



15

0 10 20 30 40 50 60
80 90 10
80 90 20 10
80 70
40 30 60 70
40 60
0.01mm
0.01mm

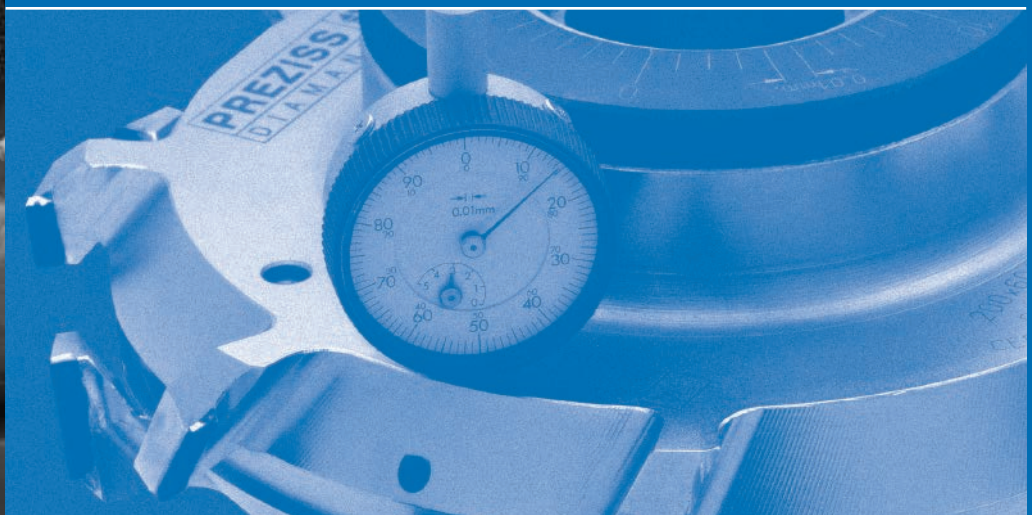
4 3 2 1 0
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4 3 2 1 0
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ISO 1940
MEC

STRAIGHT ROUTER CUTTERS AND GROOVERS

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STRAIGHT ROUTER CUTTERS OF POLYCRYSTALLINE DIAMOND

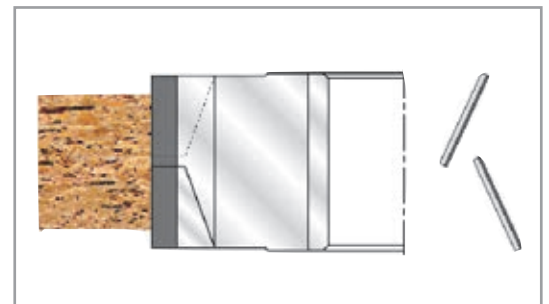
This group of cutters includes those cutters used most in the furniture industry. This is because it is in the operations of profiling, rebating and grooving where most linear metres are machined.

The optimisation of these processes requires the incorporation of polycrystalline diamond tools, which are constantly evolving and improving in quality and production.

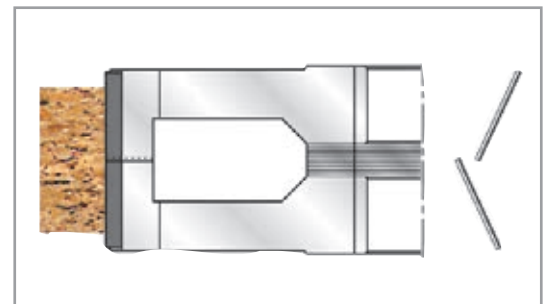
PROFILING

The objective of this operation is to finish the straight edges of coated boards, generally in profiling machines or edges lipping machines, spindle machines and special machines.

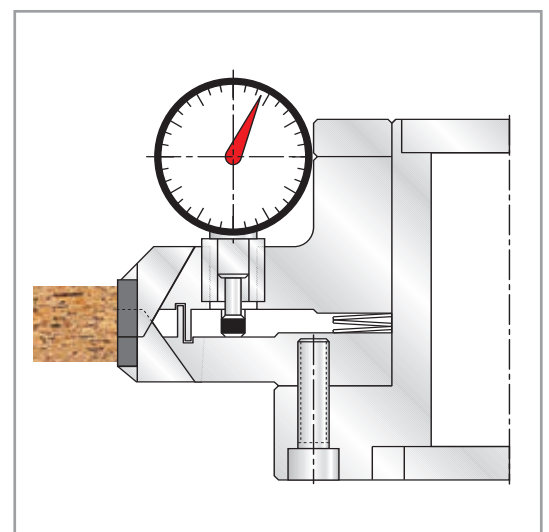
The best result is obtained with the adjustable edge trimming cutters, made of 2 blocks with opposed axial angles and space rings. By varying the height one can make use of the full length of tip and at the same time achieve a perfect finish.



FIXED PROFILING CUTTER BLOCK.



ADJUSTABLE CUTTERBLOCK WITH SPACE RINGS.

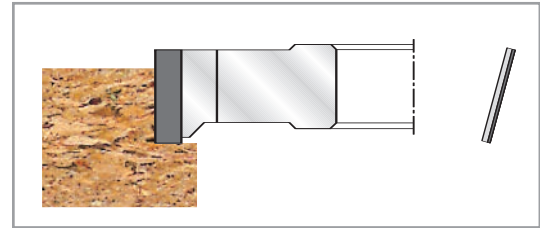


ADJUSTABLE THREADED CUTTERBLOCK.

REBATING

Just as in profiling, it is an operation done both in automatic machines and on spindle moulders, etc.

The characteristics of this PCD tool allow big production, even with hard and abrasive coatings with excellent quality.

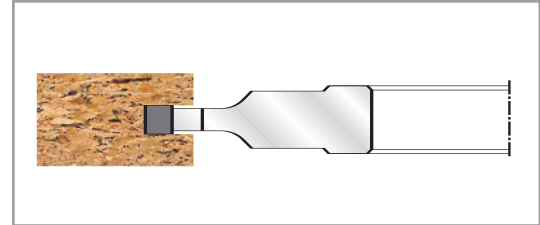


ROUTER FOR REBATING.

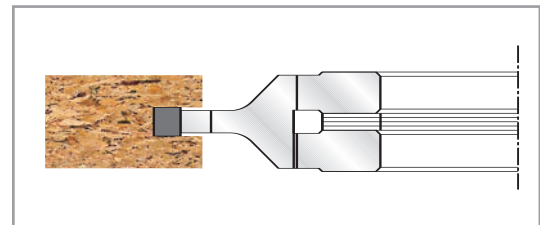
GROOVING

This operation is mainly used in the manufacturing of furniture parts, due to the high quality finish required, dimensional consistency and long-lasting. These demands make the PCD tipped groover a very economical tool.

Both the fixed cutterblock model and the different adjustable systems, are very effective in high production facilities.



FIXED ROUTER FOR GROOVING.



ADJUSTABLE ROUTER FOR GROOVING.

TABLE TO CALCULATE THE TOOL DIAMETER AND FEED SPEED

The following table shows the optimal parameters for cut speed, RPM and diameter to achieve the best tool-machine efficiency.

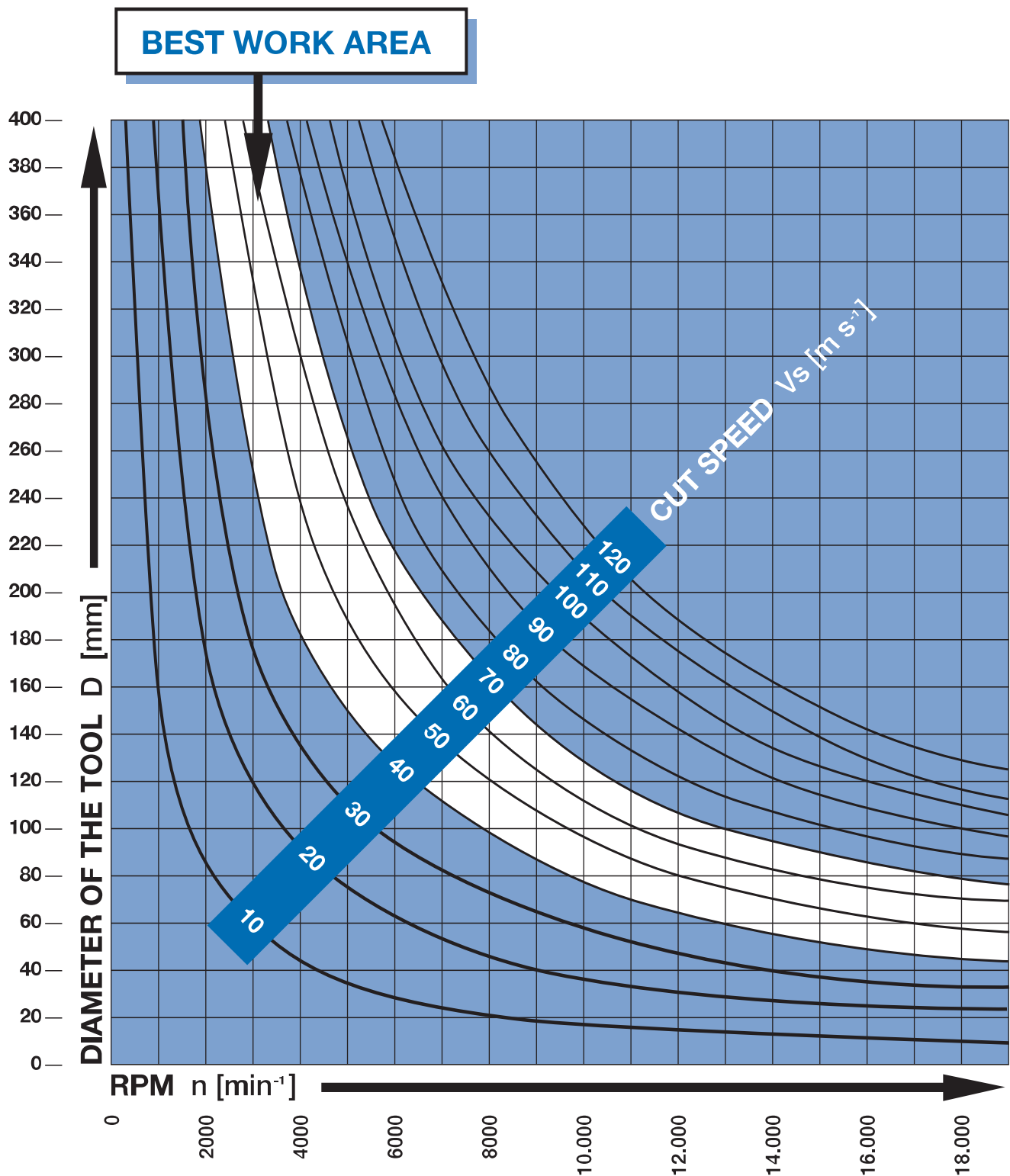
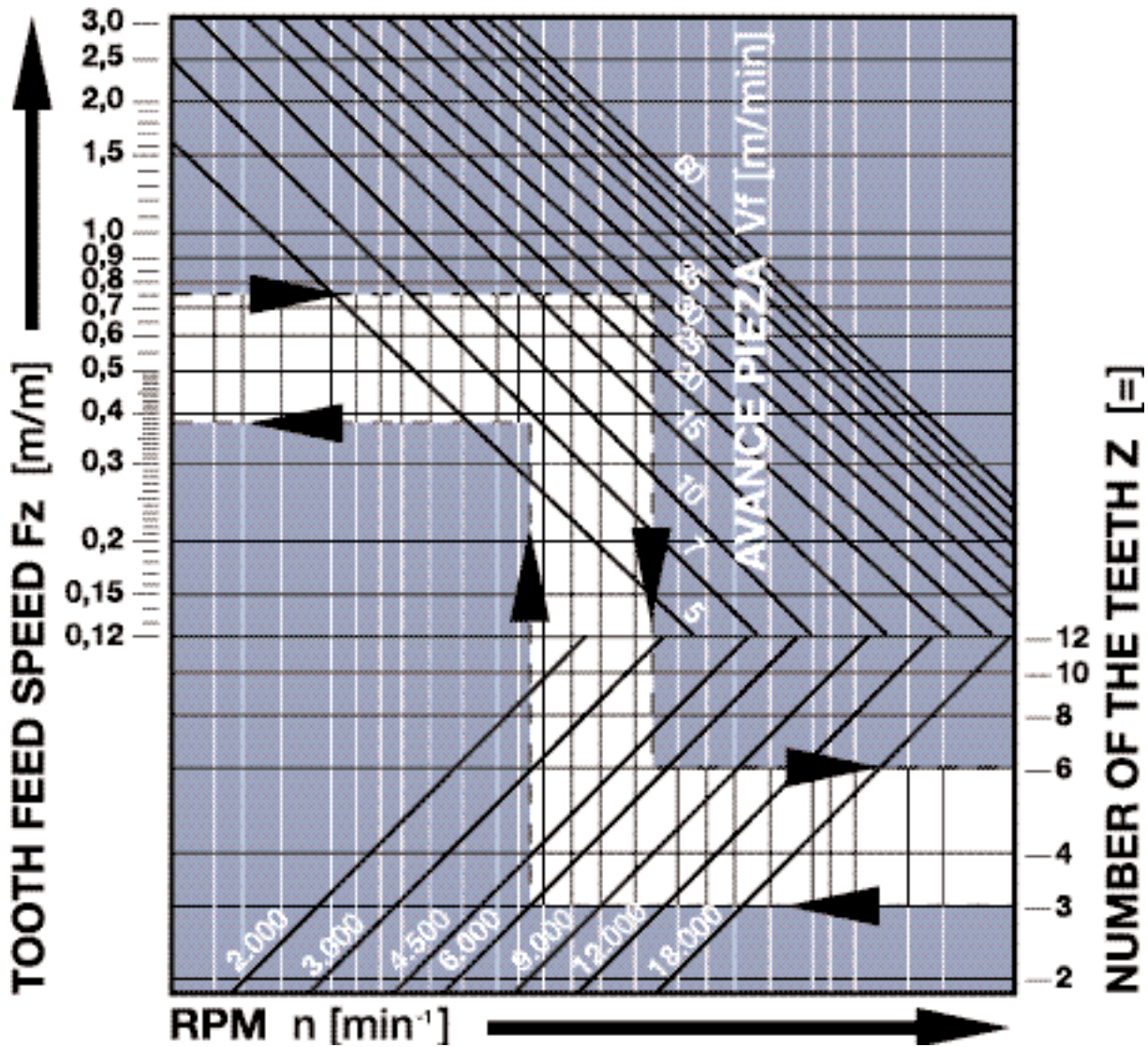


TABLE SHOWING THE REALTIONSHIP BETWEEN THE TOOTH FEED SPEED (Fz), FEED SPEED (Vf), REVOLUTIONS (RPM) AND NUMBER OF TEETH (Z)

To define the required finish level, the following table shows the relationship between tooth advance, feed, RPM and number of teeth.



Example for routers:

- $z = 3$
- $n = 6.000 \text{ min}^{-1}$
- $V_f = 7 \text{ m/min}$
- $F_z = 0,39 \text{ mm}$

Fine cut finish:

0,3 - 0,8 mm

Medium cut finish:

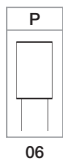
0,8 - 2,5 mm

Rough finish:

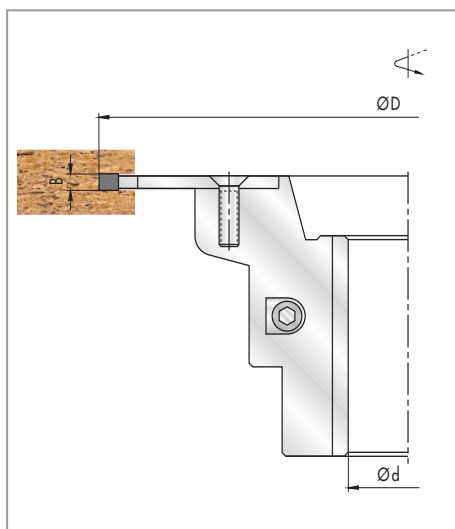
2,5 - 5,0 mm

GROOVER

High performance



ØD mm	Bo mm	B mm	Z =	PRODUCT CODE
70	34	4,0/3,0	8	3013001
75	22	3,2/2,2	10	3013002
100	30	4,0/3,0	8	3013003
120	30	4,0/3,0	8	3013004
120	30	4,0/3,0	12	3013005
120	30	4,0/3,0	16	3013006
150	30	3,0/2,0	12	3013007
150	30	3,0/2,0	18	3013008
150	30	3,0/2,0	24	3013009
150	30	4,0/3,0	12	3013010
150	30	4,0/3,0	18	3013011
150	30	4,0/3,0	24	3013012
150	30	5,0/4,0	12	3013025
180	30	3,0/2,0	12	3013013
180	30	3,0/2,0	18	3013014
180	30	3,0/2,0	24	3013015
180	30	3,0/2,0	30	3013016
180	30	4,0/3,0	12	3013017
180	30	4,0/3,0	18	3013018
180	30	4,0/3,0	24	3013019
180	30	4,0/3,0	30	3013020
180	30	6,0/5,0	18	3013026
200	30	3,0/2,0	24	3013021
200	30	3,0/2,0	30	3013022
200	30	4,0/3,0	24	3013023
200	30	4,0/3,0	30	3013024

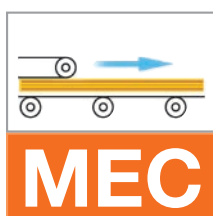


APPLICATION

- Suitable for grooving chipboard, MDF, HPL whether plain or veneered, melamine faced laminated, paper, etc.
- Cutting with or against the feed.

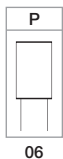
DESCRIPTION

- For grooving fixed thicknesses with PCD "CLASSIC" tips of 6,0 m/m height and flat tooth.
- Non-stick and anti-rust nickel coating.
- Mounted directly on the machine shaft or with chuck. We advise mounting on a **HYDRO PREZISS** Hydro centric chuck to improve its precision and performance (see section 90).
- Special sizes and other uses on request.

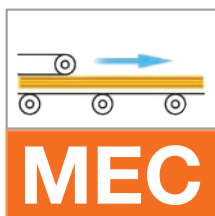
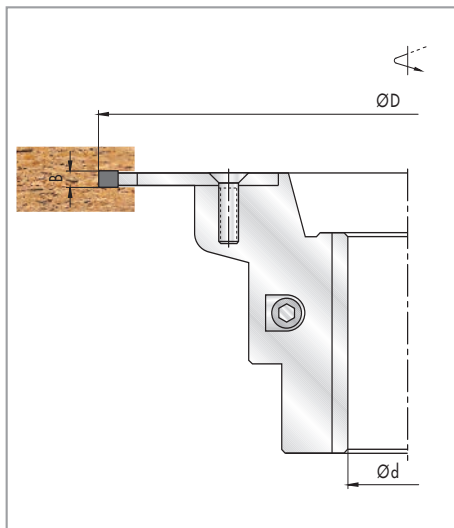


GROOVER

Economical



ØD mm	B _o mm	B mm	Z =	PRODUCT CODE
70	34	4,0/3,0	8	3014001
75	22	3,2/2,2	10	3014002
100	30	4,0/3,0	8	3014003
120	30	4,0/3,0	8	3014004
120	30	4,0/3,0	12	3014005
120	30	4,0/3,0	16	3014006
150	30	3,0/2,0	12	3014007
150	30	3,0/2,0	18	3014008
150	30	3,0/2,0	24	3014009
150	30	4,0/3,0	12	3014010
150	30	4,0/3,0	18	3014011
150	30	4,0/3,0	24	3014012
150	30	5,0/4,0	12	3014025
180	30	3,0/2,0	12	3014013
180	30	3,0/2,0	18	3014014
180	30	3,0/2,0	24	3014015
180	30	3,0/2,0	30	3014016
180	30	4,0/3,0	12	3014017
180	30	4,0/3,0	18	3014018
180	30	4,0/3,0	24	3014019
180	30	4,0/3,0	30	3014020
180	30	6,0/5,0	18	3014026
200	30	3,0/2,0	24	3014021
200	30	3,0/2,0	30	3014022
200	30	4,0/3,0	24	3014023
200	30	4,0/3,0	30	3014024



APPLICATION

- Suitable for grooving chipboard, MDF, HPL whether plain or veneered, melamine faced laminated, paper, etc.
- Cutting with or against the feed.

DESCRIPTION

- For grooving fixed thicknesses with PCD "ATTACK PLUS" tips of 5,0 m/m height and flat tooth.
- Non-stick and anti-rust nickel coating.
- Mounted directly on the machine shaft or with chuck. We advise mounting on a **HYDRO PREZISS** Hydro centric chuck to improve its precision and performance (see section 90).
- Special sizes and other uses on request.

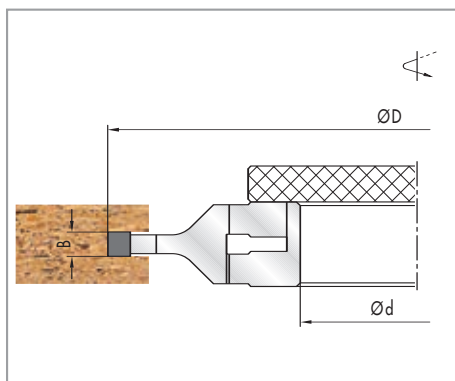
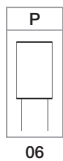
30

THREADED ADJUSTABLE GROOVER

High performance



ØD mm	Bo mm	B mm	Z =	PRODUCT CODE
100	30	3,0/5,0	4+4	3015001
120	30	3,0/5,0	6+6	3015002
150	30	3,0/5,0	6+6	3015003
150	30	4,0/7,0	6+6	3015004
150	30	5,0/10,0	6+6	3015005
150	30	7,0/14,0	6+6	3015006
150	30	10,0/20,0	6+6	3015007
160	30	3,0/5,0	6+6	3015008
160	30	4,0/7,0	6+6	3015009
180	30	3,0/5,0	8+8	3015010
180	30	4,0/7,0	8+8	3015011

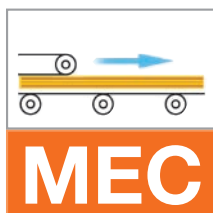


APPLICATION

- Suitable for grooving chipboard, MDF, HPL whether plain covered or veneered melamine, laminated, paper, etc.
- In automatic feed machines such as, moulding machines, edge lipping machines, etc.
- Cutting with or against the feed.

DESCRIPTION

- Groover with adjustable thickness, by means of a fine thread, with PCD tips, "CLASSIC" type of 6,0 m/m height and flat tooth.
- Non-stick and anti-rust nickel coating.
- Special sizes and other uses on request.

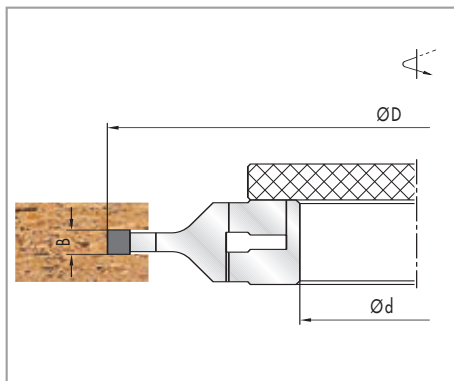
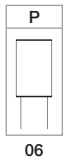


THREADED ADJUSTABLE GROOVER

Economical



ØD mm	B ₀ mm	B mm	Z =	PRODUCT CODE
100	30	3,0/5,0	4+4	3016001
120	30	3,0/5,0	6+6	3016002
150	30	3,0/5,0	6+6	3016003
150	30	4,0/7,0	6+6	3016004
150	30	5,0/10,0	6+6	3016005
150	30	7,0/14,0	6+6	3016006
150	30	10,0/20,0	6+6	3016007
160	30	3,0/5,0	6+6	3016008
160	30	4,0/7,0	6+6	3016009
180	30	3,0/5,0	8+8	3016010
180	30	4,0/7,0	8+8	3016011

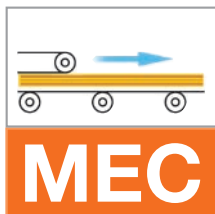


APPLICATION

- Suitable for grooving chipboard, MDF, HPL whether plain covered or veneered, melamine, laminated, paper, etc
- In automatic feed machines such as profiling machines, moulding machines, edge lipping machines, etc.
- Cutting with or against the feed.

DESCRIPTION

- Groover with adjustable thickness, by means of a fine thread, with PCD tips, "ATTACK PLUS" type of 5,0 mm height and flat tooth.
- Non-stick and anti-rust nickel coating.
- Special sizes and other uses on request.

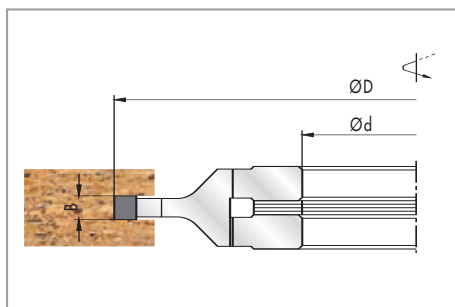
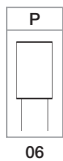


ADJUSTABLE GROOVER WITH SPACE RINGS

High performance



ØD mm	Bo mm	B mm	Z =	PRODUCT CODE
100	30	3,0/5,0	4+4	3017001
120	30	3,0/5,0	6+6	3017002
150	30	3,0/5,0	6+6	3017003
150	30	4,0/7,0	6+6	3017004
150	30	5,0/10,0	6+6	3017005
150	30	7,0/14,0	6+6	3017006
150	30	10,0/20,0	6+6	3017007
160	30	3,0/5,0	6+6	3017008
160	30	4,0/7,0	6+6	3017009
180	30	3,0/5,0	8+8	3017010
180	30	4,0/7,0	8+8	3017011

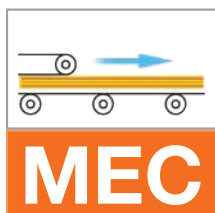


APPLICATION

- Suitable for grooving chipboard, MDF, HPL whether plain covered or veneered melamine, laminated, paper, etc.
- In automatic feed machines such as profiling machines, moulding machines, edge lipping machines, universal machines, etc.
- Cutting with or against the feed.

DESCRIPTION

- Comprising of two pieces with adjustable thickness settings, by means of space rings (set included).
- It has PCD tips "CLASSIC" type of 6,0 m/m height and flat tooth.
- Special sizes and uses on request.

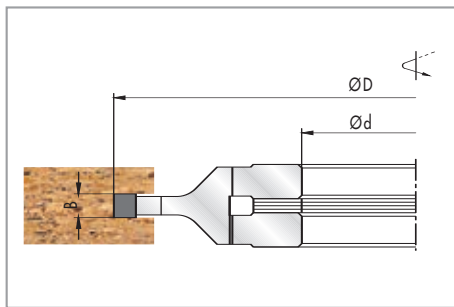
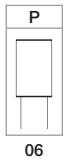


ADJUSTABLE GROOVER WITH SPACE RINGS

Economical



ØD mm	B ₀ mm	B mm	Z =	PRODUCT CODE
100	30	3,0/5,0	4+4	3018001
120	30	3,0/5,0	6+6	3018002
150	30	3,0/5,0	6+6	3018003
150	30	4,0/7,0	6+6	3018004
150	30	5,0/10,0	6+6	3018005
150	30	7,0/14,0	6+6	3018006
150	30	10,0/20,0	6+6	3018007
160	30	3,0/5,0	6+6	3018008
160	30	4,0/7,0	6+6	3018009
180	30	3,0/5,0	8+8	3018010
180	30	4,0/7,0	8+8	3018011

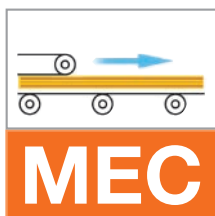


APPLICATION

- Suitable for grooving chipboard, MDF, HPL whether plain covered or veneered melamine, laminated, paper, etc.
- In automatic feed machines such as profiling machines, moulding machines, edge lipping machines, universal machines, etc.
- Cutting with or against the feed.

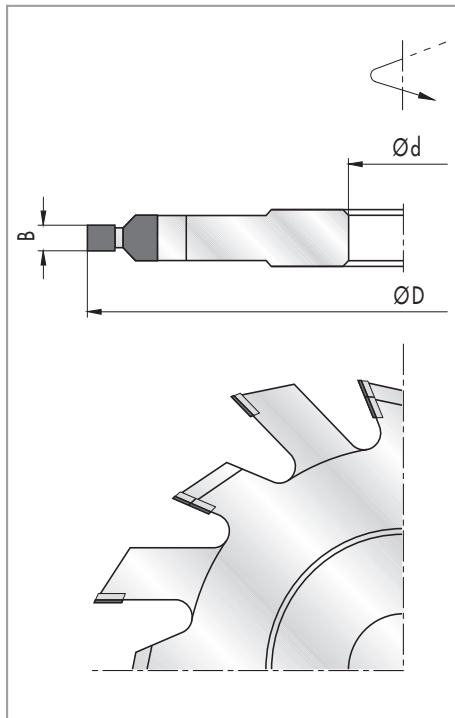
DESCRIPTION

- Two piece construction with adjustable thickness settings, by means of space rings (set included).
- It has PCD tips "ATTACK PLUS" type of 5,0 mm height and flat tooth.
- Special sizes and uses on request.



GROOVER - BEVELLER

High performance



APPLICATION

- Suitable for improving the grooving process in furniture assembly.
- Mainly in double profiling machines.
- Cutting with or against the feed.

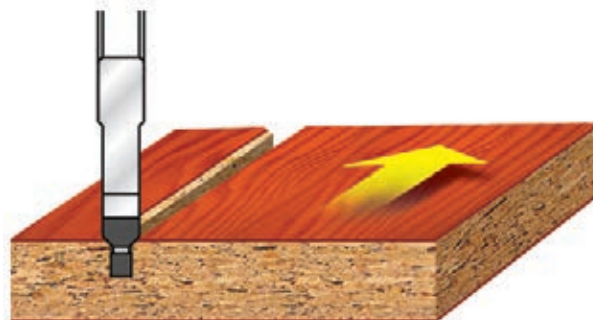
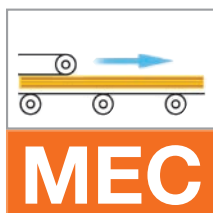
DESCRIPTION

- Combined special cutter, for grooving and bevelling the upper edges of grooves on boards, facilitating easy assembly.
- Equipped with PCD tips "CLASSIC" type of 6,0 mm height and tips with 45° bevel.
- Non-stick and anti-rust nickel coating.
- Manufactured with double bevel, left bevel right bevel.
- Made to order.
- Directly mounted onto the machine shaft or on **HYDRO PREZISS** Hydro centric chuck. (See section 90).

GROOVER - BEVELLER

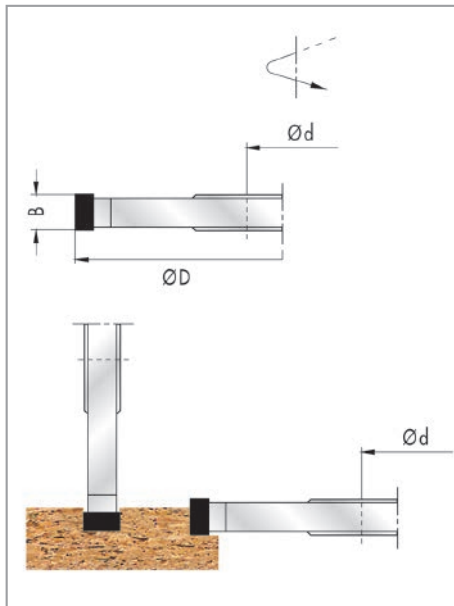
Economical

- Like article  but 5,0 mm PCD tip height and bevel tips of 45°.



GROOVING / RABBATING CUTTER

Economical



APPLICATION

- Suitable for improving the grooving process in furniture assembly.
- Mainly in double profiling machines.
- Cutting with or against the feed.

DESCRIPTION

- Designed for grooving and rabbeting.
- Equipped with PCD tips "ATTACK PLUS" 5,0 m height.
- Made to order.
- To be mounted directly to the machine spindle or with **PREZISS HYDRO Sleeve** (see section 90).

