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# INTERNATIONAL STANDARD 3590

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INTERNATIONAL ORGANIZATION FOR STANDARDIZATION • МЕЖДУНАРОДНАЯ ОРГАНИЗАЦИЯ ПО СТАНДАРТИЗАЦИИ • ORGANISATION INTERNATIONALE DE NORMALISATION

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## Modular units for machine tool construction — Spindle units

*Éléments standard pour la construction des machines-outils — Unités de broche d'usinage*

**First edition — 1976-04-15**

Corrected and reprinted —

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UDC 621.9-112

Ref. No. ISO 3590-1976 (E)

**Descriptors :** machine tools, metalworking machinery, dimensions, modular units, spindles, multi-spindle heads, specifications, dimensions.

## FOREWORD

ISO (the International Organization for Standardization) is a worldwide federation of national standards institutes (ISO Member Bodies). The work of developing International Standards is carried out through ISO Technical Committees. Every Member Body interested in a subject for which a Technical Committee has been set up 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.

Draft International Standards adopted by the Technical Committees are circulated to the Member Bodies for approval before their acceptance as International Standards by the ISO Council.

International Standard ISO 3590 was drawn up by Technical Committee ISO/TC 39, *Machine tools*, and circulated to the Member Bodies in November 1974.

It has been approved by the Member Bodies of the following countries :

Australia	Germany	Spain
Austria	Hungary	Sweden
Belgium	Italy	Switzerland
Bulgaria	Mexico	Turkey
China	Poland	United Kingdom
Czechoslovakia	Romania	U.S.S.R.
France	South Africa, Rep. of	Yugoslavia

The Member Bodies of the following countries expressed disapproval of the document on technical grounds :

Japan  
U.S.A.

# Modular units for machine tool construction – Spindle units

## 1 SCOPE AND FIELD OF APPLICATION

This International Standard specifies dimensions relating to the interchangeability of the following types of spindle unit used in special purpose machines constructed from modular units :

- Quill feed (self-feeding) single spindle drilling units (clause 4);
- Quill feed (self-feeding) single spindle drilling units with adjusting slide for tool changing (clause 5);
- Single spindle drilling units (clause 6);
- Single spindle milling units (clause 7);
- Single spindle facing and boring units (clause 8).

## 2 REFERENCES

ISO/R 297, *7/24 tapers for tool shanks.*

ISO 702, *Machine tools – Spindle noses and face plates – Sizes for interchangeability. (Parts I, II and III.)*

ISO 2905, *Modular units for machine tool construction – Spindle noses and adjustable adaptors – 16 to 48 mm.*

ISO 3476, *Modular units for machine tool construction – Flanges for mounting multi-spindle heads.*

## 3 DIMENSIONS

Dimensions for spindle units shall be in accordance with tables 1 to 5 as appropriate.

Spindle heights are not standardized.