# INTERNATIONAL STANDARD

ISO 6312

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# Road vehicles — Brake linings — Shear test procedure for disc brake pad and drum brake shoe assemblies

Véhicules routiers — Garnitures de freins — Méthode d'essai de cisaillement des ensembles de plaquettes de freins à disque et segments de freins à tambour

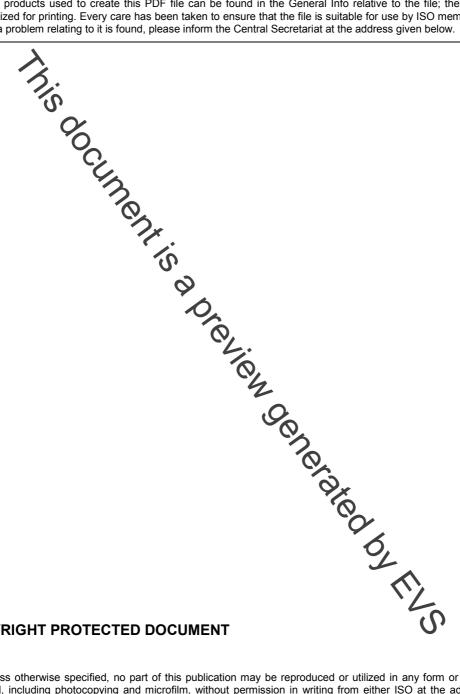


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#### **Foreword**

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The main task of technical committees is to prepare International Standards. Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights.

ISO 6312 was prepared by Technical Committee ISO/TC 22, Road vehicles, Subcommittee SC 2, Braking systems and equipment.

This third edition cancels and replaces the second edition (ISO 6312:2001), which has been technically revised.

#### Introduction

The shear property relates to stresses at the area of contact between lining and carrier in disc brake pad and drum brake shoe assemblies.

The specification for the average rate of load and the recommendation for variations in the instantaneous rate of load given in this International Standard take into account current practice, pased upon an examination of load given in this International Standard incorporates technical updates generated in the course of harmonization efforts during the development of ISO 15484. of load given in this International Standard take into account current practice, based upon an examination of equipment in use.

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# Road vehicles — Brake linings — Shear test procedure for disc brake pad and drum brake shoe assemblies

### 1 Scope

This International Standard specifies a method for measuring the strength of the bond connection between the lining material and the carrier in disc brake pad and drum brake shoe assemblies (shear strength). This International Standard is applicable to assemblies that are integrally moulded, bonded or that use mechanical retention systems (MRS) of both types used for brakes on road vehicles. This International Standard does not apply to riveted assemblies.

#### 2 Normative references

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 611, Road vehicles — Braking of automotive vehicles and their trailers — Vocabulary

#### 3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 611 and the following apply.

## 3.1 lining

friction material component of a brake lining assembly

### 3.2 carrier

component of a brake lining assembly to which the friction material is attach

#### 3.3

#### bond area

A

contact area between lining and carrier

#### 3.4

#### mechanical retention system

#### MRS

attachment method where mechanical protrusions on the backing plate aid the retention of the friction material or the underlayer

#### 3.5

#### shear force at failure

F

total load applied at the time of shear failure

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