INTERNATIONAL STANDARD

ISO 4251-1

Sixth edition
2005-09-15

AMENDMENT 1
2012-01-15

Tyres (ply rating marked series) and rims for agricultural tractors and machines —

Part 1: Tyre designation and dimensions, and approved rim contours

AMENDMENT 1

Pneumatiques (série à marquage «équivalent nappes») et jantes pour tracteurs et machines agricoles —

Partie 1: Désignation et cotes des pneumatiques et profils de jantes approuvés

AMENDEMENT 1

Reference number
ISO 4251-1:2005/Amd.1:2012(E)

COPYRIGHT PROTECTED DOCUMENT

ISO copyright office
Case postale 56 • CH-1211 Geneva 20
Tel. + 41 22 749 01 11
Fax + 41 22 749 09 47
E-mail copyright@iso.org
Web www.iso.org

Published in Switzerland

Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2.

The main task of technical committees is to prepare International Standards. Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights.

Amendment 1 to ISO 4251-1:2005 was prepared by Technical Committee ISO/TC 31, *Tyres, rims and valves*, Subcommittee SC 5, *Agricultural tyres and rims*.

Copyrighted material licensed to Dublin Institute of Technology by SAI Global (www.saiglobal.com), downloaded on 12 Jul 12 by Ann McSweeney.
No further reproduction or distribution is permitted. Uncontrolled when printed.

Tyres (ply rating marked series) and rims for agricultural tractors and machines —

Part 1:
Tyre designation and dimensions, and approved rim contours

AMENDMENT 1

Page 2, 4.3.3

Replace entire wording with the following:

The classification code I, as specified in ISO 4251-4, shall be marked on the tyre sidewall, along with an optional marking “IMP” or “IMPLEMENT” or SL suffix.

EXAMPLE

4.00-12	IMP
4.00-12	IMPLEMENT
4.00-12SL	IMPLEMENT

Page 2, 4.5

Add the following subclause after 4.4:

4.5 Tyre maximum pressure bead seating pictogram (optional)

The inscription “XXX kPa MAX” inside the pictogram (Figure 1) indicates the cold inflation pressure that shall not be exceeded within the bead seating during tyre mounting. The value of inflation pressure is determined by the tyre manufacturer.

The pictogram shall be marked on both sidewalls of the tyre.

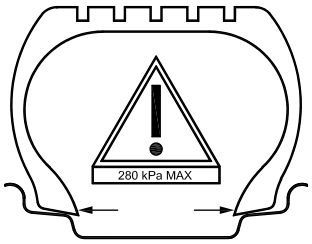

Figure 1 — Pictogram of maximum inflation pressure — Example

Page 4, Table 1

Add the following sizes:

Dimensions in millimetres

Tyre size designation	Measurement rim width code	Design dimensions of new tyres		Dimensions in service	
		Section width	Overall diameter[a]	Maximum overall width	Maximum overall diameter[b]
8.3 – 38	7.00	211	1 351	228	1 374
8.3 – 44			1 503		1 526
9.5 – 22	8.00	241	997	260	1 024
9.5 – 38			1 404		1 430
9.5 – 42			1 505		1 532
9.5 – 44			1 556		1 582
9.5 – 48			1 658		1 684
11.2 – 20	10.00	284	1 002	307	1 032
11.2 – 42			1 561		1 591
12.4 – 46	11.00	315	1 718	340	1 751
13.6 – 26	12.00	345	1 285	373	1 311
13.6 – 48			1 819		1 855
18.4 – 46	16.00	467	1 958	504	2 006

Page 6, Table 2

Add footnote d to sizes 30.5L – 32 and VA35.5L – 32. Add sizes DH30.5L – 32 and DH35.5L – 32:

Dimensions in millimetres

Tyre size designation	Measurement rim width code	Design dimensions of new tyres		Dimensions in service	
		Section width	Overall diameter[a]	Maximum overall width	Maximum overall diameter[b]
30.5L – 32[d]	27.00	775	1 820	837	1 881
VA30.5L – 32	27.00	775	1 820	837	1 881
DH35.5L – 32	31.00	902	1 980	974	2 051
VA 35.5L – 32[d]	31.00	902	1 980	974	2 051

[d] VA rims are not interchangeable with DH or DH –H, DH –B, DH –HB or DWM rims.

Page 6, Table 3

Delete Table 3 and renumber the subsequent tables.

Page 9, Table 7

Add the following sizes to the new Table 6:

Tyre size designation	Radius indices[a,b] mm
9.5 – 22	475
9.5 – 42	725
13.6 – 26	600
13.6 – 46	825
18.4 – 46	925

Page 13, Table 10

Delete tyre size 7.2, add tyre sizes VA30.5L and DH35.5L before the revised VA35.5L row, revise approved rim contour, and add footnote e to the new Table 9 as follows:

Table 9 — Agricultural drive wheels — Tractor tyres — Approved rim contours

Tyre section code	Rim diameter code	Approved rim contours[a]
9.5	22, 24, 32, 36, 38, 44, 48	W11, W12
13.6	42	W7, W8, W12A
18.4	24, 26, 28, 36, 38, 48	W15A, W15L, W16A, W16L, DD16
20.8	34, 38, 42	W16A, W16L, W17L, W18L, W18A, DD16, DD18
23.1	26, 30, 34	DW18, DW18A, DW20A, DW20B, MW20A
24.5	32	DW20A, DW20B, TW20, DW21A, DW21B, DH21, DH21H, TW21
28L	26	DW23A, DW23B, TW23, DW25A, DW25, TW25
30.5L[e]	32	DW27A, DW27B, DH27, DH27H, TW27
VA30.5L[e]	32	27VA
DH35.5L	32	DH31, DH31H, DH31B, DH31HB, 31DWM
VA35.5L[e]	32	31VA

[e] VA rims are not interchangeable with DH or DH-H, DH-B, DH-HB or DWM rims.

Page 17

Replace the title and introductory sentence of Annex A with the following:

Tyres with nominal rim diameter codes 15.3, 16.1 and tyres for small tractors

The technical data of former standardized tyres with nominal rim diameter codes 15.3, 16.1 and tyres for small tractors are given in Tables A.1 to A.9.

Add a new Table A.2 and renumber the subsequent tables.

Table A.2 — Agricultural tractor drive wheel tyres (diagonal construction, normal section height) — Tyre size designations, measurement rims and dimensions

Dimensions in millimetres

Tyre size designation	Optional size marking	Measurement rim width code	Design dimensions of new tyres		Dimensions in service	
			Section width	Overall diameter[a]	Maximum overall width	Maximum overall diameter[b]
18.4 – 16.1	—	16.00	467	1 137	505	1 181

[a] Minimum new tyre overall diameter shall be calculated on the basis of tolerance of −3 % on design section height.

[b] Figures are based on tyres with classification code R – 1. The tractor manufacturer shall recognize that tyres with deep tread and related increased overall diameter may be used.

Page 18, Table A.3

Add the following size to the new Table A.4.

Table A.4 — Agricultural implement tyres (diagonal construction, low section height) — Tyre size designations, measurement rims and dimensions

Dimensions in millimetres

Tyre size designation	Measurement rim width code	Design dimensions of new tyres			Dimension in service		
		Section width	Overall diameter[a]		Maximum overall width	Maximum overall diameter	
			Non-traction pattern	Traction pattern		Non-traction pattern	Traction pattern
16.5L – 16.1	14.00	419	1 024	—	457	1 075	—

Add a new Table A.5.

Table A.5 — Traction drive wheel tyres for small tractor

Dimensions in millimetres

Tyre size designation	Measurement rim width code	Design dimensions of new tyres		Dimensions in service	
		Section width	Overall diameter[a]	Maximum overall width	Maximum overall diameter[b]
5 – 12	4.00	127	528	137	542
6 – 12	5.00	155	577	167	593
6 – 14	5.00	155	627	167	647
6 – 16	5.00	155	678	167	701
7 – 12	6.00	183	640	198	660
7 – 14	6.00	183	691	198	714
7 – 16	6.00	183	742	198	768
8 – 16	6.00	211	790	228	819
8 – 18	6.00	211	841	228	873

[a] Minimum new tyre overall diameter shall be calculated on the basis of tolerance of −3 % on design section height.

[b] Figures are based on tyres with classification code R – 1. The tractor manufacturer shall recognize that tyres with deep tread and related increased overall diameter may be used.

Page 18, Table A.4

Add the following sizes and footnote a to the new Table A.6:

Table A.6 — Agricultural implement tyres (normal and low section height) — Approved rim contours

Tyre size designation	Approved rim contours[a]
16.5L – 16.1	16.1xW14C, 16.1xW14C
19L – 16.1	16.1xW16CH, 16.1xW16CH
21.5L – 16.1	16.1xW16C, 16.1xW18C, 16.1xW16CH, 16.1xW18CH

[a] WC-Rim should only be applicable up to 16PR.

Add Tables A.7, A.8, A.9, and A.10:

Table A.7 — Agricultural tractor drive wheel tyres (normal section height) — Approved rim contours

Tyre size designation	Approved rim contours[a]
18.4 – 16.1	16.1xW16C, 16.1xW16CH

[a] WC-Rim should only be applicable up to 16PR.

Table A.8 — Agricultural tractor steering wheel tyres (low section height) — Approved rim contours

Tyre size designation	Approved rim contours[a]
14L – 16.1	16.1xW11C
16.5L – 16.1	16.1xW14C, 16.1xW14CH
14.5/75 – 16.1	16.1xW11C

[a] WC-Rim should only be applicable up to 16PR.

Table A.9 — Small tractor tyres — Approved rim contours

Tyre size designation	Approved rim contours
5 – 12	4JA
6 – 12	5JA
6 – 14	5KB, 5JA
6 – 16	4.50E, 5.50E
7 – 12	5JA
7 – 14	5JA, 5KB
7 – 16	6LB, 6L, 6.00F
8 – 16	6LB, 6L, 6.00F
8 – 18	5.50F

Table A.10 — Rolling circumference, rolling circumference index (RCI), speed radius index (SRI)

Tyre size designation	Rolling circumference mm	Rolling circumference index (RCI)	Speed radius index (SRI) mm
8.3 – 16	2 372	30	370
8.3 – 24	2 975	34	470
8.3 – 38	4 024	40	725
8.3 – 44	4 474	42	395
9.5 – 16	2 534	31	650
9.5 – 22	2 987	34	470
9.5 – 24	3 137	35	495
9.5 – 32	3 738	—	595
9.5 – 36	4 038	40	645
9.5 – 38	4 188	—	670
9.5 – 42	4 487	42	725
9.5 – 44	4 637	—	750
9.5 – 48	4 937	44	800
11.2 – 20	2 999	—	470
11.2 – 24	3 300	36	515
11.2 – 28	3 601	38	565
11.2 – 36	4 201	41	665
11.2 – 38	4 351	41	690
11.2 – 42	4 651	—	750
12.4 – 16	2 855	33	440
12.4 – 24	3 462	37	540
12.4 – 28	3 764	—	590
12.4 – 32	4 064	40	640
12.4 – 36	4 364	41	690
12.4 – 38	4 514	42	720
12.4 – 42	4 814	43	820
13.6 – 16	3 001	34	465
13.6 – 24	3 611	38	560
13.6 – 26	3 762	—	600
13.6 – 28	3 912	39	610
13.6 – 36	4 513	—	715
13.6 – 38	4 663	43	740
13.6 – 46	5 263	45	845
13.6 – 48	5 413	—	870
14.9 – 24	3 773	39	590
14.9 – 26	3 924	39	615
14.9 – 28	4 075	40	640
14.9 – 30	4 226	41	665
14.9 – 38	4 827	43	765
15.5 – 38	4 674	43	745

Table A.10 (*continued*)

Tyre size designation	Rolling circumference mm	Rolling circumference index (RCI)	Speed radius index (SRI) mm
16.9 – 24	3 967	—	620
16.9 – 26	4 119	40	645
16.9 – 28	4 271	41	670
16.9 – 30	4 422	42	695
16.9 – 34	4 723	43	745
16.9 – 38	5 024	44	795
18.4 – 24	4 159	—	650
18.4 – 26	4 311	41	670
18.4 – 28	4 463	42	700
18.4 – 30	4 615	—	720
18.4 – 34	4 917	44	770
18.4 – 38	5 218	45	820
18.4 – 42	5 518	46	870
18.4 – 46	5 818	47	930
20.8 – 34	5 144	—	810
20.8 – 38	5 446	46	855
20.8 – 42	5 747	47	905
23.1 – 26	4 754	43	740
23.1 – 30	5 060	44	790
23.1 – 34	5 364	45	840
24.5 – 32	5 344	45	835
17.5L – 24	3 771	39	590
19.5L – 24	3 983	40	620
21 L – 24	4 162	—	650
28L – 26	4 786	43	745
30.5L – 32	5 388	—	845
VA35.5L – 32	5 853	47	915
DH35.5L – 32	5 853	47	915

Copyrighted material licensed to Dublin Institute of Technology by SAI Global (www.saiglobal.com), downloaded on 12 Jul 12 by Ann McSweeney.
No further reproduction or distribution is permitted. Uncontrolled when printed.

ICS 83.160.30

Price based on 8 pages