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

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



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Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 3.

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 International Standard may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights.

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

This second edition cancels and replaces the first edition (ISO 6312:1981), which has been technically revised.

Annex A forms a normative part of this International Standard. Annex B is for information only.

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, being based upon an examination of equipment in use.

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 integrally moulded, riveted and bonded assemblies of both types of brake on road vehicles.

2 Normative reference

The following normative document contain provisions which, through reference in this text, constitute provisions of this International Standard. For dated references, subsequent amendments to, or revisions of, any of these publications do not apply. However, parties to agreements based on this International Standard are encouraged to investigate the possibility of applying the most recent edition of the normative document indicated below. For undated references, the latest edition of the normative document referred to applies. Members of ISO and IEC maintain registers of currently valid International Standards.

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

3 Terms and definitions

For the purposes of this International Standard, 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 pad is attached

3.3

bond area

contact area between lining and carrier

3.4

shear strength

ratio of the load at failure divided by the bond area

4 Symbols and units

The symbols and preferred units used in this International Standard are given in Table 1.