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Draft Amendment No. 1 to IS 12145 -1987

**SPECIFICATION FOR QUENCHED AND TEMPERED ALLOY STEEL FORGINGS FOR
PRESSURE VESSELS**

ICS 77.140.20; 77.140.50

Alloy Steels and forgings Sectional Committee,
MTD 16Last date for receipt comments is
12 April 2024

(Page 4, Clause 2) — Insert the following new clause as clause number 2 and renumber the subsequent the clause numbers:

‘2 REFERENCES

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

<i>IS No.</i>	<i>Title</i>
IS 1387 : 1993	General requirements for the supply of metallurgical materials (<i>second revision</i>)
IS 1608 (Part 1) : 2022/ ISO 6892-1 : 2019	Metallic materials - Tensile testing - Part 1 : Method of test at room temperature (<i>fifth revision</i>)
IS 1757 (Part 1) : 2020/ ISO 148-1 : 2016	Metallic Materials — Charpy Pendulum Impact Test Part 1 Test Method (<i>fourth revision</i>)
IS 1956 (Part 6) : 1976	Glossary of terms relating to iron and steel: Part 6 forging (Including Drop Forging) (<i>first revision</i>)
IS 228	Methods for chemical analysis of steels
Part 1: 1987	Methods for chemical analysis of steels: Part 1 determination of carbon by volumetric method (For Carbon 0.05to 2.50 Percent) (<i>third revision</i>)
Part 2 : 1987	Methods for chemical analysis of steels part 2 determination of manganese in plain - Carbon and low alloy steels by arsenite method (<i>third revision</i>)
Part 3 : 1987	Methods for chemical analysis 6f steels: Part 3 determination of phosphorus by alkalimetric method (<i>third revision</i>)
Part 5: 1987	Methods for chemical analysis of steels: Part 5 determination of nickel by dimethylglyoxime (Gravimetric) method (For Nickel >0.1 percent) (<i>third revision</i>)
Part 6 : 1987	Methods for chemical analysis of steels: Part 6 determination of - Chromium by persulphate oxidation method (For Chromium) >0.1 percent) (<i>third revision</i>)

Part 7 : 1987	Methods for chemical analysis of steels: Part 7 determination of molybdenum by alpha - Benzoinoxime method in alloy steels (For molybdenum 1 percent and not containing tungsten) (<i>third revision</i>)
Part 8 : 1987	Methods for chemical analysis of steels: Part 8 determination of silicon by the gravimetric method (For Silicon 0.05 To 5.00 Percent) (<i>third revision</i>)
Part 9 : 1987	Methods for chemical analysis of steels : Part 9 determination of sulphur by evolution method (For Sulphur 0.01 to 0.25 Percent) (<i>third revision</i>)

(Page 4, Clause 3.1, line 2) — Substitute ‘IS 1387: 1993 General requirements for the supply of metallurgical materials’, for ‘IS 1387 : 1967.’

(Page 4, Footnote) — Delete†

(Page 5, Clause 5.1) — Substitute the following for the existing clause:

‘**5.1 Ladle Analysis** – The ladle analysis of the steel when made in accordance with relevant parts of IS 228 or any other instrumental, chemical method shall be as given in Table 1. In case of dispute, the procedure given in IS 228 and its relevant parts shall be the referee method. However, where the method is not given in relevant parts of IS 228, the referee method shall be agreed to between the purchaser and the manufacturer.’

(Page 6, Clause 9.2.1, line 2) — Substitute ‘IS 1608 (Part 1) : 2022/ISO 6892-1:2019 Metallic Materials — Tensile Testing — Part 1 : Method of Test at Room Temperature (*Fourth Revision*)’, for ‘1608-1972†’.

(Page 6, Clause 9.2.1, line 2) — Substitute ‘IS 1757 (Part 1) : 2020/ISO 148-1 : 2016 Metallic Materials — Charpy Pendulum Impact Test Part 1 Test Method (*Fourth Revision*)’, for ‘IS : 1499-1977‡’.

(Page 6, Clause 9.2.1, line 3) — Substitute ‘IS 1500 (Part 1) : 2019/ISO 6506-1 : 2014 Metallic Materials — Brinell Hardness Test Part 1 Test Method (*fifth revision*)’, for ‘IS 1500 - 1983§’.

(Page 6, Footnote †, ‡, §) — Delete

(Page 10, Clause 13.1.2) — Replace the existing clause and note with following clause.

‘13.1.2 BIS Certification Marking

The products(s) conforming to the requirements of this standard may be certified as per the conformity assessment schemes under the provision of the *Bureau of Indian Standards Act*, 2016 and the Rules and Regulations framed thereunder, and the product may be marked with the Standard Mark.’