

BUREAU OF INDIAN STANDARDS

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Doc No.: PGD 39 (23515)

IS 5920 (Part 13) : 2023

ISO 10110-19 : 2015

November 2023

भारतीय मानक मसौदा

प्रकाशिकी और फोटोनिक्स – ऑप्टिकल तत्वों और प्रणालियों के लिए आरेखण तैयार करना

भाग 13 सतहों और घटकों का सामान्य विवरण

Draft Indian Standard

Optics and Photonics — Preparation of Drawings for Optical Elements and Systems

Part 13 General Description of Surfaces and Components

ICS 01.100.20; 37.020

Optics and Photonics, PGD 39

NATIONAL FOREWORD

This draft Indian Standard (Part 13) which is identical with ISO 10110-19 : 2015 ‘Optics and photonics — Preparation of drawings for optical elements and systems — Part 19: General description of surfaces and component’ 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 provides a general method of describing surfaces and components. This standard applies to continuous and discontinuous surfaces. It does not apply to diffractive surfaces, Fresnel surfaces, ophthalmic glasses, and micro-optical surfaces.

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’. 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 8	Aspheric surfaces

Part 9	Wave front deformation tolerance
Part 10	Diffractive surfaces
Part 11	Laser irradiation damage threshold
Part 12	Stress birefringence, bubbles and inclusions, homogeneity, and striae

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

- Wherever the words 'International Standard' appear referring to this standard, they should be read as 'Indian Standard'.
- 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 the following International Standard for which Indian Standard also exists. The corresponding Indian Standard which is to be substituted in its place is listed below along with its degree of equivalence for the edition indicated.

<i>International Standard</i>	<i>Corresponding Indian Standard</i>	<i>Degree of Equivalence</i>
ISO 5459 Geometrical product specifications (GPS) — Geometrical tolerancing — Datums and datum systems	IS 10721 : 1983/ISO 5459 : 2011 Datum and datum systems for, geometrical tolerancing on technical drawings	Identical
ISO 10110-5 Optics and photonics — Preparation of drawings for optical elements and systems — Part 5: Surface form tolerances	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 imperfection tolerances	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; roughness and waviness	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 10110-14 Optics and photonics — Preparation of drawings for optical elements and systems — Part 14 : Wave front deformation tolerance	IS 5920 (Part 9) : XXXX/ISO 10110-14 : 2018 Optics and photonics — Preparation of drawings for optical elements and systems : Part 14 Wave front deformation tolerance	Identical
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The technical committee has reviewed the provisions of the following International Standard referred in this adopted standard and has decided that it is acceptable for use in conjunction with this standard.

International Standard

Title

ISO 1101

Geometrical Product Specifications (GPS) — Geometrical tolerancing — Tolerances of form, orientation, location and run-out

NOTE: The technical content of draft standard is not available on website. For details, please refer to ISO 10110-19 : 2015 or contact:

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