

Operating manual

10810331

ESM 150

milling machine for slide shoes

(40017951 / 1026u07)

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These instructions must be issued to the persons carrying out the tasks described herein. Unless they are accessible to such persons at all times, these instructions cannot fulfil their purpose.

The **copyright** to this instruction manual and all attachments that are entrusted personally to the recipient, remain with our company at all times. These documents may not be copied or reproduced, and never communicated or made available to third parties without our written permission.

Technical modifications to the machine described in these instructions may not be carried out without the written consent of Rieter. See also point 15.3 of the General Terms and Conditions of Sale and Shipment, Machine Sales Department.

We reserve the right to make changes to the machine described herein, which we consider necessary, at any time and without special notice.

1. Occupational safety

In accordance with the enclosed occupational safety information.



Attention!

Carefully read the operating manual before starting up the machine.

Properly set up the machine as specified in the installation instructions.



Wear safety goggles when performing tasks with the device.



Wear gloves for insulation against heat when performing tasks involving flat profiles made of aluminium.



Do not reach into any openings while the machine is in operation.

2. Introduction

The ESM 150 milling machine for slide shoes consists of the milling machine and the accessories described in chapter 4.

Safety regulations



When reading this manual you will notice that a warning symbol is used to draw attention to various points. These points refer to conditions for which extreme caution is advised to avoid injury to persons or damage to the milling machine.

The milling machine must only be used for the intended purpose (milling of slide shoes) for which it was made. Please ask the manufacturer, should you be unsure as to the purpose of the machine.

The milling machine for slide shoes may only be operated by trained personnel who have read and understood this operating manual and who were introduced to the machine by the manufacturer. If you have any questions, please contact the manufacturer.

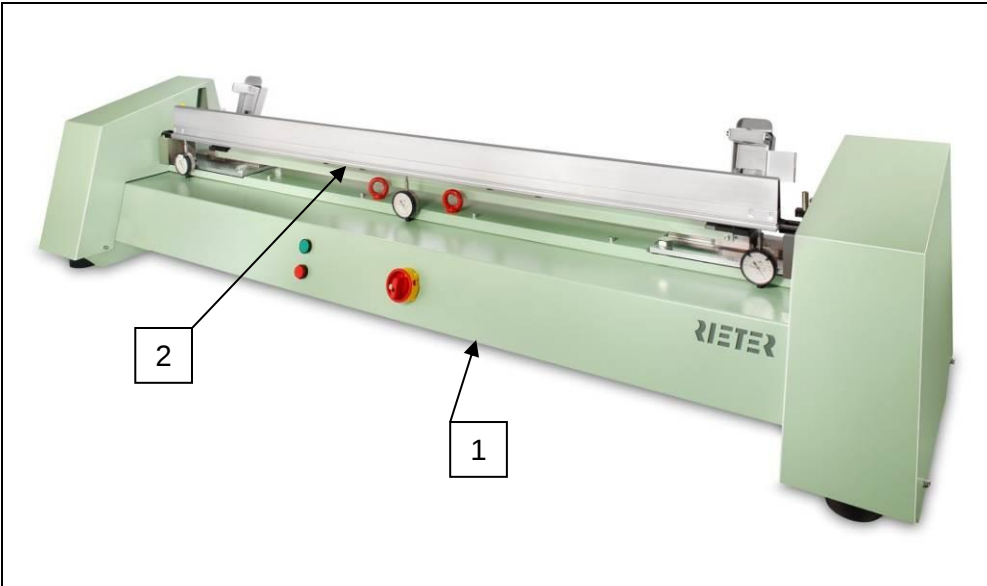
Using the milling machine for slide shoes



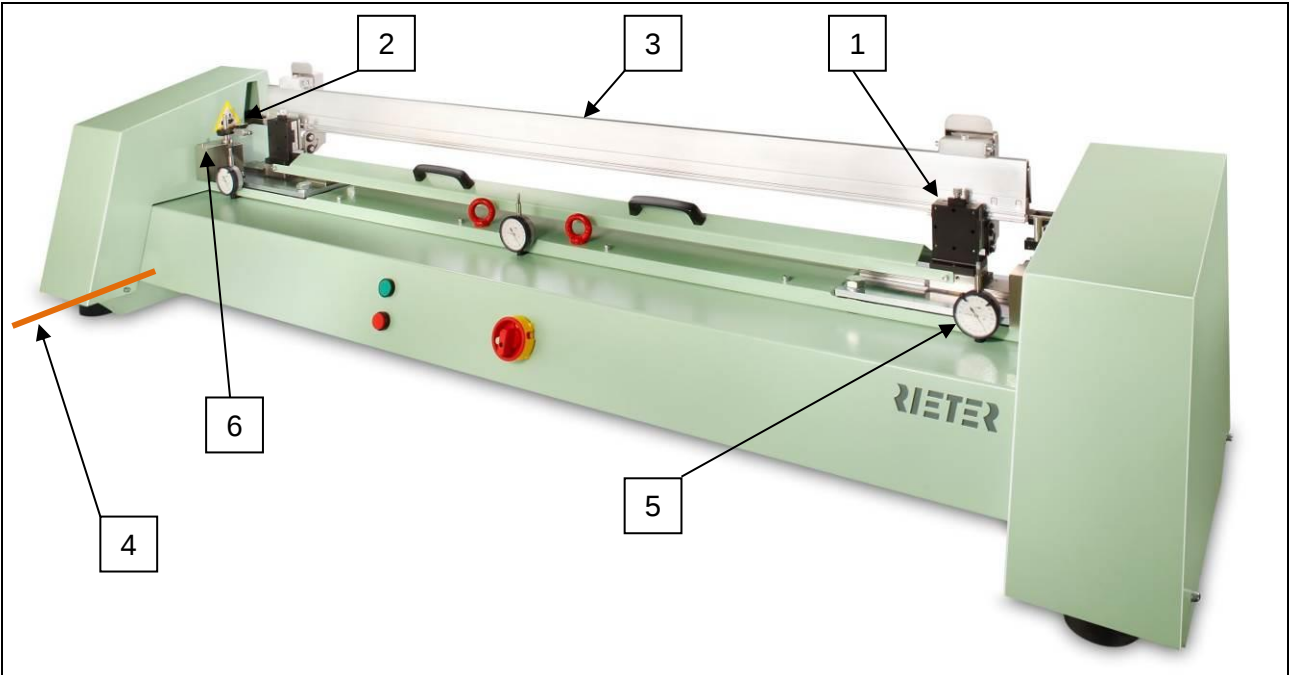
The milling machine for slide shoes must be handled with care. Improper handling can result in injury to persons.

Only mill the flat profiles with slide shoe (4b) cited in this operating manual. Improper use will render any warranty null and void, invalidate any warranty claim, and the manufacturer will not accept any liability for any damage or loss whatsoever.

3. Scope of delivery

			
			Pos. 3)
			
			Pos. 4)
			
			Pos. 5)
Pos. 1	Milling machine for slide shoes	1 pc.	
Pos. 2	Flat profile to be calibrated	1 pc.	
Pos. 3	Holder for dial gauges	2 pcs.	
Pos. 4	Brass brush	1 pc.	
Pos. 5	Scotch pad	1 pc.	

4. Components

	
1. Positioning device	4. Cable
2. Dial gauges with stand	5. Control dial gauges
3. Flat profile	6. Control supports

5. Installation

5.1 Operating conditions

The milling machine for slide shoes has been designed for use in workshops. The machine is **not** to be used outdoors. Operating temperatures: 0°C - 40 °C



The milling machine for slide shoes may only sit on the stand buffer provided for this purpose and should be stored in a horizontal position. Improper storage or transport of the milling machine for slide shoes can result in damage to the machine.

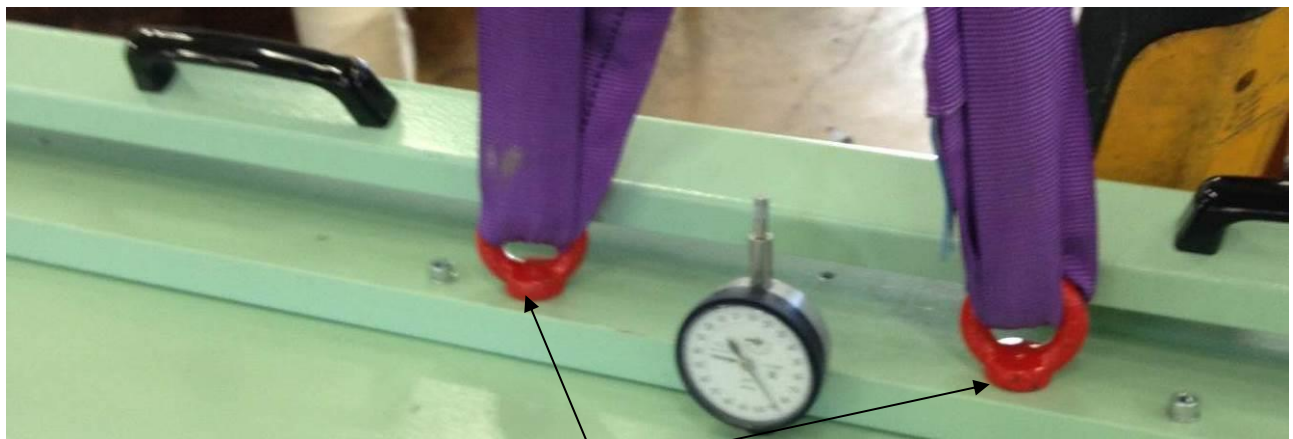
5.2 Lifting by crane

A crane can be used to lift the milling machine for slide shoes by the eyebolts designated for this purpose. Ensure that these eyebolts have been correctly fitted.

Lift the milling machine for slide shoes only by the eyebolts.

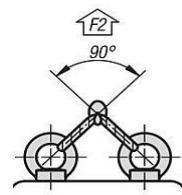


Lifting the milling machine for flats with load-securing straps results in damage to the milling machine



M12 eyebolts for transport by crane

The angle between the load-securing straps should not exceed 90°.



The eyebolts may be removed to use the milling machine.

5.3 Setting up the milling machine for slide shoes for operation

The milling machine for slide shoes must only be set up as specified in the operating manual. Failure to properly set up the machine can result in injury to persons.



The adjustable foot can be used to level the machine on uneven ground.



- Set up the milling machine for slide shoes on solid, horizontal and dry ground and ensure that it cannot slip due to vibration.
- Check to ensure that the main switch is in the “off” position.
- The milling machine can now be connected to the power mains.

6. Start-up

Attention: **Only perform tasks at the milling machine wearing close-fitting clothing. Do not reach into the milling openings when the machine is in operation.**



- Set up the machine according to the specifications given under “Setting up the milling machine for slide shoes for operation” (see Chapter 5).
- Use a connection cable to connect the milling machine for slide shoes to the power mains.
 - 50 Hz 220...240 / 380...420V
 - 60 Hz 255...290 / 440...500V
- Switch on the machine via the main switch.
- The milling process can be started.



Wear safety goggles for performing any milling task.



7. Operation:

Apart from reading this operating manual, eLearning also offers the opportunity of becoming familiar with the operation of the ESM 150

<http://esm150.rieter.com/>



7.1 General information

All steps have to be performed on both sides of the machine.



7.2 Clamping and unclamping of flat profiles

Clamping

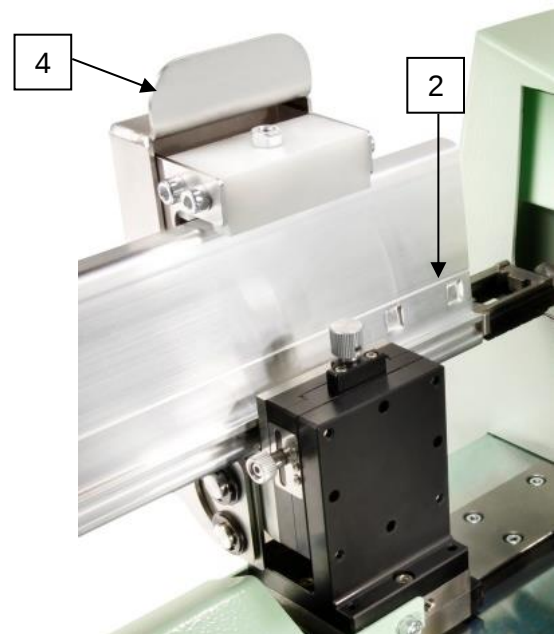
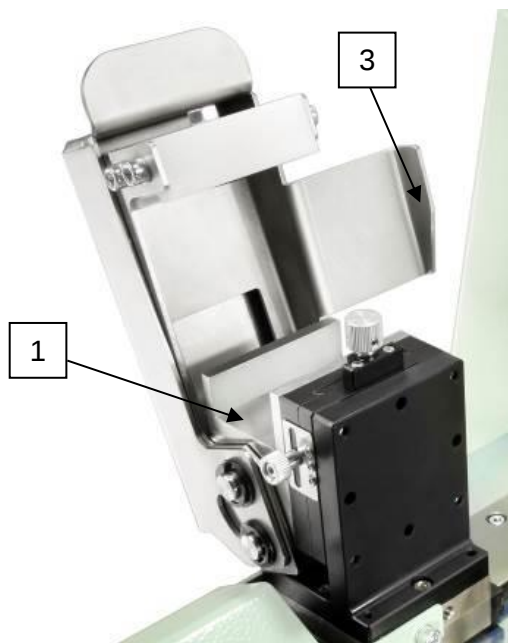
1. Move the supports towards the middle as far as possible so that the side casings will not interfere with the clamping process.
2. Check the support surfaces (1) and clean if necessary.
3. Clamp the flat profile → **Attention: The groove must face the front (2).**
4. Use the limit stop (3) to align the flat profile with the right-hand retaining clamp.
5. Attach the retaining clamp and firmly tighten with the clamp jaw (4).

Ensure that the groove (2) in the flat profile faces the front when clamping the flat profile.



Unclamping

1. Open and swing aside the retaining clamp and clamp jaw.
2. Remove the flat profile.



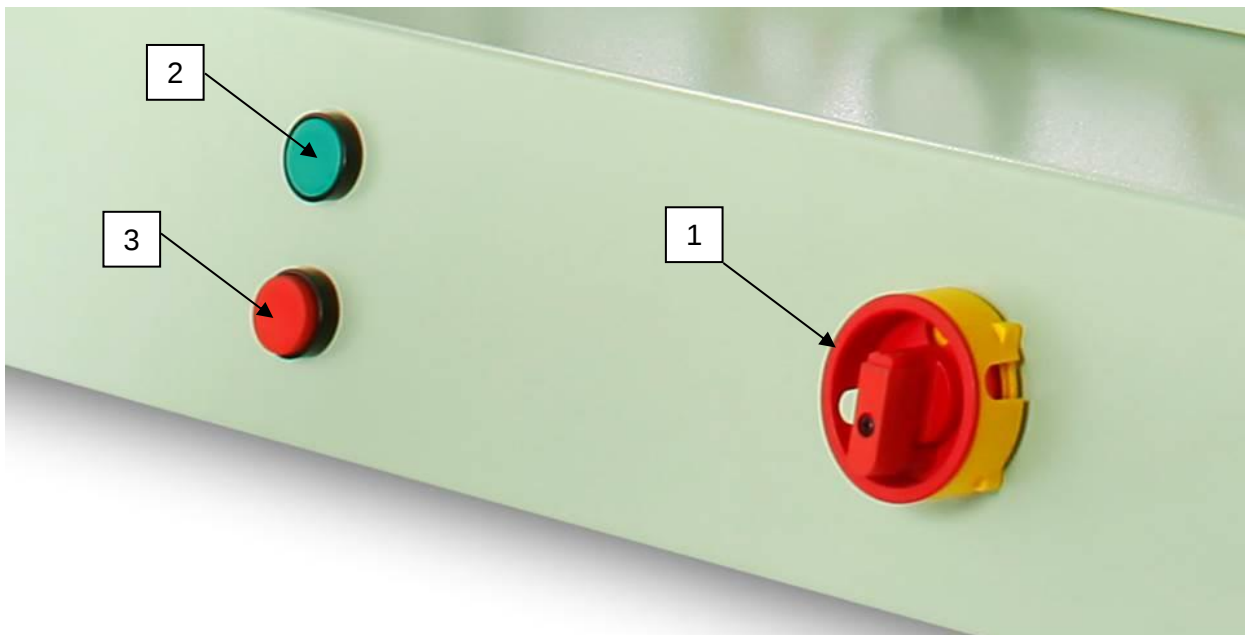
7.3 Switching the machine on or off

Switching on the machine

1. Switch on the main switch (1).
2. Press the green pressure switch (2); the lamp (2) is lit and motor noise is audible.

Switching off the machine

3. Switch off the main switch (1).
4. Press the red pressure switch (3); the lamp (2) is no longer lit.

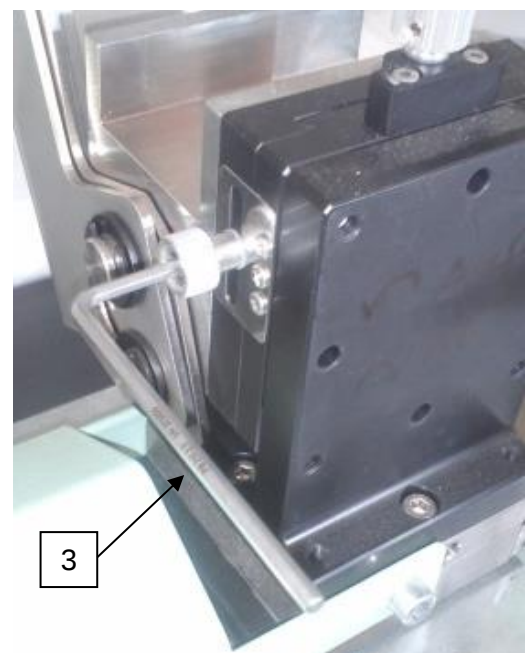
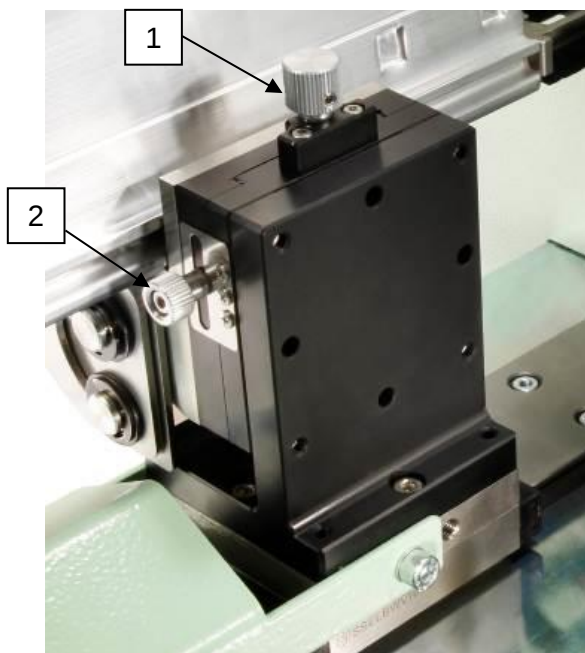


1. Main switch/Emergency stop switch
2. Start button (green)
3. Stop button (red)

7.4 Levelling and advancing

1. Use the height adjustment mechanism (1) to vertically adjust the corresponding support.
2. Secure the lock bolt (2) using an ISO2936-L-2.5 Allen wrench (3).
3. Ensure that the angle deviation is compensated at both sides.
4. The making of final adjustments always has to be approached from below.

Always use an Allen wrench to fix the lock bolt in place.



8. Milling process variants

A distinction is made between processing new slide shoes and processing already used slide shoes. This instruction manual provides information only regarding the processing of a complete set of flats.

8.1 Set of flats with new slide shoes of type 4b

We recommend performing the milling tasks for a set of flats all in one day, so that all machine settings remain the same.

To begin with, ensure that the vertical setting of the ESM150 is correct (9.1). Then mill a flat bar with new slide shoes to serve as a reference. The entire set of flats can subsequently be processed.



Type 4b

8.2 Set of flats with used slide shoes

Slide shoes can be used for as long as the grooves remain visible.

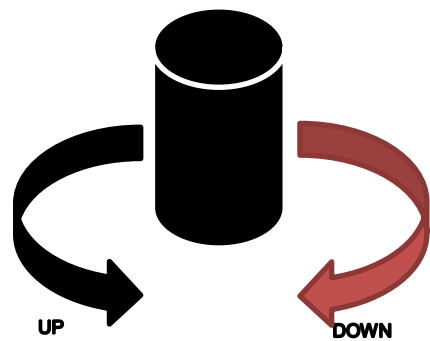
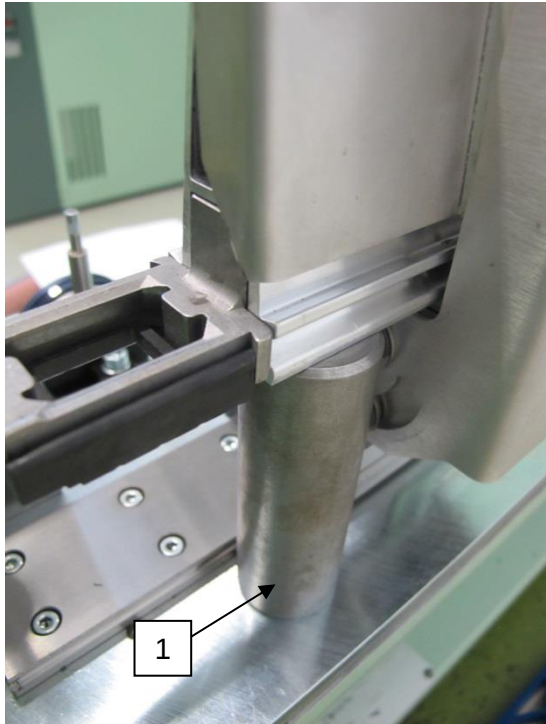
We recommend performing the milling tasks for a set of flats all in one day, so that all machine settings remain the same.

To begin with, ensure that the vertical setting of the ESM150 is correct (9.2). Then mill a flat profile to serve as a reference. The entire set of flats can subsequently be processed.

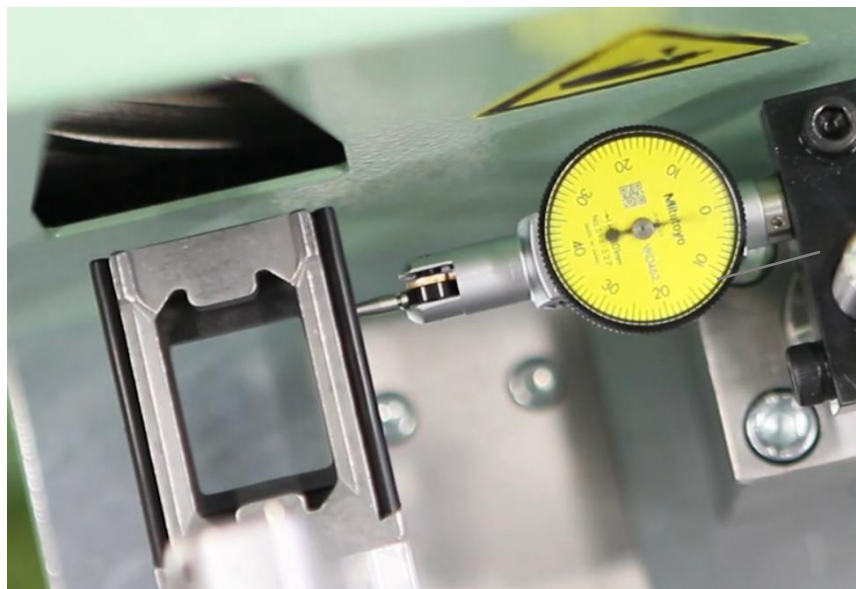
9. Setting the height

9.1 New slide shoes

1. Lower the clamped flat profile with the positioning device on to the distance gauge (1) (ensure that the distance gauge can be moved all the while).

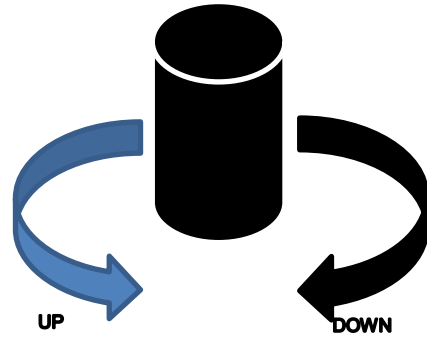
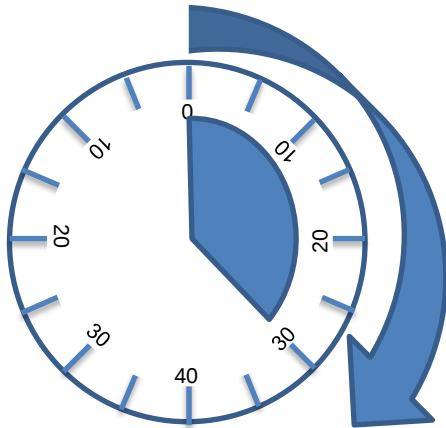


2. Check both sides and make adjustments as necessary.
3. Move the flat shoe over the dial gauge and set the dial gauge to "0.0mm".



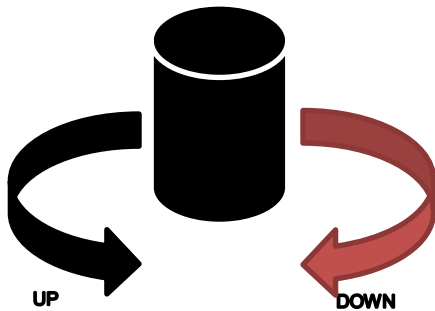
4. Move **up** with the height adjustment mechanism by 0.3mm and use the Allen wrench to fix the position in place (7.4).

Move up by 0.3mm

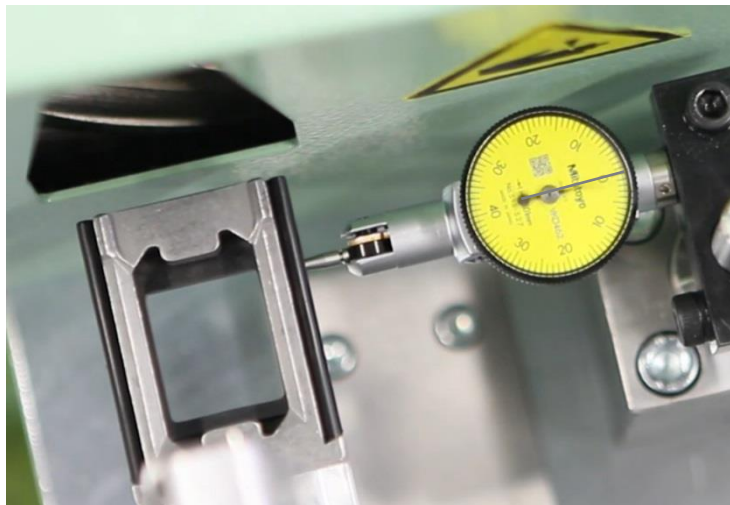


9.2 Used slide shoes

1. Clamp a flat profile with used slide shoes.
2. Using the positioning device, raise the flat profile until the slide shoe is securely positioned above the cutter.
3. Slide the slide shoe across the cutter with the machine shut off; the cutter must not contact the slide shoe.
4. Switch on the milling machine (see chapter 7.3).
5. Slowly lower the flat profile using the positioning device until the cutter slightly touches the slide shoe.



6. Move out the profile and switch off the milling machine.
7. Move the flat profile over the dial gauge and set the dial gauge to "0.0mm".



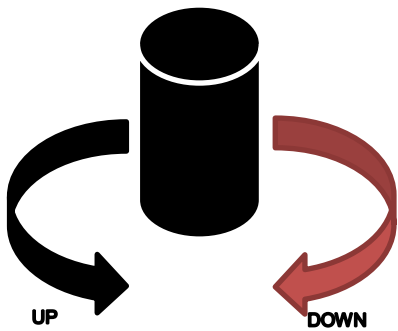
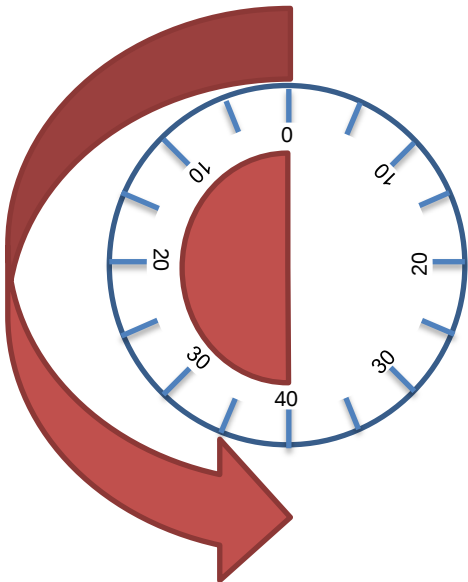
Attention: The dial gauge must make contact with the newly milled surface.



8. Advance to 0.4mm using the positioning device and return to 0.2mm **(elimination of play from below)**

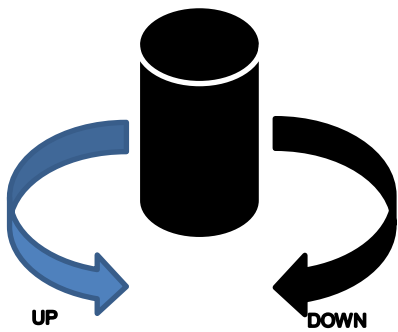
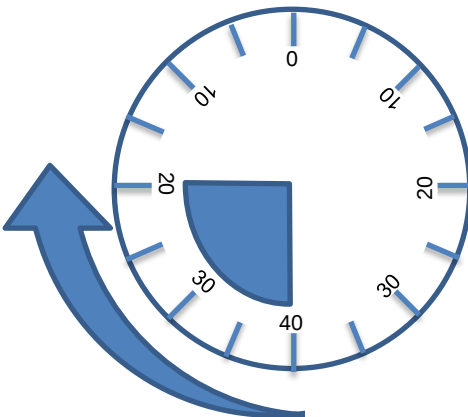
1.

Advance to 0.4mm



2.

Return by 0.2mm (elimination of play)



IMPORTANT: Elimination of play from below

9.3 Milling with new and used slide shoes

1. Start the machine (see chapter 8.2)
2. With the aid of the handles **(do not take hold of the flat profile)** guide the sliding device over the milling machine until the limit stop has been reached (repeat once so as to eliminate any cutting pressure).
3. Switch off the milling machine (see chapter 8.2).

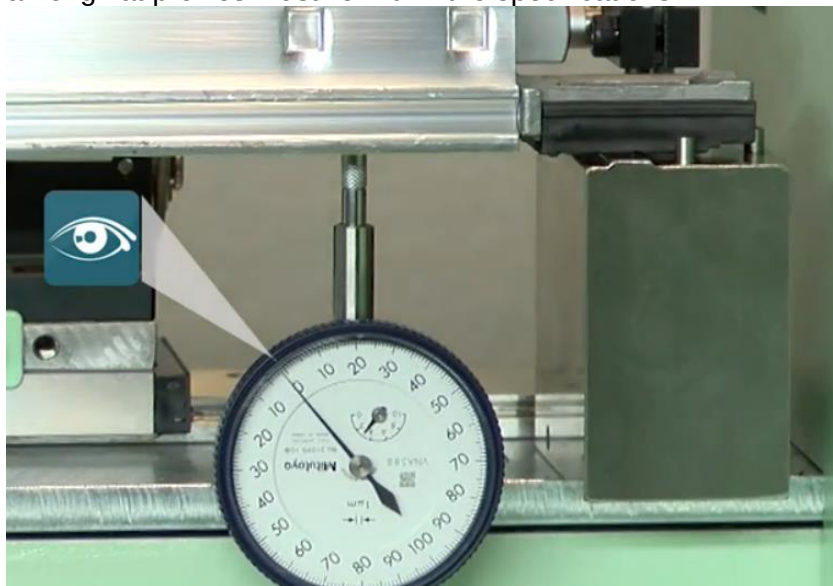
9.4 Relative measurement (set of flats)

Objective: Quick and easy detection of conspicuous or defective flat profiles within a set of flats.

Procedure:

- Place the first flat profile of a set of flats in position
- Set dial gauges to "0"
- Measure all flat profiles of a set of flats (record)
- Analyse measured values

The maximum values and minimum values of a set of flats and the corresponding variations among flat profiles must lie within the specifications.



We recommend using a measurement bar from GRAF to perform an absolute measurement (see Service Info 320).



9.5 Processing a set of flats

The remaining flat profiles can be clamped and processed in succession. No further adjustment of the positioning device is required. Relative measurement has to be performed with every flat profile and this has to be recorded.

10. Measuring device

10.1 Taking simple measurements using the integrated measuring device

The milling machine for slide shoes has two measurement supports with three dial gauges, which can be used for measuring individual flat profiles. The following rudimentary measurements can be taken:

- Quick relative measurement of flat profile in relation to a reference flat profile (2 measurement points).
- Quick relative measurement in relation to a set of flats (detection of a varying flat profile with 2 measurement points).
- Measurement of parallelism/evenness of a flat profile using the ground supports.

Comparison measurements in relation to an existing reference are possible with the dial gauges. **No** direct “absolute measurement” is possible. The procedure for taking comprehensive measurements can be found in chapter 12.

10.2 Relative measurement (individual flat profiles)

The relative measurement method is used to compare a test specimen with a known (measured) reference flat profile. This reference flat profile can be any chosen flat profile of a set of flats, or the supplied reference flat profile with measurement report.

The supplied reference flat profile serves as a calibration aid for the measuring device and may not be used as a replacement flat profile for production purposes.



The relative measurement method is applied in the case of performing repair tasks involving individual flat profiles or for making corrections to incorrectly milled slide shoes.

Procedure:

- Place a reference flat profile in position
- Set dial gauges to “0”
- Remove reference flat profile and place test specimen in position
- Determine variation and note/write down



10.3 Relative measurement (set of flats)

This measurement method is identical to the individual measurement method; however, the supplied reference flat profile is not used as a reference. The maximum variation range within a set of flats is the decisive factor here. The maximum variation range must lie within the specifications for the corresponding flat profile.

Objective: Quick and easy detection of conspicuous or defective flat profiles within a set of flats

Procedure:

- Place the first flat profile of a set of flats in position
- Set dial gauges to "0"
- Measure all flat profiles of a set of flats (record)
- Analyse measured values

The maximum values and minimum values of a set of flats and the corresponding variations among flat profiles must lie within the specifications.



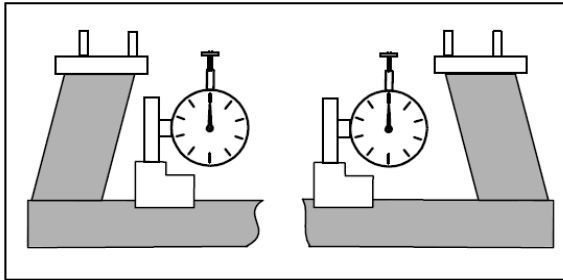
Flat profiles made of aluminium are very sensitive to heat (heat transfer from hands). The wearing of gloves for insulation against heat is recommended for taking measurements and performing tasks involving aluminium flat profiles.



11. Measurements for flat profiles on external measuring device

Proceed as follows to determine “absolute” measurement values and to verify that the flat profiles have the correct concavity.

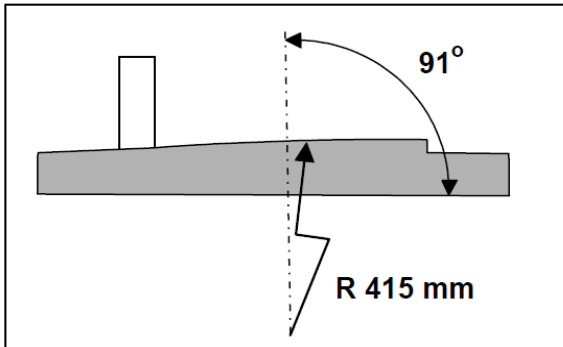
11.1 Required accessories



Measuring device

Measuring device with compensation plates for checking the card flats.

Please note: This is not part of the scope of delivery. (GRAF procurement recommendations)



Compensation plates

Compensation plates are needed for the measuring device

Please note: These are not part of the scope of delivery. (Procurement number: 0050 43261, GRAF)

Measurements have to be taken according to Service Info 320.



12. Maintenance

For trouble-free operation of the system, maintenance tasks must be carried out at regular intervals.



Should you notice unusual noise or fumes generated by the card-flat milling machine, maintenance tasks should be performed without delay.

Do not operate the machine, if the machine or the mains cable is damaged.



Periodically check the toothed belts and the condition of the cutters.
Replace the toothed belt if it is worn.

This milling machine for slide shoes requires the use of special form cutters to enable cutting the desired contour. Do not use commercially available plain milling cutters.
Operate the machine only with original Rieter spare parts.



Attention: The main switch has to be deactivated and secured prior to commencing maintenance tasks.



12.1 Installation and removal of cutters

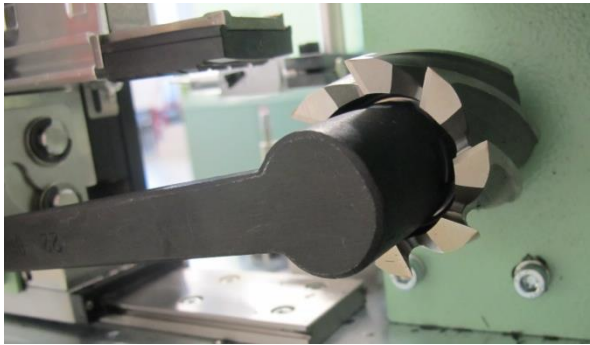
Switch off the milling machine and disconnect it from the power mains.

1.



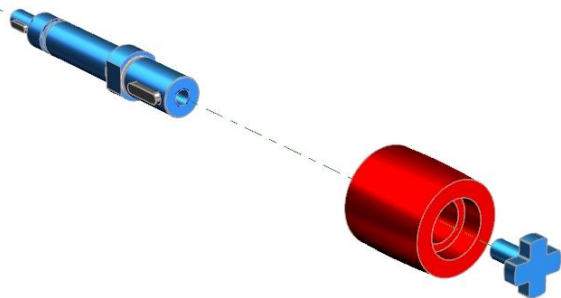
The hood can be removed after the screws at the hood have been loosened.

2.



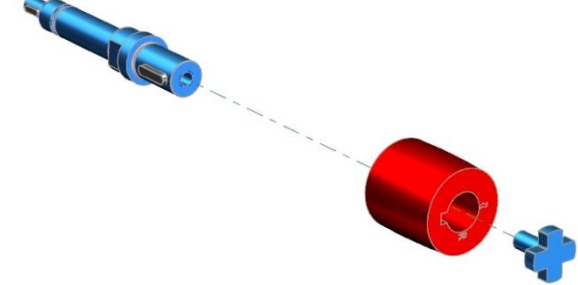
Loosen the cutters using the supplied spanner

3.



Install the left-hand cutter at the left-hand side (observe installation direction)

4.



Install the right-hand cutter at the right-hand side (observe installation direction)

Attention: Ensure that the hood is firmly screwed on again before putting the machine into operation.



12.2 Interval

Component	Interval	Measure / Criterion
Toothed belt	Once a year	Check for wear Belt tension (55N)
Spindle bearings	Twice a year	Rotation of spindles by hand Spindle should rotate freely (no noticeable resistance should be felt)
Cleaning	Four times a year	Remove chips to extend the service life
Cutter	Once a year	Check cutters; replace as needed
Complete cutter	Once every five years, or following special incidents	Re-measure alignment

12.3 Cleaning

Prior to commencing any type of cleaning task, set the main switch to OFF **and** disconnect the mains plug from the socket.



Remove both side casings for the purpose of cleaning the milling machine for slide shoes. The motors and cutting spindles are then easily accessible. Use a brush or vacuum cleaner to clean the work area.

In the case of heavy soiling of the machine, a damp cleaning cloth may be used to wipe it clean. It must be ensured, however, that water does not enter the machine.

This is also a good opportunity to check the toothed belt and the cutters. Replace the toothed belt if it is worn.

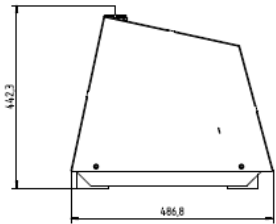
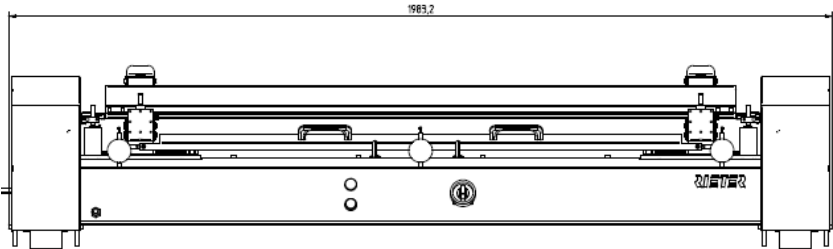
12.4 Faults

Fault	Cause	Remedy
Unable to switch on the machine	Main switch set to (0)	Set main switch to (I)
Unable to switch on the machine	Motor protection switch has triggered	Check motor protection switch
Unable to switch on the machine	Not connected to power supply	Connect to power supply via connection cable
Motors rotate; spindles stand still	Broken toothed belt	Replace toothed belt

13. Technical information

Characteristic	Values
Electric power supply	220V/ 400V ~50/60Hz ~2A
Power consumption	~ 600 W (2 three-phase asynchronous motors)
Safety devices	EMERGENCY STOP button Guard plates
Weight	Approx. 210 kg.
Ambient conditions	Indoor operation Temperature range: 0° to +50° C
Dimension	see Figure (dimensions in mm) Maximum: 1985x487x443 (set up)

Dimensions (set up for operation)



14. EC declaration of conformity

EC Declaration of Conformity

Maschinenfabrik Rieter AG
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www.rieter.com

Winterthur, 3.June 2013

Maschinenfabrik Rieter AG declares that the product

ESM 150 milling machine for slide shoes

Serial No. 40017951 (1026u07)

fulfills the following relevant provisions:

2006/42/EC EC - Machine Directive
2004/108/EC EC - Electromagnetic Compatibility Directive
including their modifications

Used harmonized standards:

ISO 11111-1 Textile machinery - Safety requirements
 Part 1: Common requirements
ISO 11111-2 Textile machinery - Safety requirements
 Part 2: Spinning preparatory and spinning machines
EN 60204-1 Safety of machinery - Electrical equipment of machines
 Part 1: General requirements

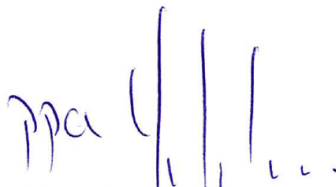
Responsible for the documentation:

Maschinenfabrik Rieter AG, Klosterstrasse 20, 8406 Winterthur, Switzerland

Maschinenfabrik Rieter AG



T. Walther
Head Parts Development SYS



H.P. Schatzmann
Head Parts Development

15. Kundenrückmeldung / Customer feedback

Dieses Formular dient der Qualitätssicherung. Bitte senden Sie dieses Formular, nach Abschluss der Montage, ausgefüllt an service.winterthur@rieter.com (Vermerk: Parts Technik Winterthur). Besten Dank für Ihre Mithilfe.

This form is required for quality control purposes. Following installation, please send the completed form to service.winterthur@rieter.com (Note: Parts Technical Department Winterthur). Thank you for your assistance.

Firma:

Company:

Maschine / Jahrgang:

Machine / Year:

Maschinennummer:

Serial number of machine:

Umbau Nr. / Umbau Typ:

Retrofitting no. / Retrofitting type:

Umbau - Montage durch Hr.: / Datum:

Retrofitting carried out by Mr.: / Date: /

Verpackung:

Packing:

OK

☐

Not
OK

☐

Bemerkungen / Comments

.....

Material vollständig:

Material complete:

☐
☐

.....

Instruktion verständlich:

Comprehensible instructions:

☐
☐

.....

Keine Probleme bei der Montage:

No problems during assembly:

☐
☐

.....

Alle Sicherheitsvorrichtungen wurden gemäss

Instruktion geprüft und sind funktionstüchtig:

All safety equipment was checked in accordance with the instructions and is fully functional:

☐
☐

.....

Bemerkungen:

Comments:

.....

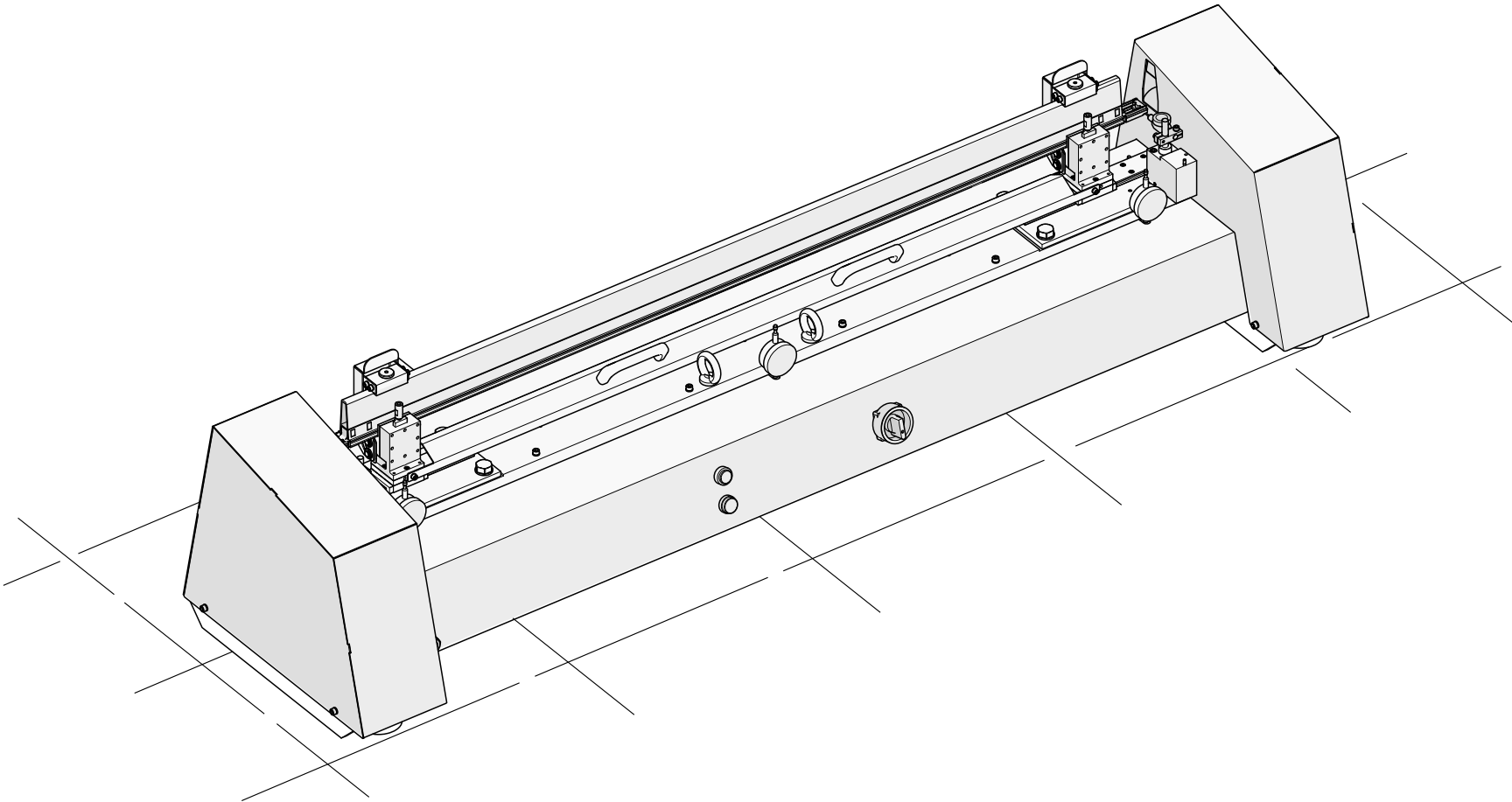
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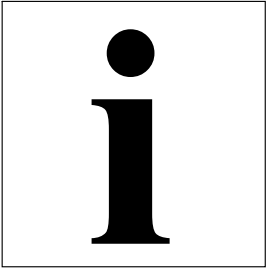
Datum, Unterschrift:

Date, Signature:

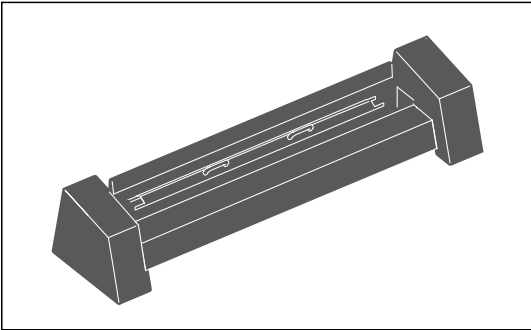
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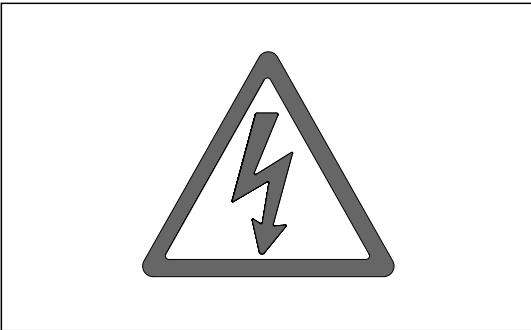
ESM_150



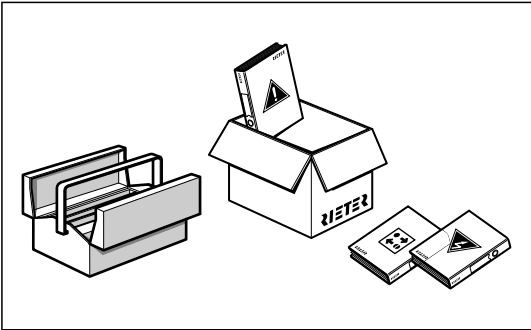
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RIETER

Dear Customer,

You have made an excellent decision in opting for Rieter machines. Our after-sales service will do everything possible to make sure that you have no cause to regret your decision during the years to come. Please use only Rieter spare parts. These are always state-of the-art and are your guarantee for first-class material and processing. Please also note that we offer no guarantee for damage to machines if this is related to spare parts or retrofits that have not been obtained direct from us or through our authorized agents.

Notes on how to use the catalogue

In order to ensure rapid delivery of spare parts, please take note of the given general information.

Important information

In the spare parts list, under the column “Comments”, you will find the marks P or G.

On the drawings you will find the symbol with the “eye”.

Characteristic	Meaning	Explanation
P	Recommended spare part	Preventive storage of the most important spare parts to ensure continued production in your plant is a risk you can calculate. For this reason we have marked the most important spare parts for your machine in the spare parts list with this code. Take advantage of our experience! On request, your Rieter Parts Service will be glad to let you have a quotation for these recommended parts.
G	Limited guarantee claim	Change the parts subject to normal wear and tear in time and carry out regular maintenance to insure that you can use your machine to its maximum capacity. As agreed in para. 12.5 of the General Conditions of Sale and Delivery, we refuse all claims under guarantee for damage due to continued use of worn out parts or faulty maintenance, and for the parts to be replaced that have worn out due to normal wear and tear.
 110	Reference	Related parts to this assembly are found in chapter 110, among others.
 Option	Recommendation	We recommend ordering those parts pre-assembled, or as complete assemblies. You may find these assemblies in chapter “Option”.
L 001	Note	The catalogue No. to the left hand side of the machine e.g. L001.
R 002	Note	The catalogue No. to the right hand side of the machine e.g. R002.

Sehr geehrter Kunde,

Sie haben sich aus gutem Grund für Rieter Maschinen entschieden. Der Kundendienst wird alles tun, damit Sie diese Entscheidung auch nach Jahren für richtig halten. Bitte verwenden Sie nur original Rieter Ersatzteile. Diese entsprechen dem neuesten Stand der Entwicklung und geben Gewähr für einwandfreies Material und beste Verarbeitung. Bitte beachten Sie, dass wir keine Garantieleistungen für Schäden an den Maschinen erbringen, wenn diese Schäden in Zusammenhang mit nicht direkt von uns oder von unseren autorisierten Vertretungen bezogenen Ersatz- oder Nachrüstteilen stehen.

Hinweis für die Benutzung des Kataloges

Zum Zweck einer möglichst schnellen Erledigung Ihrer Ersatzteilbestellung, bitten wir um Beachtung der auf dieser und den nachfolgenden Seiten gegebenen Hinweise.

Wichtige Informationen

In der Stückliste, unter der Spalte „Bemerkung“ finden Sie die Kennzeichnung P oder G.

Auf den Zeichnungen finden Sie das Symbol mit dem Auge.

Kennzeichen	Bedeutung	Erklärung
P	Empfohlenes Ersatzteil	Präventive Lagerhaltung der wichtigsten Ersatzteile zur Sicherung Ihrer Produktion bedeutet für Sie ein kalkulierbares Risiko. Aus diesem Grunde haben wir die wichtigsten Ersatzteile für Ihre Maschine im Ersatzteilkatalog mit diesem Kennzeichen versehen. Nutzen Sie unsere Erfahrung und Ihr Rieter Parts Service wird Ihnen auf Wunsch von diesen empfohlenen Teilen ein Angebot unterbreiten.
G	Eingeschränkter Garantieanspruch	Der rechtzeitige Austausch von Teilen, die einem normalen Verschleiß unterliegen und die regelmäßige Wartung sichern Ihnen einen hohen Nutzungsgrad Ihrer Maschine. Wie unter Ziffer 12.5 der Allgemeinen Verkaufs- und Lieferbedingungen vereinbart, ist jegliche Garantie ausgeschlossen für Schäden, die auf die weitere Verwendung abgenützter Teile oder mangelhafte Wartung zurückzuführen sind und für die wegen natürlicher Abnutzung zu ersetzenden Teile selber.
 110	Verweis	Anschlussteile dieser Baugruppe finden Sie z. B. auf Kapitel 110.
 Option	Empfehlung	Wir empfehlen Ihnen, diese Teile nur als vormontierte- bzw. kpl. Baugruppe zu bestellen. Sie finden diese Baugruppen im Kapitel "Option".
L 001	Hinweis	Katalognummer für linke Maschinenseite z. B. L 001.
R 002	Hinweis	Katalognummer für rechte Maschinenseite z. B. R 002.



R 40

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Rieter Ingolstadt GmbH
D-85055 Ingolstadt

Maschinenfabrik Rieter AG
CH-8406 Winterthur

Parts

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☐ Partial shipment
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Livraison partielle

☒ Full shipment
Gesamtlieferung
Livraison globale

Customer No.
Kunden-Nr.
No. de client
Customer's address
Kunden-Adresse
Adresse du client

50000

We make it LTD

Mill Road 91

RIE TER Mill Town

United Kingdom

Customer's reference
Kunden-Referenz
Référence client
Delivery address
Versandanschrift
Expédition à

000 - 01.10.2008

We make it LTD / John Smith

Mill Road 91, RIE TER Mill Town

Means of Transport
Versandvorschrift
Prescription d'expédition

by courier

Fax CH +41 52 208-8080
CH +41 52 208-7500

Fax D +49 841 9536-881

Internet: www.rieterparts.com
E-Mail: parts.sys@rieter.com

Remarks
Bemerkungen
Remarques

Date / Signature
Datum / Unterschrift
Date / Signature

Item Pos.	Machine Type Machinentyp Machine Type	Important - Wichtig - Important		Catalogue No. Katalog-Nr. No. de catalogue	Part No. Teile-Nr. Ni. article	Description Artikel-Bezeichnung Description	Quantity Menge Quantité
		Year Jahr Année	Serial No. Serien-Nr. No. de série				
1	R 40	2008	40011845-00100	210.032	1099270	off-center bolt	1
2	R 40			210.017	1094254	press sleeve 18/25 x 19	4
3	R 40			210.007	8500424	locking ring 42 x 1,75	10



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		Year Jahr Année	Serial No. Serien-Nr. No. de série				

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D-85055 Ingolstadt

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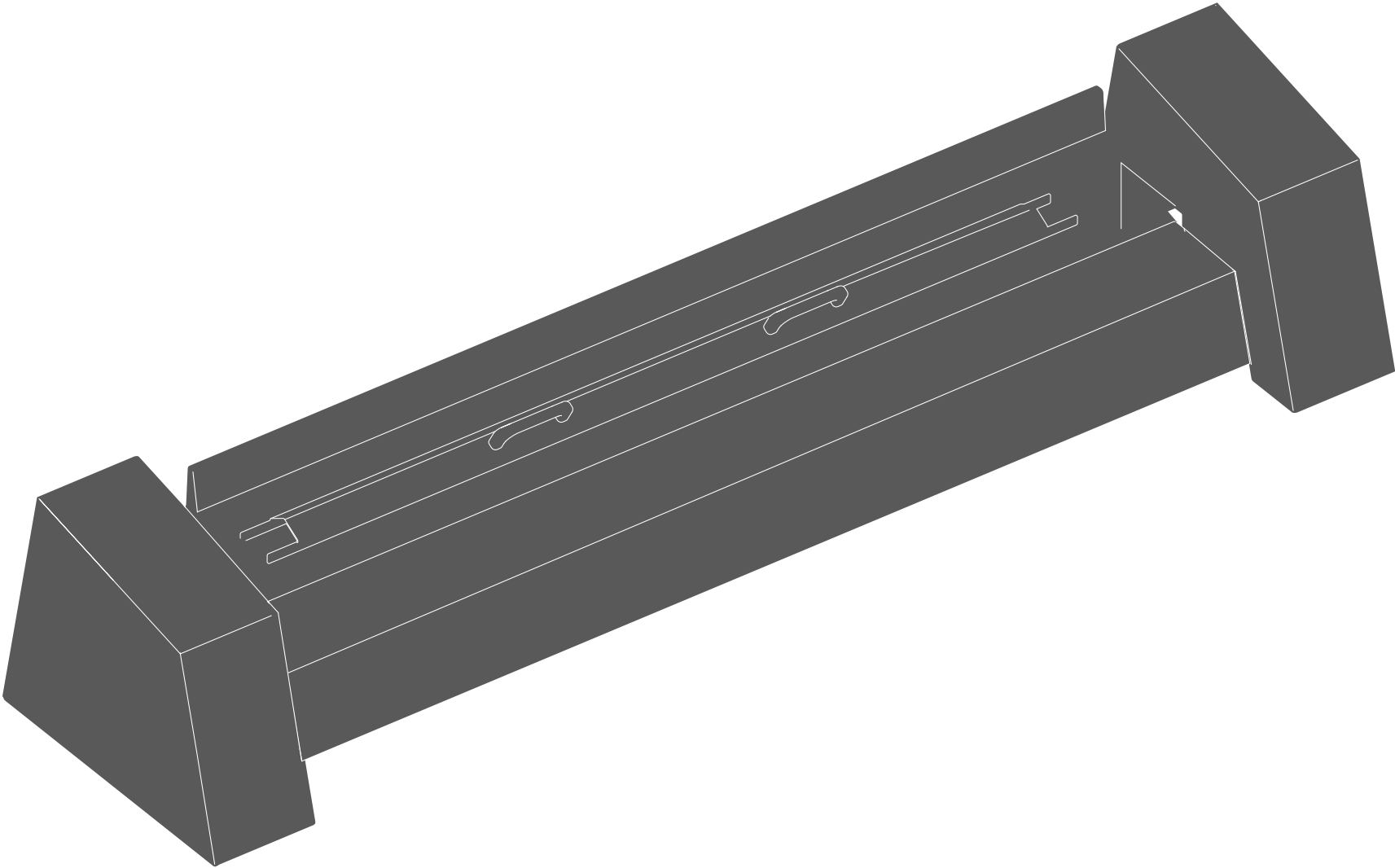
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Remarks
Bemerkungen
Remarques

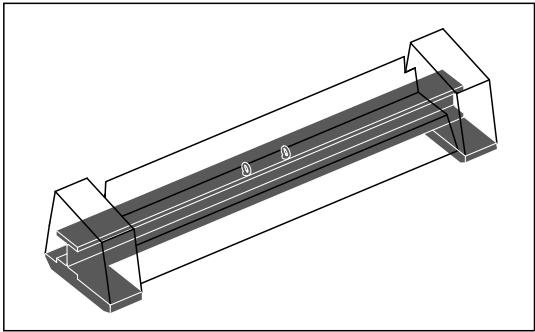
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Datum / Unterschrift
Date / Signature

Item Pos.	Machine Type Machinentyp Machine Type	Important - Wichtig - Important		Catalogue No. Katalog-Nr. No. de catalogue	Part No. Teile-Nr. Ni. article	Description Artikel-Bezeichnung Description	Quantity Menge Quantité
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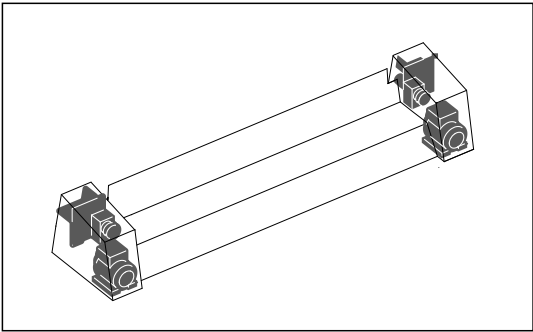
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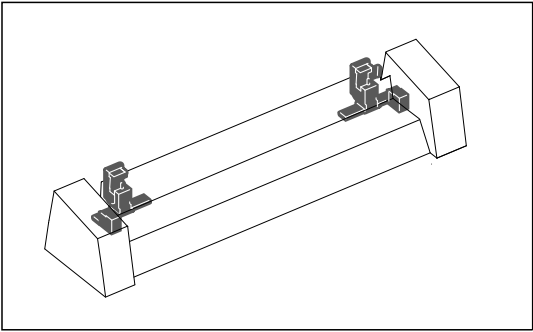
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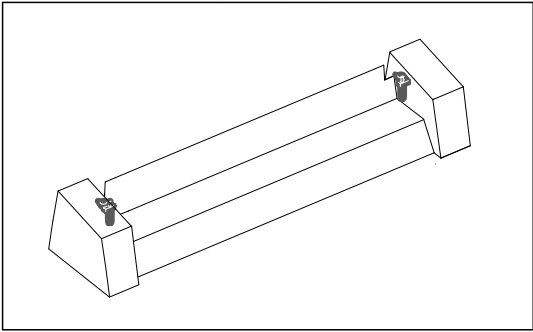
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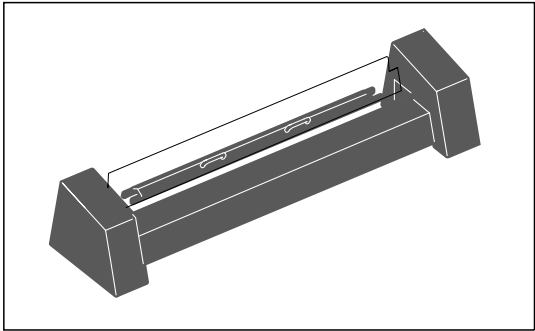
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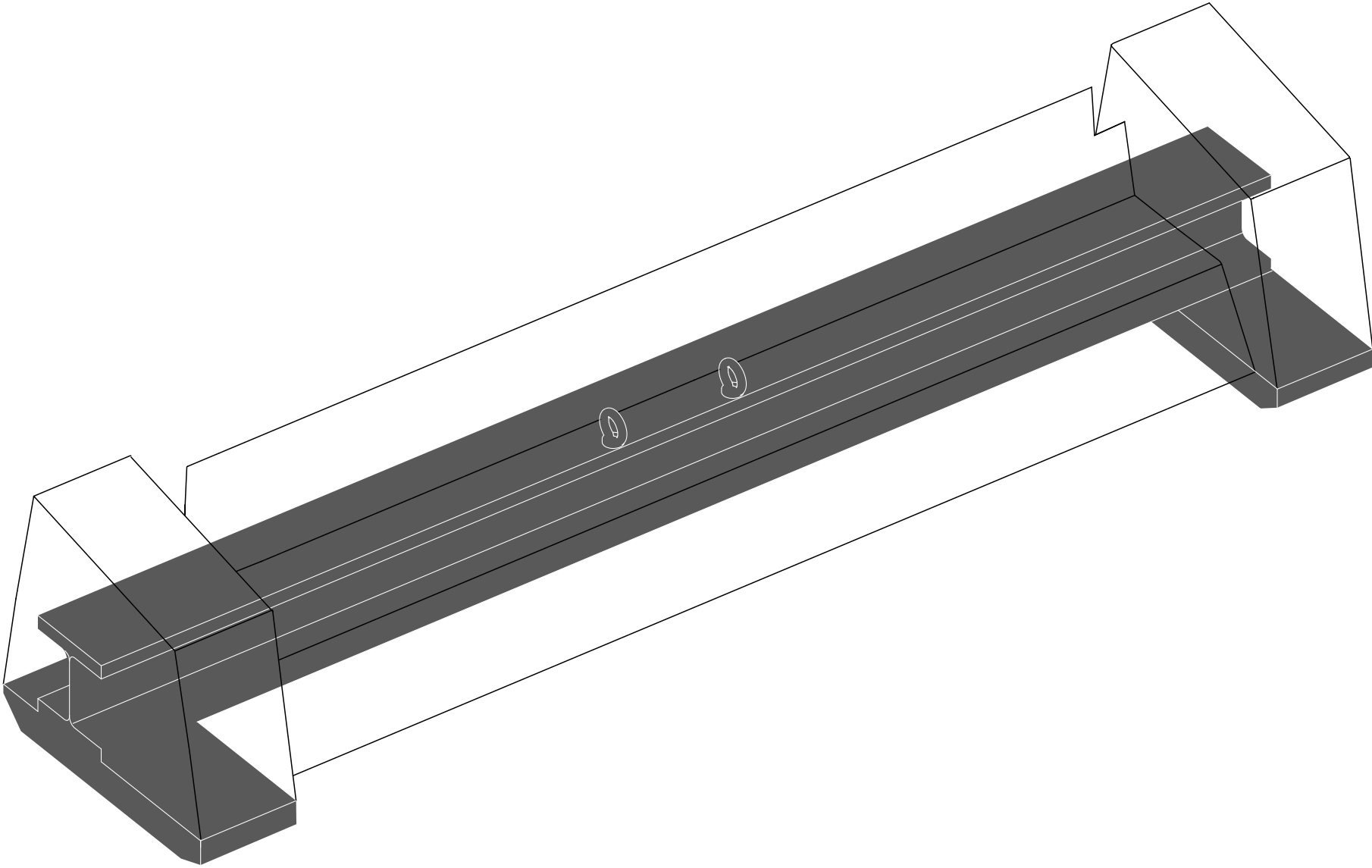
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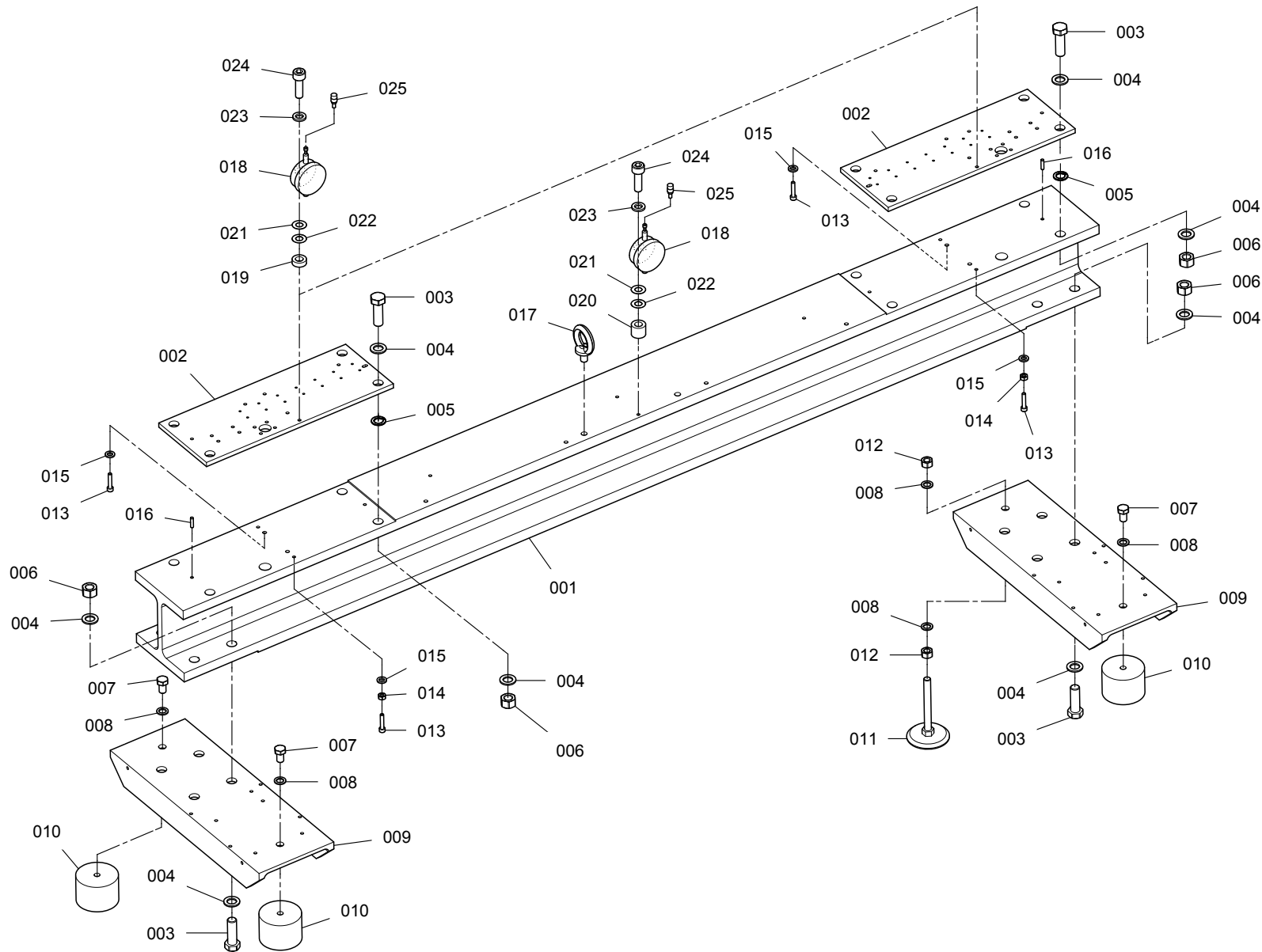


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Kunde / Customer

Maschinen-Typ / Type of machine

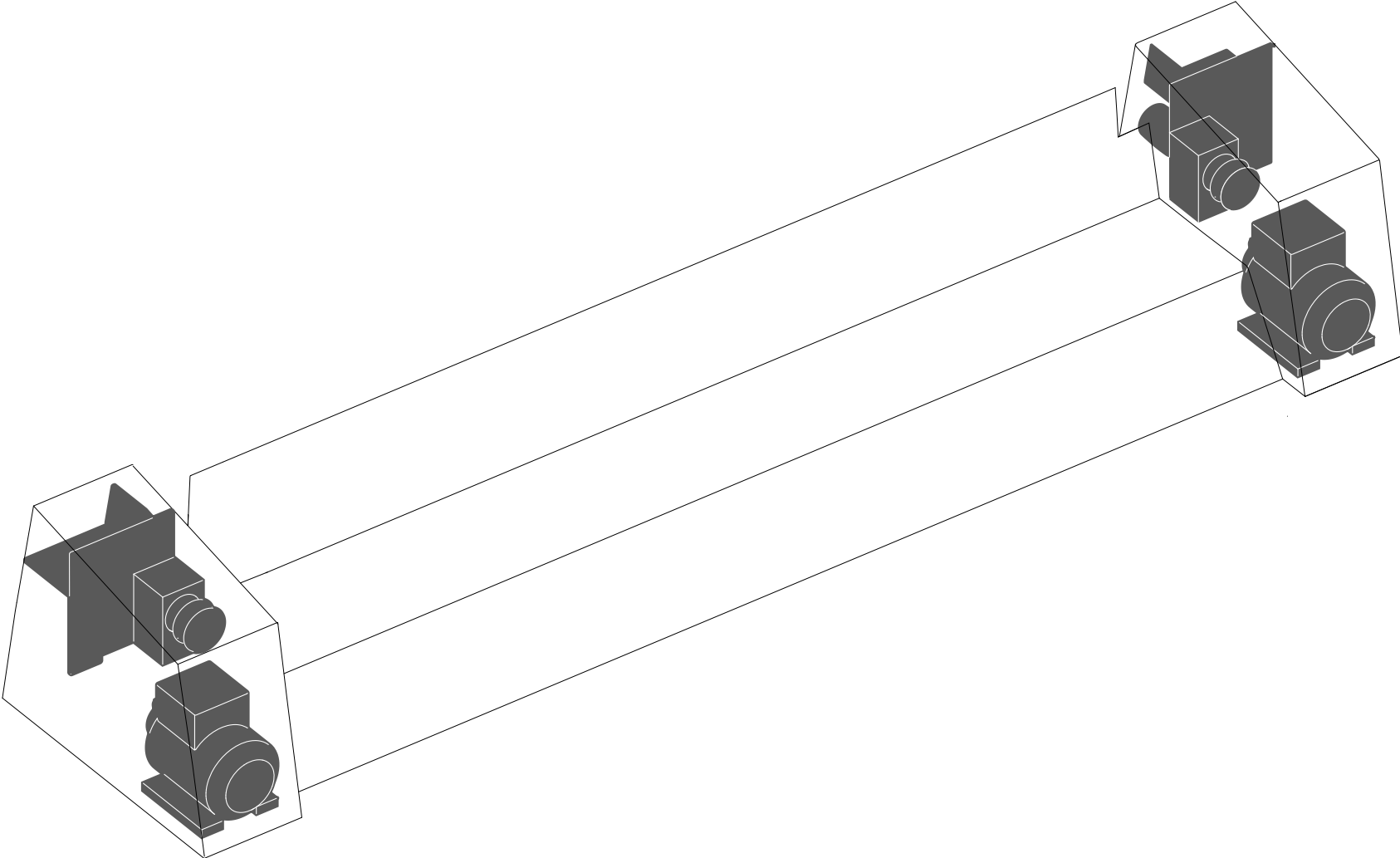
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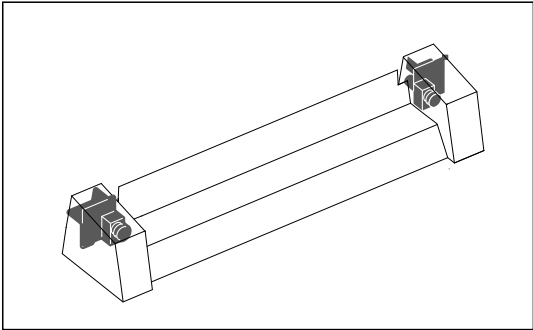
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EASY SHOE MILLING 150**40017951****110 1/1****10.12.2015****RIETER**

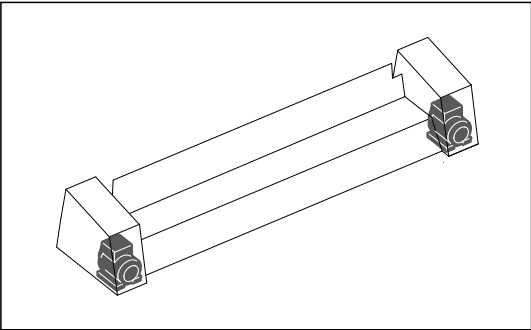
Katalog Nr. Catalogue No.	Material-Nr. Part No.	Part description en	Material-Bezeichnung de	Bemerkung Remarks
110.001	10967017	BRACKET	TRAEGER	
110.002	10773136	LEVELING BRIDGE	NIVELLIERSTEG	
110.003	10259107	HEX. SCREW M16x50	6KT-SCHRAUBE M16x50	
110.004	10472400	WASHER 17	SCHEIBE 17	
110.005	10776515	COMPENSATION RING COMPLETE	KOMPENSATIONSRING KOMPLETT	
110.006	10431843	HEXAGON NUT M16	6KT-MUTTER M16	
110.007	10259095	HEX. SCREW M12x20	6KT-SCHRAUBE M12x20	
110.008	10356546	WASHER 13	SCHEIBE 13	
110.009	10967015	U-PROFILE	U-PROFIL	
110.010	10776019	SPRING ELEMENT C75x35	FEDERELEMENT C75x35	
110.011	10776018	FOOT M12x75	FUSS M12x75	
110.012	10431841	HEXAGON NUT M12	6KT-MUTTER M12	
110.013	10258929	SCREW M6x30	ZYL.SCHRAUBE M6x30	
110.014	10431759	HEXAGON NUT M6	6KT-MUTTER M6	
110.015	10259678	WASHER 6.4	SCHEIBE 6.4	
110.016	10541212	CYLINDRICAL PIN 6x20	ZYLINDERSTIFT 6x20	
110.017	8502162	RING BOLT M12	RINGSCHRAUBE M12	
110.018	10777380	DIAL GAUGE SMALL	MESSUHR KLEIN	
110.019	10791810	BUSHING	BUCHSE	
110.020	10791871	BUSHING	BUCHSE	
110.021	10494323	ADJUSTING WASHER	Passscheibe	
110.022	10567377	ADJUSTING WASHER	Passscheibe	
110.023	10259678	WASHER 6.4	SCHEIBE 6.4	
110.024	10259461	SCREW M6X20	ZYL.SCHRAUBE M6X20	
110.025	10777553	INSET	EINSATZ	



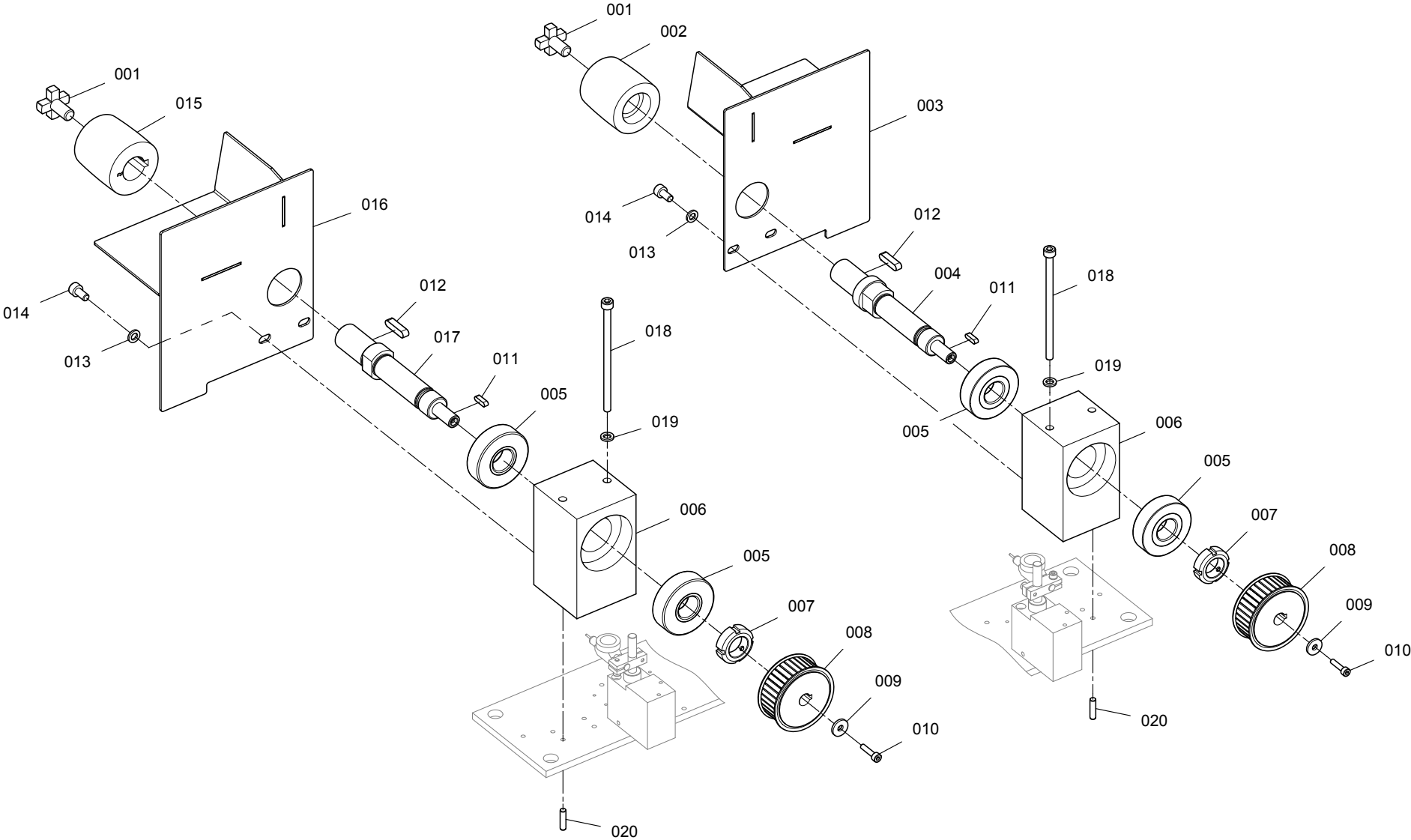
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12010



12020



Kunde / Customer

Maschinen-Typ / Type of machine

Serial-Nr. / Serial-No.

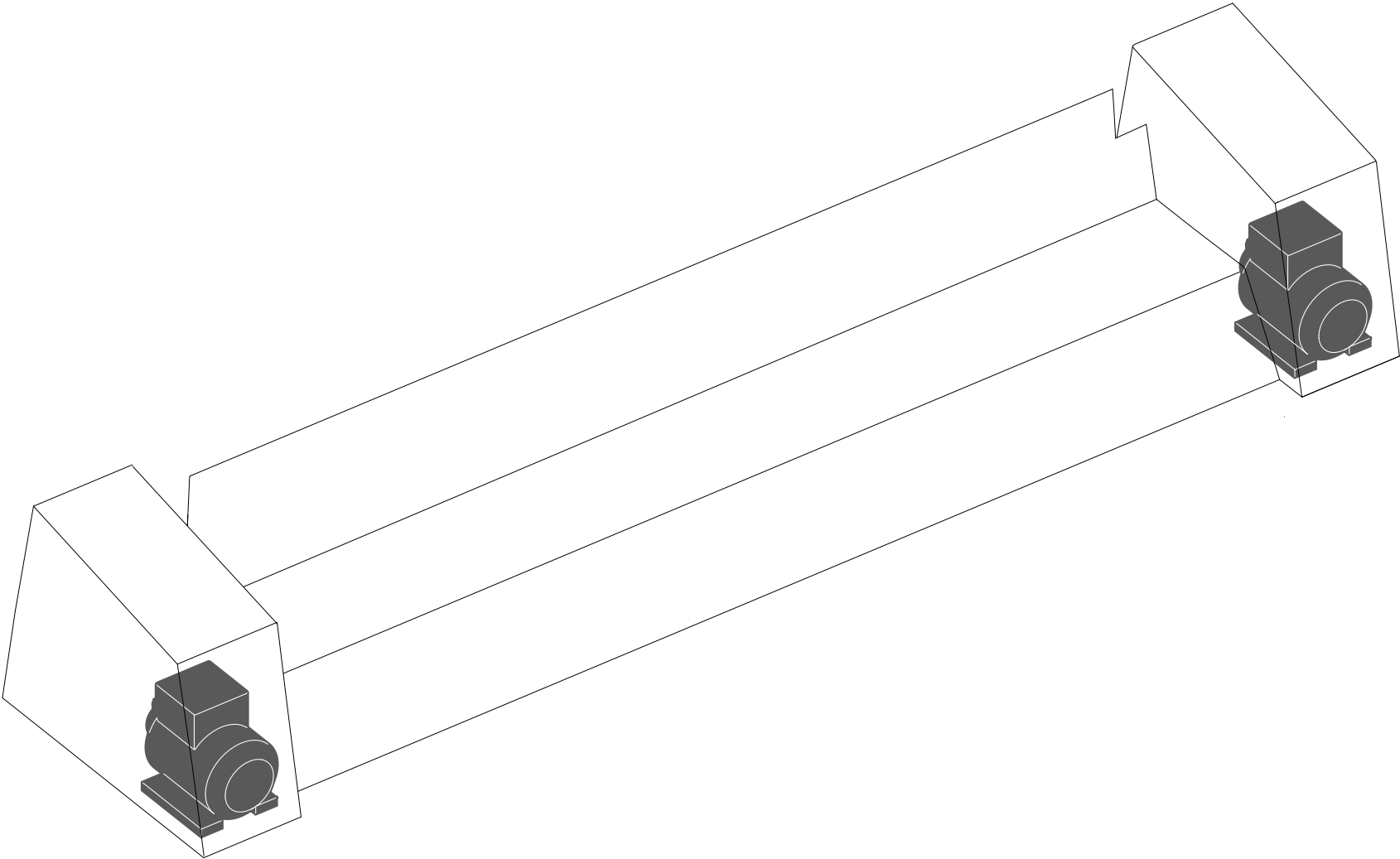
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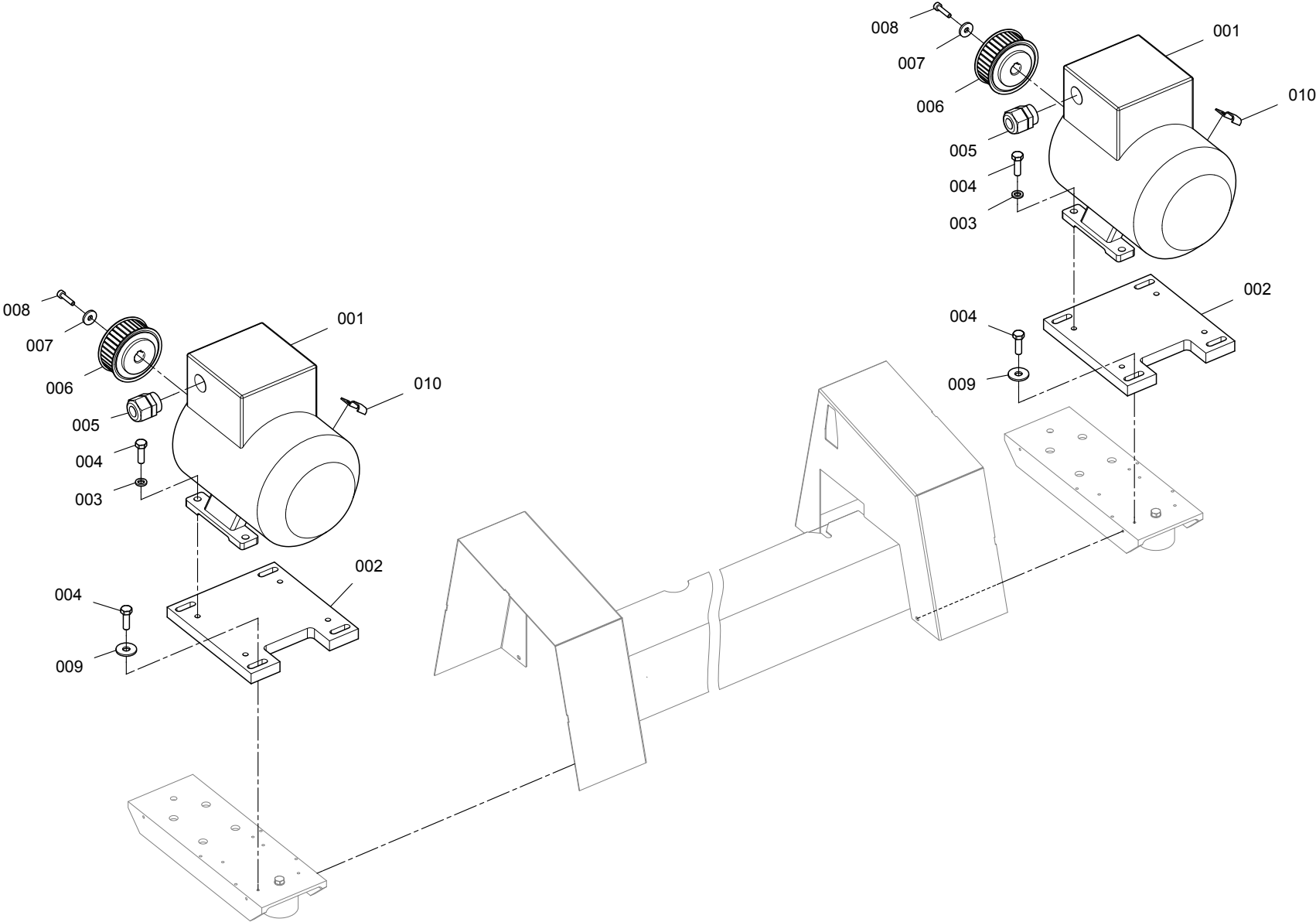
EASY SHOE MILLING 150**40017951****120 1/1****10.12.2015**

Katalog Nr. Catalogue No.	Material-Nr. Part No.	Part description en	Material-Bezeichnung de	Bemerkung Remarks
12010.001	10776245	RECESSED HEAD SCREW	KREUZLOCHSCHRAUBE	
12010.002	10776551	GEAR HOBGING MILL RIGHT	FRAESER RECHTS	
12010.003	10967019	SAFETY SIGN RIGHT	SICHERHEITSSCHILD RECHTS	
12010.004	10773156	SPINDLE SHAFT INIT.PART CPL. RIGHT	SPINDELWELLE RECHTS	
12010.005	10774830	ANGULAR BALL BEARING 20/52x15	SCHRAEGKUGELLAGER 20/52x15	
12010.006	10967018	BEARING BLOCK	LAGERBOCK	
12010.007	10775858	GROOVE NUT M20x1	NUTMUTTER M20x1	
12010.008	10775931	TOOTHED BELT DISC 36-5M-15	ZAHNRIEMENSCHIEBE 36-5M-15	
12010.009	10091482	DISK 5,3	SCHEIBE 5.3	
12010.010	10673634	CHEESE-HEAD SCREW M4x18	ZYL.SCHRAUBE M4x18	
12010.011	10576464	PARALLEL KEY 4x4x14	PASSFEDER 4x4x14	
12010.012	10472270	FEATHER KEY 6x6x25	PASSFEDER 6x6x25	
12010.013	10259678	WASHER 6.4	SCHEIBE 6.4	
12010.014	10258924	CHEESE HEAD SCREW M6x12	ZYL.SCHRAUBE M6x12	
12010.015	10776246	GEAR HOBGING MILL LEFT	FRAESER LINKS	
12010.016	10967037	SAFETY SHIELD LEFT	SICHERHEITSSCHILD LINKS	
12010.017	10773157	SPINDLE SHAFT INIT.PART CPL. LEFT	SPINDELWELLE LINKS	
12010.018	10507437	CHEESE-HEAD SCREW M6X110	ZYL.SCHRAUBE M6X110	
12010.019	10259678	WASHER 6.4	SCHEIBE 6.4	
12010.020	10541212	CYLINDRICAL PIN 5h6X20	ZYLINDERSTIFT 5h6x20	

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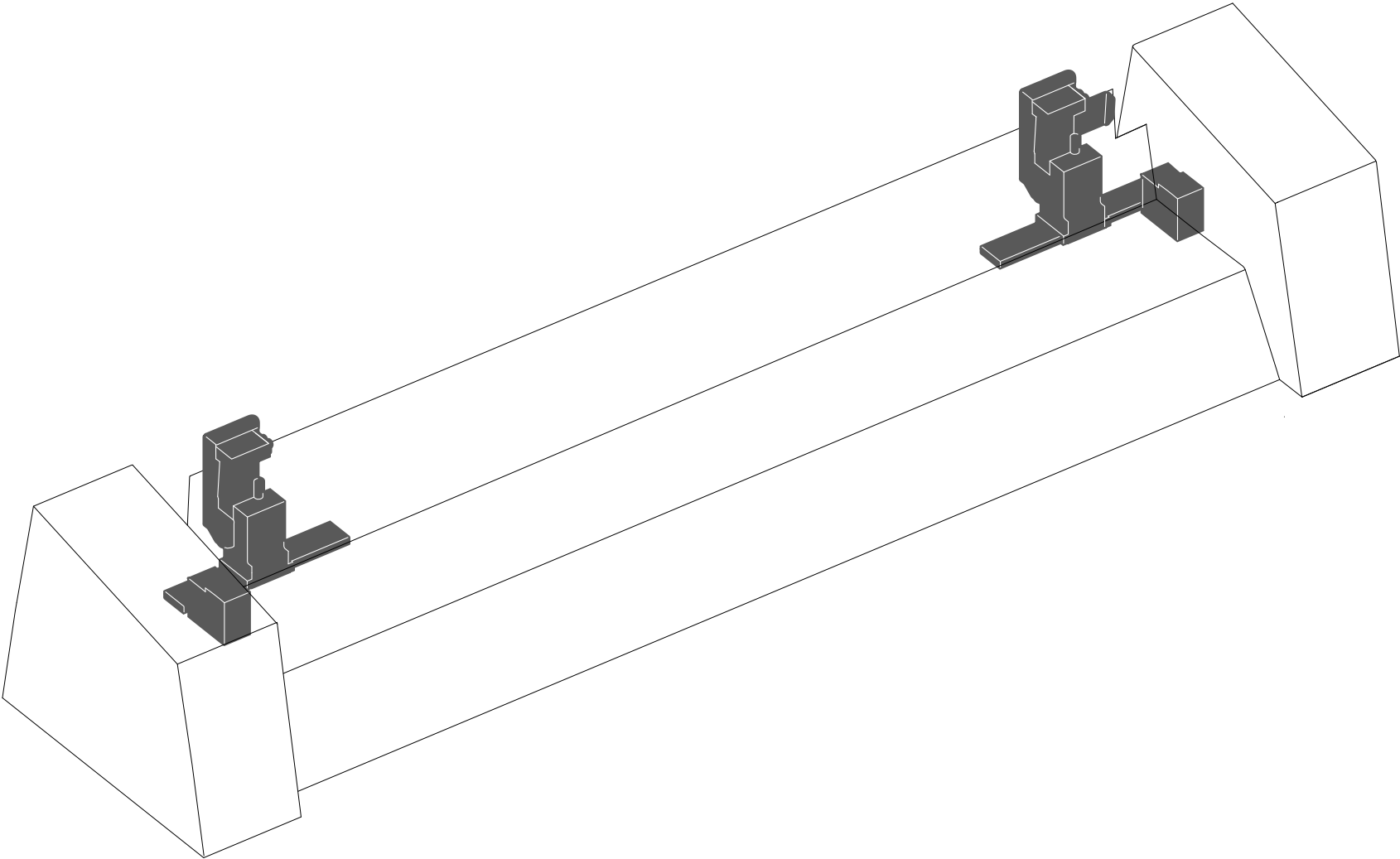
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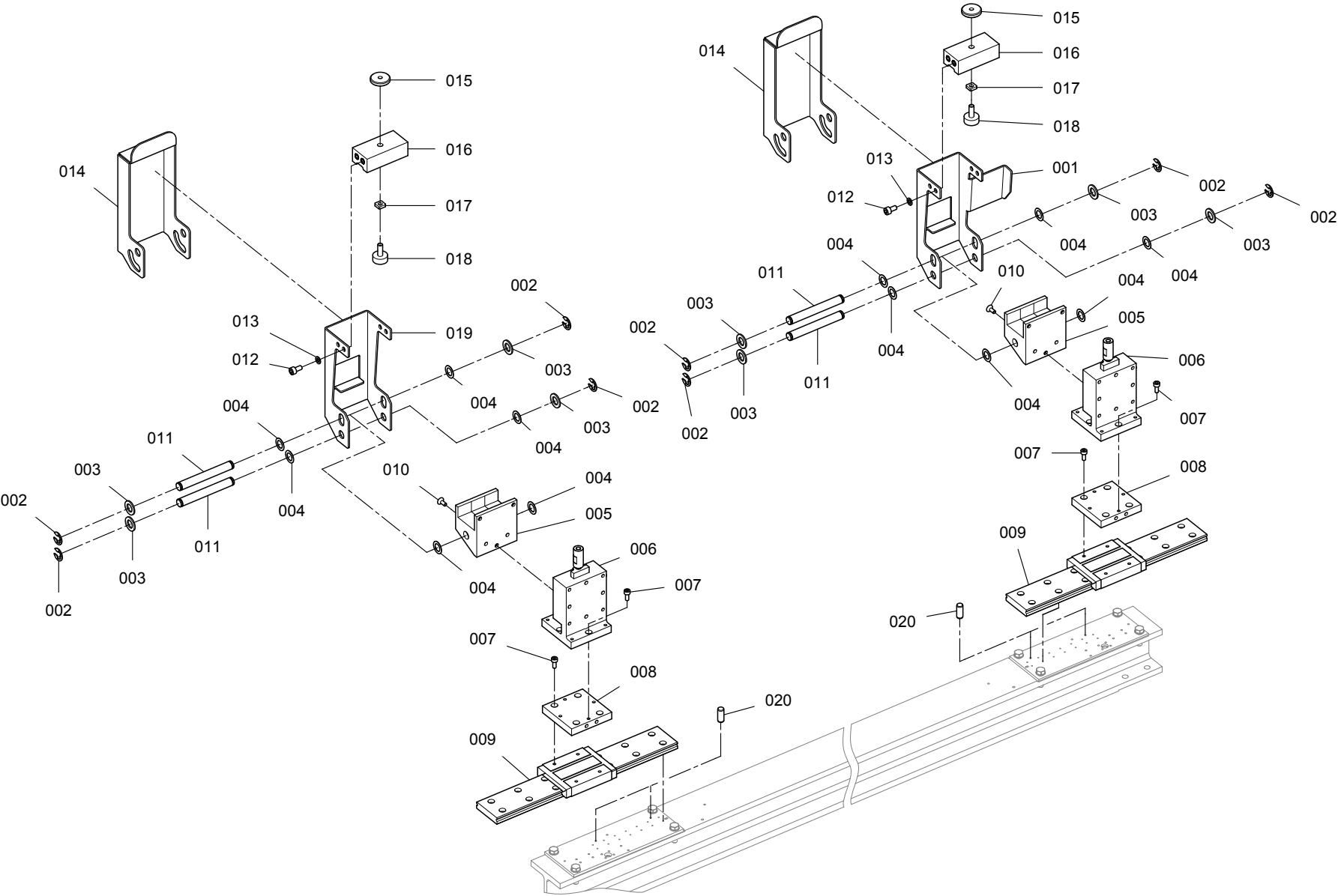


Kunde / Customer

Maschinen-Typ / Type of machine
EASY SHOE MILLING 150Serial-Nr. / Serial-No.
40017951Seite / Page
120 1/1Datum / Date
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Katalog Nr. Catalogue No.	Material-Nr. Part No.	Part description en	Material-Bezeichnung de	Bemerkung Remarks
12020.001	10774250	MOTOR DELTA 0.25kW 400V50Hz O4	MOTOR DREIECK 0.25kW 400V50Hz O4	
12020.002	10773209	TENSIONING DEVICE FOR MOTOR	MOTORSPANNSCHLITTEN	
12020.003	10259678	WASHER 6.4	SCHEIBE 6.4	
12020.004	10259081	HEX. SCREW M6x20	6KT-SCHRAUBE M6x20	
12020.005	10162193	CABLE GLAND Ms M20x1,5x7 6-10	KABELVERSCHRAUBUNG Ms M20x1,5x7 6-10	
12020.006	10775931	TOOTHED BELT DISC 36-5M-15	ZAHNRIEMENSCHLEIBE 36-5M-15	
12020.007	10091482	DISK 5,3	SCHEIBE 5.3	
12020.008	10673634	CHEESE-HEAD SCREW M4x18	ZYL.SCHRAUBE M4X18	
12020.009	10258855	WASHER 6.4	SCHEIBE 6.4	
12020.010	10164829	CLAMP	SCHELLE	





Kunde / Customer

Maschinen-Typ / Type of machine

Serial-Nr. / Serial-No.

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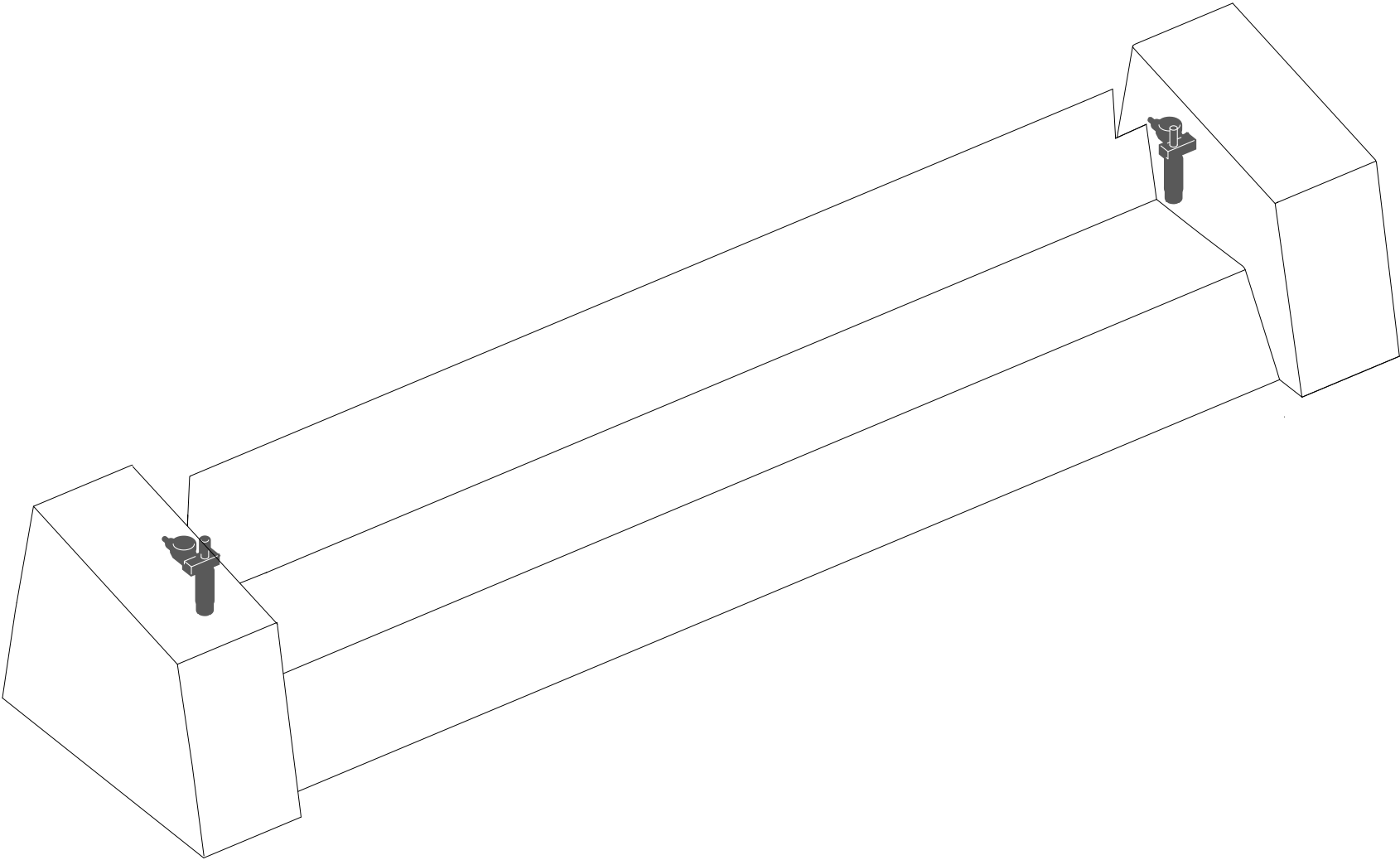
EASY SHOE MILLING 150**40017951****130 1/1****10.12.2015**

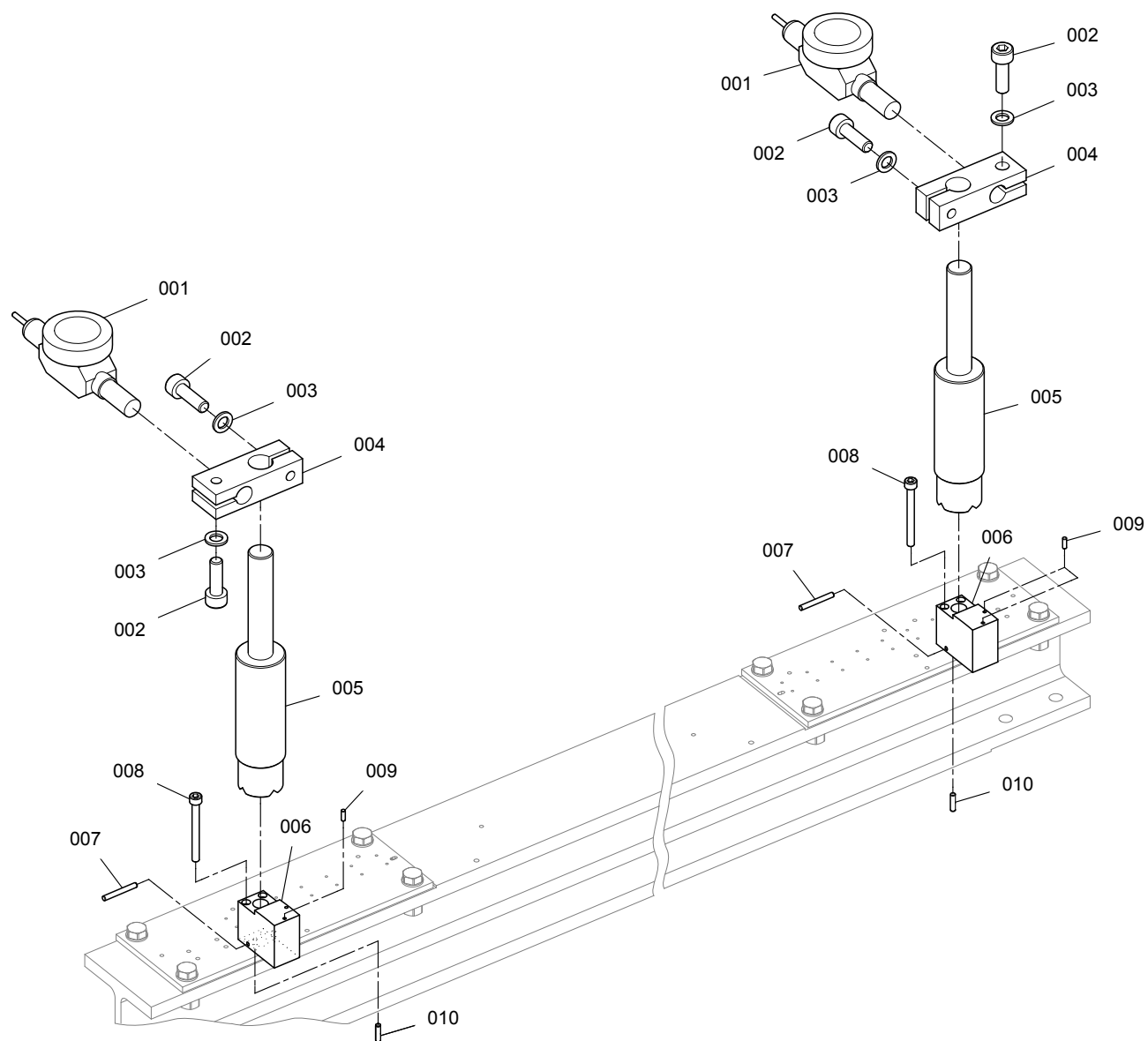
Katalog Nr. Catalogue No.	Material-Nr. Part No.	Part description en	Material-Bezeichnung de	Bemerkung Remarks
130.001	10773204	CLAMPING JAW STOP	SPANNBACKE ANSCHLAG	
130.002	10259450	LOCKING DISC 8	SICHERUNGSSCHEIBE 8	
130.003	10258851	WASHER 10.5	SCHEIBE 10.5	
130.004	10494322	ADJUSTING WASHER DIN988-10/16x0.5	PASSSCHEIBE 16x0.5	
130.005	10773160	ADAPTER ANGLE	ADAPTERWINKEL	
130.006	10997366	POSITIONING DEVICE COMPLETE ZEG60-R	POSITIONIEREINRICHTUNG KOMPLETT ZEG60-R	
130.007	10258901	CHEESE-HEAD SCREW M4x10	ZYL.SCHRAUBE M4x10	
130.008	10773201	INTERMEDIATE PLATE	ZWISCHENPLATTE	
130.009	10774944	GUIDING RAIL SSELBWV16-270	LAUFSCHIENE SSELBWV16-270	
130.010	10259303	COUNTER SUNK SCREW M4x10	SENKSCHEIBE M4x10	
130.011	10773202	HINGE AXIS	SCHARNIERACHSE	
130.012	10258829	CHEESE-HEAD SCREW M5x10	ZYL.SCHRAUBE M5x10	
130.013	10259623	WASHER 5.3	SCHEIBE 5.3	
130.014	10773203	TENSION BRACKET	SPANNBUEGEL	
130.015	10566438	KNURLED NUT DIN467-M6-5	RAENDELMUTTER M6-5	
130.016	10773876	SUPPORTING PIECE COMPLETE	AUFLAGESTUECK KOMPLETT	
130.017	10356636	SQUARE NUT M6	4KT-MUTTER M6	
130.018	10521769	RUBBER BUFFER 18x7.5	GUMMIPUFFER 18x7.5	
130.019	10773205	CLAMPING JAW SINGLE	SPANNBACKE EINFACH	
130.020	10821045	CYLINDRICAL PIN 5h6x12	ZYLINDERSTIFT 5h6x12	

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Net Weight: 0.1 KG





Kunde / Customer

Maschinen-Typ / Type of machine

EASY SHOE MILLING 150

Serial-Nr. / Serial-No.

40017951

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140 1/1

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10.12.2015

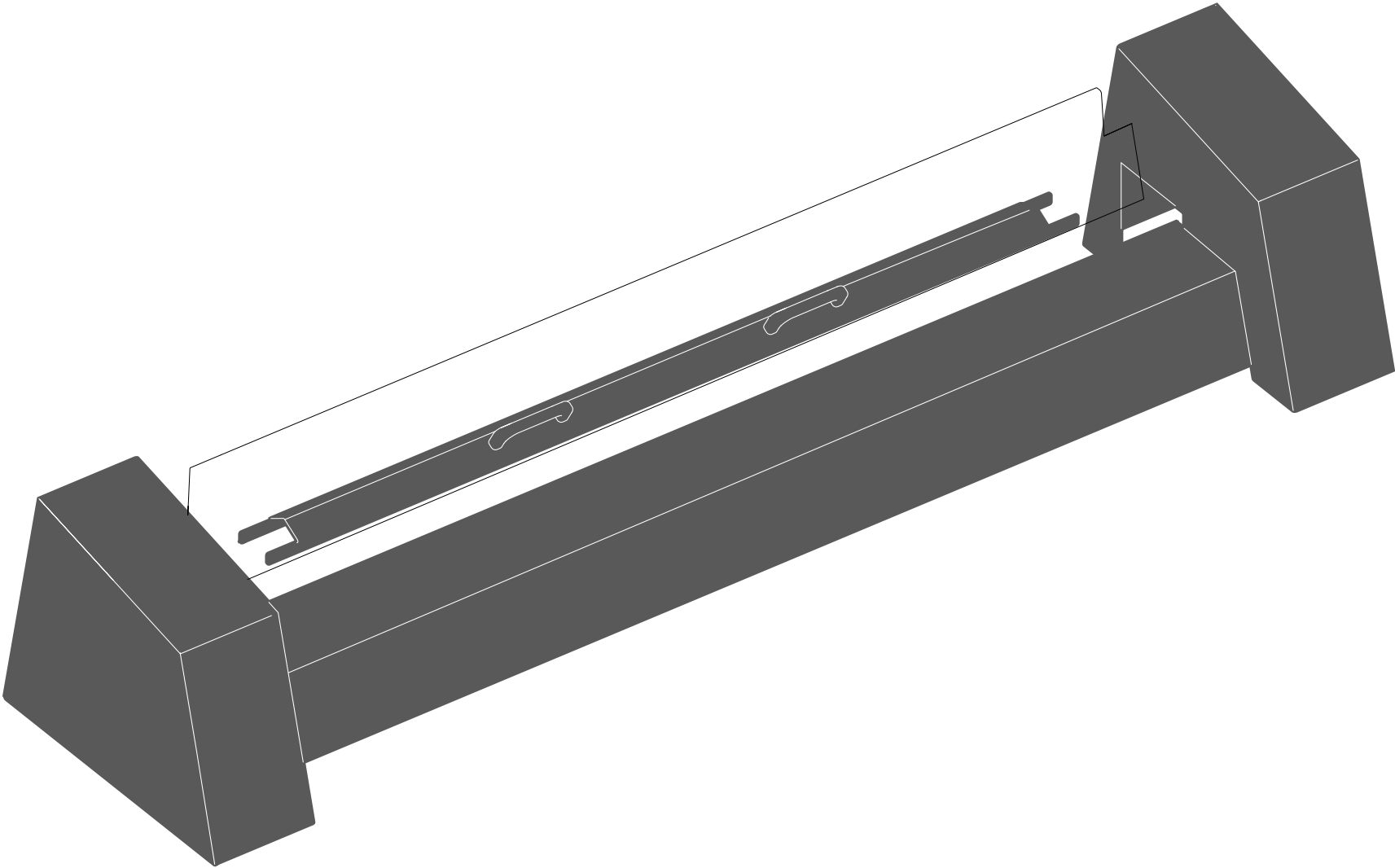


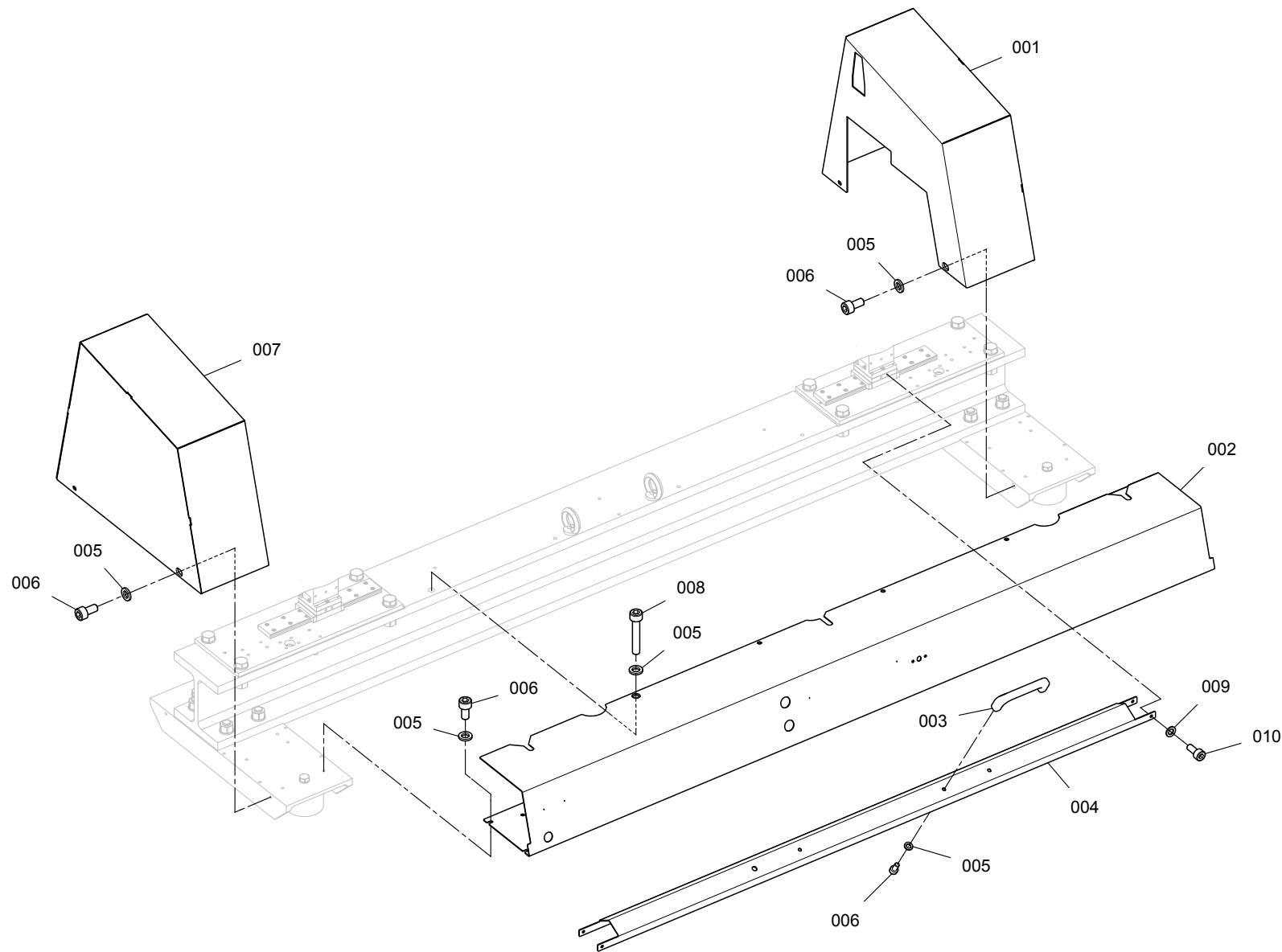
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140.001	10778231	DIAL GAUGE 513-527E	MESSUHR 513-527E	
140.002	10258913	SCREW M5x16	ZYL.SCHRAUBE M5x16	
140.003	10259623	WASHER 5.3	SCHEIBE 5.3	
140.004	10776244	CROSS CLAMPING PART KLSTK 10-8	KREUZKLEMMSTUECK KLSTK 10-8	
140.005	10773208	DIAL GAUGE STAND	MESSUHR STAENDER	
140.006	10773207	SUPPORTING PIECE	AUFLAGESTUECK	
140.007	10489618	CYLINDRICAL PIN 5m6x40	ZYLINDERSTIFT 5m6x40	
140.008	10258937	CHEESE-HEAD SCREW M6x60	ZYL.SCHRAUBE M6x60	
140.009	10443116	CYLINDRICAL PIN 4h6x12	ZYLINDERSTIFT 4h6x12	
140.010	10541212	CYLINDRICAL PIN 5h6x20	ZYLINDERSTIFT 5h6x20	

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Maschinen-Typ / Type of machine

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Serial-Nr. / Serial-No.

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Datum / Date

10.12.2015

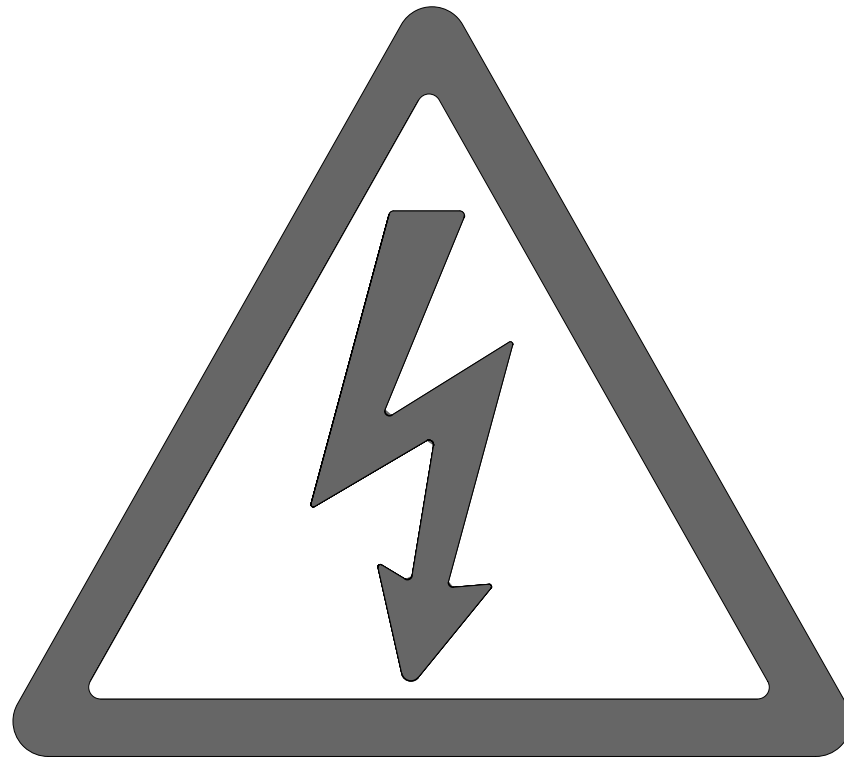


Katalog Nr. Catalogue No.	Material-Nr. Part No.	Part description en	Material-Bezeichnung de	Bemerkung Remarks
150.001	10967051	SIDE COVERING RIGHT	SEITENVERSCHALUNG RECHTS	
150.002	10967033	CONTROL SYSTEM COMPLETE	STEUERUNG KOMPLETT	
150.003	10524595	BOW HANDLE BLACK 110	BUEGELGRIFF SCHWARZ 110	
150.004	10967054	CONNECTING ANGLE	VERBINDUNGSWINKEL	
150.005	10259678	WASHER 6.4	SCHEIBE 6.4	
150.006	10258924	CHEESE HEAD SCREW M6x12	ZYL.SCHRAUBE M6x12	
150.007	10967038	SIDE COVERING LEFT	SEITENVERSCHALUNG LINKS	
150.008	10258930	SCREW M6x35	ZYL.SCHRAUBE M6x35	
150.009	10259632	WASHER 140HV	SCHEIBE 140 HV	
150.010	10258912	CHEESE HEAD SCREW M5x12	ZYL.SCHRAUBE M5x12	

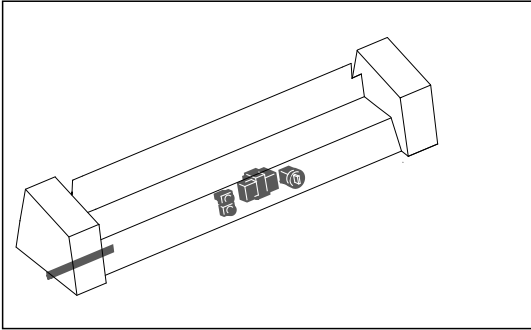
10997227 TSP Status: SG

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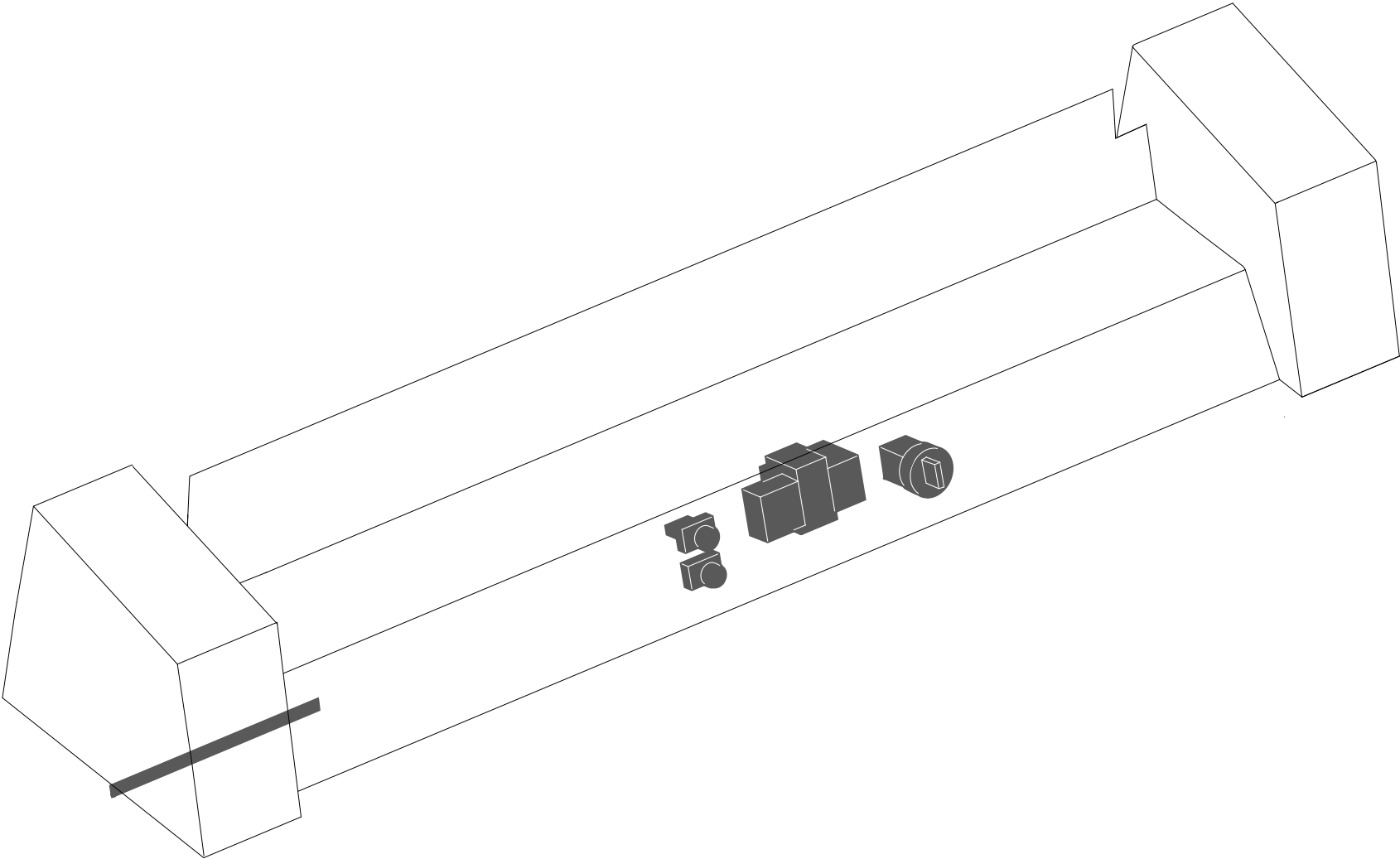
ESM_150

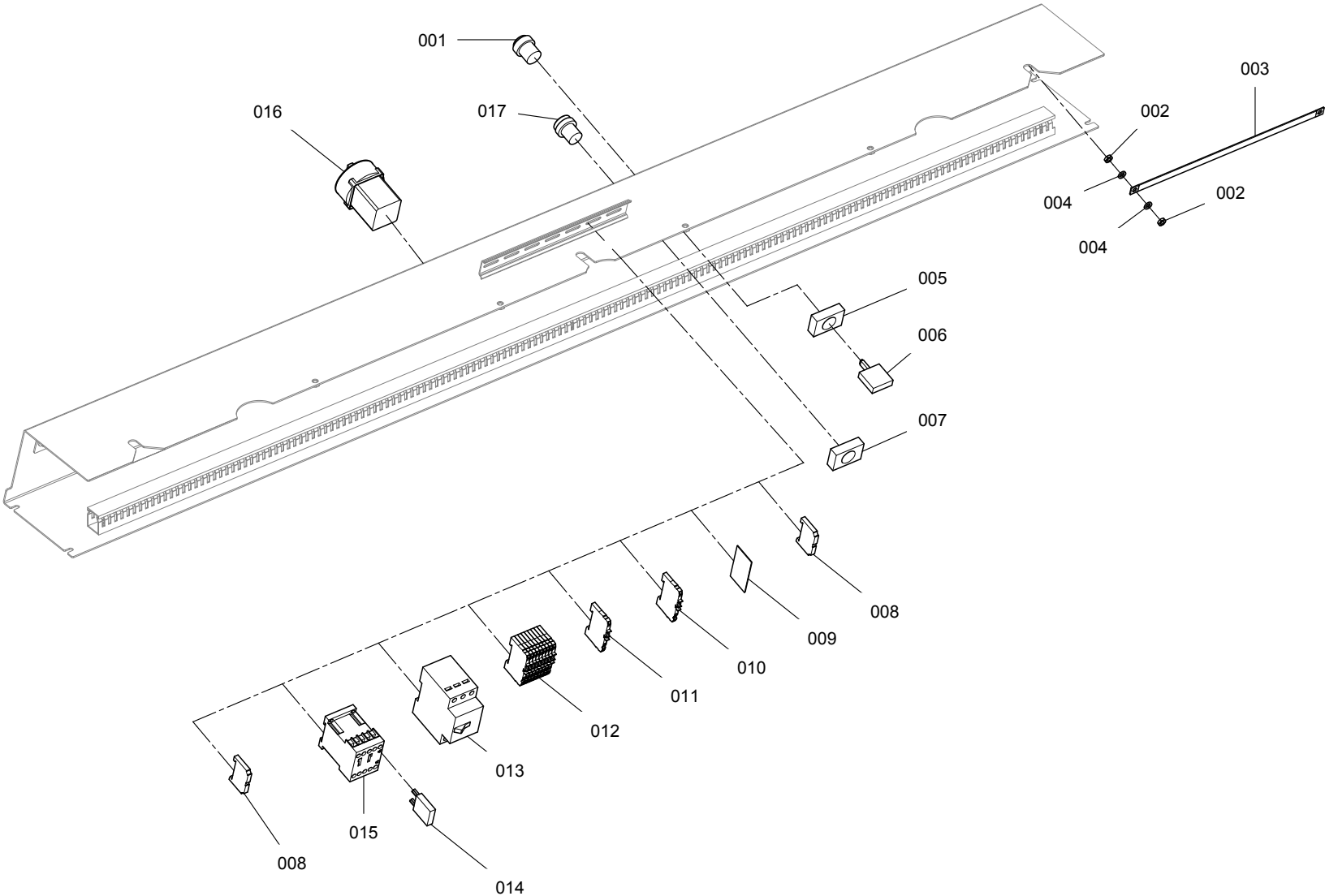


810

RIETER

Net Weight: 0.1 KG





Kunde / Customer

Maschinen-Typ / Type of machine

Serial-Nr. / Serial-No.

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Datum / Date

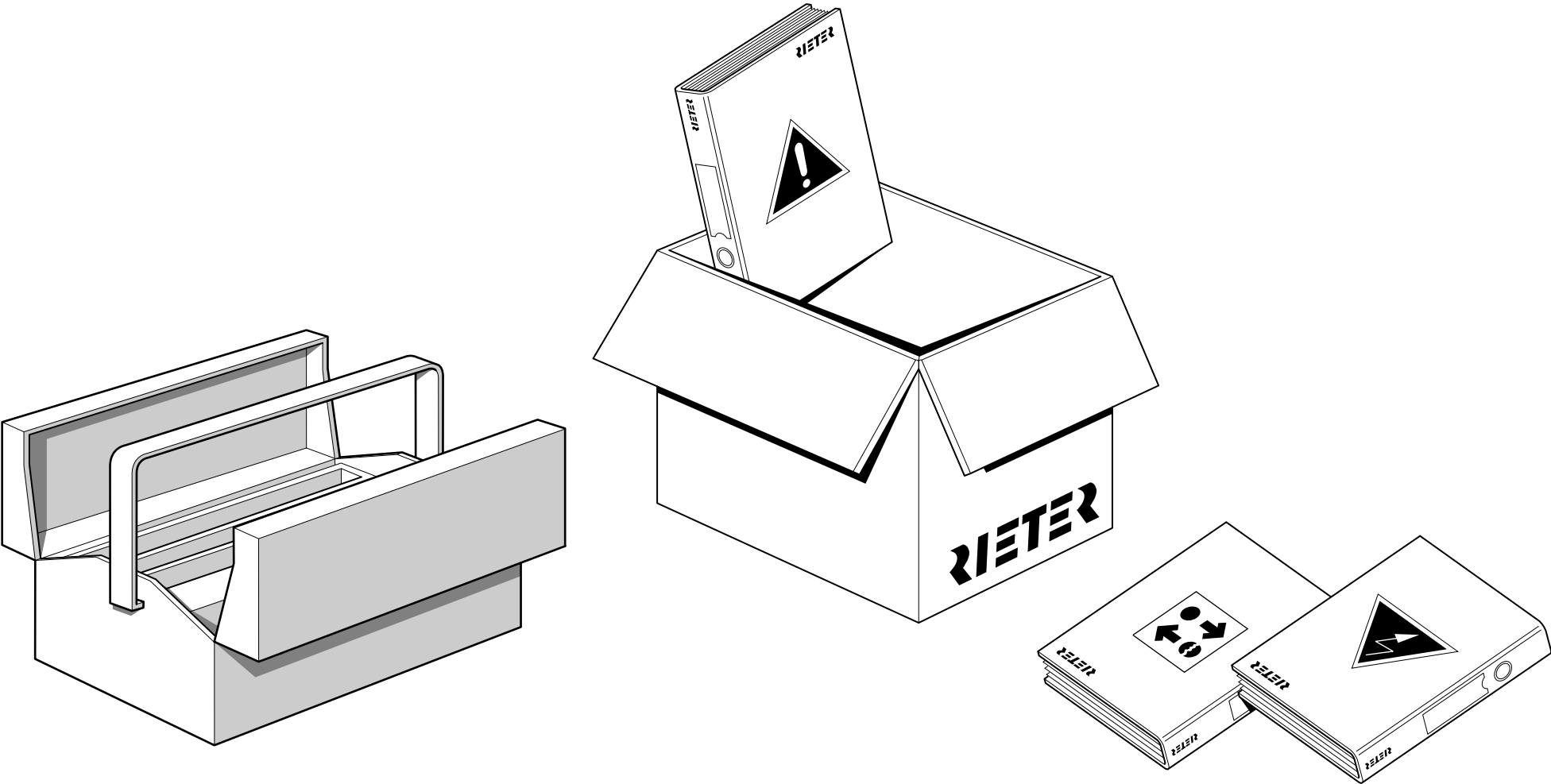
EASY SHOE MILLING 150**40017951****810 1/1****10.12.2015**

Katalog Nr. Catalogue No.	Material-Nr. Part No.	Part description en	Material-Bezeichnung de	Bemerkung Remarks
810.001	10031721	LIGHTED PUSH BUTTON HEAD GREEN	LEUCHTTASTERKNOPF GRÜN	
810.002	10356549	HEXAGON NUT M6	6KT-MUTTER M6	
810.003	10415753	GROUND STRAP CuZn 10mm2 12x1,5x300/2x6,5	MASSEBAND CuZn 10mm2 12x1,5x300/2x6,5	
810.004	10259678	WASHER 6.4	SCHEIBE 6.4	
810.005	10031762	CONTACT ELEMENT 1NO	TASTERUNTERTEIL BESTUECKT 1S AG DM22	
810.006	10799465	LED-MODUL WHITE 240V/AC	LED-MODUL WEISS 240V/AC	
810.007	10031763	PUSH BUTTON CONTACT BLOCK	TASTERUNTERTEIL BESTUECKT	
810.008	10140334	END ADJUSTER	ENDSTELLER	
810.009	10426128	PARTITION 2,5mm2 OG 1/2	TRENNWAND 2,5mm2 OG 1/2	
810.010	10426072	GROUNDING CLAMP 2,5mm2 YE/GN 1/2	ERDKLEMME 2,5mm2 YE/GN 1/2	
810.011	10574041	TERMINAL BLOCK 2,5mm2 BU 1/2	REIHENKLEMME 2,5mm2 BU 1/2	
810.012	10426096	TERMINAL BLOCK 2,5mm2 GY 1/2	REIHENKLEMME 2,5mm2 GY 1/2	
810.013	10331405	MOTOR PROTECTION SWITCH 1,4/100KA	MOTORSCHUTZSCHALTER 1,4/100KA	
810.014	10089508	VARISTOR Modul 127-240VAC	VARISTOR MODUL 127-240VAC	
810.015	10441773	CONTACTOR 5,5kW 230V50/60Hz 1s S00	SCHUETZ 5,5kW 230V50/60Hz 1s S00	
810.016	10773979	MAIN SWITCH NOT-AUS 3p+N+E	HAUPTSCHALTER NOT-AUS 3p+N+E	
810.017	10031689	BUTTON RED DM22	TASTERKOPF DM22SW ROT	

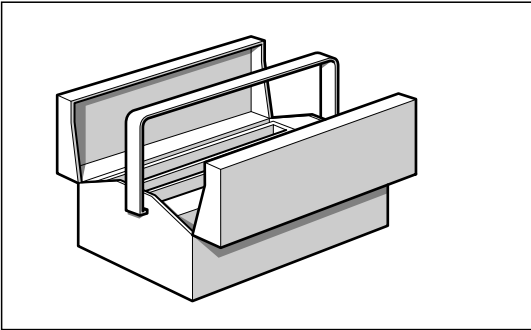
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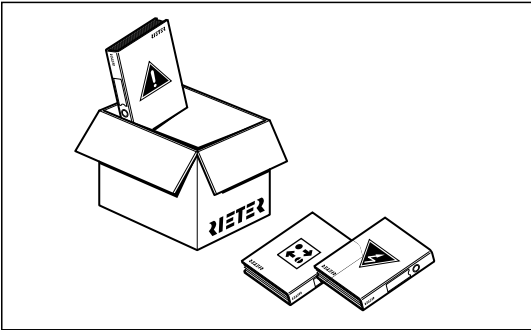
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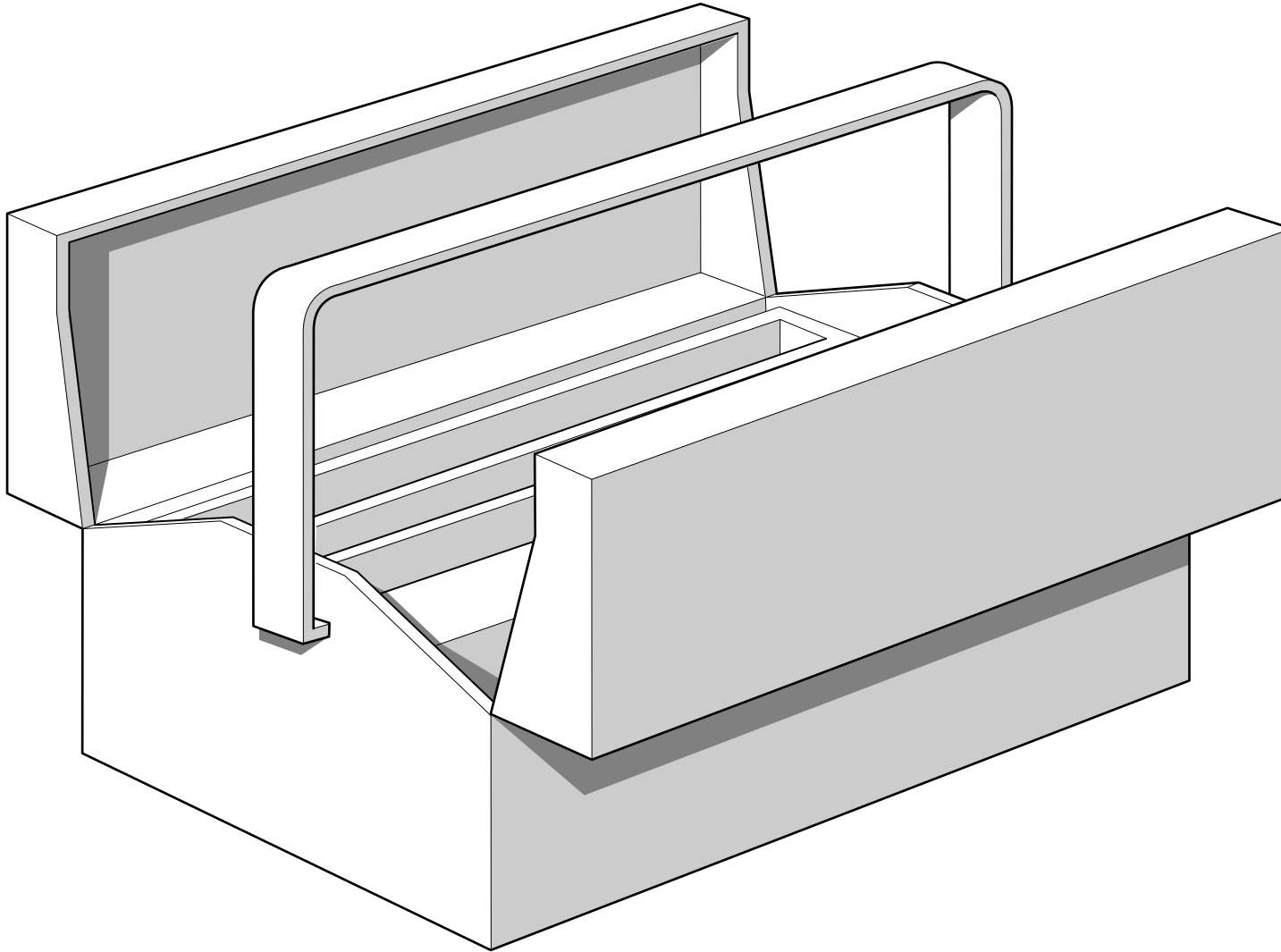
910



970

ESM_150

RIETER



910

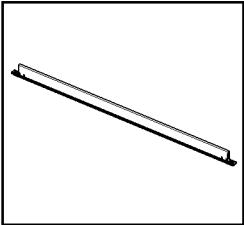
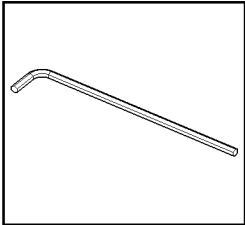
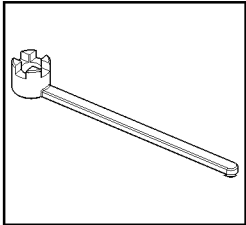
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Net Weight: 0.1 KG

10997227 TSP Status: SG

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ESM_150



						
001	002	003	004	005	006	007
008	009	010	011	012	013	014
015	016	017	018	019	020	021
022	023	024	025	026	027	028

Kunde / Customer

Maschinen-Typ / Type of machine

EASY SHOE MILLING 150

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40017951

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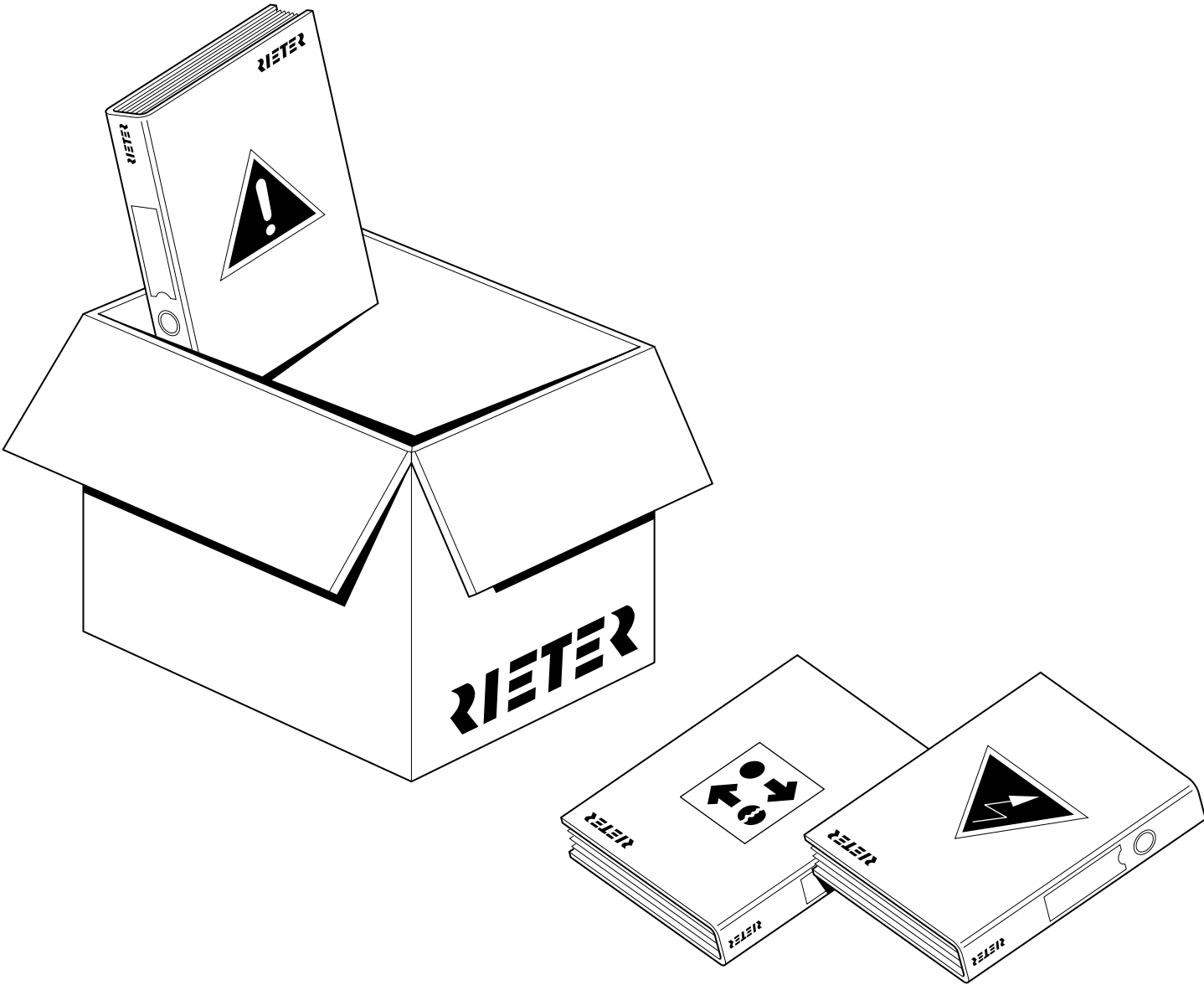
910 1/1

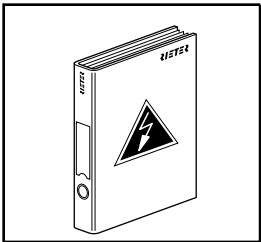
Datum / Date

10.12.2015

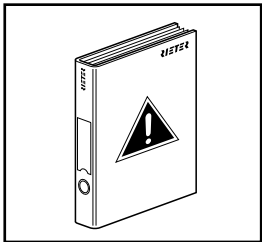
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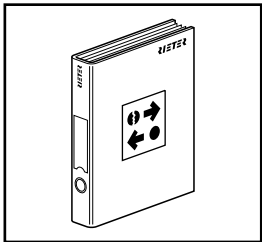




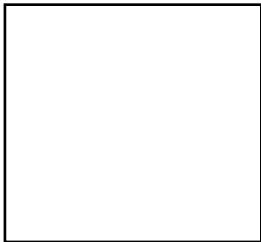
001



002



003



004

Kunde / Customer

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EASY SHOE MILLING 150

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Katalog Nr. Catalogue No.	Material-Nr. Part No.	Part description en	Material-Bezeichnung de	Bemerkung Remarks
970.001	10771275	SCHEMA ESM 150 EN/DE	SCHEMA ESM 150 EN/DE	
970.001	10771274	SCHEMA ESM 150 EN/CS	SCHEMA ESM 150 EN/CS	
970.001	10771273	SCHEMA ESM 150 EN/ZH	SCHEMA ESM 150 EN/ZH	
970.001	10771276	SCHEMA ESM 150 EN/TR	SCHEMA ESM 150 EN/TR	
970.002	10810110	OPERATING MANUAL TO ESM 150 DE	BETRIEBSANLEITUNG ESM 150 EN	
970.002	10810331	OPERATING MANUAL TO ESM 150 EN	BETRIEBSANLEITUNG ESM 150 DE	
970.002	10997524	OPERATING MANUAL TO ESM 150 PT	BETRIEBSANLEITUNG ESM 150 PT	
970.002	10997523	OPERATING MANUAL TO ESM 150 ZH	BETRIEBSANLEITUNG ESM 150 ZH	
970.002	10997526	OPERATING MANUAL TO ESM 150 TR	BETRIEBSANLEITUNG ESM 150 TR	
970.002	10997525	OPERATING MANUAL TO ESM 150 ES	BETRIEBSANLEITUNG ESM 150 ES	
970.003	10997227	SPARE PART CATALOGUE ESM EN/DE	ERSATZTEILKATALOG ESM EN/DE	

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Net Weight: 0.1 KG