,720	**4,680**	**51**
			13,390	9,600	7,570	6,690	6,170	6,050	5,880	5,820	65
			13,950	10,010	7,880	6,970	6,430	6,310	6,120	6,060	69
	144 D	16 PR	14,200	10,190	8,030	7,100	6,540	6,420	6,240	**6,150**	**73**
			7,300	5,240	4,120	3,650	3,360	3,310	3,210	3,180	33
			7,710	5,530	4,350	3,860	3,550	3,480	3,380	3,350	36
			8,110	5,820	4,590	4,060	3,740	3,670	3,560	3,530	40
MPT-04			8,520	6,110	4,820	4,260	3,920	3,860	3,740	3,700	44
			8,970	6,440	5,070	4,490	4,130	4,060	3,950	3,900	47
			9,440	6,770	5,340	4,720	4,340	4,270	4,150	4,100	51
	133 A8 (131 D)	10 PR	9,890	7,100	5,590	4,950	**4,540**	4,480	4,340	**4,300**	**54**
			9,790	7,020	5,530	4,890	4,510	4,430	4,300	4,260	40
MPT-04	132 D	10 PR	10,140	7,280	5,730	5,070	4,670	4,590	4,450	**4,400**	**44**
			10,600	7,600	5,990	5,300	4,880	4,790	4,650	4,610	47
	135 D	12 PR	11,060	7,930	6,250	5,530	5,100	5,000	4,850	**4,800**	**51**
			10,300	7,390	5,820	5,150	4,740	4,660	4,520	4,480	33
			11,010	7,900	6,220	5,500	5,070	4,980	4,830	4,780	36
MPT-04			11,660	8,370	6,590	5,830	5,380	5,270	5,120	5,070	40
	139 D	12 PR	12,320	8,840	6,970	6,160	5,680	5,570	5,410	5,360	44
			12,880	9,240	7,280	6,440	5,940	5,820	5,660	5,600	47
	142 D	14 PR	13,440	9,640	7,600	6,720	6,190	6,080	5,900	**5,840**	**51**
			11,820	8,480	6,680	5,910	5,450	5,340	5,190	5,140	33
			12,650	9,080	7,150	6,330	5,830	5,720	5,560	5,500	36
MPT-04			14,300	10,260	8,080	7,150	6,590	6,470	6,280	6,220	44
			15,140	10,860	8,560	7,570	6,980	6,850	6,650	6,580	47
	148 D	14 PR	15,980	11,460	9,030	7,990	7,360	7,220	7,020	**6,950**	**51**
			9,060	7,600	6,780	6,430	5,840				25
			9,910	8,310	7,420	7,030	6,390				29
			10,680	8,960	7,990	7,580	6,890				33
			11,450	9,600	8,570	8,130	7,390				36
			12,130	10,180	9,080	8,610	7,830				40
MPT-06			12,820	10,750	9,590	9,100	8,270				44
			13,500	11,320	10,100	9,580	8,710				47
			14,180	11,900	10,610	10,070	9,150				51
			14,780	12,400	11,060	10,490	9,540				54
			15,380	12,900	11,510	10,910	9,920				58
			15,980	13,400	11,960	11,340	10,310				62
	163 A8	16 PR	16,580	13,900	12,410	11,760	**10,700**				**65**

Construction Applications Bias Tires (continued)

Technical data and load capacities

Tire size	Tread pattern Type	Rim (permitted)	Tube Flap	New		Max. in service		Static loaded radius (inch)	Rolling circumference (inch)	Tread depth (32nd)	Tire weight (lbs)	
				Outer diameter (inch)	Section width (inch)	Outer diameter (inch)	Section width (inch)					
400/70 - 24 IND	MPT-04 TL	13×24 (13-24SDC)	16/70-24	46.4	16.0	48.0	17.3	21.5	136.5	38	176 (14 PR) 177 (156 B)	

Tire size	Tread pattern Type	Rim (permitted)	New		Max. in service		Static loaded radius (inch)	Rolling circumference (inch)	Tread depth (32nd)	Tire weight (lbs)	
			Outer diameter (inch)	Section width (inch)	Outer diameter (inch)	Section width (inch)					
400/80 - 24 IND (15.5/80 - 24)	TI-05 TL	DW13×24 (DW14L×24) (13×24, 14×24) (TW14L×24)	49.3	15.9	51.0	17.2	22.6	145.3	44	199	
16.9 - 24 IND	TI-04 TL	W15L×24 (W14L×24)	51.6	16.9	53.4	18.2	24.0	152.3	34	173	
16.9 - 24	TG-01 TL	W15L×24 (W14L×24)	51.6	16.9	53.4	18.2	22.8	149.6	32	154	
17.5L - 24 IND	TI-02 TL	W15L×24 (W14L×24)	48.9	17.5	50.4	19.0	22.9	144.2	35	161	

Tread pattern	Service description LI/SS	Ply rating PR	Tire load (lbs) at speed (mph)								Tire pressure (psi)
			Static	6	12	19	25	31	37	40	
MPT-04	151 D	14 PR	13,490	9,680	7,620	6,750	6,220	6,100	5,920	5,870	29
			13,950	10,010	7,880	6,970	6,430	6,310	6,120	6,060	36
			14,350	10,300	8,110	7,180	6,610	6,490	6,300	6,240	44
			15,470	11,100	8,740	7,730	7,130	6,990	6,790	6,730	51
			17,500	12,550	9,890	8,750	8,060	7,910	7,680	**7,600**	**58**
	156 B	–	13,950	10,100	7,830	7,190	6,950	6,310			36
			14,350	10,400	8,060	7,410	7,140	6,490			44
			15,480	11,200	8,690	7,980	7,710	7,000			51
			17,500	12,670	9,820	9,030	8,710	7,920			58
			19,490	14,110	10,940	10,050	9,700	**8,800**			**65**

Tread pattern	Service description LI/SS	Ply rating PR	Tire load (lbs) at speed (mph)							Tire pressure (psi)
			Static	6	6 cyclic	12	19	25	31	
TI-05	162 A8	–	13,170	7,160	8,590	6,240	5,950	5,720	5,210	29
			14,990	8,150	9,780	7,100	6,780	6,520	5,930	36
			16,810	9,140	10,970	7,970	7,610	7,310	6,660	44
			18,630	10,120	12,150	8,830	8,420	8,100	7,360	51
			20,450	11,110	13,340	9,690	9,250	8,890	8,090	58
			22,270	12,110	14,520	10,550	10,070	9,680	8,810	65
			24,090	13,100	15,710	11,420	10,890	**10,500**	9,540	**73**
TI-04	149 A8	12 PR	8,370	4,550	5,460	3,970	3,780	3,640	3,310	15
			9,560	5,190	6,240	4,530	4,320	4,160	3,780	17
			10,750	5,840	7,010	5,090	4,860	4,670	4,260	20
			11,900	6,460	7,760	5,630	5,380	5,170	4,710	23
			12,930	7,030	8,430	6,130	5,840	5,620	5,120	26
			14,020	7,620	9,150	6,650	6,340	6,100	5,550	29
			15,210	8,270	9,920	7,210	6,880	6,620	6,020	32
			15,850	8,610	10,340	7,510	7,170	6,890	6,270	35
			16,480	8,960	10,750	7,820	7,450	**7,150**	6,530	**38**
TG-01	149 A6	12 PR	14,530	7,890	9,470	6,880	6,570	6,320	5,740	33
			14,960	8,130	9,760	7,090	6,770	6,500	5,920	35
			15,390	8,370	10,040	7,300	6,970	6,690	6,090	36
			15,840	8,610	10,330	7,510	7,150	**6,890**	6,260	**38**
TI-02	144 A8	10 PR	9,250	5,510	6,620	4,960	4,410	3,940	3,540	16
			10,360	6,170	7,410	5,560	4,940	4,410	3,970	19
			11,480	6,840	8,200	6,150	5,470	4,880	4,400	22
			12,590	7,500	9,000	6,750	6,000	5,360	4,820	25
			13,710	8,170	9,800	7,350	6,530	5,830	5,250	29
			14,510	8,640	10,370	7,780	6,910	**6,150**	5,560	**32**

Construction Applications Bias Tires (continued)

Technical data and load capacities

Tire size	Tread pattern Type	Rim (permitted)	New		Max. in service		Static loaded radius (inch)	Rolling circum-ference (inch)	Tread depth (32nd)	Tire weight (lbs)
			Outer dia-meter (inch)	Section width (inch)	Outer dia-meter (inch)	Section width (inch)				
460/70 - 24 IND (17.5L - 24)	TI-05 TL	DW14L×24 (DW15L, DW16L, 14, 16, TW14L)	49.3	17.9	51.2	19.5	22.9	144.2	44	221
19.5L - 24 IND	TI-05 TL	DW16L×24	51.8	19.5	53.4	21.1	24.0	152.3	40	217
	GRIP-n-RIDE TL	W16L×24 (DW16L×24)	51.8	19.5	53.4	21.1	24.0	152.3	34	189
500/70 - 24 IND (19.5L - 24)	TI-05 TL	DW16L×24 (DW15L×24) (W15L×24) (W16L×24) (16×24)	51.6	19.8	53.6	20.8	23.2	152.3	40	225
21L - 24 IND	GRIP-n-RIDE TL	DW18L×24	54.8	20.6	56.1	22.7	24.2	162.6	38	233
18.4 - 26 IND	TI-06 TL	W16L×26 (W15L×26)	56.1	18.4	57.9	19.9	26.2	165.1	37	198
16.9 - 28 IND	TI-06 TL	W15L×28 (W14L×28)	55.6	16.9	57.3	18.2	26.0	163.9	35	203
16.9 - 28	TG-01 TL	W15L×28 (W14L×28)	55.6	16.9	57.3	18.2	25.2	165.1	32	170

Tread pattern	Service description LI/SS	Ply rating PR	Tire load (lbs) at speed (mph)							Tire pressure (psi)
			Static	6	6 cyclic	12	19	25	31	
TI-05	159 A8	–	14,450	7,860	9,430	6,850	6,540	6,280	5,720	29
			16,380	8,910	10,680	7,760	7,410	7,120	6,480	36
			18,310	9,960	11,940	8,680	8,280	7,960	7,240	44
			20,230	11,000	13,200	9,590	9,150	8,800	8,000	51
			22,190	12,060	14,480	10,520	10,030	**9,650**	8,780	**58**
TI-05 GRIP-n--RIDE	151 A8	12 PR	9,940	5,400	6,480	4,720	4,500	4,320	3,940	16
			11,230	6,110	7,330	5,330	5,080	4,880	4,440	19
			12,520	6,810	8,170	5,930	5,670	5,450	4,960	22
			13,830	7,510	9,020	6,550	6,250	6,010	5,470	25
			15,600	8,480	10,180	7,390	7,060	6,780	6,170	28
			16,560	9,000	10,800	7,850	7,490	7,200	6,550	30
			17,500	9,510	11,410	8,290	7,920	**7,600**	6,920	**33**
TI-05	164 A8	–	16,990	9,230	11,070	8,050	7,680	7,390	6,730	29
			19,070	10,360	12,440	9,040	8,620	8,290	7,550	36
			21,170	11,510	13,800	10,030	9,570	9,210	8,380	44
			23,260	12,650	15,170	11,020	10,520	10,110	9,210	51
			25,360	13,780	16,540	12,020	11,470	**11,000**	10,030	**58**
GRIP-n--RIDE	155 A8	12 PR	14,200	7,720	9,260	6,730	6,420	6,170	5,620	20
			15,600	8,480	10,180	7,390	7,060	6,780	6,170	23
			16,990	9,240	11,080	8,050	7,680	7,390	6,730	26
			18,390	9,990	12,000	8,710	8,310	7,990	7,280	29
			19,660	10,680	12,820	9,320	8,890	**8,550**	7,770	**32**
TI-06	156 A8	12 PR	11,470	6,230	7,470	5,440	5,180	4,980	4,530	16
			12,780	6,950	8,330	6,050	5,780	5,560	5,060	19
			14,020	7,620	9,150	6,650	6,340	6,100	5,550	22
			15,210	8,270	9,920	7,210	6,880	6,620	6,020	25
			16,360	8,890	10,670	7,750	7,400	7,110	6,470	28
			17,500	9,510	11,410	8,290	7,920	7,610	6,920	30
			18,900	10,260	12,330	8,950	8,540	8,210	7,470	33
			20,290	11,030	13,230	9,610	9,170	**8,800**	8,030	**36**
TI-06	152 A8	12 PR	9,610	5,230	6,270	4,550	4,340	4,180	3,800	16
			10,960	5,950	7,140	5,190	4,950	4,760	4,330	19
			12,330	6,700	8,040	5,840	5,570	5,360	4,870	22
			13,520	7,340	8,820	6,410	6,110	5,880	5,350	25
			14,710	7,990	9,590	6,970	6,650	6,390	5,820	28
			15,540	8,450	10,140	7,360	7,030	6,760	6,150	30
			15,980	8,690	10,420	7,570	7,220	6,950	6,320	32
			16,990	9,240	11,080	8,050	7,680	7,390	6,730	35
			18,000	9,790	11,740	8,530	8,140	**7,850**	7,120	**38**
TG-01	151 A6	12 PR	15,560	8,450	10,140	7,380	7,040	6,760	6,150	33
			15,990	8,690	10,430	7,590	7,240	6,950	6,330	35
			16,430	8,930	10,720	7,790	7,440	7,140	6,500	36
			16,870	9,170	11,000	8,000	**7,600**	7,330	6,670	**38**

Construction Applications Bias Tires (continued)

Technical data and load capacities

Tire size	Tread pattern Type	Rim (permitted)	New		Max. in service		Static loaded radius (inch)	Rolling circum-ference (inch)	Tread depth (32nd)	Tire weight (lbs)	
			Outer dia-meter (inch)	Section width (inch)	Outer dia-meter (inch)	Section width (inch)					
440/80 - 30 IND (16.9 - 30)	TI-09 TL	W15L×30 (W14L×30)	57.5	16.9	59.1	18.2	27.0	169.4	43	231	

Variation in load capacity with speed dependence

Speed (mph)	0	3	6	9	12	16	19	22	25	28	31
Constant load	+ 130%	+ 45%	+ 25%	+ 13%	+ 9%	+ 6%	+ 4%	+ 2%	(0)	- 4%	- 9%
Cyclic application	+ 130%	+ 67%*	+ 50%**	+ 34%	+ 23%	+ 11%	+ 7%	+ 3%	(0)	- 4%	- 9%

* One way distance 500 ft
** One way distance 2,000 ft


TI-09

Tread pattern	Service description LI/SS	Ply rating PR	Tire load (lbs) at speed (mph)							Tire pressure (psi)
			Static	6	6 cyclic	12	19	25	31	
			10,450	5,680	6,810	4,950	4,720	4,540	4,120	16
			11,570	6,280	7,540	5,480	5,230	5,030	4,560	19
			12,680	6,890	8,270	6,010	5,730	5,510	5,020	22
			13,950	7,570	9,100	6,600	6,310	6,060	5,510	25
TI-09			15,640	8,500	10,200	7,410	7,070	6,800	6,190	29
			16,480	8,950	10,750	7,810	7,450	7,170	6,520	32
			17,630	9,570	11,490	8,350	7,960	7,660	6,970	36
			18,330	9,960	11,950	8,690	8,280	7,970	7,240	39
	154 A8	14 PR	19,020	10,330	12,400	9,010	8,600	**8,250**	7,520	**42**

Excellent traction

SK-01

Standard tread pattern with good traction properties and sidewall protection.

Reinforced construction

SK-02

Heavy duty tread pattern, robust reinforced tread lug in the central part, higher resistance to puncture and tread wear. Reinforced sidewall.

Longer service life

SK-05

Robust tire for extreme conditions. Low void ratio and improved depth increases service life. Excellent self-cleaning properties.

Longer service life

BIG BOY

Robust industrial pattern with higher resistance to puncture and tread wear.

Excellent traction

TR-10 (R-4)

Tread pattern suitable above all for bigger skid steer loaders and front axles of backhoe loaders or telescopic platforms.

Skid steer bias tires
For small machines with great performance

Tire size	SK-01	SK-02	SK-05	BIG BOY	TR-10
23×8.50-12		•			
27×8.50-15		•			
27×10.50-15		•			
31×15.5-15		•			
10.0/75-15.3 IND	•				
10-16.5		•	•	•	
12-16.5		•	•	•	
14-17.5 IND					•
10.5/80-18				•	
12.5/80-18				•	

SK series

Technical data and load capacities

Tire size	Tread pattern Type	Rim (permitted)	Tube Flap	New		Max. in service		Static loaded radius (inch)	Rolling circum-ference (inch)	Tread depth (32nd)	
				Outer diameter (inch)	Section width (inch)	Outer diameter (inch)	Section width (inch)				
23×8.50 - 12	SK-02 TL	7.00×12	–	22.7	8.4	23.2	9.1	10.2	66.6	16	
27×8.50 - 15	SK-02 TL	7.00×15	–	26.8	8.4	27.4	9.1	12.5	78.8	18	
27×10.50 - 15	SK-02 TL	8.50×15	–	26.9	10.4	27.3	10.6	12.6	84.3	18	
31×15.5 - 15	SK-02 TL	13LB×15	–	30.2	15.1	31.5	16.0	14.2	93.4	29	
10.0/75 - 15.3 IND	SK-01 TT/TL	9.00×15.3	10-15 HS 10/75-15	30.7	10.4	31.5	10.9	14.2	90.4	21	
10 - 16.5	SK-02 TL	8.25×16.5	–	30.5	10.4	31.2	11.2	13.6	92.2	28	
	BIG BOY TL	8.25×16.5	–	31.4	10.2	32.8	11.0	14.4	92.8	24	
	SK-05 TL	8.25×16.5	–	31.7	10.2	33.1	11.0	14.4	92.8	44	

Tire weight (lbs)	Tread pattern	Service description LI / SS	Ply rating PR	Tire load (lbs) at speed (mph)				Tire pressure (psi)
				6	9	12	19	
20 (6 PR) 22 (10 PR)	SK-02	99 A4	6 PR	1,110 1,210 1,430 1,640 1,850 2,050	1,040 1,140 1,330 1,530 1,730 1,920	930 1,010 1,190 1,370 1,540 **1,710**	880 960 1,140 1,300 1,470 1,620	18 22 25 29 33 36
		115 A4	10 PR	2,320 2,500 2,670 2,950 3,210	2,160 2,330 2,490 2,750 3,000	1,930 2,080 2,230 2,460 **2,680**	1,830 1,980 2,120 2,340 2,540	41 44 46 51 **55**
27 (6 PR) 29 (8 PR)	SK-02	99 A4	6 PR	1,350 1,540 1,740 1,910 2,050	1,260 1,440 1,630 1,780 1,920	1,120 1,290 1,460 1,590 **1,710**	1,070 1,220 1,380 1,510 1,620	22 25 29 33 36
		111 A4	8 PR	2,180 2,320 2,450 2,580 2,710 2,840 2,910	2,040 2,170 2,290 2,410 2,540 2,650 2,720	1,820 1,940 2,040 2,150 2,260 2,360 **2,400**	1,720 1,840 1,930 2,040 2,140 2,240 2,300	40 44 47 51 54 58 **61**
38 (8 PR)	SK-02	106 A6	8 PR	2,430 2,580 2,730 2,870 2,980 3,090	1,870 1,980 2,090 2,210 2,320 2,450	1,630 1,740 1,810 1,900 2,030 2,180	1,540 1,650 1,760 1,870 1,980 **2,090**	44 47 51 54 58 **61**
82 (8 PR)	SK-02	119 A4	8 PR	3,130 3,380 3,730	2,620 2,830 3,110	2,500 2,700 **3,000**	2,230 2,400 2,650	36 40 **45**
43 (TT) 46 (TL)	SK-01	127 A6	10 PR	3,150 3,320 3,490 3,670 3,850 4,000 4,170 4,340 4,510 4,670	2,990 3,150 3,320 3,480 3,650 3,800 3,970 4,120 4,290 4,440	2,870 3,020 3,180 3,340 3,490 3,640 3,790 3,950 4,100 4,240	2,600 2,750 2,890 3,030 3,180 3,310 3,450 3,580 3,730 **3,860**	44 47 51 54 58 62 65 69 73 **76**
54 (8 PR) 55 (10 PR)	SK-02 BIG BOY	131 A3	8 PR	3,620 3,810 4,020 4,220 4,420 4,610	3,370 3,560 3,750 3,940 4,120 **4,300**	3,010 3,180 3,350 3,520 3,680 3,840	2,630 2,790 2,940 3,090 3,230 3,360	36 40 44 47 51 **54**
64 (8 PR)								
79 (10 PR)	SK-02 SK-05	135 A3	10 PR	4,630 4,880 5,140	4,320 4,560 **4,800**	3,860 4,070 4,290	3,400 3,630 3,770	65 69 **73**

SK series (continued)

Technical data and load capacities

Tire size	Tread pattern Type	Rim (permitted)	Tube Flap	New		Max. in service		Static loaded radius (inch)	Rolling circum-ference (inch)	Tread depth (32nd)	
				Outer diameter (inch)	Section width (inch)	Outer diameter (inch)	Section width (inch)				
12 - 16.5	SK-02 TL	9.75×16.5	–	32.7	12.1	33.5	13.0	14.6	99.1	28	
	SK-05 TL	9.75×16.5	–	32.9	12.0	34.4	13.0	15.1	97.5	44	
	BIG BOY TL	9.75×16.5	–	33.1	12.4	34.6	13.4	15.1	97.5	26	
14 - 17.5 IND	TR-10 TL	10.50×17.5	–	35.9	14.0	36.7	15.1	16.9	112.6	28	
10.5/80 - 18	BIG BOY TL	9×18	–	35.7	10.8	36.5	11.5	16.2	104.2	33	
12.5/80 - 18	BIG BOY TL	9×18	–	39.0	12.1	40.0	12.7	17.5	112.9	35	

Tire weight (lbs)	Tread pattern	Service description LI / SS	Ply rating PR	Tire load (lbs) at speed (mph)						Tire pressure (psi)
				6	9	12	19	25	31	
67 (10 PR) 67 (12 PR)	SK-02 BIG BOY			4,580	4,270	3,810	3,350			36
				4,870	4,540	4,060	3,560			40
				5,140	4,780	4,280	3,750			44
				5,380	5,030	4,490	3,940			47
				5,570	5,200	4,640	4,070			51
98 (12 PR)				5,680	5,290	4,730	4,150			58
				5,810	5,400	4,840	4,240			62
		140 A3	10 PR	5,930	**5,520**	4,940	4,330			**65**
	SK-02 SK-05 BIG BOY			6,120	5,670	5,090	4,490			69
				6,310	5,840	5,260	4,630			73
				6,530	6,040	5,420	4,770			76
84 (10 PR) 87 (12 PR) 88 (14 PR)		144 A3	12 PR	6,670	**6,150**	5,560	4,900			**80**
	BIG BOY			6,880	6,370	5,730	5,050			83
				7,100	6,570	5,910	5,200			87
		147 A3	14 PR	7,320	**6,800**	6,640	5,840			**90**
85	TR-10			6,090	5,680	5,470	4,860	4,340	3,910	46
				6,370	5,950	5,730	5,100	4,550	4,100	51
				6,680	6,240	6,020	5,350	4,770	4,300	55
				6,980	6,500	6,280	5,580	4,980	4,490	59
				7,380	6,950	6,640	5,900	5,270	4,740	65
				7,860	7,320	7,070	6,280	5,610	5,050	73
		139 B	14 PR	8,330	7,830	7,500	6,670	5,950	**5,360**	**80**
82	BIG BOY			2,840	–	2,560	2,270	2,030	1,930	41
				3,150	**–**	2,830	2,520	2,250	2,140	45
				3,440	–	3,100	2,760	2,460	2,340	49
		115 A8	10 PR	3,750	–	3,370	3,000	**2,680**	2,550	**54**
111	BIG BOY			3,860	–	3,470	3,090	2,760	2,620	36
				4,320	–	3,890	3,460	3,090	2,930	41
				4,780	–	4,310	3,830	3,420	3,250	45
				5,010	–	4,500	4,000	3,570	3,400	49
				5,180	–	4,670	4,150	3,700	3,520	54
				5,370	–	4,830	4,300	3,840	3,650	58
		128 A8	14 PR	5,560	–	5,010	4,440	**3,960**	3,770	**62**

Good stability

FL-08

HANDLING	■■■■■
RESISTANCE	■■■■□
SERVICE LIFE	■■■■□

Bias pneumatic – medium intensity applications
Strives to deliver optimum performance in various service conditions

Block tread design – improve traction performance.

Enhanced stability – tread pattern specifically designed to improve directional stability.

Shock absorbance – heavy duty service.


STABILITY


TIRE LIFE


COOL RUNNING

FL-08

Technical data and load capacities

Tire size (Alternative size)	Type	Rim (permitted)	Section width (inch)	Outer diameter (inch)	Minimal dual spacing (inch)	Tread depth (32nd)	Tire weight (lbs)	
4.00 - 8	TT	3 1/4I-8	4.4	16.3	5.4	13	10	
15×4.5 - 8	TT	3.00D-8	4.6	15.0	5.5	10	9	
5.00 - 8	TT	3.00D-8	5.2	18.4	6.2	14	12	
16×6 - 8 (150/75-8)	TT	4.33R-8	6.0	16.7	6.9	15	12	
18×7 - 8 (180/70-8)	TT	4.33R-8	6.8	18.2	7.8	18	18	
6.00 - 9	TT	4.00E-9	6.3	21.3	7.6	16	18	
21×8 - 9 (200/75-9)	TT	6.00E-9	7.9	21.1	9.1	19	27	
6.50 - 10	TT	5.00F-10 (5.50F-10)	7.0	23.2	8.4	18	23	
7.50 - 10	TT	5.00F-10	8.1	25.3	9.5	19	32	
23×9 - 10 (225/75-10)	TT	6.50F-10	8.9	23.4	10.2	20	33	
7.00 - 12	TT	5.00S-12	7.6	26.5	9.1	19	30 (12 PR) 30 (14 PR) 36 (16 PR)	
23×10 - 12	TT	8.00G-12	9.6	23.4	11.5	25	NA	
27×10 - 12 (250/75-12)	TT	8.00G-12	10.3	26.8	11.5	23	48	
7.00 - 15	TT	5.50-15	7.8	29.5	9.3	21	45	
7.50 - 15	TT	6.0-15 (6.5-15)	8.4	30.4	10.0 (10.2)	26 0	55	
8.15 - 15 (28×9-15)	TT	7.0-15	8.5	27.9	9.8	23	44	
8.25 - 15		6.5-15	9.2	32.9	11.1	29	71	
250 - 15 (250/70-15)	TT	7.50-15	9.9	29.0	11.3	25	55	
28×12.5 - 15	TT	9.75-15	10.8	28.6	12.8	21	NA	
300 - 15 (315/70-15)	TT	8.00-15	11.8	33.1	13.6	29	86	

For dual applications the loads are 88% of a single tire.

FL-08

	Service description LI/SS	Ply rating PR	Tire load (lbs) Counterbalanced Lift trucks up to 16 mph		Tire pressure (psi)
			Load wheel	Steering wheel	
	94 A5	8 PR	1,920	1,480	131
	97 A5	10 PR	2,090	1,610	145
	100 A5	12 PR	2,290	1,760	145
	106 A5	8 PR	2,720	2,090	120
	111 A5	10 PR	3,120	2,400	145
	113 A5	16 PR	3,300	2,540	145
	121 A5	14 PR	4,160	3,200	131
	125 A5	16 PR	4,730	3,640	145
	118 A5	10 PR	3,780	2,910	123
	121 A5	12 PR	4,160	3,200	145
	131 A5	14 PR	5,590	4,300	131
	134 A5	16 PR	6,070	4,680	145
	122 A5	10 PR	4,300	3,300	112
	125 A5	12 PR	4,730	3,640	131
	128 A5	14 PR	5,160	3,960	145
	133 A5	12 PR	5,910	4,540	116
	142 A5	20 PR	7,360	5,840	145
	133 A5	12 PR	5,910	4,540	123
	134 A5	14 PR	6,070	4,680	131
	136 A5	16 PR	6,420	4,940	145
	139 A5	16 PR	6,970	5,360	116
	143 A5	14 PR	7,820	6,000	102
	146 A5	16 PR	8,600	6,600	116
	152 A5	20 PR	10,180	7,850	145
	140 A5	14 PR	7,170	5,520	134
	144 A5	14 PR	8,030	6,150	134
	146 A5	16 PR	8,600	6,600	145
	146 A5	14 PR	8,600	6,600	145
	149 A5	14 PR	9,320	7,150	116
	153 A5	18 PR	10,460	8,050	145
	153 A5	18 PR	10,460	8,050	138
	155 A5	20 PR	11,110	8,550	145
	151 A5	20 PR	10,000	7,600	131
	164 A5	20 PR	14,330	11,000	131
	165 A5	22 PR	14,760	11,400	145

Good stability

FL-03

HANDLING	■■■■■
RESISTANCE	■■■■■
SERVICE LIFE	■■■□□

FL-07

HANDLING	■■■■□
RESISTANCE	■■■□□
SERVICE LIFE	■■■□□

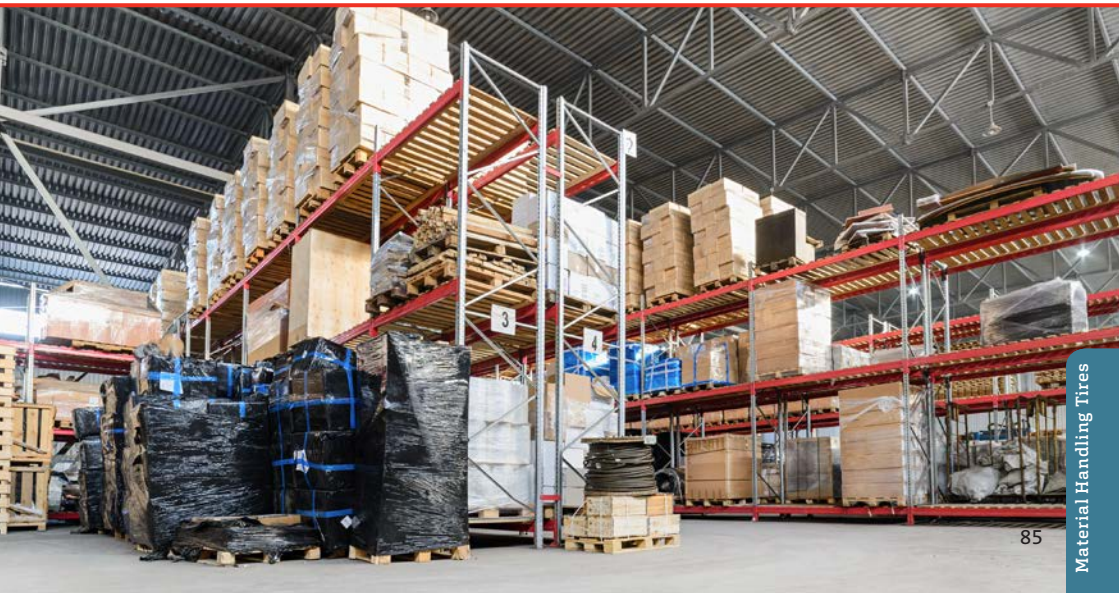
Material Handling bias tires
Good handling in various service conditions

Tire size	FL-03	FL-07	FL-08
4.00-8	•		•
15×4.5-8			•
5.00-8	•		•
16×6-8 (150/75-8)			•
18×7-8 (180/70-8)			•
6.00-9			•
21×8-9 (200/75-9)			•
6.50-10			•
7.50-10			•
23×9-10 (225/75-10)			•
7.00-12			•
23×10-12			•
27×10-12 (250/75-12)			•
23×5		•	
7.00-15			•
7.50-15			•
8.15-15 (28×9-15)			•
8.25-15			•
250-15 (250/70-15)			•
28×12.5-15			•
300-15 (315/70-15)			•

Counterbalanced lift trucks application		Maximum tire load capacity (% of reference load)
16 mph	Load wheel	130
	Steering wheel	100
22 mph	Load wheel	125
	Steering wheel	92.5

Side-loaders application	Maximum tire load capacity (% of reference load)
Static	151
16 mph	100
22 mph	92.5

Other vehicles application	Maximum tire load capacity (% of reference load)
6 mph	130
16 mph	100
25 mph	89
31 mph	84



FL series

Technical data and load capacities

Tire size	Tread pattern	Type	Rim (permitted)	Tube Flap	New		Max. in service		Static loaded radius (inch)	Minimal dual spacing (inch)	
					Outer diameter (inch)	Section width (inch)	Outer diameter (inch)	Section width (inch)			
4.00 - 8	FL-03	TT	3.00D-8 3 1/4I-8 (1)	4.00-8	16.3	4.4	16.6	4.8	7.4	5.3 5.4	
5.00 - 8	FL-03	TT	3.00D-8	5.00-8	18.4	5.2	18.8	5.6	8.2	6.2	
23×5	FL-07	TT	3.75P-13	23x5	25.0	6.1	25.8	6.6	11.4	7.3	

* obligatory for 8 PR and 10 PR

	Tread depth (32nd)	Tire weight (lbs)	Tread pattern	Service description LI / SS	Ply rating PR	Tire load (lbs) at speed (mph)		Tire pressure (psi)
						Load wheel	Steering wheel	
	8	7	FL-03	90 A5	6 PR	1,720	1,320	116
				94 A5	8 PR	1,920	1,480	131
				97 A5	10 PR	2,090	1,610	145
	8	9	FL-03	106 A5	8 PR	2,720	2,090	120
	12	15 (6 PR) 18 (10 PR)	FL-07	113 A5	6 PR	3,300	2,540	76
				121 A5	10 PR	4,160	3,200	116

Use & Maintenance

Storage

- Keep the tires clean and away from heat, light, ozone or hydrocarbon sources.
- Avoid prolonged exposure of the tires to direct sunlight.
- Avoid any contact with grease, petrol, volatile solvents or other substances that may deteriorate the rubber.
- Avoid horizontal storage for tubeless tires, only small size tires may be stacked or stored flat (maximum 6 months).
- When tires are stored flat (horizontal), the position must be lug against lug.
- Reduce inflation pressure when tires are stored fitted on rims.
- Ensure there is no water or moisture inside the tire.
- Never store tires directly in contact with the ground for long periods.

Tire repairs

- For safety reasons, repairs should only be carried out by specialists using the correct tools.

Proper use of tires

- When loading tires you have to consider the correlation between speed, inflation pressure and load capacity.
- Overloading results in premature tire failure. Use the technical documentation and inflation tables that show the load and pressure figures for different operating speeds.
- Underinflation results not only in incorrect tread wear but also in ply separation and eventually further damage to the ply.
- Overinflation makes the tire stiff and decreases its resistance against hits, leading to ply tear.

Check inflation pressure regularly

Avoid contact with grease, oil and other chemicals

Inspect tires for damage and irregularities

Observe tire and vehicle load limits

Read safety and maintenance recommendations

Use only authorized repair

Fitting and removal instructions

Demounting and mounting procedures can be dangerous, and should be performed only by trained and qualified staff, using proper tools and procedures. Failure to comply with these procedures may result in faulty positioning of the tire on the rim, and cause the tire to burst with explosive force leading to serious physical injury or death.

Fitting

1. Make sure that the rim, the tire and the tube are compatible.
2. Check that the tire is suitable for the machine. Use only rims recommended or permitted by the tire manufacturer.
3. Always use the proper specialized equipment and tools.
4. The rim must be clean and in perfect condition (no damage, etc.). If necessary, clean the rim thoroughly with a wire brush. Never fit a tire onto a rim that shows cracks, significant distortion, evidence of welded repair, etc.
5. Thoroughly inspect the inside as well as the outside of the tire in order to identify any damage that may be present. If the damage is considered to be beyond repair, the tire should be scrapped.
6. If fitting with a tube, always use the correct new tube and flap for the tire size. For fitting tubeless tires without tubes, on tubeless rims, always use a new tubeless valve.
7. Before fitting, lubricate the rim and the beads. Use only a suitable lubricant that will not damage the tire (never use silicone or petroleum-based products).
8. We recommend vertical fitting. In case of horizontal fitting it is impossible to see if the lower bead is correctly seated.
9. Fit the tire on the rim diametrically opposite to the valve hole (respect, if present, the rotation direction indicated by the arrows). With the help of a suitable lever and closely repeated applications, get the first bead over the rim flange. Then pose the lightly inflated talc-coated tube (if fitted) inside the tire. Locate the valve, fitting the ferrule loosely. Fit the second bead, lever it progressively over the rim flange, finish at the valve.
10. For seating the beads and centering of the tire, remove the valve core. Slowly inflate to ensure correct seating of the beads. Ensure that the beads do not pinch the tube.
11. During tire inflation keep at a safe distance and always use a safety cage. If possible, fasten the tire to the wall or use retaining chains. During pressure readings ensure that no part of the body is within the possible trajectory of the valve mechanism or of the caps. It is recommended to use suitable pressure limitation gauges. Use a filter and dehumidifier on the compressed air line to avoid introducing humidity or dirt. Never use a hammer to make a tire bead seat by hitting it.
12. Continue inflation. Make sure that you do not inflate beyond 36 psi if the beads are not well seated and centered on the wheel.
13. If the beads are not correctly seated, deflate, lubricate and inflate again. Repeat these operations until the beads are correctly seated.
14. When all the previous operations have been correctly done refit the valve core. Set the pressure according to the load – see tables in technical databook.
15. Make sure the valves do not touch the rims, the brake drums or other fixed mechanical parts.

Removing

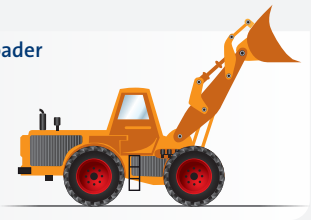
- Never try to unseat the beads of an inflated tire.
- Always remove the valve core.
- Let the tire deflate, check before unseating that the tire is completely deflated. Never use tools that could damage the rims or the beads of the tire.

Earthmover tires

"L" series type tires

"L" series type tires are used on all size loaders and dozers in off-road applications. Most loader type tires, because of their extremely heavy construction, are limited to very low speeds and very short haul distances, 6 mph and 820 ft maximum.

Wheeled Loader



Wheeled Dozer

Loader Service: Closed working cycle
Low speed – up to 6 mph
Short distance – up to 820 ft

Dozer Service: Pushes or grades material
Low speed – up to 6 mph
Travel distance varies

Load and Carry Service: Picks up and transports material
Low speed – up to 16 mph
Short distance – cycle length up to 2,000 ft

"L" series tires are categorized by **number code**, type and tread **depth**.

Number code	Type	Tread depth
L-2	Traction Design	Regular Tread Depth
L-3	Rock Design	Regular Tread Depth

Below are examples of Mitas "L" Series tires

L-2

L-3

The letter designation and number code is found on the sidewalls of tires.
The **L-2** traction design tire gives maximum traction in sand and soft soil conditions.
The **L-3** rock design offers good traction and rock resistance in general purpose loader operations.

These illustrations show different lug to void ratios.

TRACTION TYPE
L-2 DESIGN

ROCK TYPE
L-3 DESIGN

MITAS has also developed comparison ratings for "L" series type tires.
Note: The numbers are relative ratings with the L-3 tire rated at 100. For example, the L-2 tire has 20 % better traction than the L-3. Certain tire construction features and applications can affect these ratings.

The data below could vary from operation and / or from size to size of tire.

"L" series tires				
	Traction	Rock resistance	Tread wear	Lug to Void ratio
L-2	120	90	90	1 : 1
L-3	100	100	100	1 : 2

Determining Inflation Pressures for Loaders

1 – By weighing the machine axle

- Determine the maximum load on each tire by weighing, this is the only way of setting tire pressures accurately for optimum performance
- Use the table "Variation in load capacity with speed" for LOADERS to determine the pressure
  Front axle: for laden front axle (bucket full)
  Rear axle: for unladen rear axle (bucket empty)

2 – By calculation, using the machine manufacturer's data

When the machine is loading with the bucket penetrating into the material, the loader is often on the point of tipping.

It is in this state that the front tires are most heavily laden.

- Determine the maximum load / tire on the front and rear axles

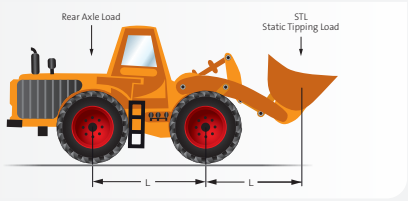
FRONT axle

The load on the front axle is equal to the total unladen weight of the machine + the tipping load (tipping load is shown in machine manufacturer's data).

REAR axle (bucket empty)

- Use either the unladen rear axle load given by the machine manufacturer, or
- Take 60 % of the unladen weight of the machine (to have a margin of safety)

Earthmover tires (continued)



Example calculation (for a loader with the following characteristics):

Tire equipment:		23.5 - 25 16 PR EM-30 TL
Unladen weights:	Front:	17,640 lbs (1)
	Rear:	18,740 lbs (2)
	Total:	36,380 lbs (3)
Straight line tipping load:		30,650 lbs (4)

Maximum axle load – Front (static*)
(3) + (4) = 67,030 lbs or 33,520 lbs per tire

Maximum axle load – Rear
(2) = 18,740 lbs or 9,370 lbs per tire

Base pressures as per table "Variation in load capacity with speed"
Front = 43 psi (* increase for static load from 6 mph is 60 %, 33,520 / 1.6 = 20,950 lbs)
Rear = 36 psi (calcuated with a margin of safety for speed 16 mph)

Important

The rule to determine pressures by calculation applies to loaders of standard specifications, which have not been modified for special use. The calculated pressures are the minimum for the loads and may be increased to obtain a desired level of handling, or for particular applications, (but must remain within the published load / pressure schedule for the tire size and type). In the case of long travel distances (e.g. delivery of new machine, transfer from one site to another, etc.), specific precautions need to be taken:

Vehicles in Transit

- Vehicles must be empty during transit
- Set inflation pressure on cold tires to the maximum value permitted by the table "Variation in load capacity with speed" for loaders
- Maximum vehicle speed 22 mph
- Cooling stop 30 minutes after each 30 miles transit
- Transit to a distance longer than 60 miles is not recommended and the vehicle must be transported on a trailer

The inflation pressure will increase during roading of the vehicles. The pressure must not be lowered when tires are warm.

Determining Inflation Pressures for Dozers:

Depending on the type of work, tires on a dozer are subjected to different types of loading.

- The load on the Front Axle is maximum when loading (pushing) a scraper
- The load on the Rear Axle is maximum when dozing or while stockpiling

From a practical viewpoint, the maximum load on either of the two axles is approximately equal to 2 / 3 of the machine weight.

- Using this method determine the load on each tire
- Use the table "Variation in load capacity with speed"

Determining Inflation Pressures for Telescopic Handlers

In the case of telescopic handlers the pressures recommended by the machine manufacturer should be used. These pressures are determined by the machine manufacturer after conducting a "Tilt Test" for stability. In the absence of the machine manufacturer's recommendation, use the pressure corresponding to the maximum normalized load as shown in the table "Variation in load capacity with speed" for LOADERS for both front and rear tires.

List of homologations

Inch	Tire size	Alternative tire size	Tread pattern	DOT 119	ECE R.54	M + S	ECE R.106	ECE R.117	EC 2001/43
EM Bias Tires									
20"	500/45-20		TI-12				•		
22.5"	500/60-22.5		TI-12				•		
	600/40-22.5		TI-12				•		
Light Equipment Bias Tires									
18"	280/80-18	(10.5-18)	MPT-01				•		
	10.5-18		MPT-02			•			
	340/80-18	(12.5-18)	MPT-01				•		
19.5"	18-19.5		MPT-03						•
20"	340/80-20	(12.5-20)	MPT-01				•		
	16/70-20	(405/70-20)	MPT-02			•			
	405/70-20	(16/70-20)	MPT-01				•		
24"	405/70-24	(16/70-24)	MPT-01				•		
Crane Radial Tires									
25"	385/95 R 25		CR-01	•	•	•			
	445/95 R 25		CR-01	•	•	•			
	445/95 R 25		CR-02		•	•			
	525/80 R 25		CR-01	•	•	•			
MPT Radial Tires									
18"	335/80 R 18	(12.5 R 18)	EM-02	•	•				•
20"	335/80 R 20	(12.5 R 20)	MPT-20	•	•	•			•
	335/80 R 20	(12.5 R 20)	MPT-21	•	•	•			•
	365/80 R 20	(14.5 R 20)	MPT-20	•	•	•			•
	365/80 R 20	(14.5 R 20)	MPT-21	•	•	•			•
	405/70 R 20	(16/70 R 20)	MPT-21	•	•	•			•
22.5"	275/90 R 22.5		SRT2	•	•	•		•	•
	375/75 R 22.5		MPT-23		•	•			•
24"	405/70 R 24	(16/70 R 24)	MPT-21	•	•	•			•
	445/70 R 24	(17.5L R 24)	MPT-22		•				•
MPT Bias Tires									
18"	12.5-18		MPT-03		•	•			•
20"	10.5-20		MPT-05		•	•			•
	10.5-20		MPT-07	•	•	•			•
	12.5-20		MPT-03		•	•			•
	12.5-20		MPT-05		•	•			•
	14.5-20		MPT-03		•	•			•
	14.5-20		MPT-05		•	•			•
	16/70-20	(405/70-20)	MPT-05		•	•			•
	405/70-20	(16/70-20)	MPT-03		•	•			•
Tractor Industrial Radial Tires									
18"	340/80 R 18 IND		TI-20				•		
24"	460/70 R 24 IND	(17.5L R 24)	TI-22				•		
26"	480/80 R 26 IND		TI-20				•		
28"	440/80 R 28 IND		TI-20				•		
Construction Applications Bias Tires									
18"	320/80-18 IND	(12.5/80-18)	TR-09				•		
	340/80-18 IND	(12.5-18)	MPT-04				•		
20"	280/80-20 IND	(10.5-20)	MPT-04				•		
	340/80-20 IND	(12.5-20)	MPT-04				•		
	360/85-20 IND	(14.5-20)	MPT-04				•		
	400/70-20 IND	(16.0/70-20)	MPT-04				•		
	400/75-20 IND	(16.0/70-20)	TR-09				•		
22.5"	480/65-22.5 IND	(18-22.5)	MPT-06				•		
24"	400/70-24 IND		MPT-04				•		
	400/80-24 IND	(15.5/80-24)	TI-05				•		
	16.9-24 IND		TI-04				•		
	16.9-24		TG-01				•		
	17.5L-24 IND		TI-02				•		
	460/70-24 IND	(17.5L-24)	TI-05				•		
	19.5L-24 IND		TI-05				•		
	19.5L-24 IND		GRIP-n-RIDE				•		
	500/70-24 IND	(19.5L-24)	TI-05				•		
	21L-24 IND		GRIP-n-RIDE				•		
26"	18.4-26 IND		TI-06				•		
28"	16.9-28 IND		TI-06				•		
	16.9-28		TG-01				•		
30"	440/80-30 IND	(16.9-30)	TI-09				•		

DOT 119 Nat'l Highway Traffic Safety Admin., DOT § 571.119 Standard No. 119; New pneumatic tires for motor vehicles with a GVWR of more than 4 536 kilograms (10 000 pounds) and motorcycles.

ECE R.54 European Regulation No. 54; Uniform provisions concerning the approval of pneumatictires for commercial vehicles and their trailers.

M + S Mud & Snow Pattern

ECE R.106 European Regulation No. 106; Uniform provisions concerning the approval of pneumatictires for agricultural vehicles and their trailers.

ECE R.117 European Regulation No. 117; Uniform provisions concerning the approval of tires with regard to rolling sound emissions and to adhesion on wet surfaces and/or to rolling resistance.

EC 2001/43 European Directive 2001/43/EC relating to tires for motor vehicles and their trailers and to their fitting: noise from tires.

Terms and shortcuts used in this catalog

Acronyms	Meaning	Definition
PR	Ply Rating	Identifies different versions (load capacity/inflation pressure) of tires having the same size designation.
TYPE	Tubeless or Tube Type	Tubeless (TL) – Tires specifically designed for fitment without an inner tube on appropriate rims. Tubeless tires may be used with a tube.
LI	Load Index	Is a numerical code associated with the maximum load a tire can carry at the speed indicated by its Speed Symbol under service conditions specified by the tire manufacturer.
SS	Speed Symbol	Indicated the maximum speed at which the tire can carry a load corresponding to its Load Index under service conditions specified by the tire manufacturer.
	Free Rolling Wheels	Free rolling wheels that do not transmit motion, e.g. trailer.
	Drive Wheels	Drive wheels that transmit motion, e.g. drive wheel axle on tractors.
RIM	Recommended Rim	The rim that gives the best fitment of the tire for all conditions and types of service.
RIM (PERMITTED)	Permitted Rim	Any rim that can be permitted in addition to the recommended rim.
	New Tire Dimensions	The dimensions of an unloaded new tire mounted on its Measuring Rim at the recommended inflation pressure and allowed to stand for a minimum of 24 hours at normal room temperature before readjustment of the pressure back to its original level.
	Section Width (design)	The linear distance between the outsides of the sidewalls of an inflated new tire excluding elevations due to labeling (marking), decorations, or protective bands or ribs.
	Overall Diameter (design)	The diameter of an inflated tire at the outermost surface of the tread.
	Static Radius (theoretical nominal)	The radius of the new tire loaded at the maximum load capacity and with the corresponding tire pressure.

Acronyms	Meaning	Definition
	Rolling Circumference (theoretical nominal)	The circumference of the tire loaded at the maximum load capacity and with the corresponding tire pressure.
LOAD CAPACITY	Tire Load Carrying Capacity	The maximum load (lbs) a tire is permitted to carry under specified operating conditions. In the case of twin-fitted driven wheels, a factor of 1.76 is applied to the load capacity of a single fitment tire.
	Inflation Pressure	The “cold” pressure (psi) of the fluid with which the tire is inflated.
HLV	High Load Variation	Is where the tire load varies by a factor of “2” or more between loaded and unloaded conditions. The inflation pressure for HLV application must be increased, consult tire manufacturer. In the case of HLV, the maximum distance should not exceed 0.6 miles and maximum speed 6 mph. For a longer distance or higher speed, consult tire manufacturer. Example of purpose: without HLV - normal use with constant load in transport service, on tractor in field service, e.g. trailer, tractor; with HLV – use with various load conditions, factor > 2 between loaded and unloaded, e.g. loaders.
LLV	Low Load Variation	Standard application with low load difference between loaded and unloaded conditions.
ETRTO	The European Tire and Rim Technical Organization	Data in this Technical Databook are relevant with ETRTO standards, the further data you can find there.
	Nominal Section Width	The section width of an inflated tire mounted on its theoretical rim and indicated in the tire size designation.
IND		Agricultural tires for traction wheels for construction applications with load capacities and inflation pressures which differ from those for tires which the same size designation for use on agricultural tractors.
REINFORCED		Tires with better protection against tire damage (puncture). The load capacity and tire dimensions stay like standard execution.

Trelleborg Wheel Systems Americas, Inc.
107 Audubon Road, Suite 205
Wakefield, MA 01880

mitas-tires.com

Trelleborg Wheel Systems Czech Republic a.s. is fully compliant with the limits on Polycyclic AromaticHydrocarbons (PAHs) determined by the European Directive EC/2005/69 and REACH Regulation EC/1907/2006, since December 1st 2009.

Mitas

mitas-tires.com