

IS 1367 (Part 18) : 1996

(Superseding IS 9141 : 1979)

भारतीय मानक
औद्योगिक बन्धक सामग्री — इस्पात के चूड़ीदार बन्धक —
तकनीकी पूर्ती शर्ते
भाग 18 पैकेजबंदी
(तीसरा पुनरीक्षण)

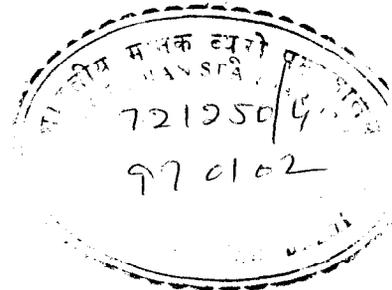
Indian Standard

INDUSTRIAL FASTENERS — THREADED STEEL
FASTENERS — TECHNICAL SUPPLY CONDITIONS

PART 18 PACKAGING

(*Third Revision*)

ICS 21.060



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November 1996

Price Group 2

FOREWORD

This Indian Standard (Third Revision) was adopted by the Bureau of Indian Standards, after the draft finalized by the Bolts, Nuts and Fasteners Accessories Sectional Committee had been approved by the Light Mechanical Engineering Division Council.

This standard was originally published in 1961 and subsequently revised in 1967 and 1979. In the present revision, following major changes have been made:

- a) Marking requirements for bolts, screws, studs and nuts have been deleted from this standard since these are already covered in IS 1367 (Part 3) : 1991 'Technical supply conditions for threaded steel fasteners : Part 3 Mechanical properties and test methods for bolts, screws and studs with full loadability (*third revision*)' and IS 1367 (Part 6) : 1994 'Technical supply conditions for threaded steel fasteners : Part 6 Mechanical properties and test methods for nuts with specified proof loads (*third revision*)', respectively.
- b) Requirements for mode of delivery that is Packaging have been modified as per IS 9141 : 1979 'Code of practice for the packaging of fasteners (*first revision*)'.

The packaging function has to fulfil a variety of objectives including the protection of the contents against transport, handling and storage hazards. Threaded fasteners, like bolts, nuts, screws and studs have some special features which must be protected to keep them fit for use at the ultimate destination. Packaging has to be designed in such a way as to ensure the availability of fasteners in packs to meet the general demand. Packaging has also to take into consideration the variations in quantity which in turn depends on the type of customer and the availability of storage facilities at his end. Some of the Indian Standards on fasteners to which this standard applies are listed in Annex A.

This standard (Part 18) covers technical supply conditions in respect of packaging of threaded steel fasteners. Other parts covering various aspects of the threaded steel fasteners and their respective degree of equivalence with International Standards are as under:

<i>IS No.</i>	<i>Title</i>	<i>ISO Standard and Degree of Equivalence</i>
IS 1367	Technical supply conditions for threaded steel fasteners:	—
(Part 1) : 1980	Introduction and general information (<i>second revision</i>)	ISO 8992 : 1986 (Related Standard)
(Part 2) : 1979	Product grades and tolerances (<i>second revision</i>)	Technically equivalent to ISO 4759-1 : 1978
(Part 3) : 1991 ISO 898-1 : 1988	Mechanical properties and test methods for bolts, screws and studs with full loadability (<i>third revision</i>)	Identical to ISO 898-1 : 1988
(Part 5) : 1980	Mechanical properties and test methods for set screws and similar threaded fasteners not under tensile stresses (<i>second revision</i>)	Technically equivalent to ISO 898-5 : 1980

NOTE — Preparation of Part 4 of this standard intended to cover 'Mechanical properties and test methods for bolts, screws and studs with reduced loadability' will await corresponding International agreement.

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Indian Standard

INDUSTRIAL FASTENERS — THREADED STEEL FASTENERS — TECHNICAL SUPPLY CONDITIONS

PART 18 PACKAGING

(*Third Revision*)

1 SCOPE

1.1 This standard sets out a procedure for packaging of threaded steel fasteners and for identification marking of the packages.

NOTE — The requirements of packaging of fasteners, notwithstanding the provisions given hereunder, shall comply with *Standards of Weights and Measures (Packaged Commodities) Rules, 1977*, issued by the Government of India.

2 REFERENCES

2.1 The following Indian Standards contain provisions which through reference in this text, constitute provision of this standard. At the time of publication, the editions indicated were valid. All standards are subject to revision, and parties agreements based on this standard are encouraged to investigate the possibility of applying the most recent editions of the standards indicated below:

<i>IS No.</i>	<i>Title</i>
1367 (Part 2) : 1979	Technical supply conditions for threaded steel fasteners : Part 2 Product grades and tolerances (<i>second revision</i>)
1367 (Part 3) : 1991 ISO 898-1 : 1988	Technical supply conditions for threaded steel fasteners : Part 3 Mechanical properties and test methods for bolts, screws and studs with full loadability (<i>third revision</i>)
1367 (Part 6) : 1994 ISO 898-2 : 1992	Technical supply conditions for threaded steel fasteners : Part 6 Mechanical properties and test methods for nuts with specified proof loads (<i>third revision</i>)
1503 : 1988	Wooden packing cases (<i>third revision</i>)
2508 : 1984	Low density polyethylene films (<i>second revision</i>)

2771 (Part 1) : 1990	Fibreboard boxes : Part 1 Corrugated fibreboard boxes (<i>second revision</i>)
6622 : 1972	Greaseproof paper
8470 : 1977	Dimensions of rigid rectangular transport packages

3 GENERAL REQUIREMENTS

3.1 The fasteners shall be marketed in the packed condition only.

3.2 The fasteners without any surface protection shall be covered with a suitable anti-corrosive agent before being packed.

3.3 For identification, the packages shall always carry suitable tags.

3.4 In a single packing unit, only fasteners of the same designation, mechanical properties and quality characteristics shall be packed.

3.5 Multiple containers may be used for a number of unit packs provided the separately packed fastener products can be identified easily by means of their labels or tags.

3.6 Packages shall be made in such a way that they are protected against mechanical damage in transit.

3.7 The external dimensions of the unit package shall conform to IS 8470 : 1977 to permit economic utilization of space and easy handling in transportation.

4 TYPES OF PACKAGING

4.1 Generally, the fasteners are supplied in boxes, crates, cartons or bags.

4.2 Bags shall be used only for Product Grade C fasteners [see IS 1367 (Part 2) : 1979].

4.2.1 The number of items in a bag shall be such that the net mass of the bag does not exceed 50 kg.

ANNEX A

(Foreword)

LIST OF INDIAN STANDARDS ON FASTENERS TO WHICH THIS INDIAN STANDARD APPLIES

<i>IS No.</i>	<i>Title</i>	<i>IS No.</i>	<i>Title</i>
IS 1363 (Part 1) : 1992 ISO 4046 : 1988	Hexagon head bolts, screws and nuts of product grade C : Part 1 Hexagon head bolts (size range M5 to M64) (<i>third revision</i>)		(size range M1.6 to M64) (<i>third revision</i>)
IS 1363 (Part 2) : 1992 ISO 4018 : 1988	Hexagon head bolts, screws and nuts of product grade C : Part 2 Hexagon head screws (size range M5 to M64) (<i>third revision</i>)	IS 1364 (Part 5) : 1992 ISO 4036 : 1979	Hexagon head bolts, screws and nuts of product grade B : Part 5 Hexagon thin nuts (unchamfered) (size range M1.6 to M10) (<i>third revision</i>)
IS 1363 (Part 3) : 1992 ISO 4034 : 1986	Hexagon head bolts, screws and nuts of product grade C : Part 3 Hexagon nuts (size range M5 to M64) (<i>third revision</i>)	1365 : 1978	Slotted countersunk head screws (<i>third revision</i>)
IS 1364 (Part 1) : 1992 ISO 4014 : 1986	Hexagon head bolts, screws and nuts of product grades A and B : Part 1 Hexagon head bolts (Size range M1.6 to M64) (<i>third revision</i>)	1366 : 1982	Slotted cheese head screws (<i>second revision</i>)
IS 1364 (Part 2) : 1992 ISO 4017 : 1988	Hexagon head bolts, screws and nuts of product grades A and B : Part 2 Hexagon head screws (size range M1.6 to M64) (<i>third revision</i>)	1862 : 1975	Studs (<i>second revision</i>)
IS 1364 (Part 3) : 1992 ISO 4032 : 1986	Hexagon head bolts, screws and nuts of product grades A and B : Part 3 Hexagon nuts (size range M1.6 to M64) (<i>third revision</i>)	3138 : 1966	Hexagonal bolts and nuts (M42 to M150)
IS 1364 (Part 4) : 1992 ISO 4035 : 1986	Hexagon head bolts, screws and nuts of product grades A and B : Part 4 Hexagon thin nuts (chamfered)	6760 : 1972	Slotted countersunk head wood screws
		6761 : 1994	Fasteners — Countersunk head screws with hexagon socket (<i>first revision</i>)
		7169 : 1989	Slotted raised countersunk (oval) head tapping screws (common head type) (<i>first revision</i>)
		7170 : 1989	Slotted countersunk (flat) head tapping screws (common head type) (<i>first revision</i>)
		7173 : 1989	Slotted pan head tapping screws (<i>first revision</i>)

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IS No.	Title	ISO Standard and Degree of Equivalence
(Part 6) : 1994 ISO 898-2 : 1992	Mechanical properties and test methods for nuts with specified proof loads (<i>third revision</i>)	Identical to ISO 898-2 : 1992
(Part 7) : 1980	Mechanical properties and test methods for nuts without specified proof loads (<i>second revision</i>)	Does not exist
(Part 8) : 1992	Mechanical and performance properties for prevailing torque type steel hexagon nuts (<i>second revision</i>)	Technically equivalent to ISO 2320 : 1983
(Part 9/Sec 1) : 1993 ISO 6157-1 : 1988	Surface discontinuities, Section 1 Bolts, screws and studs for general applications (<i>third revision</i>)	Identical to ISO 6157-1 : 1988
(Part 9/Sec 2) : 1993 ISO 6157-3 : 1988	Surface discontinuities, Section 1 Bolts, screws and studs for special applications (<i>third revision</i>)	Identical to ISO 6157-3 : 1988
(Part 10) : 1979	Surface discontinuities on nuts (<i>second revision</i>)	Technically equivalent to ISO 6157-2 : 1995
(Part 11) : 1996 ISO 4042 : 1989	Electroplated coatings (<i>third revision</i>)	Identical to ISO 4042 : 1989
(Part 12) : 1981	Phosphate coatings on threaded fasteners (<i>second revision</i>)	Does not exist
(Part 13) : 1983	Hot-dip galvanized coatings on threaded fasteners (<i>second revision</i>)	Does not exist
(Part 14) : 1984	Stainless steel threaded fasteners (<i>second revision</i>)	Technically equivalent to ISO 3506 : 1979
(Part 15) :	Requirements at subzero and elevated temperatures (<i>second revision</i>) (<i>under preparation</i>)	Does not exist
(Part 16) : 1979	Designation system and symbols (<i>second revision</i>)	Does not exist
(Part 17) : 1996 ISO 3269 : 1988	Inspection, sampling and acceptance procedure (<i>third revision</i>)	Identical to ISO 3269 : 1988
(Part 19) : ISO 3800 : 1993	Axial load fatigue testing of bolts, screws and nuts (<i>second revision</i>) (<i>under preparation</i>)	Identical to ISO 3800 : 1993
(Part 20) : 1996 ISO 898-7 : 1992	Part 20 Torsional test and minimum torques for bolts and screws with nominal diameter 1 mm to 10 mm	Identical to ISO 898-7 : 1992

IS 9141 : 1979 'Code of practice for the packaging of fasteners (*first revision*)' shall be withdrawn consequent to the publication of this standard, since its contents are now covered in this standard.

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 : 1960 'Rules for rounding off numerical values (*revised*)'. The number of significant places retained in the rounded off value should be the same as that of the specified value in this standard.

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Amendments are issued to standards as the need arises on the basis of comments. Standards are also reviewed periodically; a standard along with amendments is reaffirmed when such review indicates that no changes are needed; if the review indicates that changes are needed, it is taken up for revision. Users of Indian Standards should ascertain that they are in possession of the latest amendments or edition by referring to the latest issue of 'BIS Handbook' and 'Standards : Monthly Additions'.

This Indian Standard has been developed from Doc : No. LM 14 (0290).

Amendments Issued Since Publication

Amend No.	Date of Issue	Text Affected

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