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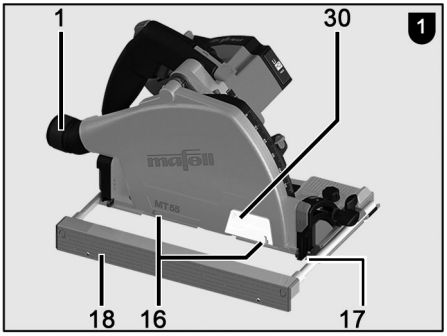
MT 55-18

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en	Plunge cut saw	Translation of the original operating instructions	25
fr	Scie circulaire plongeante	Traduction de la notice d'emploi originale	44
it	Sega ad immersione	Traduzione delle istruzioni d'uso originali	64
nl	Invalcirkelzaag	Vertaling van de originele gebruiksaanwijzing	84
es	Sierra de incisión	Traducción del manual de instrucciones original	104
fi	Upotussaha	Käännös alkuperäiskäyttöohjeesta	124
sv	Sänksåg	Översättning av originalbruksanvisningen	143
da	Dyksav	Oversættelse af den originale betjeningsvejledning	161
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sk	Ponorná píla	Originálny návod na používanie	258

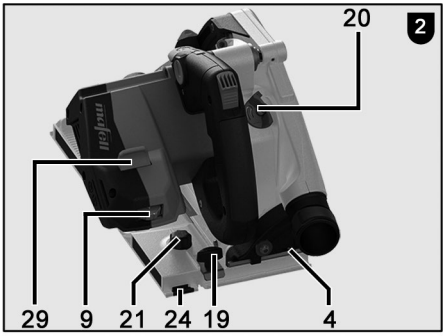
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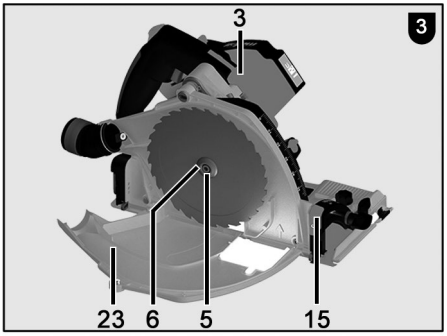
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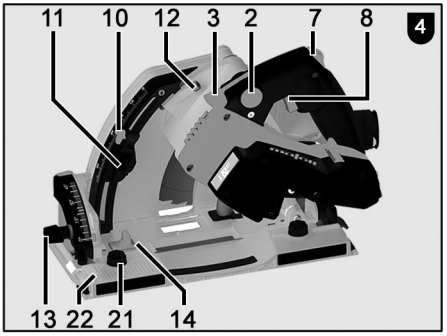
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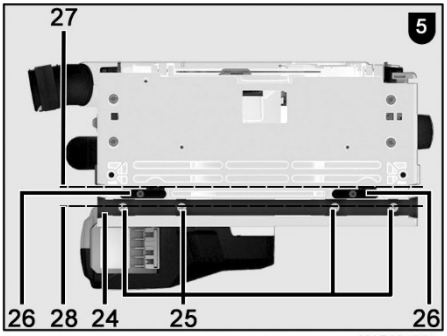
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MAF02474/a



MAF02475/a

D - EG Konformitätserklärung
Wir bescheinigen hiermit, dass die Maschine MT 55-18 den angeführten EU-Richtlinien / EU-Verordnungen entspricht. Bei Konstruktion und Bau wurden die gelisteten Normen angewendet. Bevollmächtigter für die Zusammenstellung der technischen Unterlagen: Mafell AG

GB - EC Declaration of Conformity
We herewith confirm that the machine MT 55-18 complies with the EU directives / EU regulations quoted. The standards listed were used for design and construction. Empowered person for the configuration of the technical documents: Mafell AG

F - Déclaration CE de conformité
Nous déclarons par la présente que la machine MT 55-18 est conforme aux directives UE / règlements UE applicables comme suit. Lors de la construction, les règlements suivants ont été utilisés. Plénipotentiaires pour l'assemblage des documentations techniques : Mafell AG

I - Dichiarazione di conformità CE
Con la presente certifichiamo che la macchina MT 55-18 è conforme alle direttive UE / Disposizioni UE di seguito riportate. Nella progettazione e la costruzione sono state applicate le norme elencate. Responsabile per la composizione della documentazione tecnica: Mafell AG

NL - EG conformiteitsverklaring
Wij bevestigen hiermede dat de machine MT 55-18 aan de vermelde EU-richtlijnen / EU-verordeningen beantwoord. Bij constructie en bouw werden de vermelde normen toegepast. Gemachtigde voor de samenstelling van de technische documenten: Mafell AG

E - Declaración de conformidad CE
Con la presente certificamos que la máquina MT 55-18 cumple las directivas europeas / los reglamentos europeos mencionados, los cuales forman la base tanto del diseño constructivo como de los procesos de fabricación. Apoderado legal para la compilación de la documentación técnica: Mafell AG

FIN - EY vaatimustenmukaisuusvakuutus
Vakuutamme täten, että kone MT55 vastaa mainittujen EU-direktiivien / EU-asetusten vaatimuksia. Sen suunnittelussa ja valmistuksessa on sovellettu luettelossa ilmoitettuja standardeja. Teknisten asiakirjojen laatimiseen valtuutettu henkilö: Mafell AG

S - EG Konformitetsförklaring
Vi intygar härmed att maskinen MT 55-18 uppfyller de angivna EU-direktiven / EU-förordningarna. De angivna normerna användes vid konstruktion och tillverkning. Befullmäktigad för sammanställningen av den tekniska dokumentationen: Mafell AG

DK - EU overensstemmelseserklæring
Vi attesterer hermed, at maskinen MT 55-18 opfylder de angivede EU-direktiver / EU-forordninger. Konstruktion og bygning er udført iht. de angivede standarder. Person, der er befuldmægtiget til at sammenstille det tekniske materiale: Mafell AG

RUS - Сертификат соответствия ЕС
Настоящим подтверждаем, что электроинструмент MT 55-18 соответствует указанным директивам и регламентам ЕС. При проектировании и изготовлении применялись перечисленные нормы. Уполномоченный представитель по составлению технической документации: Mafell AG

PL - Deklaracja zgodności UE
Niniejszym potwierdzamy, że maszyna MT 55-18 spełnia wymagania wyszczególnionych dyrektyw UE / rozporządzeń UE. W trakcie konstrukcji urządzenia zastosowano przedstawione normy. Pełnomocnik odpowiedzialny za zestawienie dokumentacji technicznej: Mafell AG

CZ - PROHLÁŠENÍ O SHODĚ
Tímto prohlašujeme, že stroj MT 55-18 splňuje požadavky uvedených směrnic EU / nařízení EU. Při plánování a sestavení byly využity uvedené normy.
Za sestavení technických podkladů zodpovídá: Mafell AG

SLO - ES izjava o skladnosti
S tem izjavljamo, da stroj MT 55-18 ustreza navedenim direktivam / uredbam EU. Pri konstrukciji in izdelavi so uporabljeni našteti standardi.
Za sestavo tehnične dokumentacije je pooblaščeno podjetje: Mafell AG

SVK - Vyhlásenie o zhode
Týmto potvrdzujeme, že stroj MT 55-18 je v súlade s uvedenými smernicami EÚ / nariadeniami EÚ. Pri projektovaní a stavbe boli použité normy uvedené v zozname. Osoba poverená vyhotovením technických podkladov: Mafell AG

CE

2006/42/EG (valid till 19.01.2027)
(EU) 2023/1230 (valid from 20.01.2027)
2014/30/EU
2011/65/EU

EN 62841-1, EN 62841-2-5, EN 55014-1, EN 55014-2, EN ISO 12100, EN 847-1

MT 55-18

Art.-Nr.: 91F501, 91F502, 91F503, 91F521

Mafell AG
Beffendorfer Str. 4
D - 78727 Oberndorf, den 27.07.2026

Dipl.-Ing. (FH) Thorsten Bühl
Vorstandsvorsitzender / CEO

i. V.

i. V. Dipl.-Ing. Harald Schmid, MBA
Leitung Entwicklung und Konstruktion

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1 Signs and symbols



This symbol is found in all places where you will find information for your safety.

Non-compliance with these instructions may result in very serious injuries.



This symbol indicates a potentially hazardous situation.

If this situation is not avoided, the product or objects in its vicinity may get damaged.



This symbol indicates tips for the user and other useful information.

2 Product information

for machine with Art.-No. 91F501, 91F502, 91F503, 91F521

2.1 Manufacturer´s data

MAFELL AG, Beffendorfer Straße 4, D-78727 Oberndorf / Neckar, Phone +49 (0)7423/812-0, Fax +49 (0)7423/812-218, e-mail: mafell@mafell.de, Homepage www.mafell.com

2.2 Information on the rechargeable battery

The CE Declaration of Conformity with regard to the rechargeable batteries can be found on our website www.mafell.com in the footer area under the header Legal Matters, Declaration of Conformity.

2.3 Machine identification

All details required for machine identification are available on the attached rating plate.



CE symbol to document compliance with the basic safety and health requirements according to Appendix I of the Machinery Directive.



For EU countries only

Do not dispose of electrical tools together with domestic waste!

In accordance with the European directive 2012/19/EU on waste electrical and electronic equipment and transposition into national law, obsolete electrical tools must be collected separately and recycled in an environmentally-compatible manner.



Read the operating instructions. This reduces the risk of injury.



Protect the rechargeable battery from heat, excessive solar radiation, fire, frost, water and humidity.

Protect rechargeable battery packs from humidity!



Protect rechargeable battery packs from fire!

There is danger of explosion!

Cordless Alliance System (=CAS) is a cross-manufacturer battery pack system.
Further information is available at www.cordless-alliance-system.com

2.4 Technical data

Type of motor	brushless
Operating voltage	18 V DC
Speed during idling	2660 – 5930 min^{-1}
Cutting depth 0°/45°	0 - 56.5 mm / 0 - 45 mm (0 - 2 7/32 in / 0 - 1 49/64 in)
Tilting saw unit	-1°/0°- 48°
Saw blade diameter max./min.	162 / 149 mm (6 3/8 / 5 55/64 in)
Saw blade base body thickness	1.2 mm (3/64 in)
Tool cutting width	1.2 - 3.0 mm (3/64 - 8/64 in)
Saw blade mounting hole	20 mm (25/32 in)
Hose connector diameter	35 mm (1 3/8 in)
Weight with battery (battery PowerTank 18 M 99 LiHD)	4.72 kg (10.4 lbs)
Dimensions (L x W x H)	306 x 405 x 354 mm (12 3/64 x 15 15/16 x 13 15/16 in)

2.5 Emissions

The declared noise emission values have been measured in accordance with EN 62841 and may be used for comparing the tool with another and also in a preliminary assessment of exposure.



Danger

The noise emissions during actual use of the power tool can differ from the declared values depending on the ways in which the tool is used especially what kind of workpiece is processed.

Always wear hearing protection, even when the power tool ist running idle in addition to the trigger time!

2.5.1 Noise emission specifications

Noise emission values determined according to EN 62841:

Sound pressure level	L_{PA} = 93 dB (A)
Uncertainty	K_{PA} = 3 dB (A)
Sound power level	L_{WA} = 101 dB (A)
Uncertainty	K_{WA} = 3 dB (A)

The noise measurement was recorded using the saw blade included in the standard equipment.

2.5.2 Vibration specifications

The typical hand-arm vibration according to EN 62841 is less than 2.5 m/s^2.

2.6 Scope of supply

Plunge cut saw MT 55-18 complete with:

1 saw blade KSB-WF162 GT Ø 162 x 1.8 x 20 mm, 49 teeth
1 service tool (5 mm hexagonal wrench) in bracket on the machine
1 Parallel guide fence with art. no 91F503, 91F521
1 Position indicator with art. no 91F503, 91F521
1 chip bag
1 charger APS M with item No. 91F501, 91F521
2 rechargeable battery PowerTank 18 M 99 LiHD (only with item No. 91F501, 91F521)
1 carrying case
1 operating manual
1 folder "Safety instructions"

2.7 Safety devices



Danger

These devices are required for the machine's safe operation and may not be removed or rendered inoperative.

Before operating the machine, check the safety devices for function and possible damage. Do not use the machine with missing or ineffective safety devices.

The machine is equipped with the following safety devices:

- Saw guard
- Large base plate
- Handles
- Index mechanism and brake
- Hose connector

2.8 Intended use

The plunge cut saw is exclusively suitable for longitudinal and cross cutting of solid wood and for sawing close to the edge (e.g. to create shadow joints).

Panel materials such as chip board, core board and medium density fibre board can also be processed.

Processing wood fibre insulation materials and synthetic materials (polystyrene) is also possible.

Only use the saw blades approved by Mafell in accordance with EN 847-1 in the specified ø-range.

In conjunction with the diamond saw blade you can also cut fibre cement board.

The use in industrial continuous operation is not permitted.

Any other use than described above is not permissible. The manufacturer shall not be liable for any damage arising from such other use; such use shall also void all guarantee and warranty claims.

So as to use the machine as intended, comply with the operating, maintenance and repair instructions specified by Mafell.

2.9 Residual risks



Danger

Even if used in accordance with its intended purpose and despite conforming with the safety instructions, residual risks caused by the intended use that can lead to health consequences will always remain.

- Touching the part of the saw blade that protrudes below the workpiece when cutting.
- Touching of turning parts from the side: saw blade, clamping flange and flange screw.
- Machine backlash if the blade gets stuck in the workpiece.
- Breakage of the saw blade and risk of the blade or pieces of the blade being hurled away.
- Touching live parts with the housing open and the mains plug not removed.
- Hearing can be impaired when working for long periods without ear protectors.

- Emission of harmful wood dusts during longer operation without extraction.

3 General safety instructions for power tools



Danger

Always observe the following safety instructions and the safety regulations applicable in the respective country of use!

Please also read the safety information in the enclosed folder 070500 “Safety instructions” (according to standard EN 62841-1).

4 Safety information for circular saws

4.1 Sawing method

- **Danger: Never place your hands in the vicinity or in line with the saw blade. With your other hand, support the supplementary handle or the motor casing.** If both hands are holding on to the saw they cannot get hurt by the saw blade.
- **Do not reach underneath the workpiece.** The guard cannot protect you from the blade below the workpiece.
- **Adjust the cutting depth to the thickness of the workpiece.** Less than a full tooth of the blade teeth should be visible below the workpiece.
- **Never hold the workpiece in your hands or across your leg while cutting. Secure the workpiece to a stable platform.** It is important to support the work properly to minimise body exposure, blade binding, or loss of control.
- **Hold the power tool by insulated gripping surfaces, when performing an operation where the cutting tool may contact hidden wiring or its own cord.** Contact with a "live" wire will also make exposed metal parts of the power tool "live" and could give the operator an electric shock.
- **When ripping, always use a rip fence or straight edge guide.** This improves the accuracy of cut and reduces the chance of blade binding.
- **Always use blades with correct size and shape (diamond versus round) of arbour holes.** Blades that do not match the mounting hardware of the saw will run off-centre, causing loss of control.
- **Never use damaged or incorrect blade washers or bolt.** The blade washers and bolt were specially designed for your saw, for optimum performance and safety of operation.

4.2 Kickback - reasons and corresponding safety instructions

- kickback is a sudden reaction to a pinched, jammed or misaligned saw blade, causing anuncontrolled saw to lift up and out of the workpiece toward the operator;
- When the blade is pinched or jammed tightly by the kerf closing down, the blade stalls and the motor reaction drives the unit rapidly back toward the operator;
- if the blade becomes twisted or misaligned in the cut, the teeth at the back edge of the blade can dig into the top surface of the wood causing the blade to climb out of the kerf and jump back toward the operator.

Kickback is the result of saw misuse and/or incorrect operating procedures or conditions and can be avoided by taking proper precautions as given below.

- **Maintain a firm grip with both hands on the saw and position your arms to resist kickback forces. Position your body to either side of the blade, but not in line with the blade.** Kickback could cause the saw to jump backwards, but kickback forces can be controlled by the operator, if proper precautions are taken.
- **When blade is binding, or when interrupting a cut for any reason, release the trigger and hold the saw motionless in the material until the blade comes to a complete stop. Never attempt to remove the saw from the work or pull the saw backward while the blade is in motion or kickback may occur.** Investigate and take corrective actions to eliminate the cause of blade binding.

- **When restarting a saw in the workpiece, centre the saw blade in the kerf so that the saw teeth are not engaged into the material.** If a saw blade binds, it may walk up or kickback from the workpiece as the saw is restarted.
- **Support large panels to minimise the risk of blade pinching and kickback.** Large panels tend to sag under their own weight. Supports must be placed under the panel on both sides, near the line of cut and near the edge of the panel.
- **Do not use dull or damaged blades.** Unsharpened or improperly set blades produce narrow kerf causing excessive friction, blade binding and kickback.
- **Blade depth and bevel adjusting locking levers must be tight and secure before making the cut.** If blade adjustment shifts while cutting, it may cause binding and kickback.
- **Use extra caution when sawing into existing walls or other blind areas.** The protruding blade may cut objects that can cause kickback.

4.3 Function of the saw guard

- **Check the guard for proper closing before each use. Do not operate the saw if the guard does not move freely and enclose the blade instantly. Never clamp or tie the guard so that the blade is exposed.** If the saw is accidentally dropped, the guard may be bent. Check to make sure that the guard moves freely and does not touch the blade or any other part, in all angles and depths of cut.
- **Check the operation and condition of the guard return spring. If the guard and the spring are not operating properly, they must be serviced before use.** The guard may operate sluggishly due to damaged parts, gummy deposits, or a build-up of debris.
- **Assure that the base plate of the saw will not shift while performing a "plunge cut".** Blade shifting sideways will cause binding and likely kick back.
- **Do not place the saw on the work bench or on the floor without the saw guard covering the saw blade.** An unguarded, coasting saw blade moves the saw opposite to the cutting direction and will saw whatever gets in its way. Keep in mind the saw blade's coasting time.

5 Specific safety regulations

5.1 Working range

General instructions:

- Children and adolescents must not operate this machine. This rule does not apply to young persons receiving training under expert supervision.
- Ensure that no persons are within the danger zone.
- Never work without the protection devices prescribed for the respective operating sequence and do not make any changes to the saw that could impair safety.
- Always wear your personal protective equipment while working (hearing protection, safety goggles, dust mask, safety footwear).
- Provide a free and non-slip location with adequate lighting.
- Use the thumb rest as additional possibility to guide the machine with your second hand.
- Examine the workpiece for foreign objects.
- Only saw into metal parts, e.g. nails, with a suitable saw blade.
- Do not use any cracked and warped saw blades.
- Do not use any blunt saw blades as they cause an excessive load on the motor.
- Do not use any saw blades made of high-alloy high-speed steel (HSS saw blades).
- Do not use any saw blades which are not suitable for the saw blade's idling speed.
- Immediately replace damaged cables or plugs. Replacement may only be carried out by MAFELL or an authorised MAFELL service workshop in order to avoid safety hazards.

5.2 Instructions on service and maintenance

- Clean the saw regularly, in particular the adjusting devices and guides. This is an important safety factor.
- Pay attention during transport and storage that the cable does not wind around the machine and avoid sharp bends in the cable.
- Risk of injury when changing the saw blade! Wear protective gloves when you change the saw blade and proceed with caution. You can get injured when you touch the sharp teeth of the saw blade.

- Only use original MAFELL spare parts and accessories. Otherwise, the manufacturer will not accept any warranty claims and cannot be held liable.

5.3 Note on rechargeable batteries

- Protect the machine and the rechargeable batteries from humidity!
- Do not throw the rechargeable batteries into a fire!
- Do not use any defective or deformed rechargeable batteries!
- Do not open the rechargeable batteries!
- Do not touch the contacts of the rechargeable batteries and do not short-circuit them!
- A slightly acidic, combustible liquid may leak from defective li-ion rechargeable batteries! If any battery liquid is leaking and comes in contact with the skin, immediately rinse with a copious amount of water. If any battery liquid gets into your eyes, rinse with clean water and immediately consult a doctor for medical treatment!
- Remove the rechargeable batteries from the machine before carrying out any setting, retooling, maintenance or cleaning tasks.
- Remove the rechargeable batteries when the machine is put down, transported or stored without supervision.
- Ensure that the saw is switched off when you inserting the rechargeable battery.

6 Layout

6.1 Depicted components (see Fig. 1-5)

(1) Hose connector
(2) Push-button
(3) Locking lever
(4) Hexagon screwdriver
(5) Flange screw
(6) Front clamping flange
(7) Switch lock
(8) Shift lever
(9) Setting wheel (speed)
(10) Indicator
(11) Depth stop
(12) Cylinder head screw
(13) Wing nut
(14) Slider
(15) Stop
(16) Markings
(17) Marked indicator
(18) Parallel guide fence
(19) Wing nuts
(20) Locking lever
(21) Setting wheels (guide clearance)
(22) Thumb rest
(23) Saw guard
(24) Insert
(25) Screws
(26) Guide clearance
(27) Groove (Mafell guide rails)
(28) Groove (guide rails from other manufacturers)
(29) Battery unlocking mechanism
(30) Viewing window

7 Setting / adjustment

7.1 Charging the rechargeable battery

Check whether the rated voltage of the rechargeable battery agrees with the information specified on the machine.

Rechargeable battery and charger are matched to each other. Only use original Mafell / CAS rechargeable batteries and chargers.

Before using a new machine, first of all charge the rechargeable battery.



The charging operation is described in the instructions supplied with the charger.

The rechargeable battery is equipped with a temperature monitoring system. This guarantees that the rechargeable battery is only charged in the temperature range between 0°C and 50°C. This achieves a long service life for the rechargeable battery.

A considerably shortened operating time per charging procedure means that the rechargeable battery is spent and needs to be replaced.



Danger

Explosion hazard

Protect the rechargeable battery from heat, fire and moisture.

Do not place the rechargeable battery onto heating appliances and do not expose the rechargeable battery to strong solar radiation for a longer period of time. Temperatures above 50°C are detrimental to the rechargeable battery. Allow a heated rechargeable battery to cool down before charging it.

The optimum storage temperature ranges between 10°C and 30°C.



Do not open the rechargeable battery and protect it from impacts. Keep the rechargeable battery in a dry and frost-proof place.



Danger

Cover the rechargeable battery's contacts if it is stored outside the charger. There is a fire and explosion hazard in case of a short circuit caused by metallic bridging.



Follow the instructions for the protection of the environment.

7.2 Fitting the rechargeable battery

Slide the charged rechargeable battery into the battery guide next to the handle until it perceptibly engages.



Before using the machine, convince yourself that the rechargeable battery is firmly seated in the machine.

7.3 Removing the rechargeable battery

Unlock the rechargeable battery by pressing the locking lever 29 (Fig. 2) and pull it out of the battery guide.



Do not use force to do so.

7.4 Chip extraction

Connect the machine to a suitable external dust extractor during all work generating a considerable amount of dust. The air velocity must be at least 20 m/s (65.6 ft / sec.).

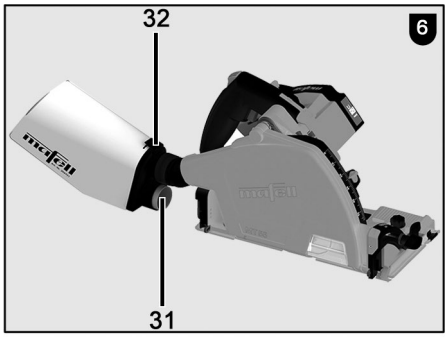
The internal diameter of hose connector 1 (Fig. 1) is 35 mm (1 3/8 in.).

Optimal chip removal can be achieved by sliding the viewing window 30 (Fig. 1) down to the level of the material to be cut prior to cutting.

A chip bag (Fig. 6) can be used instead of the external extraction. The chip bag is available as a special accessory (see www.mafell.com).

- Attach the chip bag to the hose connector.

- When processing is complete, remove the chip bag and close it with the red rubber lid 31 (included with the chip bag) to prevent accidental emptying of the chip bag.
- To empty the chip bag, swing it open with the snap-in hook 32 (Fig. 6).



7.5 Saw blade selection

For good cut quality, select the tool appropriate for the material and application from the following list and ensure that it is sharp:

For cuts along the grain in solid wood and plywood panels:

- Saw blade KSB-WL160 GT Ø 160 x 1.8 x 20 mm, 15 teeth

For cuts along and across the grain in solid wood and plywood panels:

- Saw blade KSB-WU160 GT Ø 160 x 1.8 x 20 mm, 28 teeth

For fine cuts in wood, universally suited for panel materials:

- Saw blade KSB-WF162 GT Ø 162 x 1.8 x 20 mm, 49 teeth

Cutting of aluminium and synthetic materials (polystyrene):

- Saw blade KSB-AL160 Ø 160 x 1.8 x 20 mm, 48 teeth

Cutting of laminates, HPL laminated panels, Trespa®:

- Saw blade KSB-L160 Ø 160 x 1.8 x 20 mm, 46 teeth

Cutting of cement- and gypsum-bound chipboard and fibreboard:

- Saw blade KSB-AM160 Ø 160 x 2.2 x 20, 4 teeth

7.6 Saw blade change

Danger

Unplug the rechargeable battery for all service work.

Risk of injury even if the saw wire is standing still. Wear protective gloves!

- To fold the saw guard 23 (Fig. 3) over to the side, press push-button 2 (Fig. 4) and pull the locking lever 3 upwards. Pulling the locking lever automatically locks the saw shaft and blocks the gearshift lever.
- Release the flange screw 5 (Fig. 3) by rotating it **anti-clockwise** using the hexagon screwdriver AF 5 (bracket 4, Fig. 2). Remove the screw and the front clamping flange 6.
- The saw blade can now be lifted out to the front.
- The clamping flanges must be dry and free of adhering parts, dust and grease.
- Ensure the direction of rotation is correct when inserting the saw blade.
- Then, attach the clamping flange, fit the flange screw and rotate it **clockwise** until tight.
- Close the saw guard by folding the cover shut and pressing the locking lever 3 (Fig. 3) downwards.

8 Operation

During operation and given corresponding conditions - in particular if the air is dry, or if materials such as coated board materials are used and there is no anti-static suction hose - electrostatic discharges via the operator can occur. The electronic system's protective function is activated and the machine goes into a safe state. The machine switches off automatically.

8.1 Putting into operation

Personnel entrusted to work with the machine must be made aware of the operating instructions, calling particular attention to the chapter "Safety instructions".

8.2 Switching on and off

- **Switching on:** Press the switch-on lock 7 (Fig. 4) forward to unlock it. Then, with the switch-on lock depressed, press shift lever 8.

As this is a switch without locking device, the machine will only run for as long as this shift lever is pressed.

The built-in electronic system provides for jerk-free acceleration when the machine is switched on and under load readjusts the speed to the fixed setting.

In addition, this electronic system adjusts the motor down in case of overload, i.e. the saw blade will stop. Switch the machine off then. Then switch the machine on again and continue sawing at a reduced feed speed.

Warming of the machine leads to faster overload shutdown.

The setting wheel 9 (Fig. 2) can be used to adjust the saw blade speed in a continuously variable manner between 2660 and 5930 rpm.



A suitable setting of the speed prevents the saw teeth from overheating and extends the life time of the saw blades.

Please refer to the details below for the appropriate setting of the saw blade speed for your intended use and material.

Level	Speed rpm
1	2660
2	3314
3	3968
4	4622
5	5276
6	5930

Material groups

- PVC, Plexi, PA
  - Level: **1 - 6**
- Hardwood, softwood, plywood
  - Level: **3 - 6**
- Coated panel materials
  - Level: **4 - 6**
- Fibre cement board
  - Level: **3 - 5**
- Plastic (polystyrene)
  - Level: **1 - 2**



The instructions for cutting wood can also be used for cutting structural plastic materials. When cutting plastic materials, always make a test cut to determine whether the saw will cause the material to melt. If required, adapt the cutting speed and/or the feed rate and/or the saw blade to minimise/avoid melting.



Please observe the chip removal instructions of the respective material manufacturer.

- **Switching off:** To switch off, release the shift lever 8. The built-in automatic brake limits the saw blade slowing time to approx. 3.5 s. The switch-on lock automatically takes effect again and secures the portable circular saw against accidental switch-on.

8.3 Cutting depth adjustment

The cutting depth can be adjusted in 1 mm (3/64 in) increments.

Proceed as follows:

- Adjust the indicator 10 (Fig. 4) by turning it into the top or bottom position, depending on whether you are working with or without the guide rail.

  Top position = with guide rail

  Bottom position = without guide rail

  If working with the guide rail, see also Chapter 8.9. Guide rails are special accessories.

- Set the cutting depth with the depth stop 11 according to the scale. The limit stop has a 1 mm latching mechanism.
- Intermediate dimensions can be set by rotating the cylinder head bolt 12 (Fig. 4) using the hexagon screwdriver AF 5 (bracket Fig. 2). One rotation corresponds to a 1 mm (3/64 in) change in cutting depth.

If making a separating cut, always set the cutting depth to be approx. 2 to 5 mm (5/64 to 13/64 in) deeper than the material thickness to be cut. If cutting a slot, set to the exact dimension required.

8.4 Setting for bevel cuts

For bevel cuts, the saw unit can be set to any angle between 0 °and 45°.

- Unfasten the wing screw 13 (Fig. 4).
- Adjust the angle according to the scale on the segment for tilting.
- Afterwards, tighten the wing screw 13.

In addition, the machine can be tilted to -1° or 48°.

- Release the wing nut 13 (Fig. 4).
- To tilt to -1°, pull the slide bar 14 (Fig. 4) backwards in the direction of the arrow and hold on to it.
- Tilt the machine to -1°.
- To tilt the machine to 48°, press the limit stop 15 (Fig. 3) downwards.
- Tilt the machine to 48°.
- Retighten the wing nut 13.
- 45° and 0°- limit stop are automatically reset after they have been traversed.

8.5 Plunge cuts

Danger

Risk of kickback during plunge cuts! Prior to plunging, place the machine with the rear edge of its base plate against a limit stop fastened on the workpiece. If using the guide rail (special accessory), the kickback stop F-RS available as a special accessory must be attached to the guide rail. Keep a firm hold of the machine handle during plunging and gently push the saw forward.

Additionally use the thumb rest to steadily guide the machines.

- The markings 16 (Fig. 1) on the saw guard and viewing window provide an indication of the cutting area of the saw blade when it is at full depth if using the guide rail (see also Chapter 8.9 Working with guide rails (special accessory)).
- Set the maximum cutting depth using the depth adjuster.
- When sawing, continue to move the machine until the markings on the saw guard and the viewing window have reached the marked transverse line.



with guide rail



without guide rail

8.6 Sawing according to tracings

The figure is equipped with a tracked score indicator 17 (Fig. 1) both for straight cuts and for bevel cuts. This tracing edge corresponds to the saw blade's inside.

- Secure the workpiece against shifting and arrange the workpiece supports such that the saw blade is running freely underneath the workpiece.
- Hold the machine by its handle and place the front part of its base plate onto the workpiece.
- Switch on the plunge cut saw (see Chapter 8.2). Plunge to the set cutting depth and continue to slide the machine evenly forward in the cutting direction (away from the user).
- When the cut is completed, switch off the saw by releasing the gearshift lever 8 (Fig. 4). Tilt the saw unit back into the top locked position.

8.7 Sawing with the parallel stop

When making parallel cuts, the parallel guide fence 18 (Fig. 1) serves to saw parallel to an already existing edge. The guide fence can be attached to the left or right of the machine. The cutting range on the right-hand side amounts to approx. 140 mm (5 ½ in.) and on the left-hand side to approx. 295 mm (11 5/8 in.).

- Once you have unfastened the wing screws you can adjust the cutting width 19 (Fig. 2) by moving the guide fence accordingly and afterwards retightening the wing screws.

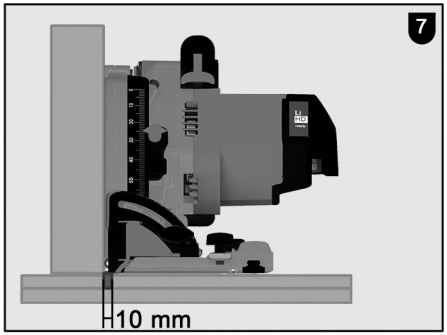
In addition, by simply turning it around (guide face for the workpiece edge points upwards), the parallel guide fence can also be used as double support to improve guidance of the plunge cut saw. Now the machine can be guided along a lath that is fastened on the workpiece, for example.

8.8 Sawing a shadow joint

A shadow joint is required for expansion joints, e.g. for shaping floor covering edges (floating) to the wall. The gap between floor and wall, which is concealed by a skirting board, allows the floor to move under load and the effects of temperature/humidity.

A shadow joint is also useful for visually contrasting surfaces, e.g. for tongue and groove ceilings. Here, a somewhat broader, colour-coordinated substructure is fitted circumferentially. This substructure later becomes visible due to the shadow joint, thus creating an even edge that can either be colour-contrasted or backlit.

- Set the cutting depth for the material to be sawn using the depth adjuster (see also Chapter 8.3 "Cutting depth adjustment").
- Position the machine on the surface of the material to be sawn.
- Ensure that the base plate bears flush against the material to be sawn and that the saw guard bears against the lateral guide face.
- Now switch on the machine and slowly plunge into the material to be sawn.
- Push the machine forward and away from you to saw the shadow joint (10 mm (25/64 in) wide). It is also possible to set the saw to -1° for this operation to provide maximum protection for the lateral contact surface (see also Chapter 8.16)



8.9 Working with guide rails (special accessory)

The plunge cut saw can be used to work with the guide rails that are available as special accessories (see www.mafell.com).

In addition, it is possible to use some of the guide rails that are freely available on the market.

When using other machine types, it can be necessary to exchange the splinter guard.

Procedure for working with the guide rail:

- Fasten the guide rail to the workpiece using lever clamps F-SZ or the suction clamping system Aerofix F-AF. This prevents the guide rail from slipping on the workpiece during sawing. Lever clamps F-SZ and the suction clamping system Aerofix F-AF are special accessories (see www.mafell.com). If the guide rail is not fastened on the workpiece, apply greater downward pressure to the workpiece during sawing.
- Use the two setting wheels 21 (Fig. 2 and 4) to set the guide clearance at the machine to achieve an as accurate as possible cutting guide.

When using other guide rails available on the market, loosen the screws 25 (Fig. 5) at the underside of the machine and remove the insert 24. Then adjust the guide clearance 26.

8.10 Scoring with a guide rail

The scoring function enables the tear-free cutting of laminated and painted surfaces, even with worn splinter guard at the guide rail (see also Chapter 8.9 Working with guide rails (special accessory)).

Scoring helps to produce a clean cut when working with panel materials. Use a suitable saw blade and ensure that it is sharp (see Chapter 7.5).

To avoid the surface from tearing out, follow the procedure below:

- First, set the guide clearance using the two setting wheels 21 (Fig. 2 and 4) (see also Chapter 8.9).
- Fasten the guide rail on the workpiece.
- Pivot the locking lever 20 (Fig. 2) clockwise to the stop. The scoring depth is now set to approx. 2.5 mm (3/32 in).
- Place the machine with the guide groove onto the guide rail.
- Set the cutting depth taking account of the thickness of the guide rail (see Chapter 8.3).
- Score the board. Pivot the locking lever 20 (Fig. 2) anti-clockwise to the stop.
- Plunge to the preset cutting depth and saw through the full board thickness.

For the scored, clean edge to be retained, the saw blade automatically offsets slightly to the right at full cutting depth.

8.11 Working with the diamond saw blade in fibre cement board (special accessories)

Follow the procedure below:

- Connect the machine to an external extraction system.
- Use a suitable saw blade (see chapter 7.3).
- Exchange the saw blade (see chapter 7.4).

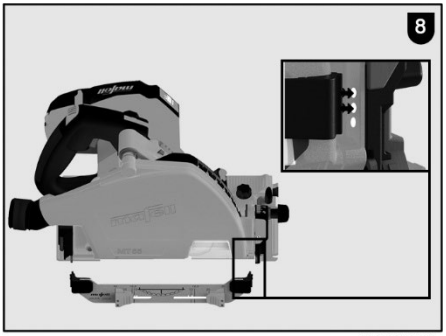
The diamond saw blade was developed for fibre cement board. The diamond-fitted teeth are more delicate than the teeth of the carbide saw blade. This is why you are working with a guide rail. Cutting other materials can lead to damage to the saw blade.

8.12 Working with the position indicator MT-PA (special accessory)

The position indicator MT-PA supports accurate working when plunging into the workpiece. It can be used with or without an additional guide rail.

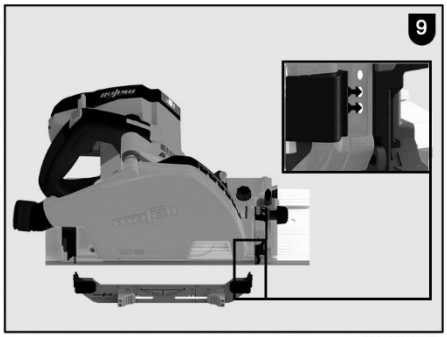
When using the position indicator, it is recommended to select a cutting depth of 10, 12.5, 25 or 50 mm as printed on the position indicator (corresponding to 25/64, 31/64, 63/64 or 1 62/64 in).

- **If working without a guide rail**, hook the position indicator into the two upper fastening holes in front of and behind the saw guard (see Fig. 8).



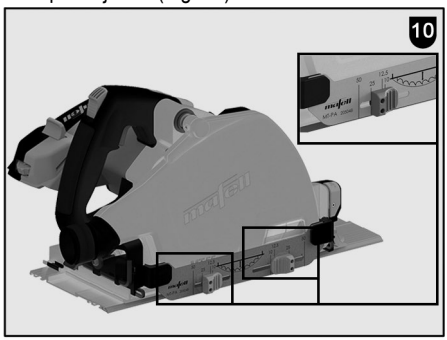
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- **If working with a guide rail**, hook the position indicator into the two lower fastening holes (see Fig. 9).



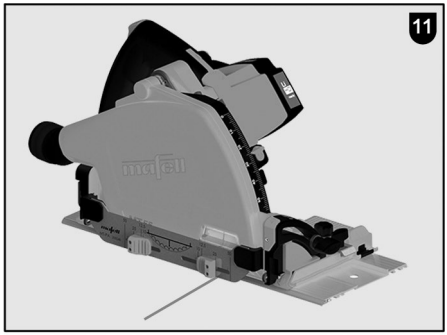
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- Now set the cutting depth using the depth adjuster (see Chapter 8.3). Move both sliders (left and right) of the position indicator to the dimension set on the depth adjuster (Fig. 10).



MAF02480/a

- When sawing, continue moving the machine until the position indicator sliders reach the marked transverse line (see Fig. 11).



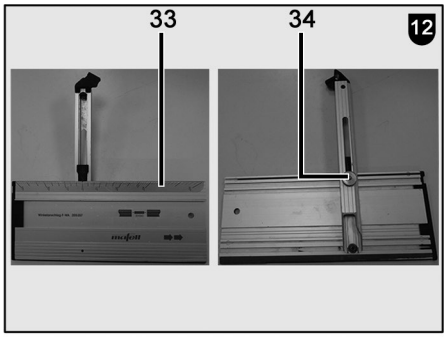
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8.13 Using the angle fence F-WA (special accessory)

The angle fence F-WA can be used to make bevel cuts between -45° and 60°. The angle fence F-WA can be connected with any guide rail using a connecting piece F-VS.

For bevel cuts, follow the procedure below:

- Set the angle for the bevel cut using the scale 33 and fasten the locking device 34.
- Align the angle fence on the workpiece.
- Cut the workpiece with the set angle.



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The rail length of the angle fence F-WA in the 90° position is 200 mm (7 14/16 in).

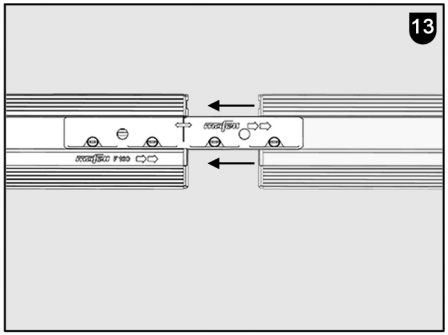
When set to 0°, push the indicator into the notch with your thumb, keep it depressed and fasten the locking device.

8.14 Using the connecting piece F-VS (special accessory)

The connecting piece F-VS is used to connect two guide rails F or a guide rail F with a special accessory (angle fence F-WA and suction clamping system Aerofix F-AF1).

Proceed as follows to use the connecting piece F-VS:

- Remove the end caps from the guide rail F.
- Push the connecting piece F-VS sideways into the guide rail F up to the centre mark and fasten with two eccentric screws.
- Slide the second rail or the special accessory onto the connecting piece F-VS until the two parts to be joined meet.
- Fasten the two parts with the other two eccentric screws.
  - ➢ The connecting piece aligns the two parts to be connected in the longitudinal direction.



MAF02483/a

If the connecting piece F-VS is not to be used, either push it all the way in and fasten it with eccentric screws or remove it.

8.15 Using the suction clamping system Aerofix F-AF (special accessory)

The suction clamping system Aerofix F-AF1 can be extended with the guide rails F using the connecting piece F-VS. It uses the suction force produced by the dust extractor to generate a vacuum under the rail profile.

Suction clamping operates in front of the material from below (for example for separating cuts) or onto the material from above (for plunge cuts).

8.16 Undercut at -1°

An undercut at -1° is used for tear-free and neat cut edges when assembling workpieces with visible abutting edges (for example visible panel joints, edges on coated or veneered materials). The two workpieces are processed from the rear with the -1° cutting angle. The edges are cut so that they can be joined flush in the visible area.

- Pull the slider 14 (Fig. 4) back in the direction of the arrow to tilt to -1°.
- Now cut the two workpieces to be joined from the rear.

8.17 Undercut at 48°

An undercut at 48° is used for bevel edges or mitres. In this case too, the edges or mitres are cut so that they can be joined flush in the visible area.

- Push the stop 15 (Fig. 3) down to pivot the machine to 48°.

45° and 0° limit stop are automatically reset after they have been traversed by the workpiece.

9 Service and maintenance

Danger
Unplug the rechargeable battery for all service work.

MAFELL machines are designed to be low in maintenance.

The ball bearings used are greased for life. When the machine has been in operation for a longer period of time, we recommend to hand the machine in at an authorised MAFELL customer service shop for inspection.

Only use our special grease, order No. 049040 (1 kg tin) for all greasing points.

9.1 Storage

Clean the machine thoroughly if the machine is not used for a longer period of time. Spray blank metal parts with a rust-proofing agent.

9.2 Transport

The included Li-ion rechargeable batteries are subject to the requirements of dangerous goods legislation. The rechargeable batteries can be transported by the user on the road without any further requirements.

For the dispatch by third parties (e.g.: air transport or forwarding agent), special requirements for packaging and labelling must be observed. In this case, a dangerous goods expert must be consulted when preparing the package.

Only dispatch rechargeable batteries if their housing is undamaged. Tape open contacts and pack the rechargeable battery so that it does not move in the packaging.

Please also observe any further national regulations.

9.3 Disposal of rechargeable batteries/batteries



Electrical tools, rechargeable batteries, accessories and packaging should be recycled in an environmentally friendly manner.

Do not dispose of electrical tools together with domestic waste!

For EU countries only:



According to the European Directive 2012/19/EC, power tools that are no longer serviceable, and according to the Battery Regulation (EU) 2023/1542, defective or used rechargeable batteries/batteries must be collected separately and recycled in an environmentally sound manner.



Return unusable rechargeable batteries/batteries directly to:

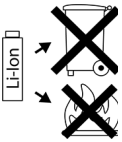
- electronic stores
- recycling centres
- municipal hazardous waste collection vehicles
- other registered local collection points
- For further information on disposal, please visit www.batterie-zurück.de online.

Mafell AG is registered with the EAR Foundation for the disposal and recycling of waste electrical and electronic equipment and battery packs:

WEEE Reg. No. DE 98107000

Battery Reg. No. DE 25385810

Rechargeable batteries/batteries:



Li-Ion:

Please observe the instructions in section “Transport”, page 41.

Subject to change.

10 Troubleshooting



Danger

Determining the causes for existing defects and eliminating these always requires increased attention and caution. Unplug the rechargeable battery beforehand!

Some of the most frequent defects and their causes are listed in the following chart. In case of other defects, please contact your dealer or the MAFELL customer service directly.

Defect	Cause	Elimination
Machine cannot be switched on	Rechargeable battery is discharged	Charge the rechargeable battery
	Rechargeable battery not engaged in end position	Allow rechargeable battery to engage completely
Rechargeable battery almost empty, an LED on the rechargeable battery is flashing.	Electronic system protects the rechargeable battery from deep discharge.	Press key 22 to check (Fig. 1 + 3). If only one LED is still glowing, recharge the rechargeable battery.
Overload, machine switches off.	A sustained load has overheated the machine or the rechargeable battery. A warning signal is sounded (beep tone). As long as the machine or the rechargeable battery have not cooled down, every further attempt to switch on the machine will result in another beep tone.	Allow the machine and the rechargeable battery to cool down. The rechargeable battery can be cooled down much faster with a charger with air cooling. The machine can also be cooled down much faster by using a different rechargeable battery and idling the machine.
The machine switches off at a sudden increase in load.	The sudden increase in load also causes the current that is required for the machine to rise. A warning signal is sounded (beep tone). This rise in current, which occurs when there is a sudden blockage or kickback, is measured and then leads to the machine being switched off.	Switch off the machine by releasing the switch trigger. Afterwards, you can switch the machine back on again and resume work as normal. Try to avoid further blockages.
The machine switches off during operation	Electrostatic charge. The electronic system's protective function is activated and the machine goes into a safe state. The machine switches off.	Use an anti-static suction hose
Saw blade jams as the machine is advanced	Feed rate too fast	Reduce feed speed
	Blunt saw blade	Release the switch immediately. Remove the machine from the workpiece and replace the saw blade

Defect	Cause	Elimination
	Tension in the workpiece	Heightened caution during sawing, risk of kickback increases.
	Poor machine guidance (for example due to free-hand guidance)	Use parallel guide fence or guide rail
	Uneven workpiece surface	Straighten the surface
Saw blade vibrates in the work piece	Saw blade not correctly adjusted	Retighten saw blade
	Work piece not fastened	Fasten work piece with clamps
Burn marks on the cut surfaces	The saw blade used is unsuitable for the task or blunt	Replace saw blade
Chip ejection blocked	Wood is too damp	Clean chip ejection Use dry wood
	Extended cutting operation without extraction	Connect machine to an external extraction, e.g. portable dust extractor
Sudden smoke emission from the motor casing	Overload of the machine's electronic system	Interrupt the power supply by removing the battery pack. The smoke emission stops. **Do not insert a rechargeable battery! Avoid inhaling the smoke!**
Plastic melts during sawing	Blunt or incorrect saw blade, cutting speed and/or feed rate too high/low	Replace saw blade Reduce/increase cutting speed and/or feed rate
Saw tooth tips overheated	Blunt or incorrect saw blade, cutting speed and/or feed rate too high/low	Replace saw blade Reduce/increase cutting speed and/or feed rate

11 Optional accessories

- Rechargeable battery PowerTank 18 M 72 LiHD Order No. 094500
- Rechargeable battery PowerTank 18 M 72 LiHDX Order No. 094523
- Rechargeable battery PowerTank 18 M 99 LiHD Order No. 094503
- Rechargeable battery PowerTank 18 M 144 LiHD Order No. 094498
- Rechargeable battery PowerTank 18 M 144 LiHDX Order No. 094520
- Rechargeable power station APS M Order No. 094492
- Rechargeable power station APS M+ Order No. 094509
- Rechargeable PowerStation APS M+ - GB Order No. 094511

Further information on optional accessories can be found on our homepage: www.mafell.com

12 Exploded drawing and spare parts list

The corresponding information in respect of spare parts can be found on our homepage: www.mafell.com