
INTERNATIONAL STANDARD



3970

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

Modular units for machine tool construction – Integral way columns – Floor-mounted type

Éléments standard pour la construction des machines-outils – Montants à glissière incorporée – Montage au sol

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[ISO 3970:1977](#)

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Descriptors : machine tools, modular units, pillars, dimensions, interchangeability.

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 3970 was developed by Technical Committee ISO/TC 39, *Machine tools*, and was circulated to the member bodies in November 1975.

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Czechoslovakia	Mexico	U.S.A.
France	Romania	U.S.S.R.
Hungary	South Africa, Rep. of	Yugoslavia

The member body of the following country expressed disapproval of the document on technical grounds :

Germany

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1 SCOPE AND FIELD OF APPLICATION

This International Standard specifies certain dimensions relating to the interchangeability of integral way columns of the floor-mounted type used in special purpose machines constructed from modular units.

The method of construction is alternative to that given in ISO 3589.

2 REFERENCES

ISO 2934, *Modular units for machine tool construction – Wing bases for columns.*

ISO 3589, *Modular units for machine tool construction – Integral way columns.*

3 DIMENSIONS

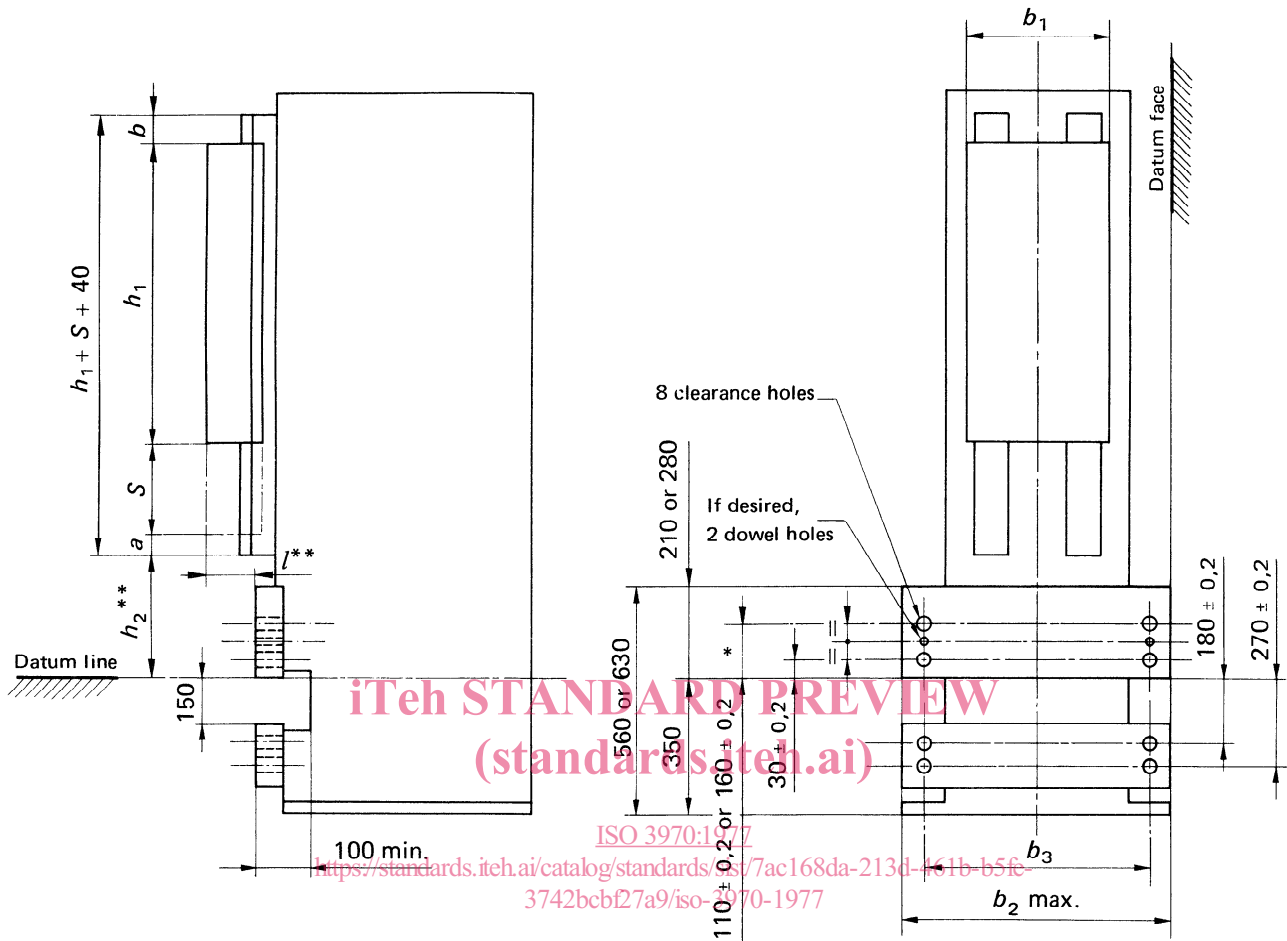
Dimensions for columns shall be in accordance with the table.

3.1 The dimensions laid down for the length h_1 of the saddle may be decreased by one step using values from the R10 series of preferred numbers.

3.2 The dimensions given for the stroke S may be increased using values chosen from the R 5 series of preferred numbers.

If required, other values may be chosen from the R 10 series of preferred numbers.

Dimensions in millimetres



* The alternative distance to the bolt holes can be used with either height of integral way column

** At the manufacturer's discretion

FIGURE – Integral way column – Floor-mounted type

TABLE – Dimensions of integral way columns – Floor-mounted type

Dimensions in millimetres

Nominal size	Width of saddle b_1	Length of saddle h_1 ¹⁾	Stroke S ²⁾	Column base width and flange width b_2 max.	Fixing hole centres b_3 ± 0,2	Fixing bolt size
400	400	800	400	600	545	M 20
500	500	1 000	400	700	645	M 20 or M 24
630	630	1 250	400	830	775	M 20 or M 24
800	800	1 600	400	1 000	945	M 20 or M 24
$a + b = 40$ min.						

1) See 3.1.

2) See 3.2.