Precision meets Motion

Manual

EWS . saw & disc milling cutter

EWS Tool Technologies

EWS . saw & disc milling cutter

Bedienungsanleitung

EWS . saw & disc milling cutter

Manual

1. Identification

Type: **EWS . saw & disc milling cutter**

Designation: Saw & disc milling cutter

Manufacturer:
EWS Weigele GmbH & Co. KG
Maybachstr. 1
73066 Uhingen
Tel. +49 (0)7161 93040-100
www.ews-tools.de

2. Product specifications

2.1. unctions and area of application

Here we have a driven tool which facilitates an economic production of slots, bevels or grooves possible on a CNC lathe. Due to the modular design of the milling head, the spindle unit can be easily exchanged, which allows the use of a num-ber of hob cutter diameters.

2.2. Technische Daten

Dimensions:	see print (machine specific)
Max. rotations:	see print
Max. torque at the drive:	see print
Driving reduction:	Standard 3:1 or 2:1
Direction of driving torque:	dual
Cutting arbor diameter:	Ø08 bis Ø32 (machine specific)
Cutter type:	Disc or hob cutter (for cutters with hard steel applications, at least two cut-tings should always be simultaneously undertaken. Otherwise damage may occur to the bearings and drive.)
Cutter diameter:	see print (machine specific)
Lubrication:	Permanent lubrication
Coolant supply:	via coolant tube directly to the cutter

2.3. Machine requirements

Working area:
To avoid collisions with the turret socket or the housing it is important to have sufficient space when rotating the turret with the **EWS . saw & disc milling cutter** Depending on the build size, one or two neighbouring stations could be impacted.

Torque requirements:
It is essential that the machine has enough torque to run to cutting tool effectively.

2.4. Safety

Any and all OSHA or other applicable governing body laws must be observed while operating the **EWS . saw & disc milling cutter** .

2.5. Safe disposal

The operator has to comply with the regulations of the environmental protection law.

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3. Operating instructions

3.1. Set up

The tool must be mounted on the machine's turret before adjusting the EWS . saw & disc milling cutter
In so doing, observe that:

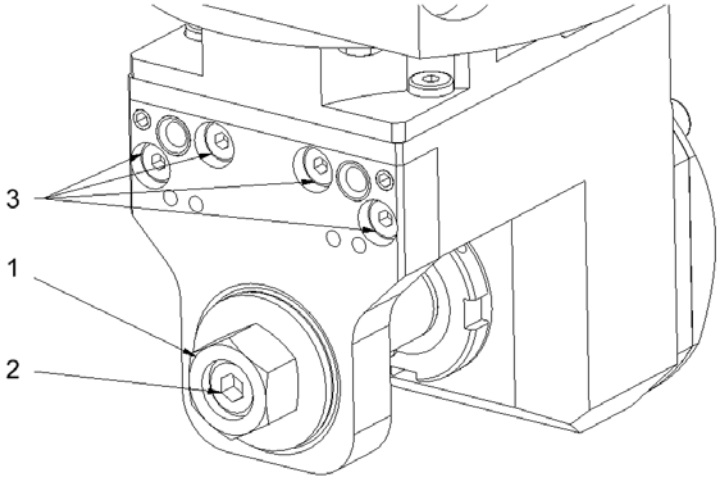
The position of the twin surface on the tool head corresponds to the groove in the machine drive for a twin drive. for a gear drive, the teeth of the drive shaft on the tool head and the turret must engage.
It is important not to damage the O-ring seal at the base of the tool when mounting on the turret.

3.2. How to change milling cutters

The steps for the changing the milling cutter are as follows:.

1. Loosen the Nut (Pos.1), prevent the arbor from rotating by holding it steady with the appropriate allen wrench. (Pos.2).

2. Loosen and remove the four cap screws (Pos.3).



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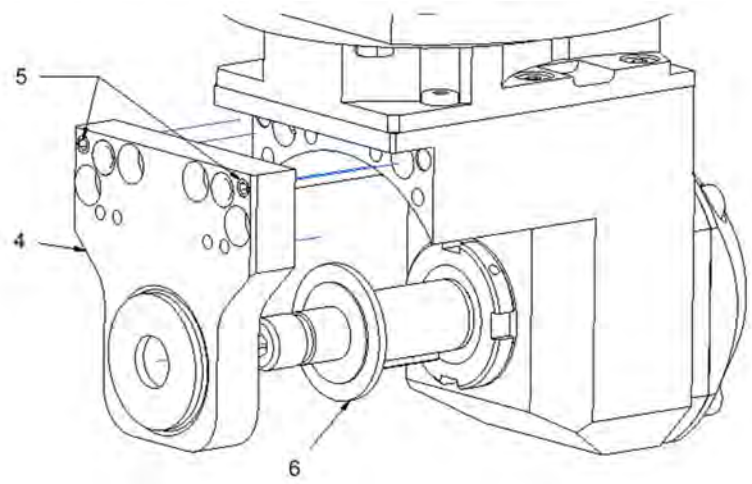
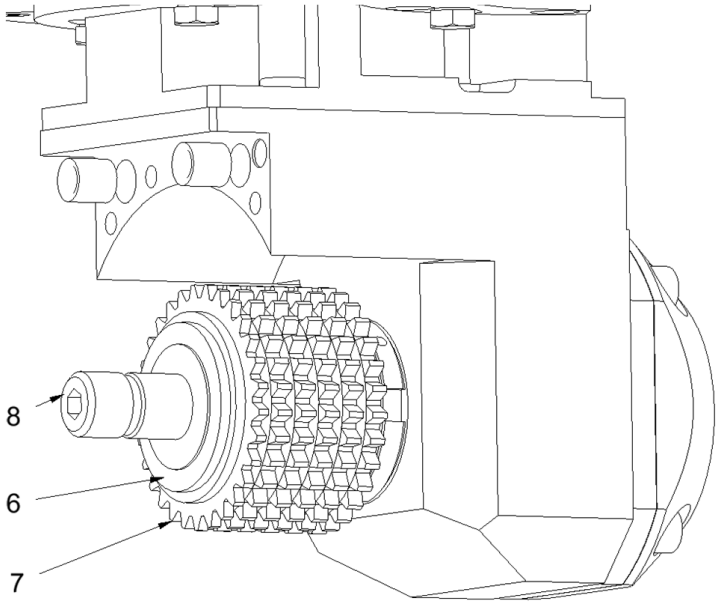
3. Remove the support plate (Pos.4) together with the grooved ball bearing and cutter spindle rings (Pos.6). The 2 set screws (Pos.5) should be used to evenly separate the support plate from the tool body.



4. Mount the milling cutter (Pos.7) with the corresponding cutter spindle ring (Pos.6) onto the mandrel (Pos.8).



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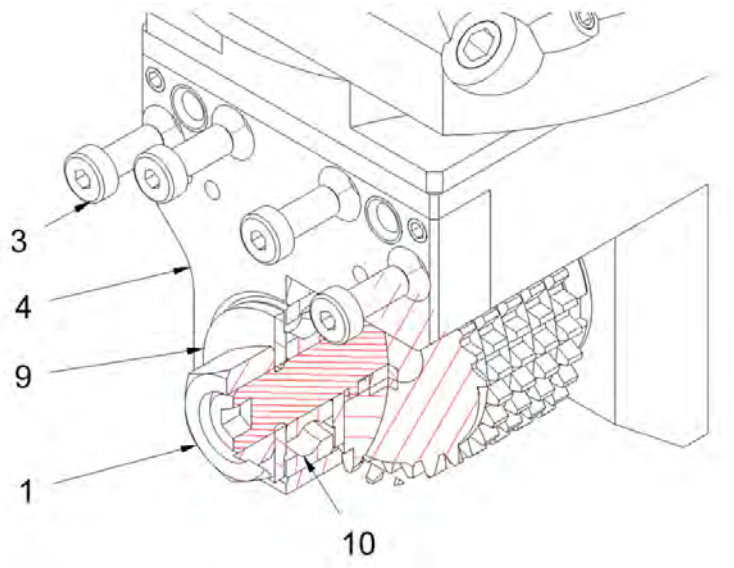
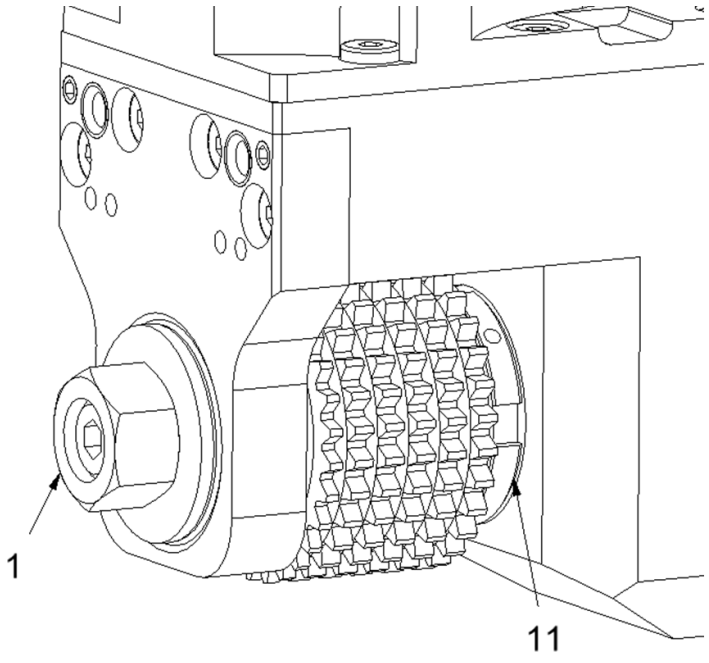
5. After the milling cutter set has been mounted, the support plate (Pos.4) with the disc (Pos. 9) and the grooved ball bearing (Pos.10) has to be installed. The support plate gets tightened by four cap screws (Pos.3). The nut (Pos.1) must be installed finger-tight at this point.



6. Now follows the fine adjustment of the finger-tight nut (Pos.1). This is conducted by adjusting the spanner nut (Pos.11) until the milling cutter has reached the required position. Finally the entire milling cutter set is tightened by the nut (Pos.1) and the spanner nut (Pos.11) is secured by the radial lock screws.



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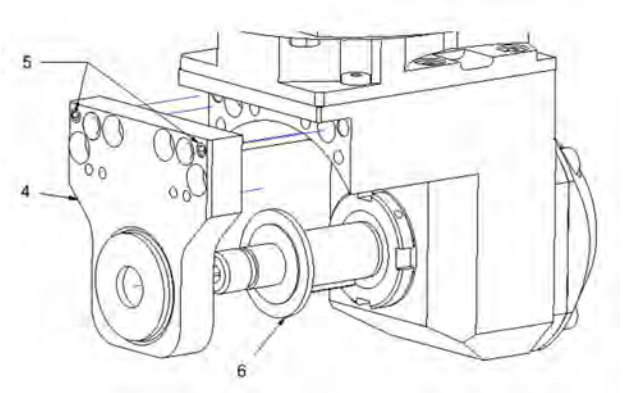
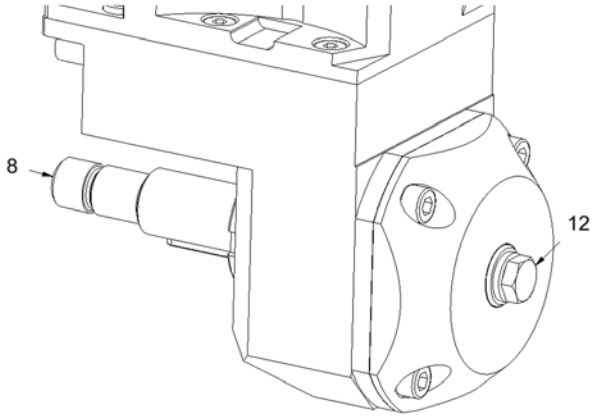
3.3. How to change the cutter arbor

he modular **EWS . saw & disc milling cutter** has interchangeable cutter arbors with different diameters. Use the following procedure to change the arbors:

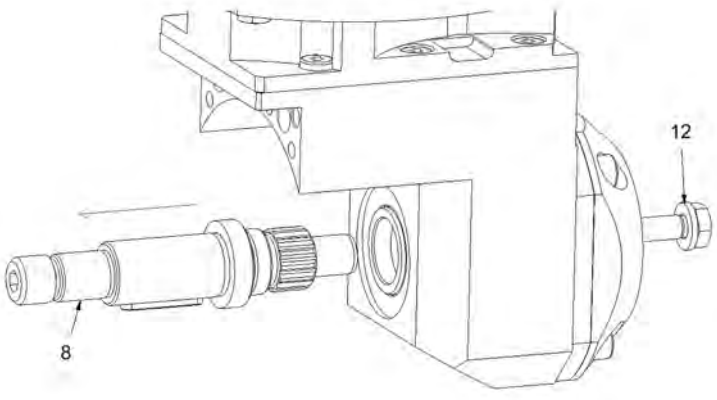
1. Remove the support plate (Pos.4) together with the grooved ball bearing and cutter spindle rings (Pos.6). This operation is similar to changing the milling cutter. (see 0 How to change milling cutters).



2. Loosen the hex screw (Pos.12) on the opposite side of the support plate by retaining the arbor with the appropriate allen wrench at the end of it (Pos. 8).



3. After the removal of the hex screw (Pos.12), pull the milling arbor forward (Pos.8) and replace it with the arbor that you want to use.



4. The reassembly must be conducted in reverse order Steps 3-1.

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3.4. Max. tightening torque for nut pos. 1

Thread size	Tightening torque max. [Nm]
M8	23
M10	45
M12	80
M16	180
M20	300

→ For tightening torques for screws, see the operating instructions for "driven and static tools"

4. Cleaning and maintenance

4.1. Cleaning

leaning with a cloth or a brush is sufficient.

Important: Cleaning with compressed air is not allowed as particles can be blown into the seal surfaces on the tool and cause damage to the gears and bearings. Do not use benzene or in-dustrial washing machines!

4.2. Preventive maintenance

After operating the EWS . saw & disc milling cutter it is recommended to lubricate the metallic parts to prevent corrosion.

4.3. Maintenance

An annual inspection is recommended.
The EWS . saw & disc milling cutter is permanently lubricated and maintenance free.

5. Warranty

The General Terms of Sales and Delivery of the manufacturer apply (see www.ews-tools.de).

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Tooling Systems and Turrets

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