

केन्द्रीय मुहर विभाग -2

संदर्भ -: केमूवी-2/16:11169 (Part 1)

03 10 2022

विषय: संशोधित IS 11169 (Part 1):2022 के अनुपालन के दिशा निर्देश

यह उपरोक्त विषय के संदर्भ में है।

सक्षम अधिकारी द्वारा अनुमोदित दिशानिर्देश अनुपालन हेतु संलग्न है।

सभी क्षेत्रीय/शाखा कार्यालयों से अनुरोध है की दिशानिर्देशों का तत्काल प्रभाव से अनुपालन सुनिश्चित करें।

**शिवम आहूजा
वैज्ञानिक C**

प्रमुख (केमूवी 2)

सभी क्षेत्रीय/शाखा कार्यालय/प्रयोगशालाएँ/MTD/LPPD

CENTRAL MARKS DEPARTMENT-2

Our Ref: CMD-2/16:11169 (Part 1)

03 10 2022

Subject: Guidelines for implementation of Revised IS 11169 (Part 1):2022

This has reference to the subject mentioned above.

The Competent Authority has approved the enclosed Guidelines for implementation.

All ROs/BOs are requested to ensure the implementation of the above Guidelines with immediate effect.

**(Shivam Ahuja)
Scientist C**

Head (CMD-2)

All ROs/BOs/Labs/MTD/LPPD

CENTRAL MARKS DEPARTMENT-2

Our Ref: CMD-2/16: 11169 (Part 1)

03 10 2022

Subject: Guidelines for implementation of Revised IS 11169 (Part 1):2022 (Steel for Cold Heading/Cold Extrusion Applications – Wrought Carbon and Low Alloy Steels)

1. IS 11169 (Part 1):1984 has been revised as IS 11169 (Part 1):2022 and has been published. The last date for implementation of the revised Standard is **15 December 2022** after which the old Standard shall stand withdrawn.
2. All BOs shall inform the Applicants and Licensees under their jurisdiction about implementation of the revised Standard within a week of issuance of these guidelines.
3. The significant changes in the revised Standard as listed in the Table are given for the purpose of general guidance. BOs shall ensure that the product conforms to all the requirements, as applicable, as per the revised Standard.

Clause	Change
2 References	A separate clause for Reference Standards has been added Latest version of standards have been updated including methods for Mechanical and Metallurgical Tests
4.2 Supply of Material Annex A.1, B.1, C.1	Delivery Conditions for supply of all three groups of steel i.e. Steels not intended for Heat Treatment, Case Hardening Steels and Steels for Quenching and Tempering have been specified in Tabular form at Annex A.1, B.1 and C.1 respectively
7 , Table A.2, B.2, C.2, C.3 Chemical Composition	Grades of majorly used cold heading/cold extrusion quality have been added in all three groups of steel i.e. Steels not intended for Heat Treatment, Case Hardening Steels and Steels for Quenching and Tempering Nomenclature of new grades has been introduced as per IS 1762(Part 1)
8 Mechanical Properties Table A.3, A.4, B.3, B.4, B.5, B.8,C.4, C.5,C.6,C.7 and C.8	Mechanical properties in various delivery conditions have been specified in separate Tables for each group of steels

8.2. Hardenability Table B.6, B.7, C.9, C.10,C.11,C1.2	Provision for ordering steel wire/wire rod/bar based on hardenability is incorporated. Requirements of Hardenability (H/HH/HL/CH) have been specified in separate tables for Case Hardening Steels and Steels for Quenching and Tempering
13 Aptitude to Cold Forming	Upsetting Test Criterion is modified by allowing acceptance limits to be agreed upon between manufacturer and purchaser
14 Surface Quality Table 3,4,5	Surface Quality Criteria has been modified Surface Quality Class requirements for Wire Rods/Bars/Bright Products have been specified
15 Decarburization	Limits of Decarburization have been modified
17 Shapes, Dimensions and Tolerances Table 7,8,9,10	Tolerances of Wire Rods have been modified to be specified as per IS/ISO 16124 Tolerances on Bright Products i.e. Bright Bars and Drawn Flats have been specified separately
Annex D	Test Methods for Supplementary or Special Requirements have been specified at Annex D
Annex E	A comparative list indicating grades covered in various designations systems has been added

4. Consequent upon the issuance of the revised Standard, the existing product manual has been revised with modifications in the scope and grouping guidelines. The same is being circulated separately.

5. The guidelines for implementation of the revised Standard is given below:

A. LICENSEES:

1. a) Switchover of Existing Licences as per IS 11169 (Part 1):1984 to IS 11169 (Part 1):2022

i) On revision of IS 11169 (Part 1);1984 to IS 11169 (Part 1):2022, a no. of new grades under each category of steels i.e. Steels not intended for Heat Treatment , Case-Hardening Steels and Steels for Quenching and Tempering have been

added. Further, the delivery conditions for each category of steel have now specified separately and mechanical properties under each delivery condition have been specified. In addition, provisions for supplying Case Hardening Steels and Steels for Quenching and Tempering on the basis of Hardenability requirements (H/HH/HL/CH) have been incorporated. Further, Bright Products have now been explicitly covered under the standard and their requirements have been specified separately.

Accordingly, Scope and Grouping Guidelines have been revised as specified in the Product Manual of IS 11169 (Part 1):2022.

ii) BOs shall advise licensees to submit **declaration with regards to their desired scope of licence** as specified in the Product Manual of IS 11169 (Part 1):2022 along with the following evidence of conformity as per IS 11169 (Part 1):2022 :-

i) In-house/Independent Test Reports as per IS 11169 (Part 1):2022 for all varieties to be covered in the scope of the licence as per grouping guidelines.

ii) Manufacturing Machinery and Test Equipment List as per IS 4824:2022

ii) BOs shall verify the documentary evidences submitted by the licensees for their compliance as per IS 11169 (Part 1):2022 and shall issue endorsement with regards to switchover and revised scope of licence as per IS 11169 (Part 1):2022.

iii) An example with regards to the existing scope of licence as per IS 11169 (Part 1):1984 and revised scope of licence as per IS 11169 (Part 1):2022 is given below for better understanding:-

Licence No.	Existing Scope of Licence	Revised Scope of Licence	Evidence of Conformity Required
CM/L-5200091588	Designation: 15C4, 25C4, 45C8, 26C10BT, 16Mn5Cr4 Condition: As rolled Bars from 16 mm up to and including 40 mm Wire Rod from 5.5 mm to up to and including 40 mm	Grade Designation: Steels not intended for Heat Treatment : 15C4, 25C4 Case Hardening Steels: 16Mn5Cr4 Steels for Quenching and Tempering:	3 In-house/Independent Test Reports are required to be submitted for switchover as per IS 11169 (Part 1):2022: Grade Designation: 15C4 or 25C4 of Wire Rod/Bar/Bright Bar of any size, Delivery Condition: Untreated

		<p>45C8, 26C10BT Delivery Condition: Untreated (as hot-rolled) Product Form: Wire Rod,Bars,Bright Bars Shapes/Sizes: Wire Rods (Round, Square, Hexagonal) of Nominal Size from 5.5 mm mm to up to and including 40 mm, Bars (Round, Square, Hexagonal) of Nominal Size from 16 mm mm to up to and including 40 mm Bright Bars (Round, Square, Hexagonal) of Nominal Size from 16 mm to up to and including 40 mm, Tolerance Class h10, h11, h12</p>	<p>(as hot-rolled) Grade Designation: 16 Mn5Cr4, Wire Rod/Bar/Bright Bar of any size, Delivery Condition: Untreated(as hot-rolled) Grade Designation: 45C8 , Wire Rod/Bar/Bright Bar of any size, Delivery Condition: Untreated(as hot-rolled)</p> <p>Out of the above 3 reports, at least one report shall be of a Bright Bar of Tolerance Class h10</p>
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iv) Bos shall ensure that the revised scope of licence shall not be given beyond the sizes already covered under the existing scope of licence.

b) Change in Scope of Licence

i) All licensees intending to include new grades within each category of steels i.e. Steels not intending for Heat Treatment, Case Hardening Steels and Steels for Quenching and Tempering can apply for inclusion through the following options:-

i) **Submit independent test reports of all the new grades intended to be included in the licence as per Grouping Guidelines of IS 11169 (Part 1):2022 along with other requisite documents such as machinery list, test equipment list, in-house test reports etc.**

ii) **Licensees possessing complete in-house testing facilities as per IS 11169 (Part 1):2022 may also submit a request to their respective BOs, along with necessary documentation as above, for a special inspection for inclusion of grades on Factory Testing Basis without any independent testing.**

ii) Bos shall ensure that if requests for inclusion on Factory Testing Basis are received, the same shall be taken up on priority and preferably an inspection within 15 days shall be planned in case of such requests. The no. of days for the visit may be fixed based upon the no. of grades applied for inclusion.

2. All Licensees shall implement the revised Standard by **15 December 2022**. Any difficulty in implementation shall be brought to the notice of CMD 2 at the earliest but in any case at least 30 days before the last date of implementation. BOs shall ensure that no Licences are under operation as per old Standard after **15 December 2022**. The status of implementation of the revised Standard shall be confirmed by Head (BO) to CMD-2 within two weeks of the last date of concurrent running.

3. BOs shall also plan an early surveillance visit, preferably within 30 days of switchover by the licensee, for verification of the implementation of the revised standard.

4. If the Licensee fails to complete all actions by **15 December 2022** it shall be dealt with as per the prevailing guidelines.

B. APPLICATIONS FOR GRANT OF LICENCE:

1. Existing Applications where Sample has been submitted in the Laboratory/Test Report has been issued by the Laboratory may be processed as per the old Standard. However, if the Applicant is desirous of considering the Application as per the revised Standard, a declaration may be obtained from the Applicant to that effect and the Application may be processed accordingly. An undertaking shall also be obtained from such Applicants that if the sample fails in new test requirements, Licence will not be granted by BIS as per the old version.

2. Applications which are recorded henceforth may be processed as per the old Standard or the revised Standard. Processing of Applications as per the old Standard shall be permitted only upto **14 December 2022** and for such cases Applicant shall give a declaration that they will implement the revised Standard by **15 December 2022**
3. Beyond **15 December 2022** no Licence shall be granted as per the old Standard.

C. CHANGE IN SCOPE OF LICENCE:

1. For change in scope of licence, the relevant provisions as given above for Applicants shall apply.
2. However, processing of such applications for change in scope of licence as per the old Standard shall be permitted only up to the date of implementation of the revised Standard or up to **15 December 2022** whichever is earlier.
3. The above guidelines come into force with immediate effect.

Shivam Ahuja
Sc. C

Head (CMD-2)
DDG (Certification)
ROs/BOs