



INTERNATIONAL ORGANIZATION FOR STANDARDIZATION

# ISO RECOMMENDATION R 701

INTERNATIONAL GEAR NOTATION

SYMBOLS FOR GEOMETRICAL DATA

1st EDITION  
March 1968

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Printed in Switzerland

Also issued in French and Russian. Copies to be obtained through the national standards organizations.

## BRIEF HISTORY

The ISO Recommendation R 701, *International gear notation – Symbols for geometrical data*, was drawn up by Technical Committee ISO/TC 60, *Gears*, the Secretariat of which is held by the Institut Belge de Normalisation (IBN).

Work on this question by the Technical Committee began in 1950 and led, in 1962, to the adoption of a Draft ISO Recommendation.

In December 1965, this Draft ISO Recommendation (No. 889) was circulated to all the ISO Member Bodies for enquiry. It was approved, subject to a few modifications of an editorial nature, by the following Member Bodies :

|           |               |                |
|-----------|---------------|----------------|
| Argentina | Israel        | Spain          |
| Australia | Italy         | Sweden         |
| Austria   | Japan         | Switzerland    |
| Belgium   | Netherlands   | Turkey         |
| Chile     | New Zealand   | United Kingdom |
| France    | Norway        | Yugoslavia     |
| Germany   | Poland        |                |
| Hungary   | South Africa, |                |
| India     | Rep. of       |                |

One Member Body opposed the approval of the Draft :

Czechoslovakia

The Draft ISO Recommendation was then submitted by correspondence to the ISO Council, which decided, in March 1968, to accept it as an ISO RECOMMENDATION.

## INTERNATIONAL GEAR NOTATION

### SYMBOLS FOR GEOMETRICAL DATA

#### INTRODUCTION

This ISO Recommendation aims to unify the symbols used in different countries for the international notation of gears with regard to the principal geometrical data defined in ISO Recommendation R ..., <sup>(1)</sup> *International vocabulary of gears – Part I : Geometrical definitions*.

These symbols have been chosen after detailed comparative study, taking into account the necessity of retaining a certain number of letters for standardization of other notations at a later date, such as those dealing with gear accuracy.

Consequently it is important

- (1) to bring national standards into line with this ISO Recommendation, so that in future a real international language of notations will facilitate the exchange of documents between one country and another;
- (2) to use for geometrical data only combinations of letters or signs appearing in the alphabetical Annex, in order to avoid any risk of confusion with notations to be determined later with regard to other gear data.

This ISO Recommendation consists essentially of two parts :

- on the one hand, the *principal symbols*, composed either of a single basic letter, or of a basic letter and suffix or sign which are generally inseparable for the given term (see Table 1);
- on the other hand, *additional suffixes or signs* which may be added if necessary to the principal symbols, in order to imply a particular qualification of the given term (see Table 2).

The Annex gives lists classified in alphabetical order according to the Roman and Greek alphabets, on the one hand of the basic letter symbols, and on the other hand of the suffixes and signs which have been used in the establishment of this ISO Recommendation and a combination of which may possibly be used for the notation of any other term of geometrical data not explicitly mentioned in this ISO Recommendation.

(1) At present Draft ISO Recommendation No. 888.