


INTER PLANT STANDARD IN STEEL INDUSTRY		
 IPSS	SPECIFICATION FOR COUPLING NUT FOR MALE STUD COUPLING BODY OF PERMANENTLY ATTACHED HOSE END FITTINGS	IPSS: 1-02-008-18 <i>(First Revision)</i>
	Corresponding IS does not exist	Formerly: IPSS: 1-02-008-85

0. FOREWORD

0.1 Interplant standardization in steel industry has been initiated under the aegis of the Indian Standards Institution (ISI) and the Steel Authority of India Limited (SAIL). This Interplant Standards prepared and revised by the Standard Committee on Basic Standards, Hydraulic, Pneumatic and Lubricating Equipment, IPSS 1 : 2, with the active participation of the representatives of all the steel plants and leading consultants and was adopted in January, 1985. Thereafter, standard was revised in January, 2018.

0.2 Interplant standardization for steel industry primarily aims at achieving rationalization and unification of parts and sub-assemblies used in plant equipment and accessories, and provide guidance in indenting stores or equipment for existing and new installations by individual steel plants. For exercising effective control on the inventories, it is advisable to select a fewer number of sizes (or type) from among those mentioned in this standard for the purpose of company standards of individual steel plants. It is not desirable to make deviations in technical requirements.

1.0 SCOPE

This Interplant Standards specifies dimensions, material and other technical requirements of the couplings nuts used in permanently attached hose end fittings conforming to IPSS 1-02-007-18 'Specification for assembly of permanently attached hose end fittings for hydraulic lines' and male stud coupling conforming to IPSS : 1-02-005-18 'Specification for ferrule type male stud couplings and male stud coupling bodies'.

Note : This standard does not cover the flared fittings.

2 DIMENSIONS

The dimensions shall be as given in **Table 1**.

3 MATERAIL

The material shall be 14 Mn 1S 14 conforming to IS: 1570-1996 'Schedules for wrought steels for general engineering purposes' or any other steel as agreed to between the user and the manufacturer.

4. TECHNICAL REQUIREMENTS

- 4.1 These coupling nuts shall be used with male stud coupling bodies conforming to IPSS : 1-02-007-18.
- 4.2 Threads shall conform to IS: 4218 (Part 4) – 2001 ISO General Purpose Metric Screw threads : Part 4 ‘Selected Sizes for screws, Bolts and Nuts (Second Revision)’.
- 4.3 Product grade and tolerances shall conform to IS: 1367 (Part 2)-2002 ‘Technical supply conditions for threaded steel fasteners : Part 2 Tolerance for Fasteners – Bolts, Screws, studs and Nuts – Product Grade A, B and C (Third Revision)’.
- 4.4 **Surface Protection** – The coupling nuts shall be phosphate to Class A2 of IS: 3618 – 1966 ‘Specification for phosphate treatment of iron and steel for protection against corrosion’.
5. **DESIGNATION**
A coupling nut for 6 mm outside diameter of tube of light series conforming to this standard shall be designated as: Coupling nut 16 IPSS:1-02-008-18
6. **TEST**
These nuts are to be tested according to IS: 10103-1982 ‘Method of test for female type couplings used in oil hydraulic systems’.

TABLE 1 UNION NUT

(Clause 2)

All dimensions in millimetres.

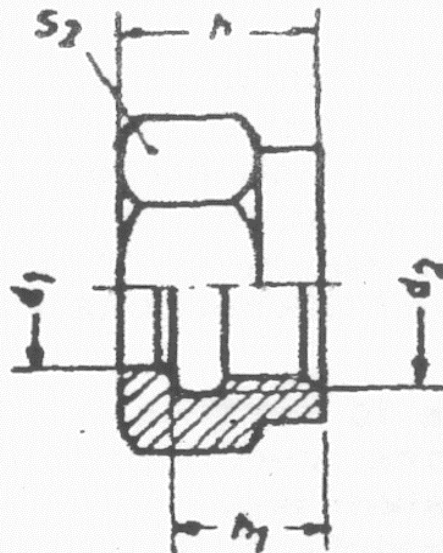
TABLE 1 UNION NUT**(Clause 2)****All dimensions in millimetres.**

Figure 1

Series	Designation	D1	D2	h	H1	S2 A/F
	NP 250	6	M 12 x 1.5	14.5	10	14
		6	M 14 x 1.5	14.5	10	17
		10	M 16 x 1.5	15.5	11	19
		12	M 18 x 1.5	15.5	11	22
		15	M 22 x 1.5	17	11.5	27
Heavy (L)	NP 160	18	M 26 x 1.5	18	11.5	32
		22	M 30 x 1.5	20	13.5	38
	NP 100	28	M 36 x 2	21	14	41
		35	M 45 x 2	24	16	50
		42	M 52 x 2	24	16	60
Light (H)	NP 640	6	M 14 x 1.5	16	11	17
		8	M 16 x 1.5	16.5	11	19
		10	M 18 x 1.5	17.5	11	22
		12	M 20 x 1.5	17.5	11	24
		14	M 22 x 1.5	20.5	13	27
	NP 400	16	M 24 x 1.5	20.5	13	30
		20	M 30 x 2	24	15.5	36
		25	M 36 x 2	27	17	46

Series	Designation	D1	D2	h	H1	S2 A/F
	NP 250	30	M 42 x 2	29	18	50
		38	M 52 x 2	32.5	19.5	60

TABLE - 1

7. **TEST CERTIFICATES**

The manufacturer shall provide a test certificate for its satisfactory performance conforming to this standard.

8. **GUARANTEE**

The manufacturer shall provide a guarantee against defective material and bad workmanship for a period of 12 months from the date of actual use of 18 months from the date of receipt, whichever is earlier.

9. **PACKING**

The nuts shall be properly packed in card board boxes with some packing material before delivery.