ISO

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## Rubber, vulcanized or thermoplastic — Determination of dead-load hardness using the very low rubber hardness (VLRH) scale

Caoutchouc vulcanisé ou thermoplastique — Détermination de la dureté sous charge constante au moyen de l'échelle de très faible dureté (VLRH)



Reference number ISO 27588:2012(E)



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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 2.

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 27588 was prepared by Technical Committee ISO/TC 45, Rubber and rubber products, Subcommittee SC 2, Testing and analysis.

This second edition cancels and replaces the first edition (ISO 27588:2008), which has been revised to include a calibration schedule for the apparatus used (see Annex B).

## Introduction

The hardness test specified in this International Standard is intended as a more discriminating alternative to the international rubber hardness degrees scale (ISO 48) for rubbers below 35 IRHD. A durometer method for soft rubbers is described in ISO 7619-1 as the AO scale. Examples of applications are low-modulus bearings, soft roller coverings and printing rubbers.

Figure 1 shows a comparison of the ranges of the IRHD N and IRHD L methods in ISO 48 with the VLRH scale of this International Standard.

The methods differ primarily in the diameter of the indenting ball and the magnitude of the indenting force, these being chosen to suit the particular application.

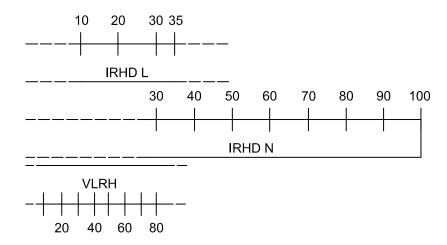


Figure 1 — Comparison of the ranges of hardness measurement methods for rubber