

BUREAU OF INDIAN STANDARDS

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*भारतीय मानक मसौदा*

**आंतरिक दहन इंजन — पिस्टन रिंग — भाग 5: गुणता आवश्यकताएँ**

*Draft Indian Standard*

**INTERNAL COMBUSTION ENGINES — PISTON RINGS — PART 5: QUALITY  
REQUIREMENTS**

ICS: 43.060.10

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Automotive Prime Movers, Transmissions Systems and Internal Combustion Engines Sectional Committee, TED 02

## NATIONAL FOREWORD

This draft Indian Standard which is identical with ISO 6621-5:2020 ‘Internal combustion engines — Piston rings — Part 5: Quality requirements’ issued by International Organization for Standardization (ISO), will be adopted by the Bureau of Indian Standards on the recommendations of Automotive Prime Movers, Transmissions Systems and Internal Combustion Engines Sectional Committee and approval of the Transport Engineering Division Council

This standard is one of the series of Indian Standards published on ‘Internal combustion engines — Piston rings’. Other standards in this series are:

- a) Part 1: Vocabulary
- b) Part 2: Inspection measuring principles
- c) Part 3: Material specifications
- d) Part 4: General specifications

The text of ISO standard is proposed for publication as an Indian Standard without deviations. Certain terminologies and 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, references appear to following International Standard for which Indian Standard also exists. The corresponding Indian Standard, which is to be substituted in its respective place, is listed below along with it’s degree of equivalence for the edition indicated:

<i>International Standard</i>	<i>Corresponding Indian Standard</i>	<i>Degree of Equivalence</i>
ISO 6621-1: 2018	IS/ISO 6621-1: 2018	Identical under single numbering

<i>International Standard</i>	<i>Corresponding Indian Standard</i>	<i>Degree of Equivalence</i>
Internal combustion engines — Piston rings — Part 1: Vocabulary	Internal Combustion Engines — Piston Rings — Part 1: Vocabulary (First Revision)	

Attention is drawn to the possibility that some of the elements of this standard may be the subject of patent rights. The Bureau of Indian Standards shall not be held responsible for identifying any or all such patent rights.

## **SCOPE**

This document specifies quality aspects that can be defined but that are not normally found on a drawing specification.

It covers the following:

- a) Single-piece piston rings of grey cast iron or steel;
- b) Multi-piece piston rings (oil control rings) consisting of cast iron parts and spring components; and
- c) Single-piece and multi-piece oil control rings of steel, i.e. oil control rings in the form of strip steel components or steel segments (rails) with spring expander components.

In addition to specifying some of the limits of acceptance relating to inspection measuring principles (covered by ISO 6621-2), this document also covers those features for which no recognized quantitative measurement procedures exist and which are only checked visually with normal eyesight (glasses if worn normally) and without magnification. Such features (superficial defects) are additional to the standard tolerances of ring width, radial wall thickness and closed gap.

This document does not establish acceptable quality levels (AQL), it being left to manufacturer and customer to decide the appropriate levels jointly. In this case, the recommendations of ISO 2859-1 are followed.

This document specifies the quality requirements of piston rings for reciprocating internal combustion engines for road vehicles and other applications. It is applicable to all such rings of a nominal diameter from 30 mm up to and including 200 mm.

**FOR COMPLETE TEXT OF THE DOCUMENT KINDLY REFER ISO 6621-5: 2020 or CONTACT:**

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**TED 02 (24508) WC**  
**IS XXXX/ISO 6621-5:2020**  
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