

Issued 1979-02
Cancelled 2009-08

Superseding J1261 NOV1984

Agricultural Tractor Tire Dynamic Indices

1. **Scope**—The purpose of this information report is to establish dynamic indices which are to be used only for calculating the travel speed of the agricultural tractor during worldwide homologation procedures.

1.1 **Rationale**—This standard is obsolete and/or out of date. We have not been able to populate a committee responsible for updating it, so we are cancelling it.

2. **References**

2.1 **Applicable Publications**—The following publications form a part of the specification to the extent specified herein. Unless otherwise indicated the latest revision of SAE publications shall apply.

2.1.1 SAE PUBLICATION—Available from 400 Commonwealth Drive, Warrendale, PA 15096.

SAE J709d—Agricultural Tractor Tire Loadings, Torque Factors, and Inflation Pressures

2.1.2 ASAE PUBLICATION—Available from the American Society of Agricultural Engineers, 2950 Niles Road, St. Joseph, MI 49085-9659.

ASAE S296.2

2.1.3 ISO PUBLICATION—Available from ANSI, 11 West 42nd Street, New York, NY 10036-8002.

ISO/DIS 4251

2.1.4 OTHER PUBLICATION

Wirtschaft verband Der Deutschen Dauschukindustrial E.V.—154

3. **Definitions**

3.1 Dynamic index is the value when multiplied by 2π that indicates the theoretical distance the tire would have traveled without slip in one revolution.

3.2 **Bias-ply Tire Construction**—Construction of the tire in which the cords of the body plies run diagonally from bead to bead.

SAE Technical Standards Board Rules provide that: "This report is published by SAE to advance the state of technical and engineering sciences. The use of this report is entirely voluntary, and its applicability and suitability for any particular use, including any patent infringement arising therefrom, is the sole responsibility of the user."

SAE reviews each technical report at least every five years at which time it may be reaffirmed, revised, or cancelled. SAE invites your written comments and suggestions.

Copyright © 2009 SAE International

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system or transmitted, in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise, without the prior written permission of SAE.

TO PLACE A DOCUMENT ORDER:

Tel: 877-606-7323 (inside USA and Canada)
Tel: 724-776-4970 (outside USA)
Fax: 724-776-0790
Email: CustomerService@sae.org
<http://www.sae.org>

SAE WEB ADDRESS:

3.3 Radial Ply Tire Construction—Construction of the tire in which the cords of the body plies run radially from bead to bead.

3.4 The maximum dynamic index is based on new tire dimensions with maximum in-service growth included.

4. General Principles

4.1 The dynamic index values are for R-1 type tires inflated to the recommended inflation pressures as shown in SAE Standard J709d (Tables 1, 2, and 3), or furnished by Tire and Rim Association, but under a load 50% of maximum load capacity of the respective tire size, inflation pressure, and construction at 32 km/h (20 mph) travel speed.

4.2 Dynamic index should not be used or converted into an effective measurable value.

TABLE 1—DYNAMIC INDICES TABLE⁽¹⁾

Tire Size		Dynamic Index (mm)	
Diagonal	Radial	Minimum mm (in)	Maximum mm (in)
8.3—24	8.3R—24	470 (18.50)	500 (19.69)
9.5—16	9.5R—16	390 (15.35)	425 (16.73)
9.5—24	9.5R—24	495 (19.49)	525 (20.67)
32	32	595 (23.43)	630 (24.80)
36	36	645 (25.39)	685 (26.97)
11.2—24	11.2R—24	515 (20.28)	550 (21.65)
28	28	565 (22.24)	605 (23.82)
12.4—16	12.4R—16	440 (17.32)	480 (18.90)
24	24	540 (21.26)	580 (22.83)
28	28	590 (23.23)	630 (24.80)
32	32	640 (25.20)	680 (26.77)
36	36	690 (27.17)	730 (28.74)
38	38	720 (28.35)	755 (29.72)
42	42	765 (30.12)	805 (31.69)
13.6—24	13.6R—24	560 (22.05)	605 (23.82)
28	28	610 (24.02)	655 (25.79)
36	36	715 (28.15)	760 (29.92)
38	38	740 (29.13)	785 (30.91)
14.9—24	14.9R—24	590 (23.23)	635 (25.0)
26	26	615 (24.21)	660 (25.98)
28	28	640 (25.20)	685 (26.97)
30	30	665 (26.18)	710 (27.95)
38	38	765 (30.12)	810 (31.89)
15.5—38	15.5R—38	745 (29.33)	785 (30.91)
16.9—24	16.9R—24	620 (24.41)	665 (26.18)
26	26	645 (25.39)	690 (27.17)
28	28	670 (26.38)	715 (28.15)
30	30	695 (27.36)	740 (29.13)
34	34	745 (29.33)	795 (31.30)
38	38	795 (31.30)	845 (33.27)
18.4—16.1		520 (20.47)	570 (22.44)
24	18.4R—24	645 (25.39)	700 (27.56)
26	26	670 (26.38)	725 (28.54)
28	28	695 (27.36)	750 (29.53)