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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.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

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For an explanation on the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the WTO principles in the Technical Barriers to Trade (TBT) see the following URL: [Foreword - Supplementary information](#)

The committee responsible for this document is ISO/TC 10, *Technical product documentation*, Subcommittee SC 6, *Mechanical engineering documentation*.

Technical product documentation (TPD) — Relief grooves — Types and dimensioning

1 Scope

This International Standard specifies a series of relief grooves for shafts and holes, intended for general use in mechanical engineering.

It also intends to avoid unnecessary multiplicity of tools by a restricted selection of groove-types and dimensional versions.

NOTE The shape and the dimensions of the relief grooves type G and H correspond with the “Indexable hard material inserts” according to ISO 6987.

2 Normative references

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

ISO 128-22, *Technical drawings — General principles of presentation — Part 22: Basic conventions and applications for leader lines and reference lines*

ISO 128-24, *Technical drawings — General principles of presentation — Part 24: Lines on mechanical engineering drawings*

3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

3.1

relief groove

clearance groove of specified form and dimensions created by removing material at an inner corner of a rotationally symmetric workpiece and which is necessary for subsequent machining and assembly with mating parts

4 Dimensions

4.1 Relief groove type E

The relief groove type E, see [Figure 1](#), shall be applied to workpieces where the planar surface is not subjected to high fatigue loads and where the cylindrical surface will be subsequently machined if necessary. They are also suitable where mating parts have a relatively large counterbore or will not be in contact with the planar surface.