

**केन्द्रीय मुहर विभाग-2**

संदर्भ -: केम्वी-2/16:8521 (Part 1)

03 07 2023

**विषय: संशोधित IS 8521 (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।

आदित्य दास  
वैज्ञानिक D

**प्रमुख (केम्वी 2)**

सभी क्षेत्रीय/शाखाकार्यालय/प्रयोगशालाएँ/TXD/LRMD

**CENTRAL MARKS DEPARTMENT-2**

Our Ref: CMD-2/16:8521 (Part 1)

03 07 2023

**Subject: Guidelines for implementation of Revised IS 8521 (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.

(Aditya Das)  
Scientist D

**Head (CMD-2)**

All ROs/BOs/Labs/TXD/LRMD

## CENTRAL MARKS DEPARTMENT-2

Our Ref: CMD-2/16: 8521 (Part 1)

03 07 2023

### **Subject: Guidelines for implementation of Revised IS 8521 (Part 1):2022 (Eye and Face Protection for Occupational Use Part 1 General Requirements)**

1. IS 5983:1980 (Eye protectors) and IS 8521 (Part 1):1977 ( Industrial safety face shields: Part 1 with plastics visor) have been amalgamated and revised as IS 8521 (Part 1) : 2022/ISO 16321-1 : 2021 (Eye and Face Protection for Occupational Use Part 1 General Requirements) and has been published. The last date for implementation of the revised Standard is **8 January 2024** after which the old Standards shall stand withdrawn.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 and also share the revised product manual hosted on BIS website for IS 8521 (Part 1) : 2022.
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	Changes
1 (Scope)	<p>IS 8521 (part 1) covered the face shields (with plastics visor) that could be used in woodworking operations against chips and sawdust; in metal machining operations against flying particles; in buffing, polishing and grinding operations where particles may strike the face; in spot welding; and in the handling of corrosive materials. The standard is being revised in order to align it with the latest version of ISO 16321-1 : 2021.</p> <p>This revision is also superseding IS 5983 : 1980 'Specification for eye-protectors' which covered the specification for eye-protectors that could be used in operations where small particles flying at high velocity, molten metal, chemical splashes, dust, gases, optical radiations (ultra-violet, infra-red and glare from intense visible light) pose hazards which are likely to impair vision or damage the eye. The revised standard specifies general requirements for eye and face protectors which are intended to provide protection for the eyes and faces of persons against one or more common occupational hazards.</p> <p>Definition of the product i.e. "protector" has been expanded to specify it as a general term for eye and/or face protectors such as, but not limited to, spectacles, goggles, face shields and eye shields and to indicate which kind of protectors it applies to and which it doesn't.</p>

	<p>Classification has been modified. The product has been broadly classified into three categories</p> <ul style="list-style-type: none"> <li>— all plano as well as corrective and prescription lensed protectors and components;</li> <li>— those eye and face protectors used for occupational-type tasks that are performed similarly to an occupation, e.g. "do-it-yourself";</li> <li>— those eye and face protectors used in educational establishments.</li> </ul> <p>In addition, it has also been classified by type - eye shields, face shields, spectacles, goggles and by the kind of filters: flat automatic welding filters, flat passive welding filters, cover, or backing plates for welding filters</p>
<p>4 (General requirements)</p>	<p>It has been specified that Protectors described in this standard are intended for use at normal ambient temperatures (<math>23 \pm 5</math>) °C , physical and mechanical requirements at extremes of temperature are included (sometimes optionally)</p> <p>Requirements for physiological compatibility have been prescribed</p> <p>Construction and adjustment requirements have been modified</p> <p>Cleaning and/or disinfection requirement has been added</p> <p>Headform 1-M in accordance with ISO 18526-4 has been prescribed as the default headform compatible with the protector for the test methods where (a) headform(s) is/are required (Unless the manufacturer specifies the headform(s) in accordance with ISO 18526-4 that is/are compatible with the protector)</p>
<p>5 (Geometrical optical requirements for protectors )</p>	<p>Geometrical optical requirements for protectors have been revised: Field of view , Refractive power and prismatic power for plano lenses, requirements for Mounted prescription lenses have been specified instead of existing requirements. Enhanced optical performance (optional requirement) has also been given.</p>
<p>6 (Physical optical requirements for protectors )</p>	<p>Physical optical requirements for protectors have been revised: Requirements for Detection of signal lights, Luminous transmittance of lenses without deliberate filter action , Specific requirements for different types of filter like Ultraviolet protective filters, Infrared protective filters; Uniformity of luminous transmittance and transmittance matching, Scattered light , Frame transmittance have been specified instead of existing requirements like spherical effect, astigmatism and prismatic effect, diffusion of light, colour recognition prescribed in IS 5983:1980</p> <p>Requirement for Anti-reflective coated lenses (optional requirement) has also been given.</p>

7 (Physical and mechanical requirements for protectors )	<p>Physical and mechanical requirements for protectors have been revised: Area to be protected, Headbands and harnesses, Quality of material and surface of mounted and unmounted lenses, visors and filters, Basic impact level of complete protectors, Resistance to thermal exposure, Resistance to UV radiation, Resistance to corrosion, Resistance to ignition, Penetration of vents and gaps have been specified instead of the existing requirements like impact resistance, penetration resistance, flammability prescribed in IS 8521 (Part 1):1977 and flame resistance, protection against high velocity particles, molten metals and hot solids, chemical splashes, dust, gases and vapours prescribed in IS 5983:1980</p> <p>Optional requirements for High-speed impact resistance, impact level C, D, E; High mass impact, impact level HM; Resistance to surface damage due to flying fine particles, Resistance to fogging of lenses or filters, Protection against molten metals and hot solids, Protection against droplets, Protection against streams of liquids, Protection against large dust particles, Protection against gases and fine dust, Protection against radiant heat, Chemical resistance, Use in explosive atmospheres have also been given.</p>
8 (Marking of protectors )	Marking requirements have been revised: Code System of letters/code numbers for marking of protectors has been prescribed based on requirements. Mandatory and optional markings on lenses/filters and on frames have also been prescribed
9 (Information to be supplied by the manufacturer)	Information to be supplied by the manufacturer with each protector has been prescribed
10 (Allocation of requirements, test samples and application)	Allocation of requirements, test samples and application Has been specified for unmounted and mounted lenses or filters and for frames and complete protectors .

4. Consequent upon the issuance of the revised Standard, the existing product manual has been revised which is being circulated separately through BIS website.

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

#### **A. LICENSEES:**

- i. The licensee shall implement the revised Standard by **8 January 2024**. Any difficulty in implementation shall be brought to the notice of CMD 2 at the earliest. BOs shall ensure that no Licences are under operation as per the old Standard after **8 January 2024**. **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.**

- ii. The licensee shall submit the following documents to the BO as evidence of conformity to the revised standard:
  - a) Required scope of licence as per the product manual for IS 8521 (Part 1) : 2022
  - b) In-house/Independent Test Reports indicating conformity of the product(s) to the revised standard as per the scope of licence required, in accordance with the grouping guidelines given in the product manual for IS 8521 (Part 1) : 2022
  - c) List of test equipment as applicable according to the required scope of licence as per revised IS 8521 (Part 1):2022 and SIT prescribed in the revised product manual.
  - d) The manufacturer shall declare whether there is any change in the manufacturing process and infrastructure for manufacturing the product as per the revised standard. If so, the revised manufacturing process flow, in-process controls and list of manufacturing machinery shall be submitted.
- iii. Verification of implementation of the revised Standard, wherever required, **shall be verified through a surveillance visit within 30 days of confirmation of implementation of the revised standard by licensee. During this visit:**
  - a) Factory testing shall be conducted for **any one** the varieties of the product which is intended to be covered in the scope of the licence. Competence of the testing personnel for testing/quality control as per the revised standard shall also be assessed.
  - b) Revised List of testing equipment, shall be verified as per the requirements of the revised standard and scope of the licence required.
  - c) Where required, revised manufacturing process flow, in-process controls and list of manufacturing machinery shall be verified.
- iv. **Endorsement to the licence for implementation of the revised standard and modified scope of licence as per revised standard shall be issued only after successful verification of the implementation of the revised standard.**
- v. If the Licensee fails to complete all actions by **8 January 2024** it shall be dealt with as per the prevailing guidelines.

## **B. APPLICATIONS FOR GRANT OF LICENCE:**

- i. 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 from such Applicants also be obtained that if the sample fails while considering the provisions of the revised Standard, Licence will not be granted by BIS as per the old version.

- ii. 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 up to **7 January 2024** and for such cases Applicant shall give a declaration that they will implement the revised Standard by **8 January 2024**.
- iii. Beyond **8 January 2024** no Licence shall be granted as per the old Standard.

**C. CHANGE IN SCOPE OF LICENCE:**

- i. For change in scope of licence, the relevant provisions as given above for Applicants shall apply.
  - ii. However, processing of such applications for change in scope of licence as per the old Standard shall be permitted only upto the date of implementation of the revised Standard or up to **8 January 2024** whichever is earlier.
6. The above guidelines come into force with immediate effect.

**Aditya Das**  
**Sc. D**

**Head (CMD-2)**  
**DDG (Certification)**