

Technical Data Book

Industrial/MPT/EM Tyres



Industrial Tires

Lift Up Your Business!

Continental 

Solid tyres

General Characteristics

Solid Tyres are best for tough applications on slow vehicles or trailers with a high risk of impact and cut damage. They are extremely stable, puncture resistant and maintenance free. Solid tyres have a high load capacity and are extremely economical, ideal for all types of forklift trucks.

Special applications by construction

Super-Elastic:

- can be fitted on pneumatic-tyre rims
- clean tyres designed for minimum floor marking in dust sensitive applications
- robust sidewall
- easy to fit with SIT-retaining bead (only for SIT-Tyres)

Press-on Bands:

- high stability
- greater load capacity on smaller dimensions

Suitable vehicles

- forklift trucks
- indoor service trailers
- airport vehicles
- self-powered lift vehicles
- side-loading forklifts
- indoor tractors
- industrial tractors
- heavy-duty transport vehicles
- platform trucks

General applications

- logistic centres
- seaports
- industry
- food and pharmaceutical industry (Clean)
- airports
- dockyards
- steel industry

CSE tyres are press-on bands for fitting on pneumatic tyre rims and comply with international ETRTO and DIN standards.

Tyre construction

Tread area and sidewall protection

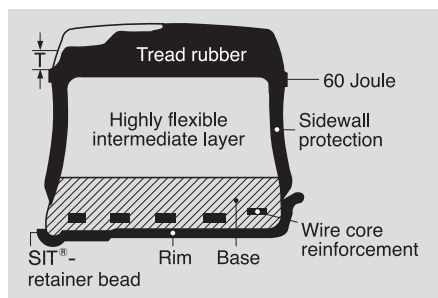
The tread area is exceptionally tough and wear resistant, giving the tyre a long service life (see footnote*).

Cushion compound

The whole structural and material content of the tyre guarantees not only good impact and vibration-damping properties but also allows rolling resistance**).

Tyre base

The tyre base is made of a hard tough compound in which the wire cores are embedded, ensuring the tyre sits firmly on the rim.



Tyre base and rim versions

Rims	Tyre bases
	<ul style="list-style-type: none"> • CSE ROBUST-SIT fits with the one-piece Lemmerz basic rim without taper, rim flange or locking rings.
	<ul style="list-style-type: none"> • CSE-ROBUST for off-centre-split and centre-split rims.

CSE-ROBUST®-SIT®

On the CSE-ROBUST® the tread rubber protects the entire sidewall from external damage.

The tyre is therefore suitable for extremely arduous applications.

* The upper edge of the 60-Joule-indicator shows the maximum limit for wear and regrooving of the CSE-tyre. Account is to be taken of the envisaged service conditions when deciding on whether to regroove a tyre.

** Temperature build-up in CSE tyres is low due to their good rolling resistance, making the tyres capable of meeting high in-service demands. Damage due to heat, however, cannot always be excluded if the tyres are used for continuous operation (e.g. on a three-shift basis, long stretches at high loads or high speeds).

New

CSEasy innovation

CSEasy – Innovative. Fast. Easy.



With the innovation CSEasy Continental markets the top product all around in terms of economy, environmental awareness and complexity minimization. In every way this solid-rubber tire represents a revolution in simplicity. No mounting press at all is needed for the wheel/tire system, which includes an adapter between the tire and the rim.

Economy

- up to 40% more mileage*
- up to 6% reduced energy cost*
- less cost for fitment
- less cost for downtime

40 % reduction in rolling resistance saves 6 % in energy

Environmental awareness

- up to 6% less CO₂ emissions*
- Nitrosamine-free!
- free of highly aromatic oils!

(in accordance with EU-Guideline 2005/69/EG)

Fitting is not only possible without a press, but can also be carried out in situ on the vehicle using standard tools. This saves time when changing tyres and reduces complications, because fewer steps are involved e.g. replacement rims.

* Reference: mileage compared with SC15, rolling resistance, energy consumption and CO₂ emissions compared with the competition.



(See fitting instructions on page 104)

New

Superior technology – the SC 20



The SC 20 generation from Continental sets new standards in terms of economy and environmental compatibility. The outstanding characteristics of this innovative tyre format are impressive:

Significantly increased mileage, 30% reduced rolling resistance and considerable lower CO₂ emissions make the SC 20 an investment that pays for itself many times over. It is the latest in a perfect range of successful developments designed by engineers at Continental and comfortably confirms their position as suppliers of premium products. Make the most of these attractive benefits.

Economy

- 20% higher mileage*
- 5% less energy consumption*

Environmental awareness

- Significantly reduced vehicle CO₂ emissions – approx. 5%!
- Nitrosamine-free!
- Free of highly aromatic oils!
(in accordance with EU Guideline 2005/69/EG)

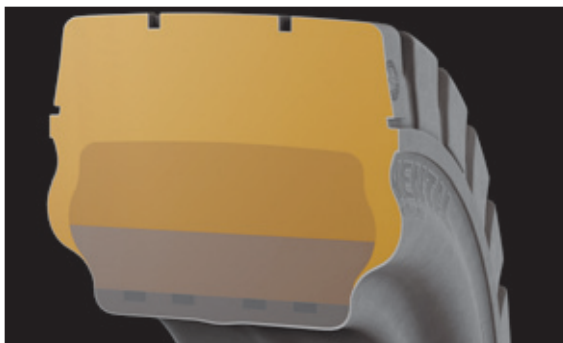
**30 % reduction in rolling resistance
saves 4.5% in energy**

* Reference: mileage compared with SC 15, rolling resistance, energy consumption and CO₂ emissions compared with the competition

SC 20 – the new features:



- Improved traction
 - Greater tread depth



- Enhanced driving comfort thanks to optimum suspension and absorption
 - Optimised aspect ratio



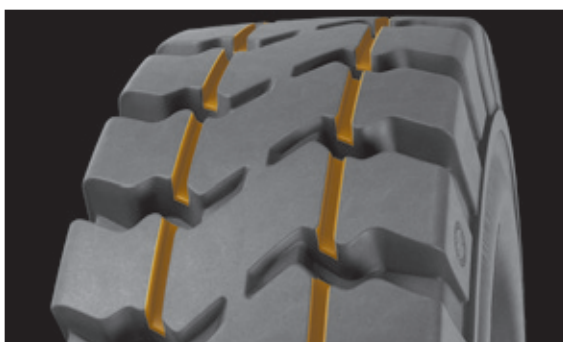
- Lower energy consumption
- Low CO₂ emissions
 - Low rolling resistance



- Very high mileage
 - Greater tread volume



- Extremely quiet running
 - Sturdy central rib/
small tread lug gaps



- Outstanding lateral guidance
 - 2 circumferential longitudinal
grooves

Core features

Customer benefits

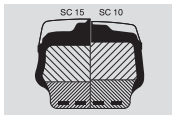
SC 15

Super-Elastic - Solid Tyres



Designed to deliver outstanding life in highly demanding environments, available in SuperClean for non marking on light-coloured surfaces.

- low rolling resistance
- excellent tread depth
- ➡ low heat build-up
- ➡ low energy consumption on electric vehicles
- ➡ long service life for low operating costs



These are improvements that really pay:

The wear volume of the SC 15 has been increased by 30 %, giving it more tread and regrooving depth than the SC 10.

SC 10

Super-Elastic - Solid Tyres

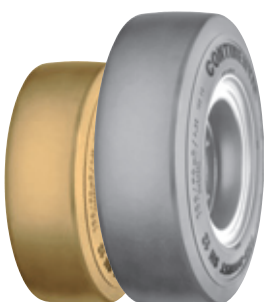


The standard tyre for general demands in universal applications.

- optimal tread design
- low rolling resistance
- compact lugs
- ➡ good traction
- ➡ low heat build-up
- ➡ low energy consumption on electric vehicles
- ➡ good ride comfort

SH 12

Super-Elastic - Solid Tyres



Smooth profile tyre for dry and smooth surfaces. Available in SuperClean for non marking on light-coloured surfaces.

- profileless
- solid shoulder
- ➡ smooth running for driver comfort
- ➡ damage resistant

Core features

Customer benefits

SC 11

Super-Elastic - Solid Tyres



Designed for trailers. Also available in SuperClean for non marking on light-coloured surfaces. The profile is available in size 15x4-8 (125/75-8) and 140/55-9.

- circumferential tread pattern ➡ good stability for safer operation
- flat solid tread ➡ good steering characteristics and greater stability

MIL

Super-Elastic - Solid Tyres



Designed for small tractors and trailers. This tread pattern is available in size 3.00-4.

Continental Super Clean

Ideally suited for the following branches of industry

- foodstuffs
- electronics
- beverages
- paper
- optics
- paint
- pharmaceuticals
- aerospace etc.

The tread and sidewall are made of a wear-resistant, light-coloured rubber compound with high resistance to tear propagation. The CDC Super Clear tyre combines all the outstanding features of the CSE ROBUST SC 15, in addition to offering the following:

- excellent mileage performance
- no contact discoloration
- no black tyre tracks or skid marks

Please note in using CSC tyres:

'Clean' tyres are electrically non-conductive.

Size range, specifications and

Tyre				Rim	Tyre dimensions (in mm)			
Size	Tread pattern	Baseversion			Standard value ¹⁾ pneumatic tyres max. in service		Istwert CSE-Reifen	
		SIT	S		width	outer dia.	width ± 2,0 %	outer dia. ± 1,0 %
acc. to ETRTO ⁶⁾								
3.00-4	MiL		■ ▲ ²⁾	2.10-4	87	260	82	250
4.00-4	SC 10		■ ▲ ²⁾	2.50 C-4	116	318	90	301
140/55-6	SC 15		■ ²⁾	4.50 E-6	130	310	142	310
4.00-8	SC 10	■	■ ²⁾	3.00 D-8	121	422	101	400
	SC 15	■ ▲	■ ²⁾ ▲		121	422	106	402
5.00-8	SC 10	■	■ ²⁾	3.00 D-8	143	476	118	451
	SC 15	■ ▲	■ ▲		143	476	126	459
125/75-8 (15 x 4½-8)	SC 10	■	■ ²⁾	3.00 D-8	132	393	105	371
	SC 11	■ ▲	■ ²⁾		132	393	110	376
	SC 15	■ ▲	■ ▲ ²⁾		132	393	121	377
	SC 20	■	■		132	393	121	377
	SH 12	■ ▲			132	393	121	377
150/75-8 (16 x 6-8)	SC 10	■	■	4.33 R-8	164	434	140	411
	SC 15	■ ▲	■ ▲		164	434	156	417
	SC 20	■	■		164	434	156	417
	SH 12	■ ▲			164	434	156	417
180/70-8 (18 x 7-8)	SC 10	■	■	4.33 R-8	187	471	152	447
	SH 12	■ ▲			187	471	156	454
	SC 15	■ ▲	■ ▲		187	471	156	454
	SC 20	■	■		187	471	156	454
140/55-9	SC 15	■ ▲		4.00 E-9	–	–	131	377
	SC 11	■ ▲			–	–	131	377
	SC 20	■	■		–	–	131	377
6.00-9	SC 10	■	■ ²⁾	4.00 E-9	173	551	138	521
	SC 11		■		173	551	138	521
	SC 15	■ ▲	■ ▲ ²⁾		173	551	143	529
200/75-9 (21 x 8-9)	SC 10	■	■	6.00 E-9	216	546	186	517
	SC 15	■ ▲	■ ▲		216	546	181	524
	SC 20	■	■		216	546	181	524
6.50-10	SC 10	■ ²⁾	■ ²⁾	5.00 F-10	191	600	161	567
	SC 15	■ ▲	■ ▲ ²⁾		191	600	162	576
	SC 20				191	600	162	576
180/60-10	SC 15	■ ▲		5.00 F-10	–	460	160	454

■ CSE-ROBUST ▲ CSC-CLEAN

1) To ensure the interchangeability of pneumatic and CSE tyres, the maximum dimensions of a pneumatic tyre are to be taken into account in designing the vehicle's clearance space.

2) These rim base types are suitable for centre-split rims.

3) Load capacities on vehicles that continuously operate on routes longer than 2000 m available on request.

4) Other vehicles: e.g. trailers, self-propelled machines, tractors, mobile cranes, straddle carriers, forklifts without counterweight, side-loading forklifts etc.

tyre load capacities

Rolling circumference (mm) ⁸⁾ ± 2,5 %	Tyre load capacity (kg) ³⁾						Size
	Stationary	on other vehicles ⁴⁾ at max. speed (mph)			on fork lifts max. 16 mph		
		4	6	16	Load wheel ⁷⁾	Steered wheel ⁵⁾	
acc. to ETRTO ⁶⁾							
790	295	260	235	195	260	195	3.00-4
960	620	535	485	412	535	412	4.00-4
1010	1240	1070	970	825	1070	825	140/55-6
1255	1100	950	860	730	950	730	4.00-8
1270	1100	950	860	730	950	730	
1425	1645	1415	1285	1090	1415	1090	5.00-8
1445	1645	1415	1285	1090	1415	1090	
1189	1210	1040	945	800	1040	800	125/75-8 (15 x 4½-8)
1205	1210	1040	945	800	1040	800	
1208	1210	1040	945	800	1040	800	
1208	1210	1040	945	800	1040	800	
1317	1740	1495	1360	1150	1495	1150	150/75-8 (16 x 6-8)
1336	1740	1495	1360	1150	1495	1150	
1336	1740	1495	1360	1150	1495	1150	
1325	1740	1495	1360	1150	1495	1150	
1435	2490	2145	1945	1650	2145	1650	180/70-8 (18 x 7-8)
1455	2490	2145	1945	1650	2145	1650	
1465	2490	2145	1945	1650	2145	1650	
1465	2490	2145	1945	1650	2140	1650	
1218	1360	1170	1060	900	1170	900	140/55-9
1218	1360	1170	1060	900	1170	900	
1218	1360	1170	1060	900	1170	900	
1650	2190	1885	1710	1450	1885	1450	6.00-9
1650	2190	1885	1710	1450	1885	1450	
1670	2190	1885	1710	1450	1885	1450	
1653	3200	2755	2505	2120	2755	2120	200/75-9 (21 x 8-9)
1680	3200	2755	2505	2120	2755	2120	
1680	3200	2755	2505	2120	2755	2120	
1800	2720	2340	2125	1800	2340	1800	6.50-10
1920	2720	2340	2125	1800	2340	1800	
1920	2720	2340	2125	1800	2340	1800	
1467	2795	2410	2180	1850	2410	1850	180/60-10


5) The steering wheel load capacities for 16 mph (25 km/h) are to be applied for tyres on side-loading forklift truck, straddle carriers and portal lift trucks with a maximum speed of 16 mph (25 km/h).

6) according to DIN 7852.

7) The load ratings are based on an average speed of approx. 6 mph in normal service. Slightly higher top speeds may be reached for a short time.

8) At nominal load (steered wheel 16 mph = 25 km/h).

The minimum dual spacing is indicated on page 84.

 Electrostatically effective with an electrical resistance of less than 10⁶ Ohms.
Electric contact between tyre and rim must be ensured.

Note: Prolonged contact with media that cause swelling (such as oil or solvents) reduces the conductivity.

Size range, specifications and

Size	Tyre			Rim	Tyre dimensions (in mm)			
	Tread pattern	Base version			Standard value ¹⁾ pneumatic tyres max. in service		Actual value CSE-Tyres	
		SIT	S		width	outer dia.	width ± 2,0 %	outer dia, ± 1,0 %
acc. to ETRTO 6)								
225/75-10 (23 x 9-10)	SC 10	■	■	6.50 F-10	243	607	195	574
	SH 12	■ ▲			243	607	195	577
	SC 15	■ ▲	■ ▲		243	607	193	583
	SC 20	■	■		243	607	143	583
200/50-10	SC 10	■	■	6.50 F-10	221	467	195	450
	SC 15	■	■		221	467	196	452
	SC 20	■	■		221	467	196	452
	SH 12	■ ▲			221	467	195	450
7.00-12	SC 10	■	■ ²⁾	5.00 S-12	207	685	175	648
	SC 15	■ ▲	■ ▲		207	685	173	657
	SC 20	■	■		207	685	173	657
23x10-12 250/60-12	SC 10	■ ▲	■ ▲	8.00 G-12	275	583	240	574
	SC 20	■	■	8.0 G-12	275	583	234	574
250/75-12 (27 x 10-12)	SC 10	■	■	8.00 G-12	275	704	240	668
	SC 15	■ ▲	■		275	704	233	676
	SC 20	■	■		275	704	233	676
315/45-12	SC 20	■ ▲	■ ▲	10.00 G-12		576	285	574
22 x 4½	SC 10	■		3.1 F-13	143	613	115	574
23 x 5	SC 10	■ ▲	■ ▲	3.75 P-13	167	654	139	613
25 x 6	SC 10	■	■	3.75 P-13	184	700	139	657
7.00-15	SC 10	■	■	5.5-15	213	761	179	717
	SC 15	■	■ ▲		213	761	179	717
7.50-15	SC 10	■	■	6.5-15	234	787	208	746
	SC 15		■	5.5-15	224	787	208	746
	SC 15	■	■	6.5-15	234	787	208	746
8.25-15	SC 10	■	■	6.5-15	253	853	208	807
	SC 10		■	5.5-15	243	853	208	807
	SH 12	■		6.5-15	253	853	206	809
	SC 15	■ ▲	■ ▲		253	853	206	819
	SC 20	■	■		253	853	206	819

■ CSE-ROBUST ▲ CSC-CLEAN

- 1) To ensure the interchangeability of pneumatic and CSE tyres, the maximum dimensions of a pneumatic tyre are to be taken into account in designing the vehicle's clearance space.
- 2) These rim base types are suitable for centre-split rims.
- 3) Load capacities on vehicles that continuously operate on routes longer than 2000 m available on request.
- 4) Other vehicles: e.g. trailers, self-propelled machines, tractors, mobile cranes, straddle carriers, forklifts without counterweight, side-loading forklifts etc.

tyre load capacities

Rolling circumference (mm) ⁸⁾ ± 2,5 %	Tyre load capacity (kg) ³⁾						Size
	Stationary	on other vehicles ⁴⁾ at max. speed (mph)			on fork lifts max. 16 mph		
		4	6	16	Load wheel ⁷⁾	Steered wheel ⁵⁾	
acc. to ETRTO ⁶⁾							
1839	4000	3445	3125	2650	3445	2650	225/75-10 (23 x 9-10)
1854	4000	3445	3125	2650	3445	2650	
1868	4000	3445	3125	2650	3445	2650	
1868	4000	3445	3125	2650	3445	2650	
1450	2870	2470	2240	1900	2470	1900	200/50-10
1473	2870	2470	2240	1900	2470	1900	
1473	2870	2470	2240	1400	2470	1900	
1445	2870	2470	2240	1900	2470	1900	
2065	3380	2920	2645	2240	2920	2240	7.00-12
2105	3380	2920	2645	2240	2920	2240	
2105	3380	2920	2645	2240	2920	2240	
1870	4380	3770	3420	2900	3770	2900	23x10-12
1870	4380	3770	3420	2900	3770	2900	250/60-12
2134	4530	3900	3540	3000	3900	3000	250/75-12 (27 x 10-12)
2166	4530	3900	3540	3000	3900	3000	
2166	4530	3900	3540	3000	3900	3000	
1870	5210	4485	4070	3450	4485	3450	315/45-12
1839	1245	1075	975	825	1075	825	22 x 4½
1964	1735	1495	1355	1150	1495	1150	23 x 5
2102	2565	2210	2005	1700	2210	1700	25 x 6
2307	4115	3545	3215	2725	3545	2725	7.00-15
2307	4115	3545	3215	2725	3545	2725	
2391	4530	3900	3540	3000	3900	3000	7.50-15
2391	4530	3900	3540	3000	3900	3000	
2391	4530	3900	3540	3000	3900	3000	
2570	5510	4750	4300	3650	4750	3650	8.25-15
2570	5510	4750	4300	3650	4750	3650	
2565	5510	4750	4300	3650	4750	3650	
2609	5510	4750	4300	3650	4750	3650	
2609	5510	4750	4300	3650	4750	3650	

5) The steering wheel load capacities for 16 mph (25 km/h) are to be applied for tyres on side-loading forklift truck, straddle carriers and portal lift trucks with a maximum speed of 16 mph (25 km/h).

6) according to DIN 7852.

7) The load ratings are based on an average speed of approx. 10 km/h in normal service. Slightly higher top speeds may be reached for a short time.

8) At nominal load (steered wheel 16 mph = 25 km/h).

The minimum dual spacing is indicated on page 84.



On request, CSE Robust tires of an electrically conductive type are also available.

Size range, specifications and

Tyre		Rim		Tyre dimensions (in mm)				
Size	Tread pattern	Base version		Standard value ¹⁾ pneumatic tyres max. in service		Actual valve CSE tyres		
		SIT	S	width	outer dia.	width ± 2,0 %	outer dia. ± 1,0 %	
acc. to ETRTO ⁶⁾								
225/75-15 (28 x 9-15/ 8.15-15)	SC 10	■	■	7.0-15	233	721	222	683
	SC 15	■ ▲	■ ▲		233	721	221	693
	SC 20	■	■		233	721	216	693
355/45-15 (28 x 12.5-15)	SC 15	■ ▲	■	9.75-15	–	687	291	683
200-15	SC 10	■	■	6.5-15	221	745	208	704
250/70-15 (250-15)	SC 10	■	■	7.0-15	265	750	222	709
	SH 12	■	■		265	750	221	720
	SC 15	■ ▲	■ ▲		265	750	221	720
	SC 20	■	■		265	750	221	720
	SC 15	■	■ ▲	7.5-15	270	750	221	720
315/70-15 (300-15)	SC 10	■	■	8.0-15	324	857	255	811
	SC 15	■ ▲	■ ▲		324	857	252	823
	SC 20	■	■		324	857	252	823
	SH 12	■ ▲			324	857	255	811
355/65-15	SC 10	■	■	9.75-15	372	861	300	811
	SC 15	■ ▲	■ ▲	9.75-15	372	861	291	823
	SC 20	■	■	9.75-15	372	861	291	823
355/50-20	SH 12	■ ▲		10.0-20	372	861	315	823
8.25-20	SC 15	■	■	6.5-20	253	1002	210	937
10.00-20	SC 15		■	7.5-20	297	1088	265	1025
				6.5-20	287	1088	265	1025
			■	8.0-20	302	1088	265	1025
12.00-20	SC 15		■	8.5-20	337	1163	270	1089
			■	8.0-20	332	1163	270	1089
			■ ▲	10.0-20	352	1163	308	1089
12.00-24	SC 15		■	8.5-24	337	1263	280	1185
			■	10.0-24	305	1263	305	1185
14.00-24	SC 15		■ ▲	10.0-24	405	1391	325	1287

■ CSE-ROBUST ▲ CSC-CLEAN

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tyre load capacities

Rolling circumference (mm) ⁸⁾ ± 2,5 %	Tyre load capacity (kg) ³⁾						Size
	Stationary	on other vehicles ⁴⁾			on fork lifts		
		at max. speed (mph)			max. 16 mph		
		4	6	16	Load wheel ⁷⁾	Steered wheel ⁵⁾	
acc. to ETRTO ⁶⁾							
2189	4380	3900	3540	3000	3900	3000	225/75-15
2240	4380	3900	3540	3000	3900	3000	(28 x 9-15/ 8.15-15)
2247	6420	5525	5015	4250	5525	4250	355/45-15 (28 x 12.5-15)
2256	3670	3160	2865	2430	3180	2430	200-15
2296	5510	4750	4300	3650	4750	3650	250/70-15 (250-15)
2305	5510	4750	4300	3650	4750	3650	
2307	5510	4750	4300	3650	4750	3650	
2307	5510	4750	4300	3650	4750	3650	
2599	6795	5850	5310	4500	5850	4500	315/70-15 (300-15)
2645	6795	5850	5310	4500	5850	4500	
2645	6745	5850	5310	4500	5850	4500	
2599	6795	5850	5310	4500	5850	4500	355/65-15
2632	9060	7000	6430	5450	7800	6000	
2675	9060	7000	6430	5450	7800	6000	
2675	9060	2000	6430	5450	7800	6000	355/50-20
2720	10440	8990	8160	6915	8990	6915	
2992	5550	4400	4335	3675	4400	3675	8.25-20
3250	7550	6000	5450	5000	6000	5000	10.00-20
3250	7550	6000	5450	5000	6000	5000	
3250	7550	6000	5450	5000	6000	5000	
3486	9440	7500	6810	6250	7500	6250	12.00-20
3486	9440	7500	6810	6250	7500	6250	
3486	9770	7765	7050	6470	7765	6470	
3792	10040	7980	7250	6650	7980	6650	12.00-24
3792	10040	7480	7250	6650	7986	6650	
4135	13855	11000	10000	9175	11000	9175	14.00-24

5) The steering wheel load capacities for 16 mph (25 km/h) are to be applied for tyres on side-loading forklift truck, straddle carriers and portal lift trucks with a maximum speed of 16 mph (25 km/h).

6) according to DIN 7852.

7) The load ratings are based on an average speed of approx. 10 km/h in normal service. Slightly higher top speeds may be reached for a short time.

8) At nominal load (steered wheel 16 mph = 25 km/h).

The minimum dual spacing is indicated on page 84.



On request, CSE Robust tires of an electrically conductive type are also available.

