

KF 1000


 mafeil
 creating excellence

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WARNUNG

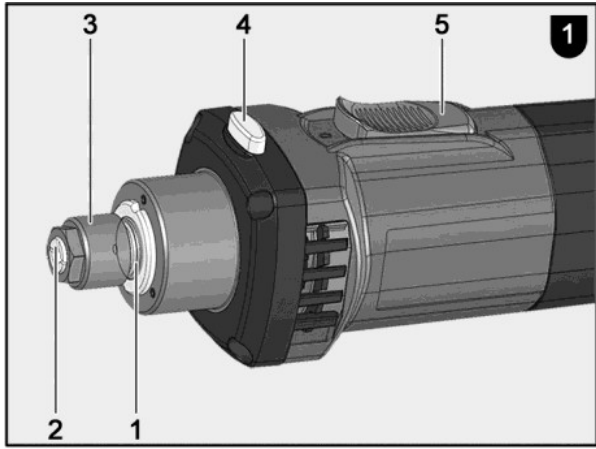
Lesen Sie alle Sicherheitshinweise und Anweisungen. Versäumnisse bei der Einhaltung der Sicherheitshinweise und Anweisungen können elektrischen Schlag, Brand und/oder schwere Verletzungen verursachen. **Bewahren Sie alle Sicherheitshinweise und Anweisungen für die Zukunft auf.**

WARNING

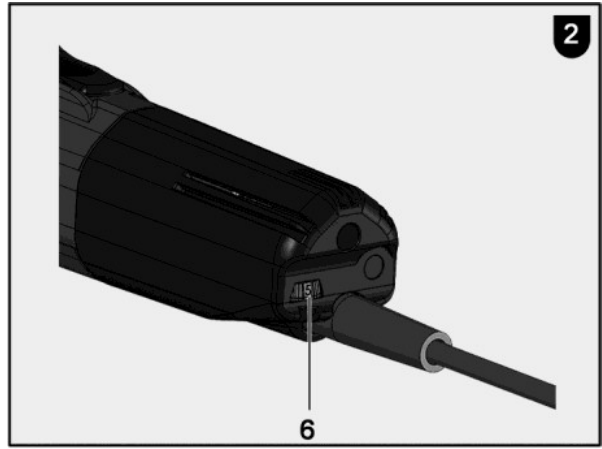
Please read all safety instructions and directions. Failure to comply with the safety instructions and directions can cause electric shock, fire and/or serious injuries. **Please retain all safety instructions and directions for future reference.**

AVERTISSEMENT

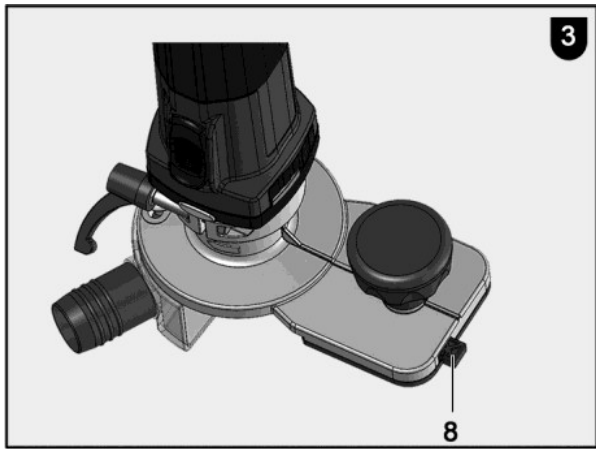
Veillez lire toutes les consignes de sécurité et instructions. Tout non-respect des consignes de sécurité et instructions risque d'être à l'origine de décharges électriques, d'incendies et/ou de blessures graves. **Conservez toutes les consignes et instructions pour pouvoir les relire à tout moment.**



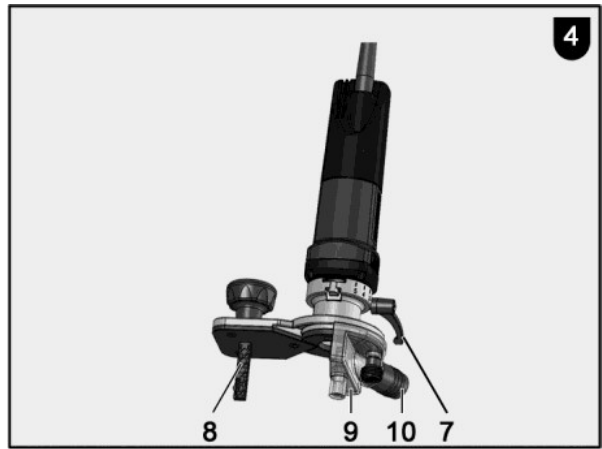
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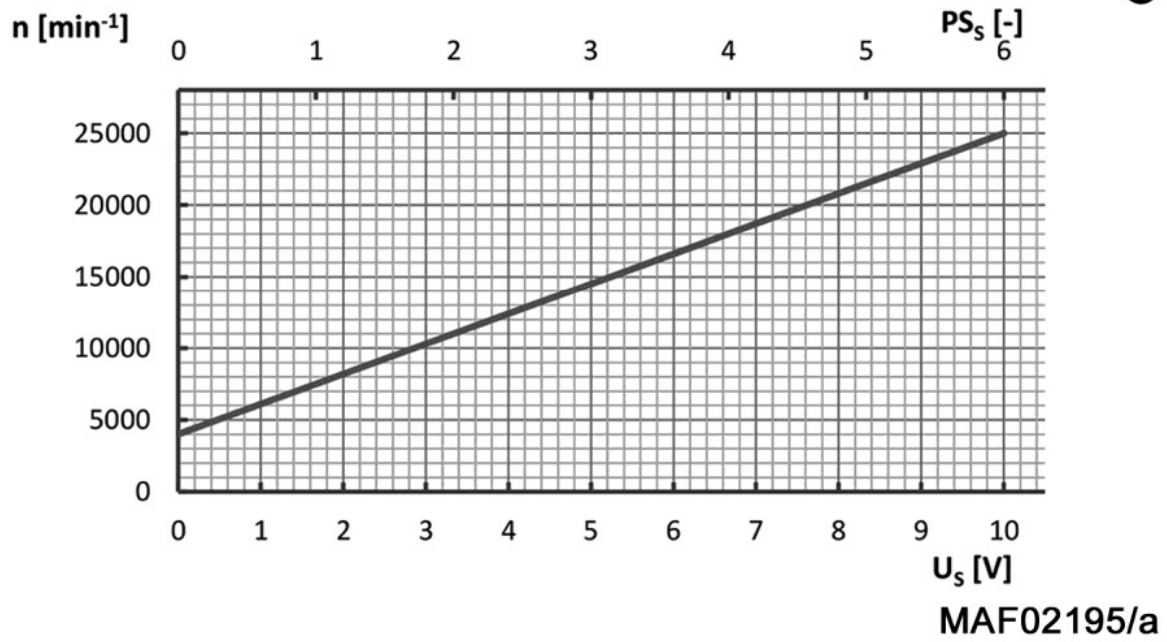
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	KF 1000
1	4.000 min^{-1}
2	7.500 min^{-1}
3	12.000 min^{-1}
4	16.000 min^{-1}
5	21.000 min^{-1}
6	25.000 min^{-1}

D - EG Konformitätserklärung

Wir bescheinigen hiermit, dass die Maschine KF 1000 den angeführten EU-Richtlinien 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 KF 1000 complies with the EU directives 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 KF 1000 est conforme aux directives CE 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 KF 1000 è conforme alle seguenti direttive CE applicabili. Nella progettazione e la costruzione sono state applicate le seguenti norme. Responsabile per la composizione della documentazione tecnica: Mafell AG

NL - EG conformiteitsverklaring

Wij bevestigen hiermede dat de machine KF 1000 aan de vermelde EU-richtlijnen 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 se certifica que la máquina KF 1000 cumple las directivas europeas mencionadas, las 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 KF 1000 vastaa mainittujen EU-direktiivien 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 KF 1000 uppfyller angivna EU direktiv. 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 KF 1000 opfylder de angivene EU-direktiver. Konstruktion og bygning er udført iht. de angivene standarder. Person, der er befuldmægtiget til at sammenstille det tekniske materiale: Mafell AG

RUS - Сертификат соответствия ЕС

Настоящим подтверждаем, что машина KF 1000 отвечает требованиям указанных директив ЕС. При проектировании и изготовлении применялись перечисленные нормы. Уполномоченный представитель по составлению технической документации: Mafell AG

PL - Deklaracja zgodności UE

Niniejszym potwierdzamy, że maszyna KF 1000 spełnia wymagania wyszczególnionych dyrektyw UE. W trakcie konstrukcji urządzenia zastosowano przedstawione normy. Pełnomocnik odpowiedzialny za zestawienie dokumentacji technicznej: Mafell AG

CZ - PROHLÁŠENÍ O SHODĚ

Tímto prohlašujeme, že stroj KF 1000 splňuje pokyny uvedených směrnic 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 KF 1000 ustreza navedenim direktivam EU. Pri konstrukciji in izdelavi so uporabljeni naštetí standardi. Za sestavo tehnične dokumentacije je pooblaščenó podjetje: Mafell AG

SVK - Vyhlasenie o zhode

Týmto potvrdzujeme, že stroj KF 1000 zodpovedá uvedeným smerniciam EÚ. Pri projektovaní a stavbe boli použité normy uvedené v zozname. Osoba poverená vyhotovením technických podkladov: Mafell AG



2006/42/EG
2014/30/EU
2011/65/EU

EN 62841-1, EN 62841-2-17, EN 55014-1, EN 61000-3-2,
EN 61000-3-3, EN 12100

KF 1000

Art.-Nr. 91C501, 91C520, 91C521

Mafell AG

D - 78727 Oberndorf, den 08.09.2022

Dipl.-Ing. Matthias Krauss
Vorstandsvorsitzender / CEO

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

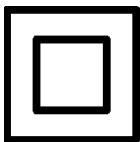
in respect of machines with item number 91C501, 91C520, 91C521

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

2.2 Machine identification

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



Protection class II



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 electric tools together with household waste material!

In accordance with the European directive 2002/96/EC 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.



To reduce the risk of injury, please read the operating instructions.

2.3 Technical data

Universal motor, radio and TV interference suppressed	230 V~, 50 Hz
Power input (nominal load)	1000 W
Current at nominal load	4.6 A
Idling speed	4,000 - 25,000 rpm
Tool holding fixture with collet \varnothing	8 mm (0 5/16 in.)
Tool shank maximum	8 mm (0 5/16 in.)
Tool shank minimum	3 mm (0 1/8 in.)
Milling cutter \varnothing , maximum	30 mm (1 3/16)
Weight without mains cable	2.1 kg (4.63 lbs)
Length of connecting cable	4 m (13 1/8 ft.)
Dimensions (W x L x H)	103 x 226 x 328 mm (4 1/16 x 8 57/64 x 12 29/32)

2.4 Emissions

The declared noise emission values have been measured in accordance with DIN EN 62841-1 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 is running idle in addition to the trigger time!

2.4.1 Noise emission specifications

Noise emission values determined according to EN 62841:

Sound pressure level	$L_{PA} = 71 \text{ dB (A)}$
Uncertainty	$K_{PA} = 3 \text{ dB (A)}$
Sound power level	$L_{PA} = 82 \text{ dB (A)}$
Uncertainty	$K_{PA} = 3 \text{ dB (A)}$

The noise measurement was done without tool at idling speed.

2.5 Scope of supply

Edge cutter KF1000 complete with:

- 1 milling table, complete
- 1 collet \varnothing 8 mm OZ8
- 1 open-ended spanner AF 17
- 1 carrying case
- 1 operating manual
- 1 folder "Safety Instructions"

2.6 Use according to intended purpose

The KF1000 is exclusively suitable for flush milling and profile milling of wood, plastics and similar materials in conjunction with the complete milling table included in the supply.

Any other use than described above is not permissible. The manufacturer cannot be held liable for any damage arising from such other use.

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

Please take into account the milling motor capacity at maximum tool diameter and anticipated machining depth. Keep power tools away from rain or moisture. The penetration of water into a power tool increases the risk of electric shock.

The appliance is not designed for non-stop industrial operation. The maximum speed can be referenced in chapter 2.3 Technical data.

2.7 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.

- Breakage of the tools and risk of the tools or parts of them 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 hazardous or potentially explosive dusts (all types) during longer lasting operation without extraction. Please note the safety data sheet of the material to be machined.

3 Safety instructions



Danger

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

General instructions:

- Children and adolescents must not operate this machine. This rule does not apply to young persons receiving training and being supervised by an expert.
- Never work without the protection devices stipulated for the respective operating sequence and do not effect any modifications on the machine that could impair safety.
- Damaged cables or plugs must be immediately replaced. Replacement may only be carried out by MAFELL or an authorised MAFELL service workshop in order to avoid safety hazards.
- Avoid sharp bends in the cable. Do not wind the cable around the milling motor especially when transporting and storing the milling motor.

Machine-specific safety instructions:

- **Only hold the power tool by the isolated handles, as the milling tool could encounter and cut into its own connecting cable.** Cutting accessory contacting a "live" wire may make exposed metal parts of the power tool "live" and could give the operator an electric shock.
- Only operate the machine with a correctly fitted milling table and extraction hood.
- Only use milling tools approved for at least 25,000 rpm according to EN 847.
- Ensure that the milling tool is firmly seated and check that it is running smoothly.

Do not use:

- Damaged tools or tools that have changed their shape.
- Blunt tools due to the excessive motor load.
- Tools that are not suitable for the milling motor speed during idling.

Instructions on the use of personal protective equipment:

- Always wear ear protectors during work.
- Always wear a dust mask during work.
- Always wear protective goggles during work.

Instructions on operation:

- Do not reach with your hands into the danger zone of the tool.
- Examine the workpiece for foreign objects.
- Never support the workpiece in your hand or over your leg. Secure the workpiece against a sturdy support.

Instructions on service and maintenance:

- Regular cleaning of the milling motor is an important safety factor.
- Only original MAFELL spare parts and accessories may be used. Otherwise, the manufacturer will not accept any warranty claims and cannot be held liable.

4 Setting / Adjustment

4.1 Mains connection

Prior to initial operation, make sure that the mains voltage agrees with the operating voltage stated on the milling motor's rating plate.

4.2 Selection of tools

Only use the collets/adaptor sleeves and suitable milling cutters listed in chapter 8 "Optional accessories".

4.3 Tool change



Danger

Pull the power plug during all service work.



Wear protective gloves during a **tool change**. The insertion tool can get very hot during longer operation and/or the insertion tool's cutting edges are sharp.

The spindle 1 (Fig. 1) of the milling motor is equipped with a precision collet 2 (Fig. 1) to hold the tools. Tightening and releasing the unit nut 3 (Fig. 1) is made easy with a spindle lock 4.

Proceed as follows for the tool change:

- Lock the spindle 1 (Fig. 1) to unclamp the tool by pressing the locking button 4 (Fig. 1).
- Detach union nut 3 with an open-ended spanner AF 17.
- Pull off the tool to the front.
- Push the new tool into the tool holding fixture up to the limit stop.
- Check the tool's seat.
- Spindle 1 is locked when the tool is clamped.
- Tighten union nut 3 with the open-ended spanner

5 Operation

5.1 Initial operation

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

Mount the milling cutter and the milling table before you put the machine into operation.

5.2 Switching on and off

- **Switching on:** Push the switch 5 (Fig. 1) forward until it engages.
- **Switching off:** Push onto the rear end of the switch. The switch jumps into off position.

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 reduces the motor output in case of an overload, i.e. the spindle stops. Switch the machine off then. Remove the cause (reduce feed speed, use sharp tool, etc.) and continue to work.

With the setting wheel 6 (Fig. 2) you can adjust the speed continuously. Appropriate speed values at the different levels can be referenced in the table on page 4.

5.3 Setting the digging depth

The milling depth can be adjusted continuously by turning the motor unit in relation to the milling table.

- Release the clamping lever 7 (Fig. 4).
- Turn the motor unit to adjust the milling depth
- Clockwise turning = increase milling depth
- Anti-clockwise turning = decrease milling depth
- Re-tighten the tension lever



The scale on the milling attachment can be used for fine adjustment.

5.4 Additional limit stop



The additional limit stop 8 (Fig. 3) can be used for machining corners.

- Pull the additional limit stop 8 (Fig. 3) from its bracket and insert it in the base plate. (Fig. 4)

5.5 Collets



Danger

To protect the thread, only screw the union nut 3 (Fig. 1) lightly onto the spindle 1, but do not tighten when no tool is inserted. Collet 2 could get pressed together too much and be damaged in the process.

- Always use the correct tool size for the respective collet.
- Oil the collet a little at the beginning and after longer use.
- Unscrew the union nut 3 with the collet 2.
- Tilt out the collet 2 to the side.
- If the collet is jammed, loosen it with a rubber hammer by a light blow from behind.

5.6 Extraction hood

Always use the extraction hood 9 while working with the tool (Fig. 4).

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 10 (Fig. 4) is 29 mm (1 9/64 in.).

The extraction hood is equipped with a thrust ring brake for milling cutters with thrust ring.

On milling cutters without thrust ring, the brake can be removed by pulling the spring-loaded brake pin upwards and off.

To reactivate the brake, press the spring-loaded brake pin into the bracket provided until it engages.

6 Service and maintenance



Danger

Pull the power plug during all service work.

MAFELL machines are designed to be low in maintenance.

Replace the carbon brushes at the latest after 125 - 150 operating hours. The spare parts can be referenced in chapter 9.

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.

6.1 Storage

If the power tool is not used for a longer period of time, it has to be carefully cleaned. Spray bright metal parts with a rust inhibitor.

7 Troubleshooting



Danger

Determining the causes for existing defects and eliminating these always requires increased attention and caution. Pull the mains plug 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	No mains voltage	Check power supply
	Mains fuse defective	Replace fuse
	Carbon brushes worn	Take the machine to a MAFELL customer service shop
Machine stops while working	Mains failure	Check mains back-up fuses
	Overload	Reduce feed speed Use sharp tool

8 Optional accessories

- Collet Ø 6 mm OZ8 + union nut Order No. 093826
- Collet Ø 8 mm OZ8 + union nut Order No. 093825
- Face-milling cutter ø 19 mm Order No. 090282

9 Exploded drawing and spare parts list

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

GARANTIE

Gegen Vorlage der Garantieunterlage (Original-Kaufbeleg) werden innerhalb der jeweils gültigen Gewährleistungsregelungen kostenlos alle Reparaturen ausgeführt, die nach unseren Feststellungen wegen Material-, Bearbeitungs- und Montagefehlern erforderlich sind. Verbrauchs- und Verschleißteile sind hiervon ausgeschlossen. Hierzu muss die Maschine bzw. das Gerät frachtfrei an das Werk oder an eine MAFELL-Kundendienststelle geschickt werden. Vermeiden Sie, die Reparatur selbst zu versuchen, da dadurch der Garantieanspruch erlischt. Für Schäden, die durch unsachgemäße Behandlung oder durch normalen Verschleiß entstanden sind, wird keine Haftung übernommen.

WARRANTY

Upon presentation of the warranty document (original invoice), we will carry out all repairs free of charge in accordance with the applicable warranty provisions, processing and mounting faults free of charge on presentation of this properly filled-in Guarantee Certificate and your original receipt. This is not valid for consumables and wearing parts. For this purpose, the machine or the appliance is to be forwarded freight paid to our plant or to an authorized MAFELL repair service. Refrain from trying to carry out the repairs yourself as otherwise your warranty claim will become extinct. We do not accept any liability for any damage resulting from improper handling or normal wear.

GARANTIE

Sur présentation de cette carte de garantie, dûment remplie par votre fournisseur et accompagnée de l'original de la pièce justifiant l'achat, nous effectuerons gratuitement toutes les réparations faisant l'objet d'un recours en garantie pendant la période indiquée, de la construction ou de la fabrication, à l'exclusion des pièces de consommation et d'usure. La machine ou l'appareil doit être pour cela expédié franco de port à notre usine ou à un atelier de service après-vente MAFELL. Évitez de procéder vous-mêmes à toute réparation, ceci périmant tout recours en garantie par la suite. Nous déclinons toute responsabilité en cas de dommages découlant d'une manipulation non conforme ou d'une usure normale.

GARANZIA

Dietro presentazione del presente certificato di garanzia, regolarmente compilato, insieme alla ricevuta originale, vengono eseguite gratuitamente tutte le riparazioni necessarie riscontrate dai nostri accertamenti, entro il periodo di garanzia vigente, dovuti a difetti di materiale, di lavorazione o di montaggio. Da ciò sono esclusi pezzi di consumo e pezzi soggetti ad usura. A questo scopo la macchina ovvero l'apparecchio (elettrico) va spedito franco di porto allo stabilimento oppure a d un punto di assistenza clienti della MAFELL. Evitate di tentare Voi stessi di effettuare la riparazione, altrimenti il diritto di garanzia viene revocato. Non ci assumiamo alcuna responsabilità per danni derivanti da trattamento non conforme o da normale usura.

GARANTIE

Tegen vertoon van dit reglementair ingevuld garantie-bewijs, samen met het originele koopbewijs worden binnen de telkens geldige garantieregelingen gratis alle reparaties uitgevoerd, die volgens onze constateringen op grond van materiaal-, bewerkings- en montagefouten vereist zijn. Verbruik- en slijtagedelen zijn hiervan uitgesloten. Hiervoor moet de machine resp. het apparaat vrachtvrij naar de fabriek of naar een MAFELL-klantenservice worden gestuurd. Vermijdt u het de reparatie zelf uit te voeren, omdat daardoor de garantieclaim vervalt. Voor schade die door ondeskundige behandeling of door normale slijtage is ontstaan, wordt geen aansprakelijkheid aanvaardt.

GARANTÍA

Presentando este documento de garantía (recibo original de compra), todas las reparaciones necesarias por defectos de material, errores de mecanizado o faltas de montaje en el marco de las reglamentaciones de la garantía concedida por parte del fabricante se efectuarán libre de gastos. Se excluyen sin embargo piezas fungibles o de desgaste. Para ello, entregue a porte pagado la máquina o el equipo a las fábricas del fabricante o a uno de los puntos de asistencia técnica de MAFELL. No realice nunca las tareas de reparación a cuenta propia. De lo contrario, caducará el derecho a garantía. No se asumirá responsabilidad alguna por los daños que se desprendan del uso inapropiado ni por el desgaste en el uso diario.

TAKUU

Tätä takuukuittia (alkuperäinen ostokuitti) vastaan suoritetaan voimassa olevan takuuaian sisällä maksutta kaikki korjaukset, jotka olemme todenneet tarpeellisiksi materiaali-, valmistus- ja asennusvirheistä johtuen. Käyttö- ja kuluvat osat ei kuulu takuupiiriin. Korjausta varten kone tai laite on lähetettävä asianmukaisesti postitettuna joko tehtaalte tai johonkin MAFELL-asiakaspalveluun. Älä yritä korjata konetta itse, koska siinä tapauksessa takuu sammuu. Takuu ei vastaa vahingoista, jotka johtuvat asiaankuulumattomasta käytöstä tai normaaliista kulumisesta.

GARANTI

Mot uppvisande av kvitto utförs kostnadsfritt, under giltiga garantiåtaganden, alla reparationer som efter fastställande från vår sida kan härledas till material-, bearbetnings- eller monteringsfel. Förbruknings- och förslitningsdelar undantagna. Maskinen eller verktyget måste skickas fraktfritt till fabrik eller till MAFELLkundservice. Undvik att själv försöka utföra reparationen då detta leder till att garantianspråk förfaller. För skador som uppkommer på grund av felaktig behandling eller normalt slitage övertas inget ansvar.