International Standard 7570

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Woodworking machines — Surface planing and thicknessing machines — Nomenclature and acceptance conditions

Machines à bois — Machines combinées de menuiserie à raboter et dégauchir — Nomenclature et conditions de réception

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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.

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. They are approved in accordance with ISO procedures requiring at least 75 % approval by the member bodies voting.

International Standard ISO 7570 was prepared by Technical Committee ISO/TC 39, *Machine tools*.

Users should note that all International Standards undergo revision from time to time and that any reference made herein to any other International Standard implies its latest edition, unless otherwise stated.

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Woodworking machines — Surface planing and thicknessing machines — Nomenclature and acceptance conditions

1 Scope and field of application

This International Standard specifies the appropriate terminology for each part of the machine and, with reference to ISO 230/1, the geometrical tests for surface planing and thicknessing machines; it also gives the corresponding permissible deviations which apply to machines of general purpose use and normal accuracy.

NOTE — In addition to terms used in two of the three official ISO languages (English and French), this International Standard gives the equivalent terms in German, Spanish, Italian and Swedish in an annex; these have been included at the request of Technical Committee ISO/TC 39 and are published under the responsibility of the member bodies for Germany, F.R. (DIN), Spain (IRANOR), Italy (UNI) and Sweden (SIS). However, only the terms given in the official languages can be considered as ISO terms.

This International Standard deals only with the verification of accuracy of the machine. It does not apply to testing the running of the machine (vibrations, abnormal noises, stick-slip motion of the components, etc.), nor to its characteristics (speeds, feeds, etc.) which should generally be checked before testing accuracy.

This International Standard does not impose any practical test for surface planing and thicknessing machines. Practical tests should be exceptions and have to be stated in a previous agreement between the manufacturer and the user.

This International Standard applies to those machines designated by the number 12.81 in ISO 7984.

2 References

ISO 230/1, *Acceptance code for machine tools — Part 1: Geometric accuracy of the machine operating under no load or finishing conditions.*

ISO 7984, *Woodworking machines — Technical classification of woodworking and auxiliary machines.* [1)]

3 Preliminary remarks

3.1 In this International Standard all dimensions and permissible deviations are expressed in millimetres.

3.2 To apply this International Standard, reference should be made to ISO 230/1, especially for installation of the machine before testing, the warming up of the main spindle and other moving parts, and description of measuring methods. The measuring instruments shall not permit errors over 1/3 of the tolerances being checked.

3.3 The sequence in which the geometrical tests are given is related to the sub-assemblies of the machine and this in no way defines the practical order of testing. In order to make the mounting of instruments or gauging easier, tests may be applied in any order.

3.4 It is not always possible nor necessary to carry out all the tests given in this International Standard.

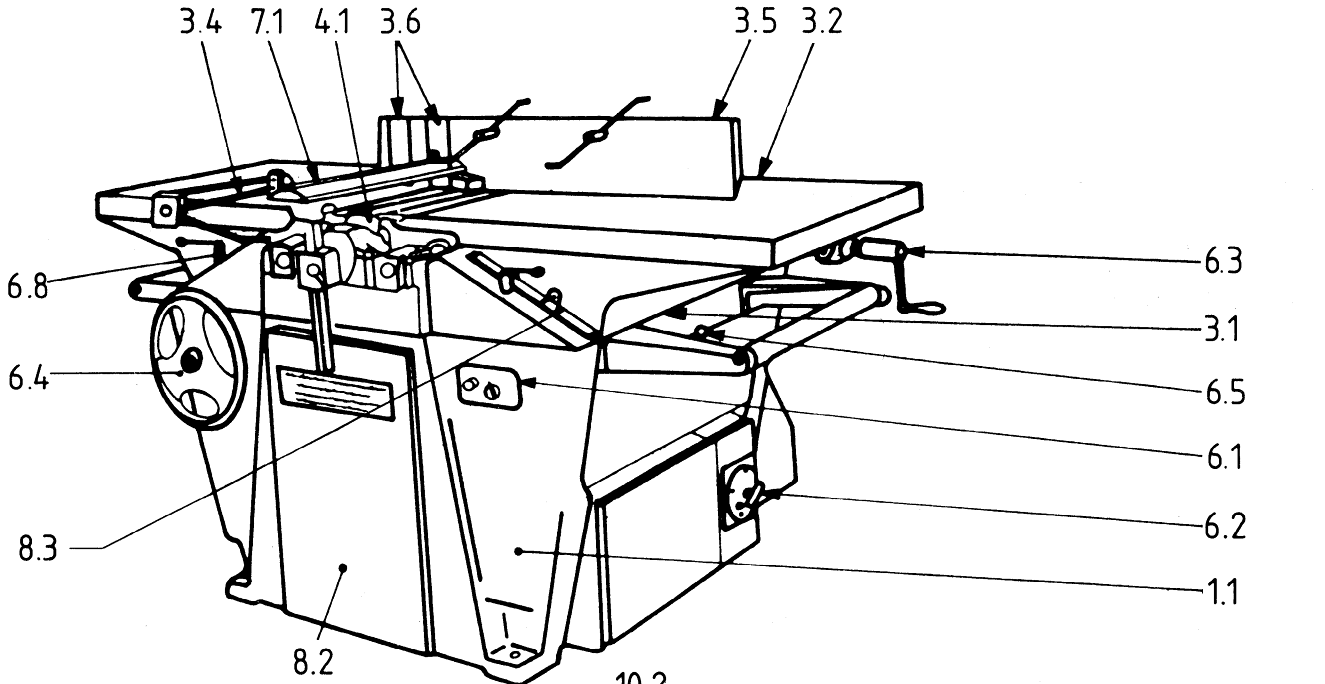
3.5 It is up to the user to choose, in agreement with the manufacturer, those tests relating to the properties which are of interest to him, but these tests shall be clearly stated when ordering a machine.

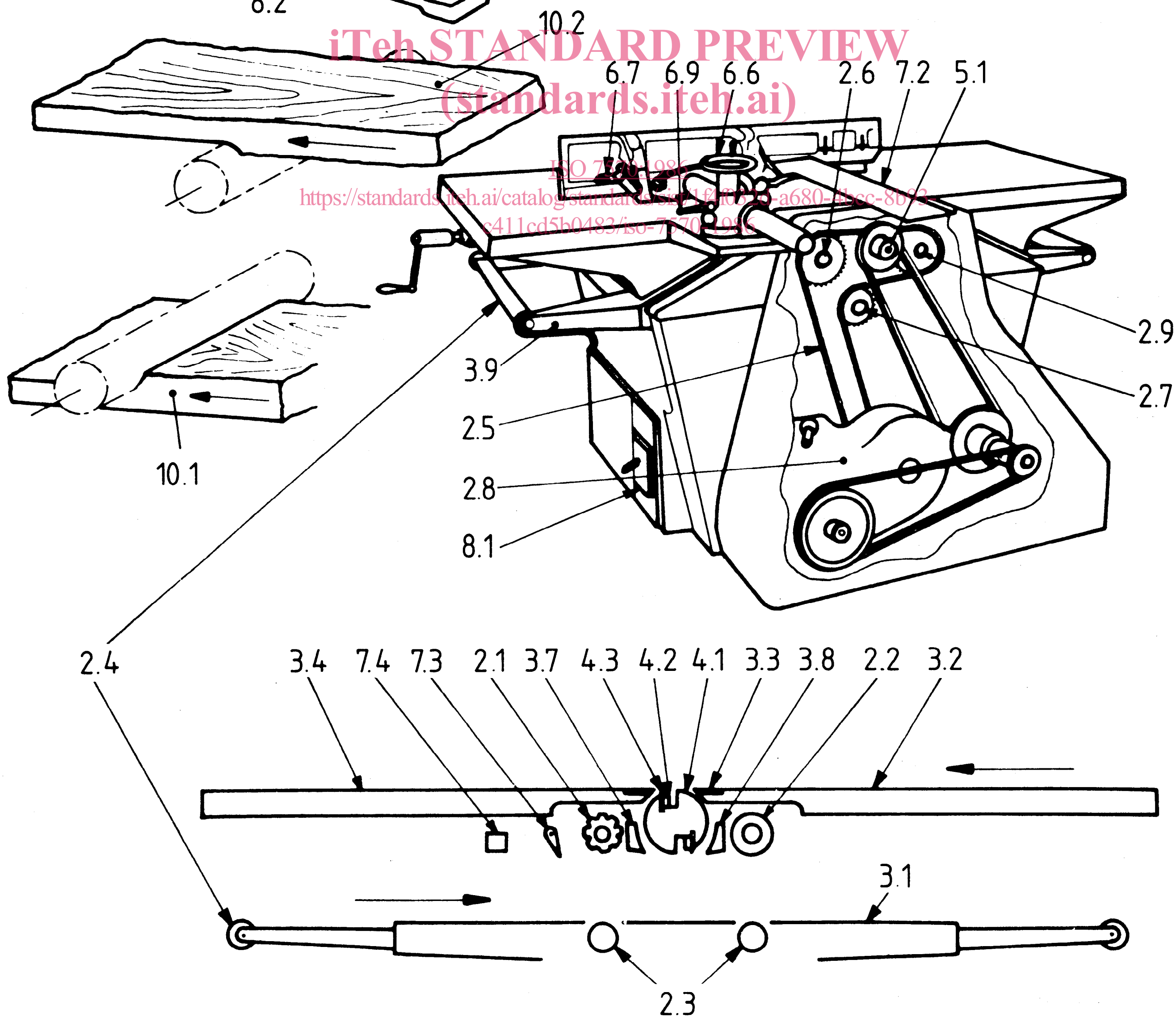
3.6 A movement is longitudinal when it takes place in the working direction of the piece.

3.7 When establishing the tolerance for a measuring range different from that given in this International Standard (see clause 2.311 in ISO 230/1), it should be taken into consideration that the minimum value of the tolerance is 0,01 mm.

1) At present at the stage of draft.

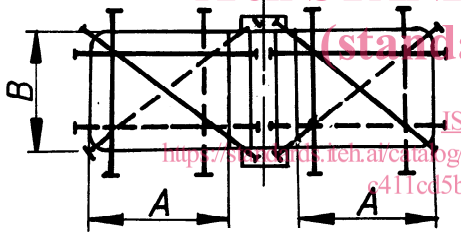
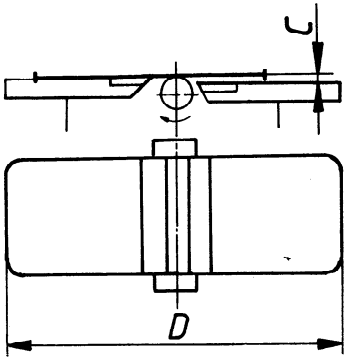
4 Nomenclature

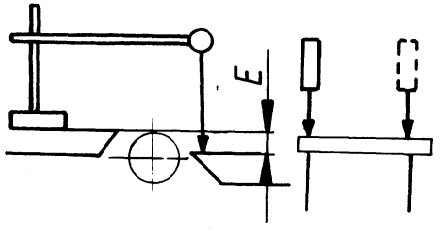
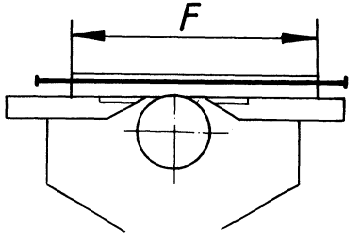
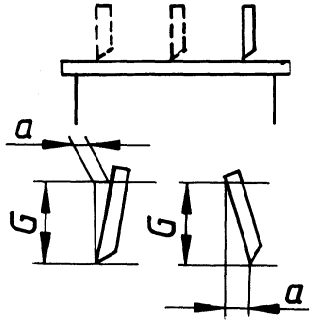


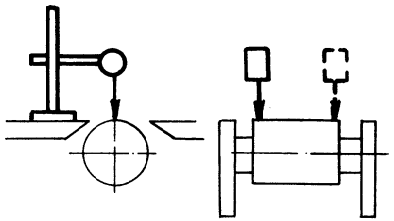
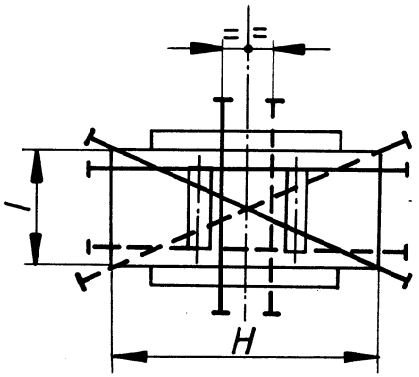


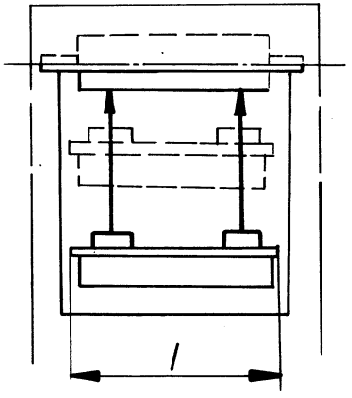
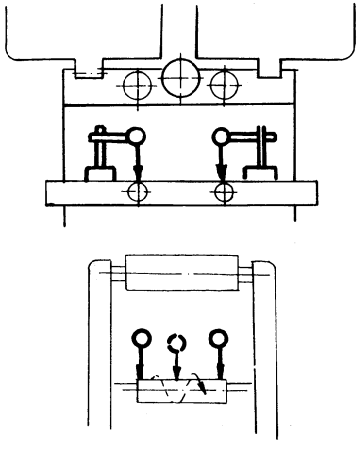
Reference	English	French
	Surface planing and thicknessing machines	**Machines combinées de menuiserie à raboter et dégauchir**
1	**Framework**	**Ossature**
1.1	Main frame	Bâti
2	**Feed of workpiece and/or tools**	**Déplacement des pièces et/ou outils**
2.1	Infeed feed roller	Cylindre d'entrée
2.2	Outfeed feed roller	Cylindre de sortie
2.3	Thicknessing table rollers	Cylindre de la table de rabotage
2.4	Table extension roller	Cylindre de la rallonge de table de rabotage
2.5	Feed roller drive chain	Chaîne d'entraînement des cylindres d'entrée
2.6	Feed roller drive sprockets	Pignon du cylindre d'entrée
2.7	Tensioning roller sprockets	Pignon du tendeur de chaîne
2.8	Speed reduction gearbox or variable speed gear	Réducteur ou variateur de vitesse
2.9	Outfeed roller drive sprockets	Pignon du cylindre de sortie
3	**Workpiece, support clamp and guide**	**Support, maintien et guidage des pièces**
3.1	Thicknessing table	Table de rabotage
3.2	Infeed surfacing table	Table d'entrée de dégauchissage
3.3	Surfacing table lip plates	Lèvres des tables de dégauchissage
3.4	Outfeed surfacing table	Table de sortie de dégauchissage
3.5	Canting fence	Guide inclinable
3.6	Fence gauge plates	Plaques du guide
3.7	Infeed pressure bar	Presseur d'entrée
3.8	Outfeed pressure bar	Presseur de sortie
3.9	Table extension support arm	Rallonge de table
4	**Tool-holders and tools**	**Porte-outils et outils**
4.1	Cutterblock	Broche porte-outil
4.2	Cutterblock wedge	Coin de blocage de la lame
4.3	Blade	Lame
5	**Workheads and tool drives**	**Unité de travail et son entraînement**
5.1	Cutterblock bearing	Palier de roulement
6	**Controls**	**Commandes**
6.1	Starting switch	Commutateur
6.2	Isolating switch	Interrupteur
6.3	Surfacing table vertical adjustment	Réglage de la table de dégauchissage
6.4	Thicknessing table vertical adjustment	Réglage vertical de la table de rabotage
6.5	Thicknessing table rollers vertical adjustment	Réglage vertical des cylindres de la table de rabotage
6.6	Fence fine adjustment	Réglage micrométrique du guide
6.7	Fence canting adjustment	Réglage d'inclinaison du guide
6.8	Surfacing table drawback lock	Verrouillage de la table de dégauchissage
6.9	Fence transverse lock	Verrouillage du déplacement du guide
7	**Safety devices**	**Dispositifs de sécurité**
7.1	Cutterblock guard (bridge guard)	Protecteur du porte-outil
7.2	Cutterblock rear guard	Protecteur arrière du porte-outil
7.3	Anti-kick-back fingers	Linguet antirecul
7.4	Cut depth limiter	Limitateur de passe
8	**Miscellaneous**	**Divers**
8.1	Dust extraction outlet	Buse d'aspiration
8.2	Access door to control gear	Porte d'accès aux organes mécaniques
8.3	Scale for thicknessing	Règle micrométrique
9	(clause free)	(chapitre libre)
10	**Examples of work**	**Exemples de travail**
10.1	Thicknessing	Rabotage
10.2	Planing	Dégauchissage

5 Acceptance conditions and permissible deviations — Geometrical tests

No.	Diagram	Object	Permissible deviations	Measuring instruments	Observations and references in ISO 230/1 test code
G1		Checking of flatness of the tables: a) longitudinal straightness b) diagonal straightness c) transverse straightness	a) and b) 0,10 for $A \leqslant 630$ 0,20 for $630 < A \leqslant 1\,250$ 0,30 for $A > 1\,250$ c) 0,10 for $B \leqslant 400$ 0,15 for $B > 400$	Straightedge and feeler gauges	Clauses 5.212 and 5.322.
G2		Parallelism of the two surface planing tables longitudinally	$C = 5$ 0,10 for $D \leqslant 1\,250$ 0,25 for $1\,250 < D \leqslant 2\,500$ 0,40 for $D > 2\,500$	Straightedge, slip gauges and feeler gauges	Flat to convex.

No.	Diagram	Object	Permissible deviations	Measuring instruments	Observations and references in ISO 230/1 test code
G3		Checking of parallelism of the lips of the surface planing tables transversely	$E = 5$ 0,10	Dial gauge	Clause 5.412.2
G4		Checking of straightness of the canting fence	0,30 for $F \leqslant 800$ 0,40 for $F > 800$	Straightedge and feeler gauges	Clause 5.212
G5		Checking of squareness of the canting fence to the table	a/G 0,10/100	Square and feeler gauges	

No.	Diagram	Object	Permissible deviations	Measuring instruments	Observations and references in ISO 230/1 test code
G6		Checking of parallelism of the cutterblock to the outfeed surface planing table	0,10 where the blades setting device is not carried from the cutterblock 0,05 where the blades setting device is carried from the cutterblock	Dial gauge	Clause 5.412.4
G7		Checking of flatness of the thicknessing table: a) longitudinal straightness b) diagonal straightness c) transverse straightness	a) and b) 0,20 for $H \leqslant 1\,000$ 0,30 for $H > 1\,000$ c) 0,10 for $l \leqslant 400$ 0,15 for $l > 400$	Straightedge and feeler gauges	Clauses 5.322 and 5.212 For verification c) check in two places each about 50 mm on either side of the cutterblock.

No.	Diagram	Object	Permissible deviations	Measuring instruments	Observations and references in ISO 230/1 test code
G8		Checking of parallelism of the thicknessing table in upper and lower positions to the cutterblock	0,10 for $l \leqslant 400$ 0,15 for $l > 400$	Dial gauge	Clause 5.412.4
G9		Measuring of run-out of the thicknessing table rollers	0,15	Dial gauge	Clause 5.612.2 Checked at the end and centre of each roller.