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МЕЖДУНАРОДНАЯ ОРГАНИЗАЦИЯ ПО СТАНДАРТИЗАЦИИ

Woodworking machines — Double edging precision circular sawing machines — Nomenclature and acceptance conditions

Machines à bois — Machines à scier, à déligner, multilames, de finition — Nomenclature et conditions de réception

Reference number
ISO 7959 : 1987 (E)

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 7959 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 — Double edging precision circular sawing machines — Nomenclature and acceptance conditions

1 Scope and field of application

This International Standard specifies the nomenclature appropriate to each part of the machine and, with reference to ISO 230-1, the geometrical and practical tests for double edging precision circular sawing machines, and gives the corresponding permissible deviations which apply to machines of general purpose use and normal accuracy.

NOTE — In addition to terms used in the three official ISO languages (English, French and Russian), this International Standard gives the equivalent terms in the German, Spanish, Italian and Swedish languages 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 the accuracy of the machine. It does not apply to the testing of 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 the accuracy is tested.

This International Standard applies to those machines designated by the number 12.132.34 in ISO 7984.

The annex does not form an integral part of this International Standard.

2 References

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

ISO 7984, *Woodworking machines — Technical classification of woodworking machines and auxiliary machines for woodworking.*

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 the description of the measuring methods. The measuring instruments shall not permit measurement errors over 1/3 of the checked tolerances.

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 mounting of instruments and gauging easier, tests may be applied in any order.

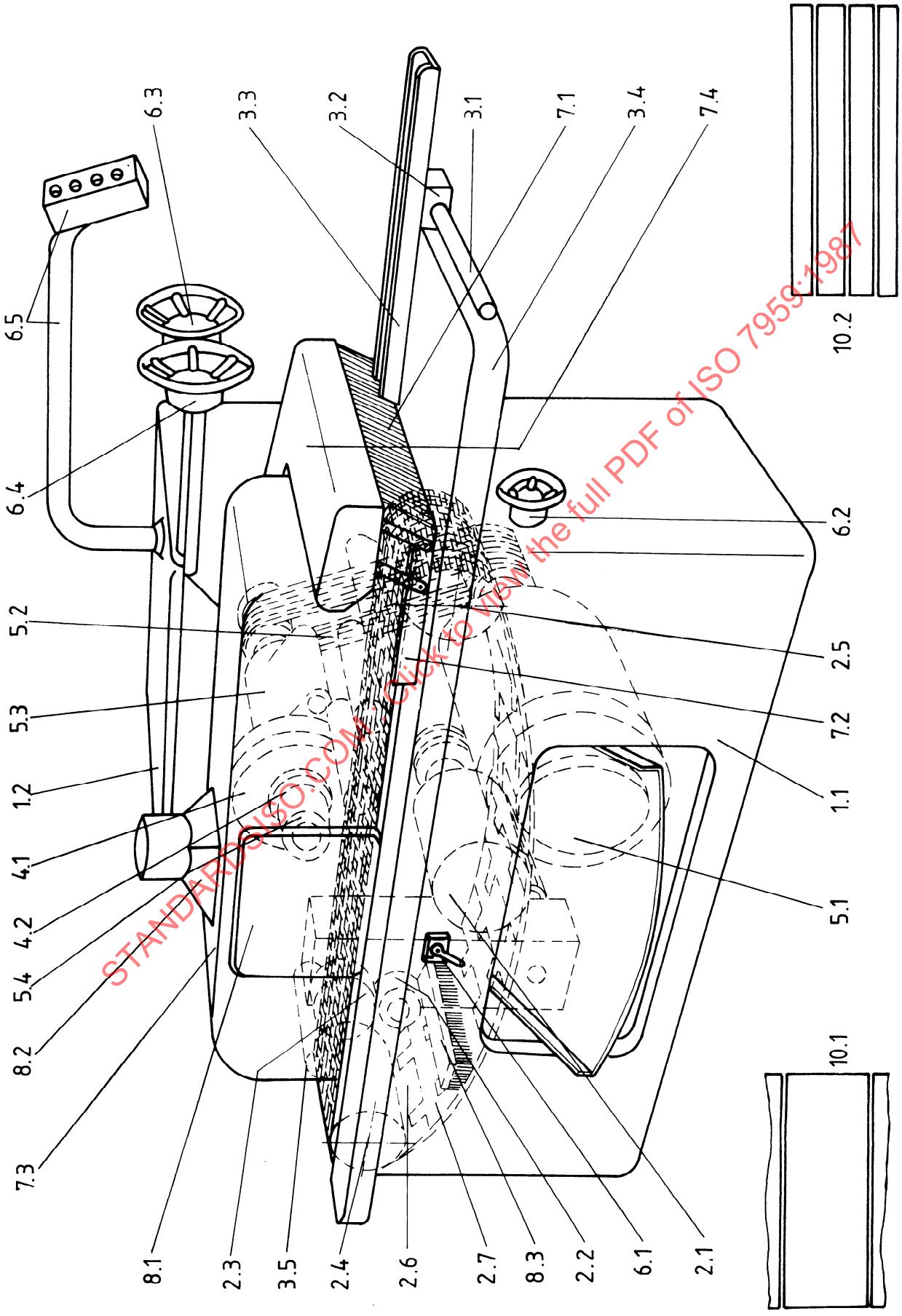
3.4 When inspecting a machine, it is not always possible or necessary to carry out all the tests given in this International Standard.

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 subclause 2.311 in ISO 230-1), it should be taken into consideration that the minimum value of the tolerance is 0,01 mm.

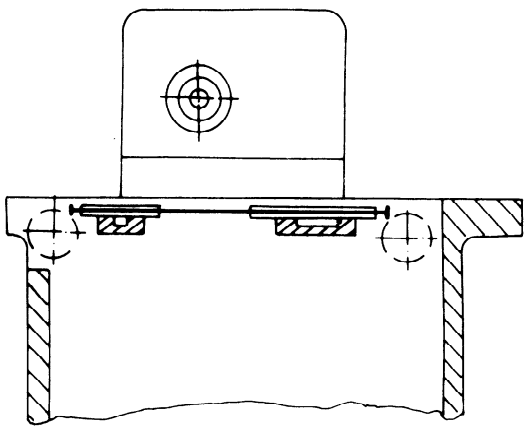
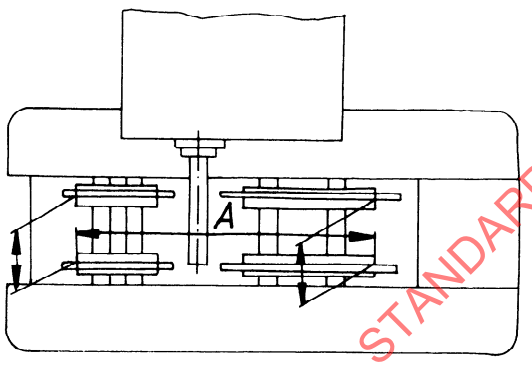
4 Nomenclature

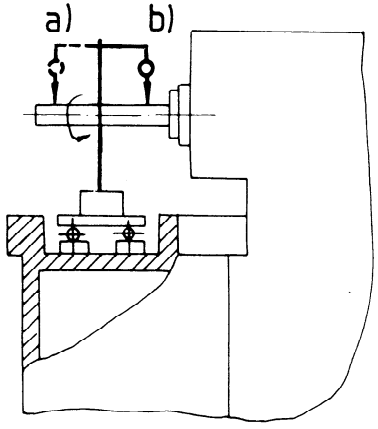
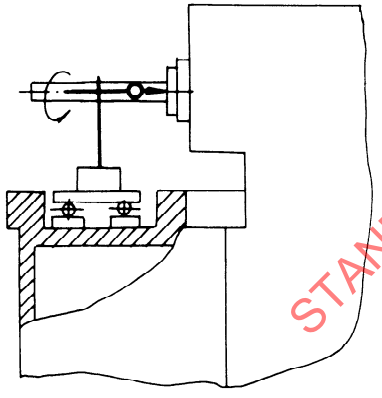


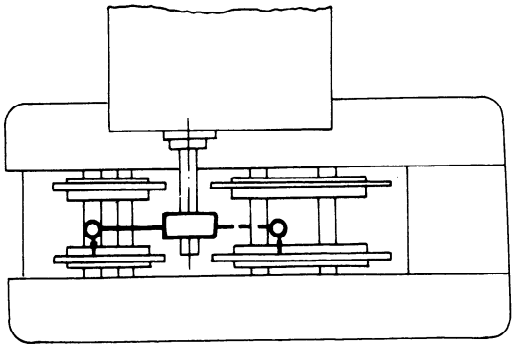
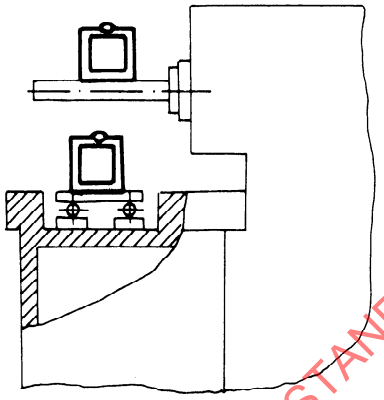
Reference	English	French	Russian
	Double edging precision circular sawing machines	**Machines à scier, à déligner, multilames, de finition**	**Станки круглопильные многодисковые кромко-обрезные**
1	**Framework**	**Ossature**	**Каркас**
1.1	Main frame	Bâti principal	Главная станина
1.2	Over-arm	Bâti auxiliaire	Вспомогательная станина
2	**Feed of workpiece and/or tools**	**Déplacement des pièces et/ou outils**	**Подача деталей и/или инструмента**
2.1	Feed motor	Moteur d'amenage	Двигатель подачи
2.2	Feed gear	Boîte de vitesses	Коробка скоростей
2.3	Feed chain drive gearing	Pignon d'entraînement du tapis chaîne	Шестерня привода подающей цепи
2.4	Feed chain drive sprocket	Arbre d'entraînement du tapis chaîne	Барабан подающей цепи
2.5	Feed chain idler pulley	Poulie de renvoi du tapis chaîne	Шкив контрпривода подающей цепи
2.6	Feed chain	Tapis chaîne	Подающая цепь
2.7	Feed chain link	Maillon de chaîne	Звено цепи
3	**Workpiece support, clamp and guide**	**Support, maintien et guidage des pièces**	**Опора, крепление и направление деталей**
3.1	Fence bar	Axe porte-guide	Направляющая штанга
3.2	Fence body	Fixation du guide	Крепление направляющей штанги
3.3	Fence	Guide	Направлающая линейка
3.4	Infeed table	Table d'entrée	Входной стол
3.5	Pressure roller	Rouleau presseur	Прижимной ролик
4	**Tool-holders and tools**	**Porte-outils et outils**	**Державки инструмента и инструмент**
4.1	Sawblade	Lame de scie	Пильный диск
4.2	Spacer	Bague entretoise	Распорная гильза
5	**Workhead and tool drives**	**Unité de travail et son entraînement**	**Рабочая головка и привод инструмента**
5.1	Saw motor	Moteur de sciage	Двигатель
5.2	V-belt drive	Courroie	Приводной ремень
5.3	Saw spindle bearing	Palier de broche de scie	Подшипник шпинделя
5.4	Saw spindle	Broche de scie	Шпиндель пильного диска
6	**Controls**	**Commandes**	**Управление**
6.1	Control gear	Commutateur général	Основной переключатель
6.2	Feed speed adjustment	Commande de l'avance	Регулировка подачи
6.3	Top pressure rise and fall adjustment	Commande de réglage vertical du bâti supérieur	Регулировка перемещения по вертикали
6.4	Spindle rise and fall adjustment	Commande de réglage du palier	Вертикальная регулировка шпинделя
6.5	Arm-mounted control panel	Tableau de commande sur bras	Пульт управления на кронштейне
7	**Safety devices** (examples)	**Dispositifs de sécurité** (exemples)	**Предохранительные устройства** (примеры)
7.1	Anti-kickback fingers	Linguets anti-recul	Противовозвратные шпонки
7.2	Side guard plate	Protecteur latéral	Боковая защитная планка
7.3	Upper housing	Capot supérieur	Верхний кожух
7.4	Anti-kickback finger housing	Capot anti-recul	Кожух противовозвратных шпонок
8	**Miscellaneous**	**Divers**	**Прочее**
8.1	Pressure housing door	Porte du capot	Люк кожуха
8.2	Dust exhaust outlet	Buse d'aspiration	Отсасывающий патрубок
8.3	Chain cleaning brush	Brosse de nettoyage	Щетка очистки цепи
9	(clause free)	(chapitre libre)	(свободная глава)
10	**Examples of work**	**Exemples de travail**	**Примеры работ**
10.1	Straight line edging	Déligner	Обрезка кромок
10.2	Multi-ripping	Débiter	Продольная распиловка

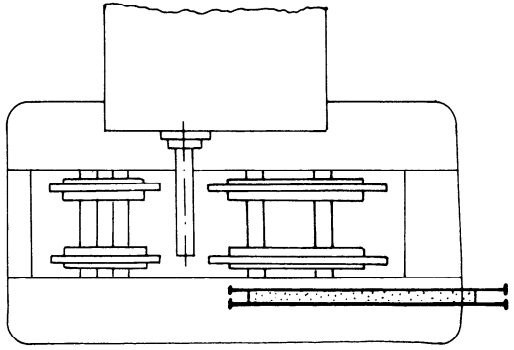
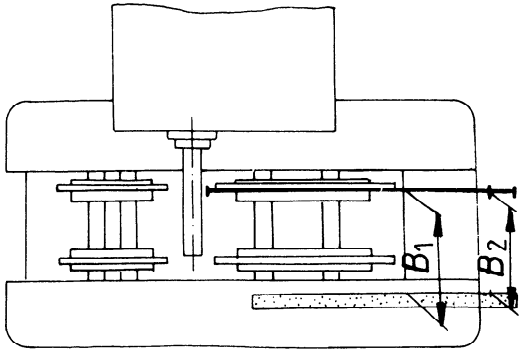
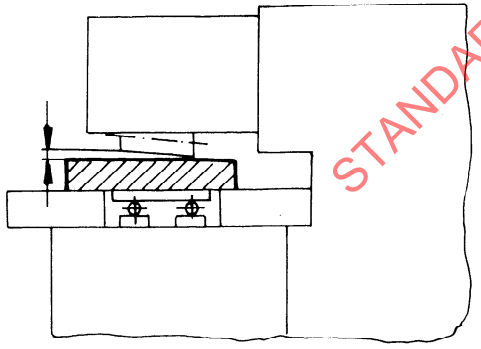
5 Acceptance conditions and permissible deviations

5.1 Geometrical tests

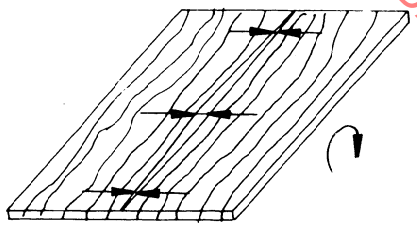
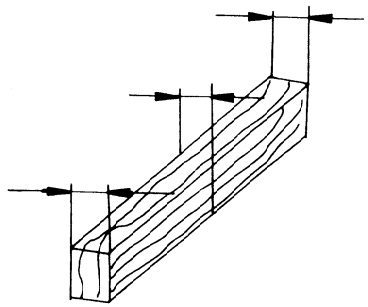
No.	Diagram	Object	Permissible deviation	Measuring instruments	Observations and references to the ISO 230-1 acceptance code
G1		Checking of straightness of the chain ways	0,05	Straightedge and feeler gauges	Subclause 5.212.1 Left chain way. Right chain way.
G2		Checking of parallelism of the chain ways	0,1 for the length A	Slide gauge	Subclause 5.412.2

No.	Diagram	Object	Permissible deviation	Measuring instruments	Observations and references to the ISO 230-1 acceptance code
G3		Measurement of run-out of spindle a) near the end of the spindle b) near the spindle nose	a) 0,03 b) 0,02	Measuring plate with parallel faces and dial gauge	Subclause 5.612.2
G4		Measurement of camming of saw flange	0,02	Measuring plate with parallel faces and dial gauge	Subclause 5.632

No.	Diagram	Object	Permissible deviation	Measuring instruments	Observations and references to the ISO 230-1 acceptance code
G5		Checking of squareness of the spindle to the chain ways	0,1/1 000	Dial gauge and special test device	Subclause 5.512.1
G6		Checking of parallelism of the spindle to the chain ways	0,3 for a measuring length of 1 000	Measuring plate with parallel faces and level	Subclause 5.412.32

No.	Diagram	Object	Permissible deviation	Measuring instruments	Observations and references to the ISO 230-1 acceptance code
G7		Checking of straightness of the fence	0,1	Straightedge and feeler gauges	Subclause 5.212.1
G8		Checking of parallelism of the fence to the chain ways	B_1 and B_2 0,1 for a measuring length of 1 000	Straightedge and slide gauge	Subclause 5.412.2
G9		Checking of parallelism of the pressure rollers to the upper plane of the chain	0,2	Measuring plate with parallel faces and feeler gauges	Subclause 5.412.4 Control at each roller.

5.2 Practical tests

No.	Diagram	Nature of test and execution conditions	Permissible deviation	Measuring instruments	Observations and references to the ISO 230-1 acceptance code
P1		Checking of straightness of saw cuts for a feed rate of 10 m/min Two test pieces, with one side sawn, 2 000 × 250 × 25 of good texture: rough side edged with a saw blade in central position	0,1	Feeler gauges	Subclauses 4.1 and 4.2 Rotate the test piece by 180° and repeat the test. (No load defects.)
P2		Checking of parallelism of the saw cuts for a feed rate of 10 m/min Test piece width, 10	0,2	Slide gauge	Subclauses 4.1 and 4.2

Annex

Equivalent terms

(This annex does not form an integral part of the standard.)

Reference	German	Spanish	Italian	Swedish
	Mehr- und Vielblattleistenkreissägemaschinen	**Sierras circulares multiples**	**Sega circolare multilame per listelli**	**Klyvsågar**
1	**Ständer**	**Armazón**	**Intelaiatura**	**Stativkonstruktion**
1.1	Hauptständer	Bastidor principal	Basamento	Huvudstativ
1.2	Nebenständer	Bastidor auxiliar	Basamento ausiliario	Stativöverdel
2	**Vorschub von Werkstück und/oder Werkzeug**	**Desplazamiento de las piezas y/o de las herramientas**	**Spostamento dei pezzi e/o degli utensili**	**Matning av arbetsstycke och/eller verktyg**
2.1	Vorschubmotor	Motor de avance	Motore di avanzamento	Matningsmotor
2.2	Getriebe	Caja de velocidades	Scatola ingranaggi	Matnings-växellada
2.3	Kettenantrieb	Piñón de transmisión de la cadena	Pignone di avanzamento della catena	Drev för matarmatta
2.4	Kettenantriebswelle	Eje de transmisión de la banda cadena	Albero di avanzamento della catena	Drivhjul matarmatta
2.5	Kettenumlenkwelle	Polea de reenvio de la banda cadena	Puleggia folle di avanzamento della catena	Brythjul matarmatta
2.6	Transportkette	Banda cadena	Catena di avanzamento	Matarmatta
2.7	Kettenglied	Malla de la cadena	Maglia della catena di avanzamento	Länk till matarmatta
3	**Werkstückauflage, -halterung und -führung**	**Soporte, sujeción y guiado de las piezas**	**Supporto, fissaggio e guida dei pezzi**	**Upplag, hållare och styrning för arbetsstycke**
3.1	Anschlagwelle	Eje porta-guía	Asta portaguida	Glidstång för anhåll
3.2	Führungsstück	Fijación de la guía	Supporto della guida	Fäste för anhåll
3.3	Seitenanschlag	Guía	Guida	Anhåll
3.4	Aufgabetisch	Mesa de entrada	Tavola di alimentazione	Inmatningsbord
3.5	Druckwalze	Rodillo presor	Rulli di pressione	Tryckvals
4	**Werkzeugträger und Werkzeuge**	**Porta-herramientas y herramientas**	**Portautensili ed utensili**	**Verktygshållare och verktyg**
4.1	Sägeblatt	Disco de sierra	Lama della sega	Sågblad
4.2	Zwischenring	Anillo distanciador	Distanziatore	Distansring
5	**Einbauteile und Teile für den Werkzeugantrieb**	**Unidad de trabajo y su transmisión**	**Unità operatrice e suo azionamento**	**Bearbetningsenheter och drivsystem**
5.1	Sägenantriebsmotor	Motor de la sierra	Motore della sega	Sågmotor
5.2	Keilriemen	Correas	Guida a V delle cinghie	Kilrem
5.3	Sägewellenlager	Palier del eje de la sierra	Supporto dell'albero della sega	Spindellagring
5.4	Sägewelle	Eje de la sierra	Albero della sega	Sågspindel
6	**Bedienungs- und Überwachungsorgane**	**Mandos**	**Comandi**	**Manöverorgan**
6.1	Hauptschalter	Commutador general	Interruttore generale	Matningsväxel
6.2	Vorschubverstellung	Mando de avance	Comando velocità di avanzamento	Inställning av matningshastighet
6.3	Höhenverstellung des Supports	Mando del reglaje vertical del bastidor superior	Comando di regolazione verticale superiore	Inställning av presstryck
6.4	Verstellung des Sägenlagers	Mando del reglaje del palier	Comando di regolazione verticale dell'albero	Inställning av spindel
6.5	Bedientafel mit Arm	Mesa de mando sobre los brazos	Pannello di controllo su braccio	Manöverpanel på arm

Reference	German	Spanish	Italian	Swedish
	Mehr- und Vielblattleistenkreissägemaschinen	**Sierras circulares multiples**	**Sega circolare multilame per listelli**	**Klyvsågar**
7	**Sicherheitseinrichtungen** (Beispiele)	**Dispositivos de seguridad** (ejemplos)	**Dispositivi di sicurezza** (esempi)	**Säkerhetsanordningar** (exempel)
7.1	Rückschlagsicherungen	Lengueta antiretroceso	Dispositivo di antirigetto	Återkastskydd
7.2	Seitliche Abschirmung	Protector lateral	Protezione laterale	Sidoskydd
7.3	Support	Bastidor superior	Supporto	Kåpa
7.4	Rückschlagarm	Dispositivo antiretroceso	Dispositivo antirigetto	Fäste för återkastskydd
8	**Verschiedenes**	**Diversos**	**Varie**	**Diverse**
8.1	Supportdeckel	Puerta de la cubierta	Portello del supporto	Kåplucka
8.2	Absaugstutzen	Boca de aspiración	Bocca aspirazione polveri	Stos för spånutsug
8.3	Reinigungsbürste	Cepillo de limpieza	Spazzola pulitrice della catena	Rengöringsborste
9	(freier Abschnitt)	(libre)	(libero)	(vakant)
10	**Arbeitsbeispiele**	**Ejemplos de trabajo**	**Esempi di lavorazione**	**Arbetsexempel**
10.1	Besäumen	Ranurar	Refilatura	Kantsågning
10.2	Zuschneiden	Cortar	Taglio multiplo	Lamellsågning