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BUREAU OF INDIAN STANDARDS

DRAFT FOR COMMENTS ONLY

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भारतीय मानक मसौदा

वेल्डिंग के लिए रबर होज़ — विशिष्टि

(IS 447 का *पांचवां पुनरीक्षण*)

Draft Indian Standard

RUBBER HOSES FOR WELDING — SPECIFICATION

(*Fifth Revision* of IS 447)

(ICS No. 25.160.30, 83.140.40)

Rubber and Rubber Products Sectional Committee, PCD 13	Last date for receipt of comment is **21 June 2025**

NATIONAL FOREWORD

(*Formal clauses will be added later*)

This standard was first published in 1953 and subsequently revised in 1964,1968, 1980 and 1988.

The fifth revision has been undertaken to align it with the latest version of ISO 3821 : 2019 in dual numbering system to make pace with latest developments that have taken place at international level.

The text of ISO Standard has been approved as suitable for publication as an Indian Standard without deviations. Certain conventions and terminologies are, however, not identical to those used in Indian Standards. Attention is particularly drawn to the following:

a) Wherever the words ‘International Standard’ appear referring to this standard, they should be read as ‘Indian Standard’.

b) Comma (,) has been used as a decimal marker while in Indian Standards, the current practice is to use a point (.) as the decimal marker.

In this adopted standard reference appears to certain International Standards for which Indian Standards also exist. The corresponding Indian Standards, which are to be substituted in their respective places, are listed below along with their degree of equivalence for the editions indicated:

International Standard	*Corresponding Indian Standard*	*Degree of Equivalence*
ISO 37, Rubber, vulcanized or thermoplastic — Determination of tensile stress-strain properties	IS 3400 (Part 1) : 2021/ISO 37 : 2017Methods of test for vulcanized rubber Part 1 Tensile stress-strain properties (*fourth revision*)	Identical
ISO 188, Rubber, vulcanized or thermoplastic — Accelerated ageing and heat resistance tests	IS 3400 (Part 4) : 2012 /ISO 188 : 2011Methods of test for vulcanized rubber Part 4 Accelerated ageing and heat resistance (*third revision*)	Identical
ISO 1307:2006, Rubber and plastics hoses — Hose sizes, minimum and maximum inside diameters, and tolerances on cut-to-length hoses	IS 15933 : 2011/ISO 1307 : 2006 Rubber and plastics hoses — Hose sizes, minimum and maximum inside diameters, and tolerances on cut-to-length hoses	Identical
ISO 1402, Rubber and plastics hoses and hose assemblies — Hydrostatic testing	IS 443 (Part 3) : 2023/ ISO 1402 : 2021Methods of test for rubber and plastics — Tubing, hoses and hose assemblies Part 3 Rubber and plastics hoses and hose assemblies — Hydrostatic testing (*fourth revision*)	Identical
ISO 10619-1, Rubber and plastics hoses and tubing — Measurement of flexibility and stiffness — Part 1: Bending tests at ambient temperature	IS 443 (Part 10) : 2023/ISO 10619-1 : 2017Methods of test for rubber and plastics — Tubing, hoses and hose assemblies Part 10 Rubber and plastics hoses and tubing — Measurement of flexibility and stiffness — Bending tests at ambient temperature	Identical

ISO 10619-2, Rubber and plastics hoses and tubing — Measurement of flexibility and stiffness — Part 2: Bending tests at sub-ambient temperatures	IS 443 (Part 11) : 2023/ISO 10619-2 : 2021Methods of test for rubber and plastics — Tubing, hoses and hose assemblies Part 11 Rubber and plastics hoses and tubing — Measurement of flexibility and stiffness — bending tests at sub-ambient temperatures	Identical
ISO 1817, Rubber, vulcanized or thermoplastic — Determination of the effect of liquids	IS 3400 (Part 6) : 2018/ISO 1817 : 2015 Methods of test for vulcanized rubbers Part 6 Determination of the effect of liquids (*fourth revision*)	Identical
ISO 4671, Rubber and plastics hoses and hose assemblies — Methods of measurement of the dimensions of hoses and the lengths of hose assemblies	IS 443 (Part 8) : 2023 /ISO 4671 : 2022 Methods of test for rubber and plastics — Tubing, hoses and hose assemblies Part 8 Rubber and plastics hoses and hose assemblies — Methods of measurement of the dimensions of hoses and the lengths of hose assemblies	Identical
ISO 7326, Rubber and plastics hoses — Assessment of ozone resistance under static conditions	IS 443 (Part 1) : 2022 / ISO 7326 : 2016 Methods of test for rubber and plastics tubing, hoses and hose assemblies Part 1 Rubber and plastics hoses assessment of ozone resistance under static conditions (*fourth revision*)	Identical
ISO 8033, Rubber and plastics hoses — Determination of adhesion between components	IS 3400 (Part 24) : 2021/ISO 8033 : 2016 Methods of test for vulcanized rubber Part 24 rubber and plastics hose — Determination of adhesion between components (*second revision*)	Identical
ISO 8330, Rubber and plastics hoses and hose assemblies — Vocabulary	IS 16204 : 2023 / ISO 8330 : 2022 Rubber and plastics	Identical

	hoses and hose assemblies — Vocabulary (*first revision*)	
ISO 11114-3, Gas cylinders — Compatibility of cylinder and valve materials with gas contents — Part 3: Autogenous ignition test for non-metallic materials in oxygen atmosphere	IS/ISO 11114-3 : 2010 Gas cylinders — Compatibility of cylinder and valve materials with gas contents — Part 3: Autogenous ignition test for non-metallic materials in oxygen atmosphere	Identical
ISO 23529, Rubber — General procedures for preparing and conditioning test pieces for physical test methods	IS 13867 : 2021/ISO 23529 : 2016 Rubber — General procedures for preparing and conditioning test pieces for physical test methods (*first revision*)	Identical

The committee has reviewed the provisions of the following International Standards referred in this adopted standard and has decided that they are acceptable for use in conjunction with these standard:

International Standard	*Title*
ISO 15296	Gas welding equipment — Vocabulary
ISO 4080	Rubber and plastics hoses and hose assemblies — Determination of permeability to gas

For the purpose of deciding whether a particular requirement of this standard is complied with, the final value, observed or calculated, expressing the result of a test or analysis, shall be rounded off in accordance with IS 2: 2022 ‘Rules for rounding off numerical values (*second revision*)’. The number of significant places retained in the rounded off value should be the same as that of the specified value in this standard.

NOTE — The technical content of the document is not available on website. For details, please refer the corresponding ISO 3821 : 2019 or kindly contact:

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