

MULTI-PLANE HD MILLING DISC



OPERATING MANUAL ENGLISH

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Translation of the original operating manual

0 Specified use

The Multi-Plane HD milling disc (art. no.: 20114) has been authorized for the milling of the following materials:

- aluminium, aluminium alloys and cast aluminium
- Low-stability non-ferrous metals (copper, zinc, brass)
- Fibre-reinforced plastics and wood

They may only be used with commercially-available angle grinders from 115 to 125 mm with hand protection. The Multi-Plane HD may not be used in an explosive atmosphere or with flammable materials or liquids.

The most common application is the preparation and post-processing of welding seams (chamfering and cleaning up) and the rough machining of cast parts (finishing). In cases of doubt, the use of the discs should be checked before the planned application.

The Multi-Plane HD milling disc may not be used for cutting.

1 Information for safe use

Always comply with the following specifications to ensure safe use:



Danger!

Chips will develop during material processing in a fashion similar to the use of a milling machine. When using the Multi-Plane HD, always wear gloves with cuffs (EN 388), long-armed work clothing, a mask (EN 166), ear protectors (EN 352), a particle filter P1 / FFP1 (EN 143 / EN 149) and safety boots (EN ISO 20345).

Make sure that the work station is clean, bright and well-ventilated.

The workpiece must always be clamped or secured safely and securely. The workpiece may not vibrate or slip during processing.

2 Technical data

Dimensions: 115 × 20 × 22.2 mm

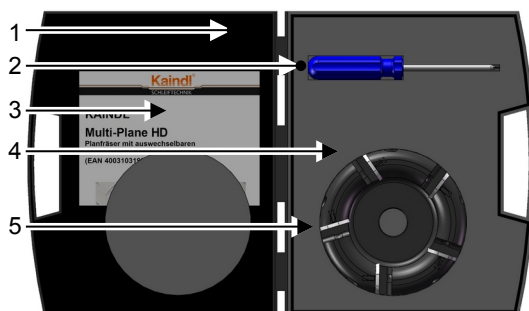
Max. RPM: 14 500/min

Cutting: Ground carbide

Tightening torque of the cutting bolts: 4Nm

Use: manual milling machine "MAN"

3 Scope of delivery



Pos.	Designation
1	Box
2	Torx screwdriver
3	Operating manual
4	Multi-Plane HD milling disc
5	Carbide cutters

4 Fitting the Multi-Plane HD milling disc

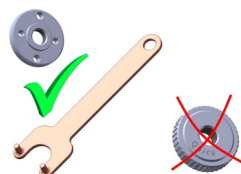


Danger!

Do not use a clamping system or quick clamping nuts which can be tightened by hand and which do not require a tool. These clamping system can work free.

Disconnect the angle grinder from the mains before fitting.

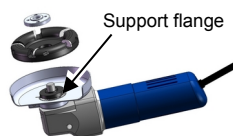
Make sure that the direction of revolution of the angle grinder corresponds with the direction of revolution arrow on the Multi-Plane HD milling disc.



The fitting of the Multi-Plane HD milling disc must be performed in accordance with the specifications issued by the manufacturer of the angle grinder pertaining to fitting grinding wheels.

The appendant support flange of the angle grinder must remain on the spindle (see fig. on the right).

Always use the correct face spanner to tighten the clamping nut.



5 Working with the Multi-Plane HD milling disc



Danger!

The Multi-Plane HD milling disc may only be used to work around the edge and not against it. The carbide cutters may not be damaged and worn.

Do not brake the Multi-Plane HD milling disc on the workpiece, otherwise the carbide cutters can break.

Working with the Multi-Plane HD milling disc is performed with little contact pressure in a fashion similar to a grinding disc for metal. A high level of contact pressure increases the wear of the carbide cutters and increases the requisite holding force.

Angle grinders must always be held with both hands. Further information about safe working practices with angle grinders is provided in the manufacturer's operating manual provided for the angle grinder. Always comply with these specifications.

6 Changing the carbide cutters



Danger!

Use only original clamping bolts (art. no.: 19071). Using other bolts can result in tension fissure of the carbide cutters (art. no.: 19994) or failure of the bolts.

Release the bolts [1] with the T 15 Torx screwdriver included in the scope of delivery and remove the carbide cutters [2].

Clean the milling machine and clamping surfaces from any soiling or built-up edges. The clamping surfaces must be undamaged.

Clean the bolt heads with cleaning solvent or resin solvent before releasing them, especially after processing wood. Place the Multi-Plane milling disc in a cleaning solution overnight if required.

Insert the new carbide cutters and tighten the bolts with a torque wrench. The tightening torque must amount to **4 Nm!**



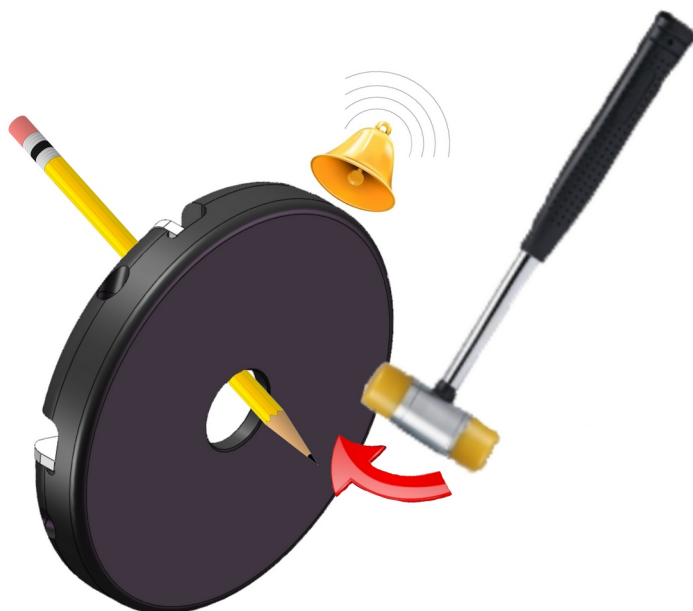


DANGER!

The Multi-Plane HD milling tool is subject to considerable pressures and stresses and requires regular inspection and maintenance.

Therefore, check the following before each use:

- The tight and perfect fit of the screwed carbide cutting elements.
- The carbide cutting elements must not have any cracks or damage and must be perceptibly sharp.
- Subject the Multi-PlaneHD to a sound test before each use to ensure that the material structure does not show any invisible damage/cracks. To this end, the milling disc is placed free-floating on a rod or pin and struck lightly to the right or left of the centre line. Milling discs without a crack produce a clear bell-like sound.



Should any of these points not present the desired characteristics or response, do not perform any work with the Multi-Plane!

8 Spare parts

Set of 5 carbide cutting inserts with clamping bolts: Art. no.: 19994

Individual clamping bolt: Art. no.: 19071

9 EC declaration of conformity

in accordance with the Machinery Directive 2006/42/EC, Appendix II 1.A

The manufacturer:

Kaindl-Schleiftechnik
Reiling GmbH
Remchinger Straße 4
75203 Königsbach-Stein

declares that the following replaceable equipment:

Product designation: KAINDL Multi-Plane HD for the manual processing of aluminium,
wood and plastics
Ø 115 × 20 × 22.2 mm

Article no.: 20114

Model year: from 02/2022

The specifications of the directive(s) stated above, including any changes valid at the point at which the declaration was issued.

The following harmonized standards were applied:

EN ISO 12100

The following national standards and regulations were applied:

Responsible for sending the documents:

Henrik Reiling, Reiling GmbH, 75203 Königsbach-Stein

Place: Königsbach-Stein

Date: 07 April 2022



Managing director