***भारतीय मानक***

***Indian Standard***

**IS 5920 (Part 5) : 2024**

**ISO 10110-8 : 2019**

प्रकाशिकी और फोटोनिक्स — प्रकाशीय तत्वों और प्रणालियों के लिए आरेखण तैयार करना

भाग 5 सतह की बनावट

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

**Part 5 Surface Texture**

ICS 01.100.20; 37.020

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भारतीय मानक ब्यूरो

BUREAU OF INDIAN STANDARDS

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Optics and Photonics Sectional Committee, PGD 39

NATIONAL FOREWORD

This Indian Standard (Part 5) which is identical with ISO 10110-8 : 2017 ‘Optics and photonics — Preparation of drawings for optical elements and systems — Part 8: Surface texture’ issued by the International Organization for Standardization (ISO) was 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 the indication of the surface texture of optical elements. This standard also specifies method for characterizing the residual surface that is left after detrending by subtracting the surface form.

IS 520 (Part 1) supersedes the originally published Indian Standard IS 5920 : 1970 ‘Recommendation for the preparation of drawing for optical elements and system’.

This standard has been published in thirteen parts. The other parts in this series are:

Part 1 General

Part 2 Surface form tolerances

Part 3 Centering tolerances

Part 4 Surface imperfections

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

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

1. Wherever the words ‘International Standard’ appear referring to this standard, they should be read as ‘Indian Standard’.
2. 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

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| --- | --- | --- |
| *International Standard* | *Corresponding Indian Standard* | *Degree of Equivalence* |
| ISO 1302 : 2002 Geometrical product specifications (GPS) — Indication of surface texture in technical product documentation | IS 10719 : 2015/ ISO 1302 : 2002 Geometrical product specifications (GPS) — Indication of surface texture in technical product documentation (f*irst revision*) | Identical |
| ISO 4287 :1997 Geometrical product specifications (GPS) — Surface texture: Profile method — Terms, definitions and surface texture parameters | IS 18432 (Part 2) : 2023/ISO 21920-2 : 2021 Geometrical product specifications (GPS) — Surface texture: Profile Part 2: Terms, definitions and surface texture parameters (ISO 4287 has been amalgamated into ISO 21920) | Identical |
| ISO 10110-1 Optics and photonics— Preparation of drawings for optical elements and systems — Part1: General | IS 5920 (Part 1) : 2024/ISO 10110-1 : 2019 — Optics and photonics — Preparation of drawings for optical elements and systems: Part 1 General | Identical |