

BUREAU OF INDIAN STANDARDS

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Doc No.: PGD 39 (23508)

IS 5920 (Part 8) : XXXX

ISO 10110-12 : 2019

November 2023

भारतीय मानक मसौदा

**प्रकाशिकी और फोटोनिक्स – प्रकाशीय तत्वों और प्रणालियों के लिए आरेखण तैयार करना
भाग 8 गैर-गोलाकार सतहें**

Draft Indian Standard

**Optics and Photonics — Preparation of Drawings for Optical Elements and Systems
Part 8 Aspheric Surfaces**

ICS 01.100.20; 37.020

Optics and Photonics, PGD 39

NATIONAL FOREWORD

This Indian Standard (Part 8) which is identical with ISO 10110-12 : 2019 ‘Optics and photonics — Preparation of drawings for optical elements and systems — Part 12: Aspheric surfaces’ issued by the International Organization for Standardization (ISO) will be adopted by the Bureau of Indian Standards on the recommendation of the Optics and Photonics Sectional Committee and approval of the Production and General Engineering Division Council.

This standard specifies rules for presentation of aspheric surfaces and surfaces with low order symmetry such as cylinders and toroids in the ISO 10110 series.

This standard has been published in thirteen parts. Part 1 of this series supersedes the originally published Indian Standard IS 5920 : 1970 ‘Recommendation for the preparation of drawing for optical elements and system’. The other parts in this series are:

Part 1	General
Part 2	Surface form tolerances
Part 3	Centering tolerances
Part 4	Surface imperfections
Part 5	Surface texture
Part 6	Surface treatment and coating
Part 7	Non-tolerance data
Part 9	Wave front deformation tolerance
Part 10	Diffraction surfaces
Part 11	Laser irradiation damage threshold

Part 12	Stress birefringence, bubbles and inclusions, homogeneity, and striae
Part 13	General description of surfaces and components

The text of ISO standard has been approved as suitable for publication as an Indian Standard without deviations. Certain conventions are however not identical to those used in Indian Standards. Attention is particularly drawn to the following

- a) Wherever the words ‘International Standard’ appear referring to this standard, they should be read as ‘Indian Standard’.
- b) Comma (,) has been used as a decimal marker while in Indian Standards, the current-practice is to use a point (.) as the decimal marker.

In this adopted standard, reference appears to certain International Standards for which Indian Standards also exist. The corresponding Indian Standards, which are to be substituted in their respective places, are listed below along with their degree of equivalence for the editions indicated:

<i>International Standard</i>	<i>Corresponding Indian Standard</i>	<i>Degree of Equivalence</i>
ISO 10110-1 Optics and photonics — Preparation of drawings for optical elements and systems — Part 1: General	IS 5920 (Part 1) : XXXX/ISO 10110-1 : 2019 Optics and photonics — Preparation of drawings for optical elements and systems : Part 1 General	Identical
ISO 10110-5 Optics and photonics — Preparation of drawings for optical elements and systems — Part 5: Surface form tolerance	IS 5920 (Part 2) : XXXX/ISO 10110-5 : 2015 Optics and photonics — Preparation of drawings for optical elements and systems : Part 5 Surface form tolerance	Identical
ISO 10110-6 Optics and photonics — Preparation of drawings for optical elements and systems — Part 6: Centring tolerances	IS 5920 (Part 3) : XXXX/ISO 10110-6 : 2015 Optics and photonics — Preparation of drawings for optical elements and systems : Part 6 Centring tolerances	Identical
ISO 10110-7 Optics and photonics — Preparation of drawings for optical elements and systems — Part 7: Surface imperfections	IS 5920 (Part 4) : XXXX/ISO 10110-7 : 2017 Optics and photonics — Preparation of drawings for optical elements and systems : Part 7 Surface imperfections	Identical
ISO 10110-8 Optics and photonics — Preparation of drawings for optical elements and systems — Part 8: Surface texture	IS 5920 (Part 5) : XXXX/ISO 10110-8 : 2019 Optics and photonics — Preparation of drawings for optical elements and systems : Part 8 Surface texture	Identical
ISO 1101 Geometrical product specifications (GPS) — Geometrical tolerancing — Tolerances of form, orientation, location and run-out	IS 8000 (Part-1) : 2019/ISO 1101 Geometrical product specifications (GPS) — Geometrical tolerancing Part 1 Tolerances of form, orientation, location and run-out (Second Revision)	Identical

NOTE: The technical content of draft standard is not available on website. For details, please refer to ISO 10110-12 : 2019 or contact:

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