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Earth-mover tyres and rims —

Part 2: Loads and inflation pressures

Pneumatiques et jantes pour engins de terrassement —
Partie 2: Charges et pressions de gonflage

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Foreword

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The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular, the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

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For an explanation of the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT), see www.iso.org/iso/foreword.html.

This document was prepared by Technical Committee ISO/TC 31, *Tyres, rims and valves*, Subcommittee SC 6, *Off-the-road tyres and rims*.

This seventh edition cancels and replaces the sixth edition (ISO 4250-2:2017), which has been technically revised.

The main changes are as follows:

— Deletion and addition of certain tyre size designations to harmonize with ISO 4250-1 and ISO 4250-3.

A list of all parts in the ISO 4250 series can be found on the ISO website.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at www.iso.org/members.html.

Earth-mover tyres and rims —

Part 2:
Loads and inflation pressures

1 Scope

This document gives working definitions of masses and load cycles and specifies tyre loads and reference inflation pressures for tyres primarily intended for earth-mover machines.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 4223-1, *Definitions of some terms used in the tyre industry — Part 1: Pneumatic tyres*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 4223-1 and the following apply.

ISO and IEC maintain terminology databases for use in standardization at the following addresses:

— ISO Online browsing platform: available at https://www.iso.org/obp

— IEC Electropedia: available at https://www.electropedia.org/

NOTE For a list of equivalent terms for tyres, valves and tubes, see ISO 3877-1.

3.1 Masses

3.1.1
maximum load
load of individual tyres determined by the manufacturer's rated gross machine mass (GMM) distribution assigned to each axle, divided by the number of tyres for that axle

Note 1 to entry: The maximum GMM includes operating, optional equipment, special modifications and field modification masses and payload defined in 3.1.1.1 to 3.1.1.5 inclusive.

Note 2 to entry: If tyre ballast is used, this is also included in the determination of GMM.

3.1.1.1
operating mass
actual mass of the base machine with equipment specified by the manufacturer, operator (75 kg), full fuel tank and full lubricating, hydraulic and cooling systems

Note 1 to entry: Net weight is an alternate term for operating mass.

3.1.1.2
optional equipment mass
difference in *operating mass* (3.1.1.1) between the optional item and standard item replaced

EXAMPLE Engine, brakes, tyres.

Note 1 to entry: This includes the operating mass of additional items offered by the manufacturer which are not replacements for standard items (such as cabs, body-liners, sideboards, air-conditioners).

3.1.1.3
mass of special modifications
difference in the *operating mass* (3.1.1.1) of the machine due to modifications not previously covered in *optional equipment mass* (3.1.1.2) that includes additional reinforcements, etc.

3.1.1.4
payload
total mass of the material being carried

3.1.1.5
field modification
operating mass (3.1.1.1) change due to machine alterations made other than by the original manufacturer

EXAMPLE Modifications for additional capacity, reinforcements.

3.2 Operating conditions

3.2.1
maximum speed
peak velocity attained by the machine

3.2.2
earth-moving haulage service
cycle where a machine self-loads or receives a load from loading equipment, transports it elsewhere and returns unloaded

Note 1 to entry: Transportation usually occurs over unimproved surfaces at medium speeds, up to 65 km/h and short distances, up to 4 km one way.

Note 2 to entry: Machines in this category are mainly haulage trucks (dumpers) and tractor-scrapers.

3.2.3
loader service
earth-moving slow speed service where the machine is used to pick up material and move it a short distance away

Note 1 to entry: Tyre loads fluctuate depending on the conditions involved when the equipment picks up the load.

Note 2 to entry: Transportation speeds are low, up to 10 km/h and distances are short, usually less than 75 m one way.

Note 3 to entry: Tyres for loader service may also be used in load-carry service and dozer service.

3.2.4
load-carry service
cycle where the machine, primarily intended for loader service, picks up a load, transports it elsewhere and returns unloaded

Note 1 to entry: Transportation usually occurs over unimproved surfaces at low speeds, up to 25 km/h, and short distances, up to 600 m. Load capacities for loader and load-and-carry cycles are provided in Table 24.

Note 2 to entry: Machines in this category consist mainly of wheel loaders, log stackers and material-handling equipment.

Note 3 to entry: Tyre manufacturers should be consulted for specific conditions.

3.2.5
dozer service
condition where a machine is used to move materials (usually earth) by pushing, dragging or grading

Note 1 to entry: Tyre loads are relatively constant and speeds are low, up to 10 km/h.

Note 2 to entry: Travel distances vary depending on work situations.

3.2.6
grader service
condition where a machine is used in construction and road maintenance

Note 1 to entry: Tyre loads are relatively constant during work cycles.

Note 2 to entry: Grader speeds are slower during working periods, with typical transportation speeds reaching about 40 km/h.

Note 3 to entry: Travel distances vary depending on the work situations.

3.2.7
creep
movement of equipment at a very low speed

Note 1 to entry: Speed is commonly not over 120 m in 60 min.

Note 2 to entry: During creep motion, loads on the tyres are usually very high and consideration shall be given to the type of surface over which the equipment is travelling.

Note 3 to entry: Tyre manufacturers should be consulted for specific conditions.

3.2.8
drive-away
self-propelled movement of a machine from one location to another under non-working conditions

Note 1 to entry: This condition is not part of the standard.

Note 2 to entry: Tyre manufacturers should be consulted for specific conditions.

3.2.9
industrial service
tyres used on industrial vehicles

EXAMPLE Counterbalanced lift truck, container handler, straddle carrier, aircraft tow tractor, mobile crusher, log stacker

4 Special conditions

For longer hauls and/or speeds in excess of those indicated in Tables 1 to 23, and drive-away conditions, tyre manufacturers should be consulted for instructions regarding permissible loads and the required inflation pressures.

5 Selection of tyres for new machine design

Selection of size and strength index of the tyre used on each axle shall be based on the highest individual wheel load as determined by gross machine mass (GMM) distribution, including load transfer and the machine application.

Maximum load per tyre shall not be greater than that specified in the applicable tables.

The performance of machines fitted with earth-mover tyres depends on the operating conditions and more particularly on the specific ground pressure which is governed by the inflation pressure. It is therefore advisable to select tyre size on the basis of low inflation pressure.

6 Inflation pressures

6.1 Tyres covered by this document that have a speed symbol A2, 10 km/h shall not exceed a cold inflation pressure of 1 000 kPa. All other tyres cold inflation pressure shall not exceed 800 kPa. Rim and wheel manufacturers shall be consulted to determine if the rim and wheel are of sufficient strength for the intended service conditions.

6.2 Inflation pressures shown in the load/inflation tables are reference cold inflation pressures and do not include any pressure build-up due to vehicle operation. In practice, the tyre inflation pressure recommended by the different tyre manufacturers can vary according to the reference cold inflation pressure.

6.3 In agreement with tyre manufacturers, inflation pressures can be adjusted to compensate for extreme atmospheric temperature or special vehicle operating conditions.

7 Load/inflation tables

Load/inflation relations for diagonal ply rating marked tyres are given in Tables 1 to 9:

a) Table 1 - diagonal ply rating marked narrow-base tyres for earth-moving slow speed service, speed symbol A2, 10 km/h (loaded conditions);

b) Table 2 - diagonal ply rating marked narrow-base tyres for earth-moving service for relatively short hauls, speed symbol B, 50 km/h;

c) Table 3 – diagonal ply rating marked wide-base tyres for earth-moving slow speed service, speed symbol A2, 10 km/h (loaded conditions);

d) Table 4 - diagonal ply rating marked wide-base and 75 series tyres for earth-moving service for relatively short hauls, speed symbol B, 50 km/h;

e) Table 5 - diagonal ply rating marked 65 series tyres for earth-moving service for relatively short hauls, speed symbol B, 50 km/h;

f) Table 6 - diagonal ply rating marked 65, 70, 80 and 85 series tyres for earth-moving slow speed service, speed symbol A2, 10 km/h;

g) Table 7 - diagonal ply rating marked tyres in grader service, speed symbol A8, 40 km/h;

h) Table 8 - diagonal ply rating marked tyres, speed symbol A2, 10 km/h;

i) Table 9 – diagonal ply rating marked tyres for compactor service, speed symbol A2, 10 km/h;

Load/inflation relations for symbol-marked radial ply tyres are given in Tables 10 to 23:

j) Table 10 - 70, 75 and 80 series radial ply tyres for earth-moving slow speed service, speed symbol A2, 10 km/h;

k) Table 11 - 70, 75 and 80 series radial ply tyres for earth-moving haulage service, speed symbol B, 50 km/h;

l) Table 12 - symbol-marked narrow-base radial tyres, speed symbol A2, 10 km/h (loaded conditions);

m) Table 13 - symbol-marked wide-base radial tyres, speed symbol A2, 10 km/h (loaded conditions);

n) Table 14 - symbol-marked narrow-base radial tyres, speed symbol B, 50 km/h;

o) Table 15 - symbol-marked wide-base and 75 series radial tyres, speed symbol B, 50 km/h;

p) Table 16 - symbol-marked 90 series radial tyres, speed symbol B, 50 km/h;

q) Table 17 - symbol-marked 80 series radial tyres, speed symbol B, 50 km/h;

r) Table 18 - symbol-marked 65, 75 and 80 series radial tyres, speed symbol B, 50 km/h;

s) Table 19 - symbol-marked 65, 75 and 80 series radial tyres, speed symbol A2, 10 km/h;

t) Table 20 - radial tyres for compactor service, speed symbol A2, 10 km/h (loaded conditions);

u) Table 21 - symbol-marked radial tyres in grader service, speed symbol A8, 40 km/h;

v) Table 22 - symbol-marked 65 series metric radial tyres for earth-moving slow speed service, speed symbol A2, 10 km/h;

w) Table 23 - symbol-marked 65 series metric radial tyres for earth-moving service for relatively short hauls, speed symbol B, 50 km/h;

8 Load capacities for earth-mover tyres used for industrial service

For industrial service, it is recommended to use specific tyres designed for this purpose.

If tyres designed for earth-mover application are used, a formal approval from the tyre and wheel manufacturers is required as not all the earth-mover tyres can be used in such conditions.

Consult the tyre and rim manufacturers for applicable load capacities.

Table 1 — Diagonal ply rating marked narrow-base tyres for earth-moving slow speed service, speed symbol A2, 10 km/h (loaded conditions)

Tyre size designation	Ply rating	Load index	Load[a b] kg	Inflation pressure[b] kPa
12.00—20	14	164	5 000	600
	16	167	5 450	700
	20	171	6 150	825
	24	175	6 900	1 000
12.00—24 and 12.00—25	8	156	4 000	325
	14	168	5 600	575
	16	171	6 150	675
	18	173	6 500	750
	20	175	6 900	825
13.00—24 and 13.00—25	8	159	4 375	300
	12	168	5 600	450
	18	176	7 100	675
	20	178	7 500	750
	22	180	8 000	825
14.00—20	20	178	7 500	700
	24	182	8 500	850

[a] For stationary service conditions, the loads in this table may be increased up to 60 % with no increase in inflation pressure.

[b] For special equipment with a high centre of gravity, consult the tyre manufacturer.

Table 1 *(continued)*

Tyre size designation	Ply rating	Load index	Load[a b] kg	Inflation pressure[b] kPa
14.00—24 and 14.00—25	8	163	4 875	275
	10	168	5 600	350
	12	172	6 300	425
	16	177	7 300	550
	20	182	8 500	700
	24	186	9 500	850
	28	188	10 000	925
16.00—21	20	183	8 750	550
	24	187	9 750	650
	28	190	10 600	775
16.00—24 and 16.00—25	12	176	7 100	325
	16	181	8 250	425
	20	187	9 750	550
	24	190	10 600	650
	28	193	11 500	750
	32	196	12 500	875
	36	199	13 600	975
18.00—24 and 18.00—25	12	181	8 250	275
	16	188	10 000	375
	20	193	11 500	475
	24	196	12 500	550
	28	199	13 600	650
	32	202	15 000	750
	36	204	16 000	850
	40	206	17 000	950
18.00—33	24	201	14 500	550
	28	204	16 000	650
	32	207	17 500	750
	36	209	18 500	850
18.00—49	24	209	18 500	550
	28	212	20 000	650
	32	215	21 800	750
21.00—24 and 21.00—25	16	194	11 800	325
	20	198	13 200	400
	24	202	15 000	500
	28	205	16 500	575

[a] For stationary service conditions, the loads in this table may be increased up to 60 % with no increase in inflation pressure.

[b] For special equipment with a high centre of gravity, consult the tyre manufacturer.

Table 1 *(continued)*

Tyre size designation	Ply rating	Load index	Load[a b] kg	Inflation pressure[b] kPa
21.00—35	28	211	19 500	575
	32	214	21 200	650
	36	217	23 000	750
	40	219	24 300	825
	44	220	25 000	900
21.00—49	28	218	23 600	575
	32	220	25 000	650
	36	223	27 250	750
	40	225	29 000	825
	44	227	30 750	900
24.00—25	24	208	18 000	425
	30	212	20 000	525
24.00—29	24	210	19 000	425
	30	215	21 800	525
24.00—35	36	222	26 500	650
	42	225	29 000	750
	48	228	31 500	850
	54	231	34 500	975
24.00—43	36	226	30 000	650
	42	229	32 500	750
	48	231	34 500	850
24.00—49	36	229	32 500	650
	42	231	34 500	750
	48	234	37 500	850
27.00—33	24	216	22 400	350
	30	221	25 750	450
	36	225	29 000	550
27.00—49	36	233	36 500	575
	42	236	40 000	675
	48	239	43 750	775
30.00—51	40	240	45 000	575
	46	243	48 750	650
	52	246	53 000	750
33.00—51	42	245	51 500	550
	50	248	56 000	650
	58	251	61 500	750
36.00—51	42	249	58 000	500
	50	253	65 000	600
	58	256	71 000	675

[a] For stationary service conditions, the loads in this table may be increased up to 60 % with no increase in inflation pressure.

[b] For special equipment with a high centre of gravity, consult the tyre manufacturer.

Table 1 *(continued)*

Tyre size designation	Ply rating	Load index	Load[a b] kg	Inflation pressure[b] kPa
40.00—57	52	260	80 000	550
	60	263	87 500	650
	68	265	92 500	725

[a] For stationary service conditions, the loads in this table may be increased up to 60 % with no increase in inflation pressure.

[b] For special equipment with a high centre of gravity, consult the tyre manufacturer.

Table 2 — Diagonal ply rating marked narrow-base tyres for earth-moving service for relatively short hauls, speed symbol B, 50 km/h

Tyre size designation	Ply rating	Load index	Load[a] kg	Inflation pressure kPa
12.00—20	14	144	2 800	425
	16	146	3 000	475
12.00—24 and 12.00—25	8	135	2 180	225
	14	146	3 000	375
	16	149	3 250	450
	18	152	3 550	500
	20	154	3 750	550
13.00—24 and 13.00—25	8	138	2 360	200
	12	146	3 000	300
	18	155	3 875	450
	20	156	4 000	500
	22	158	4 250	550
14.00—20	16	153	3 650	375
	20	157	4 125	475
14.00—24 and 14.00—25	8	141	2 575	175
	10	146	3 000	225
	12	150	3 350	275
	16	156	4 000	375
	20	161	4 625	475
	24	165	5 150	575
	28	168	5 600	650
16.00—21	16	159	4 375	325
	20	164	5 000	400
16.00—25	12	155	3 875	225
	16	163	4 875	325
	20	167	5 450	400
	24	170	6 000	475
	28	174	6 700	575
	32	177	7 300	650
	36	179	7 750	725

[a] Load adjustment for maximum speed 65 km/h: load × 0,85.

Table 2 *(continued)*

Tyre size designation	Ply rating	Load index	Load[a] kg	Inflation pressure kPa
18.00—25	12	162	4 750	200
	16	168	5 600	275
	20	173	6 500	350
	24	177	7 300	425
	28	180	8 000	500
	32	183	8 750	575
	36	185	9 250	625
	40	187	9 750	700
18.00—33	24	182	8 500	425
	28	185	9 250	500
	32	188	10 000	575
	36	190	10 600	625
18.00—49	24	190	10 600	425
	28	194	11 800	500
	32	197	12 850	575
21.00—25	16	175	6 900	250
	20	179	7 750	300
	24	183	8 750	375
	28	186	9 500	425
21.00—35	28	192	11 200	425
	32	195	12 150	500
	36	197	12 850	550
	40	200	14 000	625
	44	201	14 500	675
21.00—49	28	199	13 600	425
	32	202	15 000	500
	36	203	15 500	550
	40	206	17 000	625
	44	207	17 500	675
24.00—25	24	189	10 300	325
	30	194	11 800	400
24.00—29	24	192	11 200	325
	30	196	12 500	400
24.00—35	36	203	15 500	475
	42	205	16 500	550
	48	209	18 500	650
	54	211	19 500	725
24.00—43	36	206	17 000	475
	42	210	19 000	575
	48	213	20 600	650

[a] Load adjustment for maximum speed 65 km/h: load × 0,85.

Table 2 *(continued)*

Tyre size designation	Ply rating	Load index	Load[a] kg	Inflation pressure kPa
24.00—49 and 27—56.5	36	209	18 500	475
	42	212	20 000	550
	48	215	21 800	650
27.00—33	24	198	13 200	275
	30	203	15 500	350
	36	205	16 500	400
27.00—49 and 30—56.5	36	214	21 200	425
	42	217	23 000	500
	48	220	25 000	575
	54	223	27 250	650
30.00—33	28	204	16 000	275
	34	209	18 500	350
	40	214	21 200	425
30.00—51 and 33—59.5	40	221	25 750	425
	46	225	29 000	500
	52	226	30 000	550
33.00—51 and 36—59.5	42	226	30 000	425
	50	230	33 500	500
	58	232	35 500	575
36.00—51 and 39—59.5	42	231	34 500	375
	50	234	37 500	450
	58	237	41 250	525
40.00—57	52	241	46 250	425
	60	244	50 000	475
	68	247	54 500	550

[a] Load adjustment for maximum speed 65 km/h: load × 0,85.

Table 3 — Diagonal ply rating marked wide-base tyres for earth-moving slow speed service, speed symbol A2, 10 km/h (loaded conditions)

Tyre size designation	Ply rating	Load index	Load[a b] kg	Inflation pressure[b] kPa
15.5—25	8	158	4 250	250
	10	163	4 875	325
	12	168	5 600	400
17.5—25	8	162	4 750	225
	12	171	6 150	350
	16	177	7 300	475
	20	181	8 250	575

[a] For stationary service conditions, the loads in this table may be increased up to 60 % with no increase in inflation pressure.

[b] For special equipment with a high centre of gravity, consult the tyre manufacturer.

Table 3 *(continued)*

Tyre size designation	Ply rating	Load index	Load[a b] kg	Inflation pressure[b] kPa
20.5—25	12	174	6 700	250
	16	181	8 250	350
	20	186	9 500	450
	24	189	10 300	525
	28	193	11 500	625
23.5—25	12	180	8 000	225
	16	186	9 500	300
	20	191	10 900	375
	24	196	12 500	475
	28	199	13 600	550
26.5—25	16	193	11 500	275
	20	198	13 200	350
	24	200	14 000	400
	26	202	15 000	450
	28	203	15 500	475
	32	206	17 000	550
26.5—29	18	197	12 850	300
	22	201	14 500	375
	26	204	16 000	450
	30	207	17 500	525
29.5—25	16	197	12 850	250
	22	202	15 000	325
	28	207	17 500	425
29.5—29	16	200	14 000	250
	22	204	16 000	325
	28	210	19 000	425
	34	214	21 200	525
	40	218	23 600	625
29.5—35	22	207	17 500	325
	28	213	20 600	425
	34	217	23 000	525
33.25—29	26	213	20 600	350
	32	218	23 600	450
	38	221	25 750	525
33.25—35	26	216	22 400	350
	32	221	25 750	450
	38	224	28 000	550
33.5—33	26	216	22 400	350
	32	221	25 750	425
	38	225	29 000	525

[a] For stationary service conditions, the loads in this table may be increased up to 60 % with no increase in inflation pressure.

[b] For special equipment with a high centre of gravity, consult the tyre manufacturer.

Table 3 *(continued)*

Tyre size designation	Ply rating	Load index	Load[a b] kg	Inflation pressure[b] kPa
33.5—39	26	219	24 300	350
	32	223	27 250	425
	38	227	30 750	525
37.25—35	30	224	28 000	375
	36	227	30 750	450
	42	230	33 500	525
37.5—33	30	224	28 000	375
	36	228	31 500	450
	42	231	34 500	525
37.5—39	28	225	29 000	350
	36	230	33 500	450
	44	234	37 500	550
37.5—51	28	230	33 500	350
	36	235	38 750	450
	44	238	42 500	525
40.5/75—39	30	228	31 500	325
	38	234	37 500	425
	46	238	42 500	525
49.5—57 50/80—57	68	263	87 500	625
53.5/85—57	68	270	106 000	650
	76	273	115 000	725

[a] For stationary service conditions, the loads in this table may be increased up to 60 % with no increase in inflation pressure.

[b] For special equipment with a high centre of gravity, consult the tyre manufacturer.

Table 4 — Diagonal ply rating marked wide-base and 75 series tyres for earth-moving service for relatively short hauls, speed symbol B, 50 km/h

Tyre size designation	Ply rating	Load index	Load[a] kg	Inflation pressure kPa
15.5—25	8	141	2 575	175
	10	146	3 000	225
	12	149	3 250	250
17.5—25	8	144	2 800	150
	12	153	3 650	225
	16	158	4 250	300
	20	164	5 000	400
20.5—25	12	160	4 500	200
	16	167	5 450	275
	20	170	6 000	325
	24	174	6 700	400
	28	178	7 500	475

[a] Load adjustment for maximum speed 65 km/h: load × 0,83.

Table 4 *(continued)*

Tyre size designation	Ply rating	Load index	Load[a] kg	Inflation pressure kPa
23.5—25	12	166	5 300	175
	16	171	6 150	225
	20	177	7 300	300
	24	180	8 000	350
	28	183	8 750	400
26.5—25	16	177	7 300	200
	20	181	8 250	250
	24	185	9 250	300
	26	186	9 500	325
	28	188	10 000	350
	32	192	11 200	425
26.5—29	18	181	8 250	225
	22	185	9 250	275
	26	189	10 300	325
	30	192	11 200	375
29.5—25	16	180	8 000	175
	22	188	10 000	250
	28	193	11 500	325
29.5—29	16	182	8 500	175
	22	190	10 600	250
	28	195	12 150	325
	34	200	14 000	400
	40	202	15 000	475
29.5—35	22	293	11 500	250
	28	199	13 600	325
	34	202	15 000	400
33.25—29	26	199	13 600	275
	32	202	15 000	325
	38	206	17 000	400
33.25—35	26	201	14 500	275
	32	204	16 000	325
	38	208	18 000	400
33.5—33	20	196	12 500	200
	26	202	15 000	275
	32	205	16 500	325
	38	209	18 500	400
33.5—39	26	204	16 000	275
	32	208	18 000	325
	38	212	20 000	400
37.25—35	30	207	17 500	275
	36	211	19 500	325
	42	215	21 800	400

[a] Load adjustment for maximum speed 65 km/h: load × 0,83.

Table 4 *(continued)*

Tyre size designation	Ply rating	Load index	Load[a] kg	Inflation pressure kPa
37.5—33	30	208	18 000	275
	36	212	20 000	325
	42	216	22 400	400
37.5—39	28	209	18 500	250
	36	214	21 200	325
	44	219	24 300	400
	52	222	26 500	475
37.5—51	28	213	20 600	250
	36	219	24 300	325
	44	223	27 250	400
40.5/75—39	30	213	20 600	250
	38	219	24 300	325
	46	223	27 250	400

[a] Load adjustment for maximum speed 65 km/h: load × 0,83.

Table 5 — Diagonal ply rating marked 65 series tyres for earth-moving service for relatively short hauls, speed symbol B, 50 km/h

Tyre size designation	Ply rating	Load index	Load kg	Inflation pressure kPa
25/65—25	12	159	4 375	175
	16	165	5 150	225
	20	169	5 800	275
30/65—25	16	174	6 700	200
	20	178	7 500	250
30/65—29	16	176	7 100	200
	20	181	8 250	250
	24	184	9 000	300
35/65—33	24	193	11 500	250
	30	197	12 850	300
	36	201	14 500	375

Table 6 — Diagonal ply rating marked 65, 70, 80 and 85 series tyres for earth-moving slow speed service, speed symbol A2, 10 km/h

Tyre size designation	Ply rating	Load index	Load kg	Inflation pressure kPa
25/65—25	12	177	7 300	250
	16	182	8 500	325
	20	187	9 750	400
30/65—25	16	191	10 900	275
	20	196	12 500	350
30/65—29	16	193	11 500	275
	20	198	13 200	350
	24	202	15 000	425

Table 6 *(continued)*

Tyre size designation	Ply rating	Load index	Load kg	Inflation pressure kPa
35/65—33	24	210	19 000	350
	30	214	21 200	425
	36	218	23 600	525
40/65—39	30	223	27 250	375
	36	226	30 000	450
41.25/70—39	34	229	32 500	375
	42	234	37 500	475
45/65—45	38	235	38 750	425
	46	239	43 750	525
	50	241	46 250	575
	58	244	50 000	675
50/65—51	46	246	53 000	475
	54	249	58 000	575
52/80—57	68	265	92 500	600
53.5/85—57	68	270	106 000	650
	76	273	115 000	725
65/65—57	62	266	95 000	500
70/70—57	84	279	136 000	675

Table 7 — Diagonal ply rating marked tyres in grader service, speed symbol A8, 40 km/h

Tyre size designation[a]	Ply rating	Load index	Load kg	Inflation pressure kPa
10.00—24TG	8	126	1 700	250
12.00—24TG	6	124	1 600	150
	8	130	1 900	225
	12	139	2 430	325
13.00—20TG	12	138	2 360	275
	16	145	2 900	375
13.00—24TG	8	133	2 060	200
	10	138	2 360	250
	12	143	2 725	300
	14	146	3 000	350
14.00—20TG	12	143	2 725	250
	16	150	3 350	350
14.00—24TG	8	140	2 500	175
	10	144	2 800	225
	12	147	3 075	275
	14	151	3 450	325
	16	153	3 650	375
16.00—24TG	12	153	3 650	225
	14	156	4 000	275
	16	160	4 500	325

[a] "TG" is a designation to be used to identify tyres mounted on SDC rims.

Table 7 *(continued)*

Tyre size designation[a]	Ply rating	Load index	Load kg	Inflation pressure kPa
18.00—25	12	157	4 125	200
	16	164	5 000	275
15.5—25	8	131	4 300	150
	10	135	4 800	175
	12	142	5 840	250
17.5—25	8	134	2 120	125
	12	145	2 900	200
	14	146	3 000	225
	16	150	3 350	275
	20	153	3 650	325
20.5—25	12	152	3 550	175
	16	156	4 000	225
	20	160	4 500	275
23.5—25	12	156	4 000	150
	16	162	4 750	200
	20	167	5 450	250
25/65—25	12	150	3 350	125
	16	157	4 125	175

[a] "TG" is a designation to be used to identify tyres mounted on SDC rims.

Table 8 — Diagonal ply rating marked tyres, speed symbol A2, 10 km/h

Tyre size designation[a]	Ply rating	Load index	Load kg	Inflation pressure kPa
12.00—24TG	8	156	4 000	325
	10	160	4 500	400
	12	165	5 150	500
13.00—24TG	8	159	4 375	300
	10	164	5 000	375
	12	168	5 600	450
	14	170	6 000	525
	16	173	6 500	600
14.00—24TG	8	163	4 875	275
	10	168	5 600	350
	12	172	6 300	425
	16	177	7 300	550
16.00—24TG	12	176	7 100	325
	16	181	8 250	425

[a] "TG" is a designation to be used to identify tyres mounted on SDC rims.

Table 9 — Diagonal ply rating marked tyres for compactor service, speed symbol A2, 10 km/h

Tyre size designation	Ply rating	Load index	Load kg	Inflation pressure kPa
8.5/90—15K[a]	6	128	1 800	350
7.50—15	6	129	1 850	400
	10	138	2 360	625
	12	142	2 650	750
	14	145	2 900	875
7.50—16	6	130	1 900	400
8.25—15	10	143	2 725	600
8.25—20	10	149	3 250	600
	12	153	3 650	725
	14	155	3 875	800
9.00—20	10	153	3 650	525
	12	156	4 000	625
	14	159	4 375	725
	16	162	4 750	825
10.5/80—16	6	130	1 900	300
10.00—20	12	160	4 500	575
	14	162	4 750	675
	16	166	5 300	800
	18	168	5 600	875
	20	170	6 000	975
11.00—20	12	162	4 750	550
	14	165	5 150	650
	16	167	5 450	725
	18	169	5 800	825
	20	172	6 300	925
	22	173	6 500	1 000
12.00—16	10	157	4 125	450
12.00—20	14	168	5 600	600
13.00—24	18	180	8 000	700
	22	183	8 750	825
	26	187	9 750	1 000

[a] The suffix "K" is used to identify tyres mounted on rims with a rim diameter code of 15 but having a specified diameter (D) of 380,2 mm.

Table 10 — 70, 75 and 80 series radial ply tyres for earth-moving slow speed service, speed symbol A2, 10 km/h

Tyre size designation	Load index	Load kg	Inflation pressure kPa
365/70R18	146	3 000	375
405/70R18	153	3 650	375
405/70R20	155	3 875	375
405/70R24	158	4 250	375
375/75R20	153	3 650	375
425/75R20	158	4 250	375

Table 10 *(continued)*

Tyre size designation	Load index	Load kg	Inflation pressure kPa
275/80R18	142	2 650	375
275/80R20	144	2 800	375
335/80R18	145	2 900	375
335/80R20	147	3 075	375
365/80R20	153	3 650	375
405/80R25	163	4 875	375
445/80R25	169	5 800	375
525/80R25	179	7 750	375

Table 11 — 70, 75 and 80 series radial ply tyres for earth-moving haulage service, speed symbol B, 50 km/h

Tire size designation	Load index	Load kg	Inflation pressure kPa
365/70R18	135	2 180	375
405/70R18	141	2 575	375
405/70R20	143	2 725	375
405/70R24	146	3 000	375
375/75R20	141	2 575	375
425/75R20	146	3 000	375
275/80R18	130	1 900	375
275/80R20	132	2 000	375
335/80R18	134	2 120	375
335/80R20	136	2 240	375
365/80R20	141	2 575	375
405/80R25	152	3 550	375
445/80R25	157	4 125	375
525/80R25	168	5 600	375

Table 12 — Symbol-marked narrow-base radial tyres, speed symbol A2, 10 km/h (loaded conditions)

Tyre size designation	Symbol	Load index	Load kg	Inflation pressure kPa
12.00R20	⋆	160	4 500	550
12.00R24 and 12.00R25	⋆	165	5 150	550
	⋆⋆	175	6 900	800
	⋆⋆⋆	177	7 300	950
13.00R24 and 13.00R25	⋆⋆	180	8 000	800
	⋆⋆⋆	182	8 500	950
14.00R20 and 14.00R21	⋆	160	4 500	550
	⋆⋆	171	6 150	825

NOTE Tyres designed for the slow speed application, tyres marked L, usually cannot be used for tyres designed for haulage application, tyres marked E. However, some tyres can be dual marked (e.g. E-3/L-3) indicating tyres are approved for both applications.

Table 12 *(continued)*

Tyre size designation	Symbol	Load index	Load kg	Inflation pressure kPa
14.00R24 and 14.00R25	★★	186	9 500	800
	★★★	188	10 000	950
16.00R20 and 16.00R21	★	181	8 250	550
	★★	192	11 200	825
16.00R25	★	184	9 000	550
	★★	195	12 150	800
18.00R25	★	194	11 800	550
	★★	204	16 000	800
18.00R33	★	199	13 600	550
	★★	209	18 500	800
21.00R25	★	202	15 000	550
	★★	213	20 600	800
21.00R33	★★	217	23 000	800
21.00R35	★	208	18 000	550
	★★	219	24 300	800
21.00R49	★★	225	29 000	800
24.00R35	★	217	23 000	550
	★★	227	30 750	800
24.00R49	★	223	27 250	550
	★★	234	37 500	800
27.00R49	★	230	33 500	550
	★★	240	45 000	800
30.00R51	★	237	41 250	550
	★★	248	56 000	800
33.00R51	★	243	48 750	550
	★★	253	65 000	800
36.00R51	★	249	58 000	550
	★★	260	80 000	800
37.00R57	★	251	61 500	550
	★★	261	82 500	800
40.00R57	★	258	75 000	550
	★★	268	100 000	800

NOTE Tyres designed for the slow speed application, tyres marked L, usually cannot be used for tyres designed for haulage application, tyres marked E. However, some tyres can be dual marked (e.g. E-3/L-3) indicating tyres are approved for both applications.

Table 13 — Symbol-marked wide-base radial tyres, speed symbol A2, 10 km/h (loaded conditions)

Tyre size designation	Symbol	Load index	Load kg	Inflation pressure kPa
15.5R25	⋆	169	5 800	500
	⋆⋆	176	7 100	600
17.5R25	⋆	176	7 100	500
	⋆⋆	182	8 500	600
20.5R25	⋆	186	9 500	500
	⋆⋆	193	11 500	600
23.5R25	⋆	195	12 150	500
	⋆⋆	201	14 500	600
26.5R25	⋆	202	15 000	500
	⋆⋆	209	18 500	600
26.5R29	⋆	204	16 000	500
	⋆⋆	211	19 500	600
29.5R25	⋆	208	18 000	500
	⋆⋆	216	22 400	600
29.5R29	⋆	211	19 500	500
	⋆⋆	218	23 600	600
29.5R35	⋆	214	21 200	500
	⋆⋆	221	25 750	650
33.25R29	⋆	218	23 600	500
	⋆⋆	225	29 000	650
33.25R35	⋆	221	25 750	500
	⋆⋆	228	31 500	650
33.5R33	⋆	221	25 750	500
	⋆⋆	228	31 500	650
33.5R39	⋆	224	28 000	500
	⋆⋆	231	34 500	650
37.25R35	⋆	228	31 500	500
	⋆⋆	234	37 500	650
37.5R33	⋆	228	31 500	500
	⋆⋆	234	37 500	650
37.5R39	⋆	230	33 500	500
	⋆⋆	237	41 250	650
37.5R51	⋆	234	37 500	500
	⋆⋆	241	46 250	650
40.5/75R39	⋆	234	37 500	500
	⋆⋆	241	46 250	650
55/80R57	⋆⋆	268	100 000	650
55.5/80R57	⋆⋆	268	100 000	650
60/80R57	⋆⋆	274	118 000	650

NOTE Tyres designed for the slow speed application, tyres marked L, usually cannot be used for tyres designed for haulage application, tyres marked E. However, some tyres can be dual marked (e.g. E-3/L-3) indicating tyres are approved for both applications.

Table 14 — Symbol-marked narrow-base radial tyres, speed symbol B, 50 km/h

Tyre size designation	Symbol	Load Index	Load[a] kg	Inflation pressure kPa
12.00R20	★	143	2 725	475
	★★	153	3 650	700
12.00R24	★★	156	4 000	650
and 12.00R25	★★★	158	4 250	700
13.00R24	★★	162	4 750	650
and 13.00R25	★★★	163	4 875	700
14.00R20	★	154	3 750	450
and 14.00R21	★★	164	5 000	650
14.00R24	★★	168	5 600	650
and 14.00R25	★★★	169	5 800	700
16.00R20	★	165	5 150	450
and 16.00R21	★★	175	6 900	650
16.00R25	★	167	5 450	450
	★★	177	7 300	650
18.00R25	★	176	7 100	450
	★★	185	9 250	650
18.00R33	★★	191	10 900	650
	★★★	195	12 150	800
21.00R25	★★	195	12 150	650
21.00R33	★★	200	14 000	700
	★★★	203	15 500	800
21.00R35	★★	201	14 500	650
21.00R49	★★	207	17 500	650
24.00R35	★★	209	18 500	650
	★★★	212	20 000	800
24.00R49	★★	215	21 800	650
27.00R49	★★	223	27 250	650
	★★★	226	30 000	800
30.00R51	★★	230	33 500	650
33.00R51	★★	235	38 750	650
	★★★	238	42 500	800
36.00R51	★★	241	46 250	650
37.00R57	★★	246	53 000	700
	★★★	249	58 000	800
40.00R57	★★	250	60 000	700

[a] Load adjustment for maximum speed 65 km/h: load × 0,88.