

## **General rules for the utilization of the cutter heads**

**EN** General rules for the utilization of the cutter heads 2-7

**ES** Normas generales para la utilización de los cabezales 8-13

**FR** Normes générales pour l'utilisation des porte-outils 14-19

**IT** Norme generali per l'utilizzo delle teste 20-25

**DE** Allgemeine Vorschriften  
für die Verwendung von Messerköpfen 26-31

**RU** Общие правила по использованию насадных фрез 32-37

**PL** Ogólne warunki użytkowania głowic CMT 38-43

# CUTTER HEADS

## 1.1 CONVENTIONAL USE



### 1.1.1 RPM

Every cutter and cutter head is etched with a recommended maximum RPM. This information must be taken into consideration throughout the installation process. Never exceed the recommended RPM.

### 1.1.2 Application type

This tool shall be used in accordance with the feed etching indicated on the tool body.

#### • MAN

(manual feed)



Cutting against the feed



Climb cutting



Tools marked "MAN" may also be used on machinery with mechanical feed. Climb cutting is strictly prohibited.

#### • MEC

(mechanical feed)



Cutting against the feed

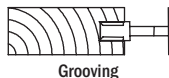
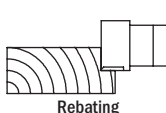


Climb cutting



Tools marked "MEC" are only allowed to be used on machinery with mechanical feed! Always follow manufacturer's instructions, which accompany the machine and indicate the appropriate tool for use.

### 1.1.3 Woodworking method



### 1.1.4 Materials accepted for use

Wood, wood-based materials, and materials with similar cutting properties as per those listed in section "Field of Application". Do not use on metal surfaces.

## 1.2 SAFE HANDLING



### 1.2.1 Application for use

It is strongly recommended that users follow all European and National Safety Regulations including all safety provisions as set forth in EN 847-1 and EN 847-2. The tool must only be used as described in section "1.1 Conventional Use".



### 1.2.2 Packaging and handling

Always store and transport knives in their intended packaging to avoid damaging cutting parts.

Handle the knife with caution when you are preparing to store it.

Attention: Danger of injury due to cutting parts.

Always wear safety gloves especially when replacing knives, disassembling the cutting tool, or while cleaning and performing maintenance operations.



### 1.2.3 Assembly and mounting of cutting tool

Before using the cutting tool, and when in first use, check all cutting parts for damage; check that fastening screws are tight as well as clamping mechanisms, to ensure proper positioning and safety.

Always mount all pieces. If possible, use corresponding parts of similar weight in order to prevent imbalance.

Tensure that all parts of the cutter head are kept clean at all times. It is important that there is sufficient space left to allow the correct evacuation of dust and debris.

All cutting surfaces as well as clamping elements must be free of residue such as resin, grease, oil and water.

Tighten/loosen the fastening screws and locking nuts, using the spanner provided and applying the recommended torque value.

The use of tool extensions and fastening methods involving hammering are absolutely prohibited.

The heads of the screws must be kept clean at all times in order to guarantee proper fastening and secure grip with the spanner and to prevent damage to the screws themselves.

Unless indicated otherwise, the fastening screws must be tightened in proper sequence, that is, from the inside out.

Ensure that the tool is mounted, clamped and used in accordance with the manufacturer's instructions.

Carefully read all operating instructions, which accompany the machinery and always verify the direction of rotation.



Operation of the machinery during the mounting of the tool is strictly prohibited. (Please refer to the Operating Instructions Manual which accompany the machinery)

Cutting parts must never come in contact with one another, with clamping mechanisms and/or with other parts of the machinery.



When stacking the cutting tools, ensure that the cutting parts do not interfere with one another. It is strictly prohibited to apply lateral pressure, for example, in order to interrupt the operation of the tool.

Danger of pull-out!

Danger of serious injury from thrown parts!

Danger of serious injury!



During assembly, ensure that the tool has been mounted securely and sits firmly in the tool seat.

The area in which tool is mounted must be free of residue, such as grease, oil and water. The surface of the clamping wedge must be flat.

### 1.2.4 Caution



Regularly check cutting parts, clamping elements, screws and tool body for potential damage – especially if the tool accidentally came into contact or collided with parts of the machinery itself such as clamping elements and parts of dust extraction systems.

Only use genuine CMT accessories (knives, fastening elements, clamping wedge, fastening screws, setting gauges, etc...).

Carrying out regular checks of the cutting tools ensures that damage is promptly detected and repaired in time prior to next use.



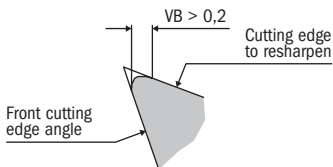
Never use a deformed or damaged tool. All damaged tools must be inspected by an expert.

Tools bearing cracks or damaged cutting parts should be tagged and taken out of service. It is strictly forbidden to use any damaged tool.

## 2 TOOL – SPECIFIC PARTS

### 2.1 Maintenance

For reasons relating to work safety, the cutting parts must be repaired in the event that:



- 1) Wear and tear marks VB on the cutting tool are greater than 0,2mm – particularly noticeable in the areas in which the greatest wear takes place.
- 2) Wear on the cutting parts is visible in the form of cracks and breaks.



All woodworking tools must be protected against humidity in order to prevent corrosion. The cutting parts must be cleaned regularly as resins and glue tend to accumulate on the cutting edges – proper maintenance ensures increased longevity of the tool as well as enhanced operational safety.



Cleaning detergents can irritate the skin, eyes and damage the tool. Always use protective hand and eye gear while carrying out maintenance. Use only the recommended detergents (see Section 4 Detergents/Cleaning Products). Always follow the detergent manufacturer's instructions when using detergents.

### 3 REPAIRS & MODIFICATIONS

#### 3.1 General Instructions

Tool sharpening must be carried out only by qualified experts and in accordance with the manufacturer's instructions as it is imperative that the characteristics and original geometry of the cutting parts not be altered in any way.



When sharpening is required, the proper grinding equipment must always be used. Never modify the space between the cutting edge and the body or limiters. Tolerance/Distance is determined as per European Standard requirements EN 847-1.

Use only spare parts that correspond to manufacturer's requirements for the replacement of original parts. All spare parts must maintain tolerances, which guarantee proper clamping system.

In the event of any modification such as retipping, the etching must be revised and updated accordingly on the tool, specifying the modification that was carried out. Include the name and trade stamp of the company that performed the modifications or replaced the cutting tips.



It is strictly prohibited carrying out any modification to the tool (such as the removal of the pins). Repairs or modifications to the tool may only be carried out by the manufacturer or by special authorized workshops. Risk of tool breakage!

Specialists/Specialized workshops designated for repairs must be experts in the following repair fields:

- Up-to-date engineering technologies (construction & project design);
- National Provisions for the production of woodworking tools;
- EU Safety Directives & Legislation.

Required Competencies:

- Standard equipment
- Competency to perform related operations

Regardless of the operation carried out on the tool whether sharpening, repair or modification, the tool is required to meet EU Standard as per EN 847-1, with particular attention to:

- Balance quality
- Cutting part thickness
- Cutting edge protection
- Deflector width
- Projection of the spurs

#### 4 DETERGENTS/ CLEANING PRODUCTS

It is imperative that thorough cleaning of the tool is carried out after every use. It is recommended that Formula 2050, product code 998 or equivalent.

### 5 CHANGING THE MOUNTING PARTS

Please refer to section "1.2 Safe handling".



#### 5.1 Tool set (If applicable)

A tool set consists of many individual tool pieces.

Only methods used in accordance with the specifications provided by the machine manufacturer regarding original parts (i.e. spacers) can be used to modify the cutting tool (i.e. cutting depth). An individual tool piece within the tool set should never be used independently unless indicated otherwise by the manufacturer.

## 5.2 Changing the cutting parts

Attention when replacing the carbide/HS knives!

Ensure to take the following precautions:

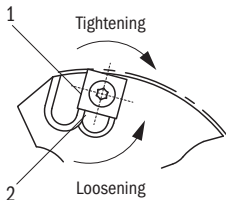
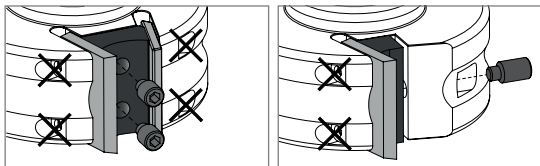
1. The clamping screws must only be loosened using the spanner provided to you by the manufacturer. Never use tools of any other type as they may damage the clamping system.
2. Remove the blocking wedge, the clamping elements and the knife.
3. Clean the blocking wedge, the clamping elements, the knife, as well as the replaceable knives and ensure they are maintained in the correct position.
4. Take care in installing the replacement knife or the interchangeable knives in the correct position.
5. Ensure that the knives are correctly mounted and locked into position or depending on the tool type, locked onto the setting gauge according to the specifications for that knife. Tighten the clamping screws with the spanner provided (torque – minimum 3.5Nm). In the case of adjustable cutter heads, ensure that the universal knife is correctly positioned and locked into place and that the torque 3 Nm.
6. For cutter heads with setting gauges, ensure that the knives are mounted and locked into place on the same side.



It is strictly forbidden to loosen or remove the pins as shown in the illustration (marked by X). Not all cutter heads are equipped with these pins (please refer to CMT catalogue).

For these specific cutter heads, changing the knife is only possible by removing the blocking wedge.

Spare parts for the pins not included.



## 5.3 Changing the cutting knives

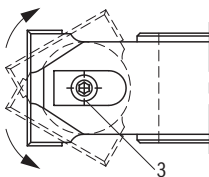
1. Loosen the clamping screws (1) with the appropriate tool. Proceed to remove the cutting knife (2) as well as the clamping screw (1).

2. Insert the replacement knife into the tool, ensuring that the cutting edge of the knife faces the direction in which you intend to work. Tighten the clamping screw (1) using the correct tightening torque.



## 5.4 Chamfer angle adjustment (if applicable)

- 1) Clean the clamping screws (3).
- 2) Loosen the clamping screws (3) turning the screws counter clockwise.
- 3) Rotate the adjustable head until reaching the desired chamfering angle. Adjustments can also be made using graduated scale which is present on the body and tool head (adjustment options vary depending on tool model).
- 4) Tighten the clamping screws (3) clockwise – (8,9 Nm).



## 5.5 Spare parts

Consult sales documentation for information regarding spare parts.

**CMT WILL NOT BE HELD RESPONSIBLE FOR ANY ACCIDENT, WHICH IS THE DIRECT RESULT OF MISUSE, ABUSE OF THE TOOLS OR THE FAILURE TO PROPERLY FOLLOW SAFETY INSTRUCTIONS AS WELL AS THE PROVISIONS PROVIDED FOR THE SAFE HANDLING, OPERATION AND MAINTENANCE OF THE SAME.**

## SYMBOLS



General  
Mandatory Action



General  
Danger



General Prohibition



Wear Safety Gloves



Cutting Hazard  
Hands & Fingers



Do not use  
defective tools



Engage blocking  
mechanism



Corrosive  
Material

Reference: ISO 3864-1:2002-05  
Safety signs and colours  
Eumabois: instruction manual  
([www.eumabois.com](http://www.eumabois.com))

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