

## 11. DIA tools

# DIA tools

Tools with DIA tips designed for professional machining of solid wood and other wood-based materials such as chip-board, laminates, MDF, HDF, PVC and CORIAN. Use and selection of a proper diamond significantly increases life of tools in comparison with traditional tools with carbide (HM) blades.

The *DIA tools* chapter includes only example types and models of tools with DIA blades. The main part of our offer are special tools designed and manufactured on client's special request, meeting buyer's specific demands. Before we start designing and production process we take into consideration many issues connected with client's requirements such as expected machining quality, type and parameters of the machine, workpiece material and many others. Every DIA special tool or set of tools is properly selected for the type of work, parameters and conditions prevailing during the machining, in order to guarantee proper work of the tool, both in standard and extreme conditions.

DIA tools are produced with various clamping types, however, we put special focus on hydro clamping or all types of clamping on conical HSK shanks. The clamping construction guarantee run-out tolerance reduced to minimum.

Thanks to hydro system, which allows for perfect balancing of the tool, we obtain very high surface quality and ability to work with high cutting and feed speed.

All types of cutter heads are manufactured on modern CNC machines of world-renowned producers, which guarantee high accuracy and precision of the produced tools. The construction and production remains in accordance with all points of safety standard EN/PN-847-1 concerning tools for mechanical woodworking. Time of design and production process of cutters or catalogue sets marked with "+" as well as special tools made on client's special request usually doesn't exceed 10-15 working days after agreeing all the details.

Orders should include:

- outer diameter (D) or diameters range,
- bore diameter (d),
- number of teeth (z) or spindle rotation speed and feed speed,
- type of machined material,
- profile drawing with dimensions or profile sample,
- other information relevant for designing and production process.



# Contents

<b>11. DIA tools</b>	
Pictograms	11.4
Tooth configuration	11.5
Technical parameters	11.5
<b>11.1 Straight shank cutters</b>	11.6
<b>11.2 Turbo shank cutters</b>	11.14
<b>11.3 Profile shank cutters</b>	11.21
<b>11.4 Straight brazed cutters</b>	11.26
<b>11.5 Sets of brazed cutters</b>	11.32
<b>11.6 Profile brazed cutters</b>	11.34
<b>11.7 Inserted hoggers</b>	11.39
<b>11.8 Scoring saw blades</b>	11.45
<b>11.9 Saw blades</b>	11.50

# Pictograms



solid dry hardwood



hard exotic wood



chipboard



plywood



laminated board



MDF



HDF



HPL



plastics



construction board



corian



single cut



multi-rip saw blade



cutting in stack



cylinder boring bits



scoring saw blade



aluminium body



cross and longitudinal cut



formatting



rebating



grooving



edge machining



profiling



mechanical feed



manual feed



CNC machine



DIA blade



carbide



non-resharpenable



2-3 times resharpenable



4-6 times resharpenable



5-6 times resharpenable



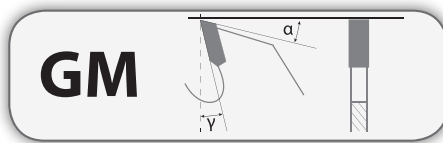
7-9 times resharpenable



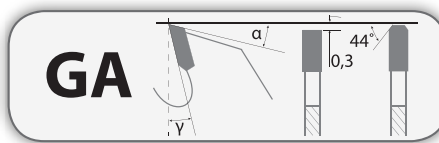
multiple resharpening

- available / stock product
- + production time 9–15 working days.

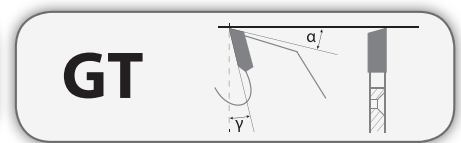
# Tooth configuration



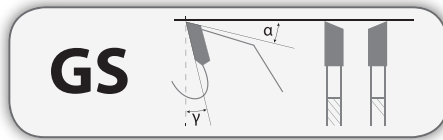
flat



triple-chip + flat



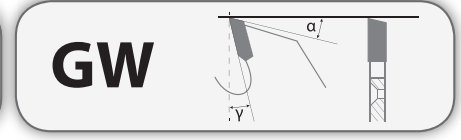
top bevel, right



alternate top bevel



conical-flat



top bevel, left

Cutters with shear angle are designed for working on CNC centres: IMA, Reichenbacher, Homag, Bisse.

They are used for rebating, grooving and forming. Drilling blade is made from HM.

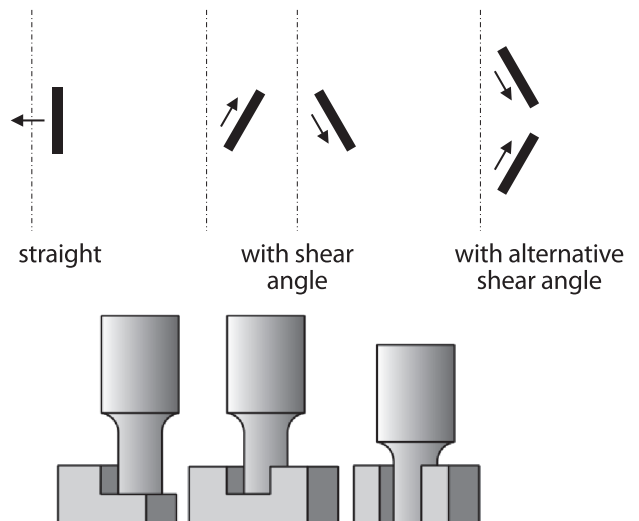
Cutters' construction guarantees:

- quiet and stable work,
- better surface quality,
- increased life.

Type of material:

- MDF, HDF,
- chipboard,
- laminated chipboard,
- CORIAN,
- laminates,
- hard exotic wood.

## Teeth



**Diagrams determining P (minute feed) in relation to height of the removed material a.**

**Type of work:** formatting with drilling ability.

**Rotation speed:**

$D = 10 \div 12 \text{ mm}; n = 18\,000 \div 24\,000 \text{ obr/min}$

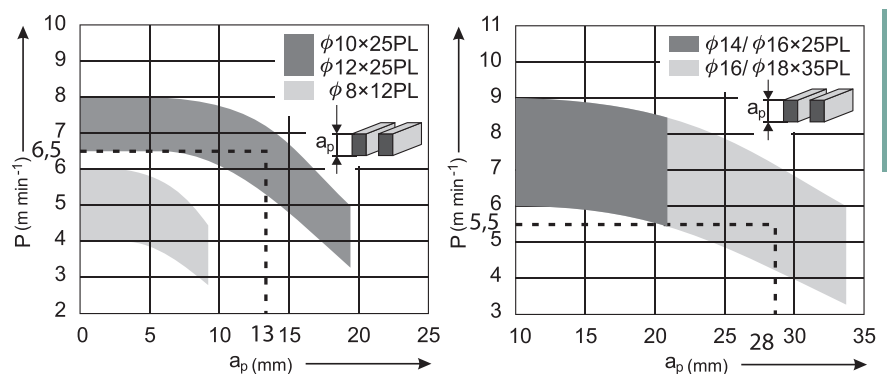
$D = 14 \div 20 \text{ mm}; n = 16\,000 \div 24\,000 \text{ obr/min}$

**Teeth number:**

$z = 1 \text{ and } z=1+1$

Drilling blade HM, optionally DP.

## Technical parameters TJD group



## TJD-01

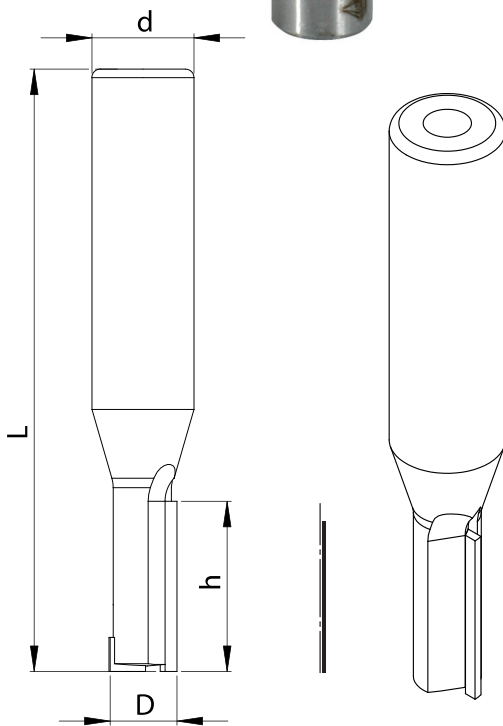
Straight shank cutters type **TJD-01**.

**Type of work:** formatting, splitting, rebating, grooving and copying on CNC machines. Used especially for making very small inner radiuses.

**Material:** solid hardwood, chipboard, plywood, MDF, HDF, construction board, plastics.

**Specification:**

- polished PKD surface,
- drilling blade HM,
- blade positioned axially,
- optional body from HM or special alloy in order to increase stiffness and life of the tool,
- sharpening zone 1-1,2 mm,
- $P_{\max} = 2-3 \text{ m/min.}$
- $N_{\max} = 24\,000 \text{ r.p.m.}$



Catalogue number	Type	D mm	h mm	d mm	L mm	z	↙	
TJD01.0102B	TJD-01	8	20	12	66	1	R	•
TJD01.0102BL	TJD-01	8	20	12	66	1	L	+
TJD01.029G	TJD-01	10	25	12	71	1	R	•
TJD01.028G	TJD-01	10	20	12	66	1	R	+
TJD01.028GL	TJD-01	10	20	12	66	1	L	+
TJD01.029GL	TJD-01	10	25	12	71	1	L	+

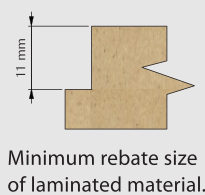
Straight shank cutters type **TJD-04**.

**Type of work:** formatting, splitting, rebating, grooving and copying on CNC machines.

**Material:** solid hardwood, chipboard, plywood, MDF, HDF, laminated materials.

**Specification:**

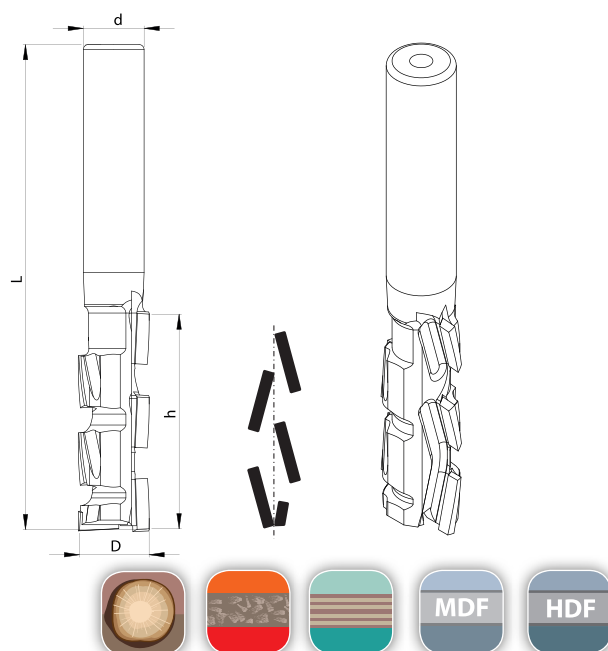
- ability to work simultaneously in two axes X and Z,
- HM drilling blade (PKD on request),
- sharpening zone 1,5-2 mm,
- $P_{\max} = 3-6 \text{ m/min}$ ,
- $N_{\max} = 24\,000 \text{ r.p.m.}$



Minimum rebate size  
of laminated material.



## TJD-04



Catalogue number	Type	D mm	h mm	d mm	L mm	z	↙	
TJD04.12F	TJD-04	12	25	12	86	1+1	R	+
TJD04.12FL	TJD-04	12	25	12	86	1+1	L	+
TJD04.12B	TJD-04	12	32	12	83	1+1	R	+
TJD04.12BL	TJD-04	12	32	12	83	1+1	L	+
TJD04.14F	TJD-04	14	25	12	86	1+1	R	+
TJD04.14FL	TJD-04	14	25	12	86	1+1	L	+
TJD04.14B	TJD-04	14	32	12	83	1+1	R	+
TJD04.14BL	TJD-04	14	32	12	83	1+1	L	+
TJD02.16A	TJD-04	16	25	16	86	1+1	R	+
TJD02.16AL	TJD-04	16	25	16	86	1+1	L	+
TJD02.16A25	TJD-04	16	25	25	86	1+1	R	+
TJD02.16A25L	TJD-04	16	25	25	86	1+1	L	+
TJD04.16B	TJD-04	16	35	16	96	1+1	R	+
TJD04.16BL	TJD-04	16	35	16	91	1+1	L	+
TJD04.16D	TJD-04	16	35	25	91	1+1	R	+
TJD04.16DL	TJD-04	16	35	25	91	1+1	L	+
TJD04.18BC	TJD-04	18	25	25	91	1+1	R	+
TJD04.18BCL	TJD-04	18	25	25	91	1+1	L	+
TJD04.18A	TJD-04	18	35	25	96	1+1	R	+
TJD04.18AL	TJD-04	18	35	25	96	1+1	L	+
TJD02.20A	TJD-04	20	25	20	91	1+1	R	+
TJD02.20AL	TJD-04	20	25	20	91	1+1	L	+
TJD04.20B	TJD-04	20	25	25	91	1+1	R	+
TJD04.20BL	TJD-04	20	25	25	91	1+1	L	+
TJD04.413	TJD-04	20	35	20	96	1+1	R	+
TJD04.413L	TJD-04	20	35	20	96	1+1	L	+
TJD04.414	TJD-04	20	35	25	96	1+1	R	+
TJD04.414L	TJD-04	20	35	25	96	1+1	L	+

## TJD-06

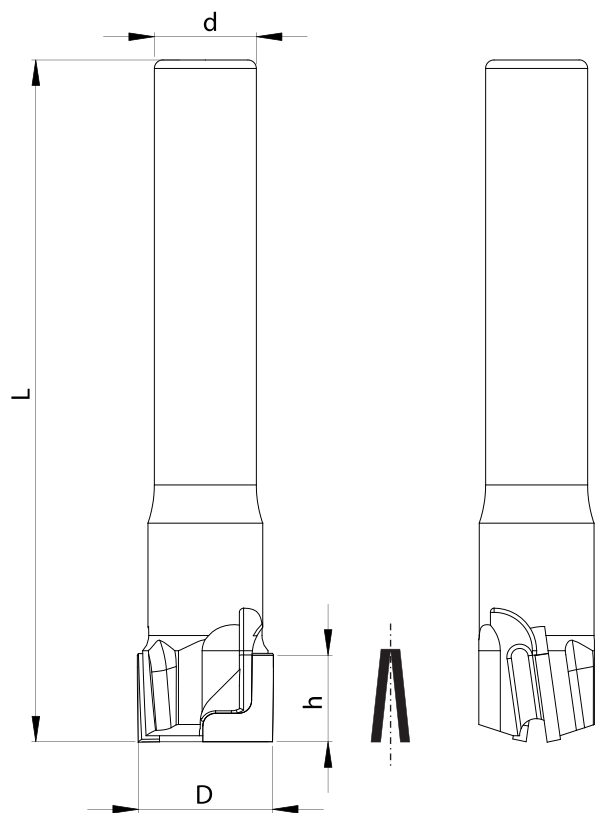
Straight shank cutters type **TJD-06** resharpenable 2-3 times.

**Type of work:** grooving, rebating, drilling on CNC machines.

**Material:** solid hardwood, laminated materials, chipboard, plywood, MDF, HDF.

**Specification:**

- high quality machining,
- drilling ability,
- PKD Drilling blade,
- $P_{\max} = 3-6 \text{ m/min.}$
- $N_{\max} = 24\,000 \text{ r.p.m.}$



Catalogue number	Type	D mm	h mm	d mm	L mm	z	↗	
TJD006.6010	TJD-06	6	6	12	60	1	R	+
TJD006.6020	TJD-06	8	6	12	60	1	R	+
TJD006.6030	TJD-06	10	8	12	65	2	R	+
TJD006.6040	TJD-06	10	12	12	67	2	R	+
TJD006.6050	TJD-06	12	12	12	70	2	R	+
TJD006.6060	TJD-06	16	16	12	80	2	R	+
TJD006.6070	TJD-06	20	10	12	80	2	R	+
TJD006.6080	TJD-06	20	15	12	80	2	R	+
TJD006.6090	TJD-06	25	10	12	85	2	R	+
TJD006.6100	TJD-06	30	15	12	90	2	R	+

Straight shank cutters type **TJD-07** resharpenable 2-3 times.

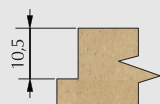
**Type of work:** formatting, splitting, rebating.

Material: solid hardwood, laminated materials, chipboard, plywood, MDF, HDF.

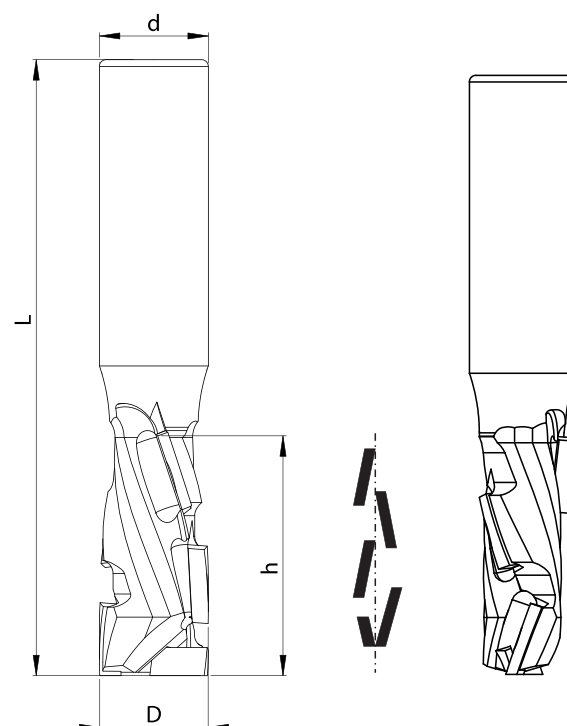
**Specification:**

- blades positions at big shear angle guarantee quiet and stable work,
- long life,
- HM drilling blade (PKD on request),
- spiral blades guarantee high cutting quality, lower cutting resistance and longer life of the blade,
- $P_{\max} = 3-6 \text{ m/min}$ ,
- $N_{\max} = 24000 \text{ r.p.m.}$

We offer all cutters also in "L" version.

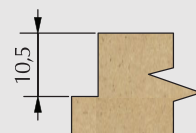
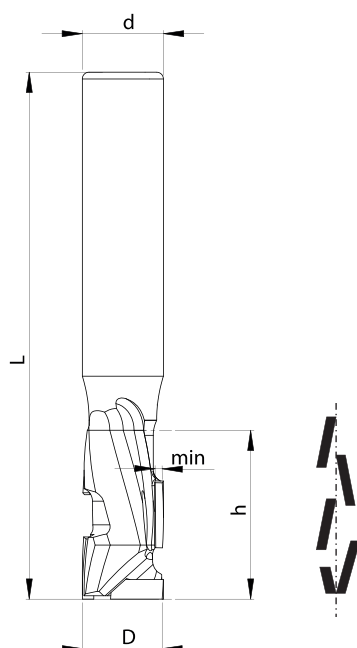
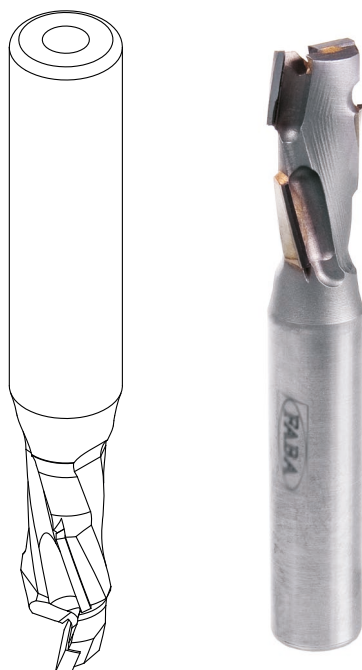


Minimum rebate size  
of laminated material.



Catalogue number	Type	D mm	h mm	d mm	L mm	z	↗	
TJD007.0460	TJD-07	10	25	12	76	1+1	R	•
TJD007.0040R	TJD-07	12	25	12	78	1+1	R	•
TJD007.0050R	TJD-07	12	35	12	88	1+1	R	•
TJD007.0181	TJD-07	14	25	16	81	1+1	R	+
TJD007.0092	TJD-07	14	35	16	81	1+1	R	+
TJD007.0021R	TJD-07	16	25	16	81	1+1	R	•
TJD007.0020R	TJD-07	16	25	25	91	1+1	R	•
TJD007.0030R	TJD-07	16	35	16	91	1+1	R	•
TJD007.0030RL	TJD-07	16	35	16	91	1+1	L	•
TJD007.0034R	TJD-07	16	35	25	96	1+1	R	•
TJD007.0171R	TJD-07	16	43	16	100	1+1	R	•
TJD007.0080R	TJD-07	18	35	25	96	1+1	R	•
TJD007.0061R	TJD-07	18	43	20	109	1+1	R	•
TJD007.0060R	TJD-07	18	43	25	109	1+1	R	•
TJD007.0392	TJD-07	18	52	25	112	1+1	R	+
TJD007.0120R	TJD-07	20	25	20	86	1+1	R	•
TJD007.0150R	TJD-07	20	35	20	96	1+1	R	•
TJD007.0071R	TJD-07	20	43	20	109	1+1	R	•
TJD007.0270R	TJD-07	20	52	20	112	1+1	R	•

## TJD-08



Minimum rebate size of laminated material.

Straight shank cutters type **TJD-08** single use (non-resharpenable). Used PKD tip has been reduced to minimum, so that the cutters are not subject to resharpening and costly regeneration. Shank cutters type TJD-08 are convenient offer for companies processing wood-based materials and plastics on CNC routers.

**Type of work:** formatting, splitting, rebating

**Material:** chipboard, plywood, MDF, HDF, plastics

**Specification:**

- one positioning of the machine without corrections after resharpening,
- no problems with servicing (regeneration),
- very low price,
- long life and cutting quality,
- $P_{\max} = 3-6 \text{ m/min.}$
- $N_{\max} = 24\,000 \text{ r.p.m.}$



Catalogue number	Type	D mm	h mm	d mm	L mm	z		
TJD008.1240	TJD-08	12	24	12	78	1+1	R	•
TJD008.0022	TJD-08	16	25	16	81	1+1	R	•
TJD008.0051	TJD-08	12	35	12	88	1+1	R	•
TJD008.0032	TJD-08	16	35	16	91	1+1	R	•

Shank cutter with multiple resharpening possibility typ **TJD-10** designed for formatting on CNC machines. The tool can work with left or right rotation to avoid material chipping.

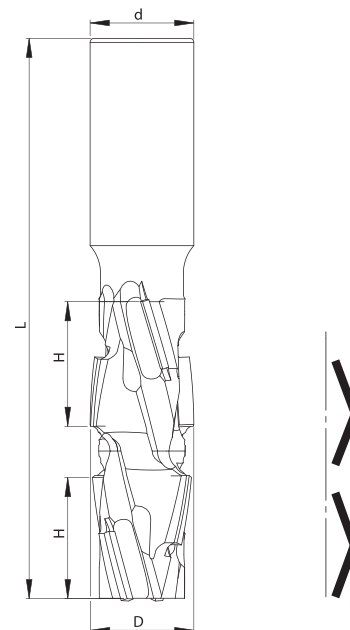
**Type of work:** formatting.

**Material:** chipboard, MDF.

**Specification:**

- highly efficient formatting of laminated materials with perfect edge quality,
- works with both rotation directions,
- $P_{\max} = 14 \text{ m/min.}$
- $N_{\max} = 24\,000 \text{ r.p.m.}$

# TJD-10



11

Catalogue number	Type	D mm	H2 mm	d mm	L mm	z	
TJD010.0100	TJD-10	25	30	25	135	1+1	+

## TDT-08A

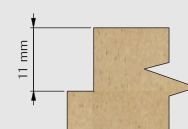
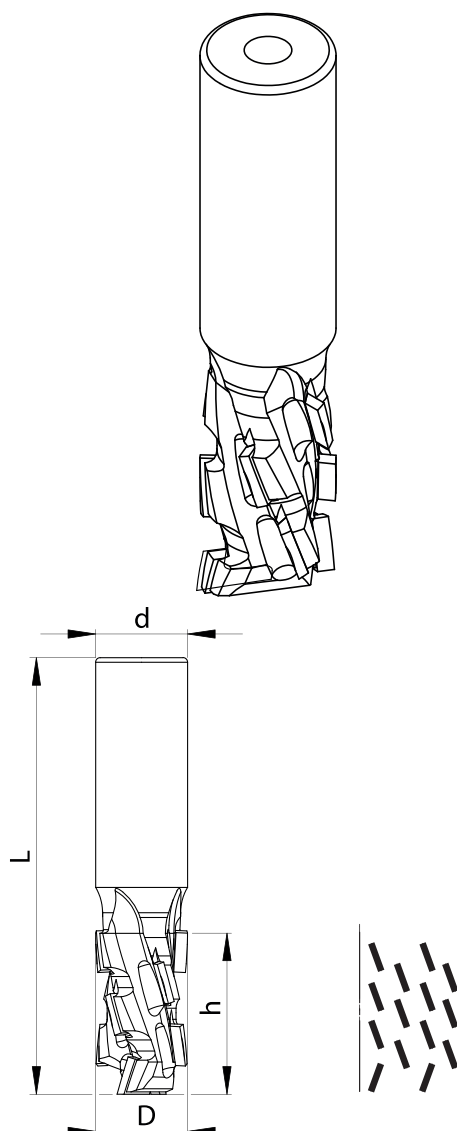
Economical turbo shank cutters type **TDT-08A**  $z=2+2$  designed for CNC routers.

**Type of work:** formatting, curvilinear splitting, grooving rebating.

**Material:** chipboard, plywood, MDF, HDF, laminates.

**Specification:**

- tools construction guarantees highly efficient cutting with perfect edge quality thanks to blades with positive and negative shear angle,
- increased teeth number  $z=2+2$  enables for feed speed up to 12-14 m/min,
- HM drilling blade (PKD on request),
- $P_{max} = 8-14$  m/min,
- $N_{max} = 24\,000$  r.p.m.



Minimum rebate size  
of laminated material.



Catalogue number	Type	D mm	h mm	d mm	L mm	z		
TDT08A.0850	TDT-08A	12	23	20	80	2+2	R	•
TDT08A.0440	TDT-08A	16	20	20	80	2+2	R	+
TDT08A.0451	TDT-08A	16	27	16	90	2+2	R	•
TDT08A.0450	TDT-08A	16	27	20	90	2+2	R	•
TDT08A.0065	TDT-08A	16	35	16	95	2+2	R	•
TDT08A.0460	TDT-08A	18	27	20	90	2+2	R	+
TDT08A.0470	TDT-08A	18	35	20	95	2+2	R	•
TDT08A.0480	TDT-08A	18	45	20	105	2+2	R	+
TDT08A.0490	TDT-08A	20	27	20	90	2+2	R	+
TDT08A.0500	TDT-08A	20	35	20	95	2+2	R	+
TDT08A.0510	TDT-08A	20	45	20	105	2+2	R	+
TDT08A.0520	TDT-08A	20	54	20	115	2+2	R	+

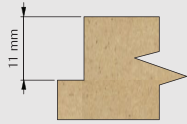
Straight shank cutters type **TD-01**, with multiple resharpening possibility.

Type of work: formatting, splitting, rebating.

Material: solid hardwood, chipboard, plywood, MDF, HDF, laminates.

#### Specification:

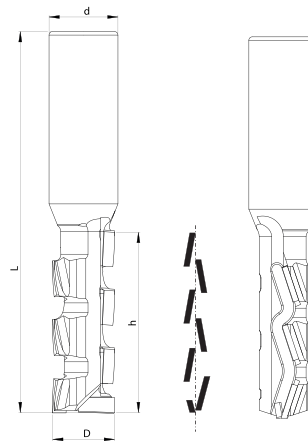
- $P_{\max} = 3-6 \text{ m/min}$
- $N_{\max} = 24\,000 \text{ r.p.m.}$



Minimum rebate size  
of laminated material.



## TD-01



Catalogue number	Type	D mm	h mm	d mm	L mm	z	↗	
TD01.100C	TD-01	18	52	20	108	1+1	R	+
TD01.100CL	TD-01	18	52	20	108	1+1	L	+
TD01.101	TD-01	20	52	20	108	1+1	R	+
TD01.101L	TD-01	20	52	20	108	1+1	L	+
TD01.102	TD-01	25	52	25	110	1+1	R	+
TD01.102L	TD-01	25	52	25	110	1+1	L	+

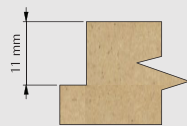
Straight shank cutters type **TD-02**, with multiple resharpening possibility.

Type of work: formatting, splitting, rebating.

Material: solid hardwood, chipboard, plywood, MDF, HDF, laminates.

#### Specification:

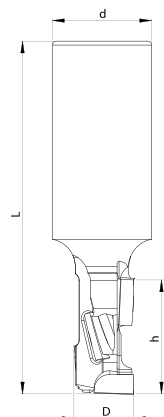
- $P_{\max} = 3-6 \text{ m/min}$ ,
- $N_{\max} = 24\,000 \text{ r.p.m.}$



Minimum rebate size  
of laminated material.



## TD-02



Catalogue number	Type	D mm	h mm	d mm	L mm	z	↗	
TD02.010	TD-02	16	28	25	83	1+1	R	+
TD02.010L	TD-02	16	28	25	83	1+1	L	+
TD02.020	TD-02	18	28	25	83	1+1	R	+
TD02.020L	TD-02	18	28	25	83	1+1	L	+
TD02.020A	TD-02	20	28	25	83	1+1	R	+
TD02.020AL	TD-02	20	28	25	83	1+1	L	+

## TD-04

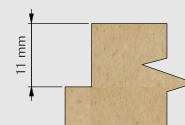
Straight shank cutters type **TD-04**, with multiple resharpening possibility.

**Type of work:** formatting, splitting, rebating.

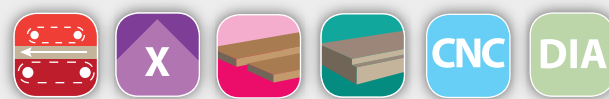
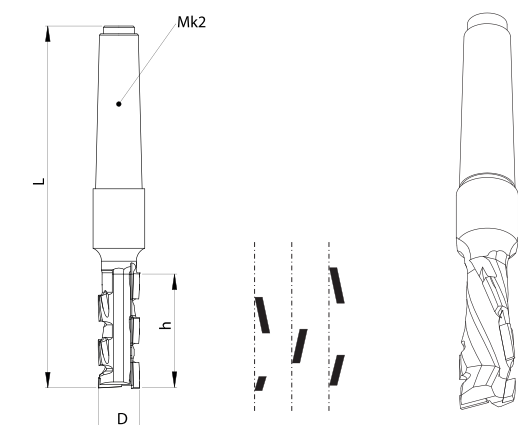
**Material:** solid hardwood, chipboard, plywood, MDF, HDF, laminates.

**Specification:**

- $P_{\max} = 3-6 \text{ m/min}$ ,
- $N_{\max} = 24\,000 \text{ r.p.m.}$



Minimum rebate size of laminated material.



Catalogue number	Type	D mm	h mm	d mm	L mm	z	↗	
TD04.010	TD-04	16	25	Mk2	140	1+1	R	+
TD04.010L	TD-04	16	25	Mk2	140	1+1	L	+
TD04.020	TD-04	16	35	Mk2	150	1+1	R	+
TD04.020L	TD-04	16	35	Mk2	150	1+1	L	+

## TD-008

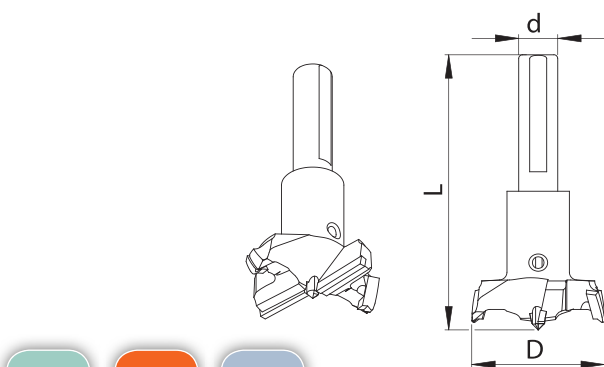
Shank cutters type **TD-008** for box hinge. Special blade geometry guarantees high quality of the machined slot and long life of the tool.

**Type of work:** dowel drilling.

**Material:** glued wood, chipboard, plywood, MDF and others.

**Specification:**

- $P_{\max} = 3-6 \text{ m/min}$ ,
- $N_{\max} = 24\,000 \text{ r.p.m.}$



Catalogue number	Type	D mm	h mm	d mm	L mm	z	$n_{\max}$	↗	
TD008.8010	TD008	15	7	10	57	2+2	24000	R	+
TD008.8020	TD008	20	7	10	57	2+2	24000	R	+
TD008.8030	TD008	25	7	10	57	2+2	24000	R	+
TD008.8040	TD008	30	7	10	57	2+2	24000	R	+
TD008.8050	TD008	35	7	10	57	2+2	24000	R	+
TD008.8060	TD008	40	7	10	57	2+2	18000	R	+
TD008.8070	TD008	50	7	10	57	2+2	18000	R	+
TD008.8080	TD008	60	7	10	57	2+2	18000	R	+
TD008.8090	TD008	65	7	10	57	2+2	18000	R	+

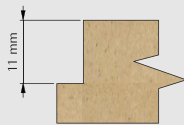
Turbo shank cutter type **TDT-01** for formatting and splitting on CNC routers.

**Type of work:** formatting, splitting.

**Material:** chipboard, MDF, HPL, veneer, laminated materials.

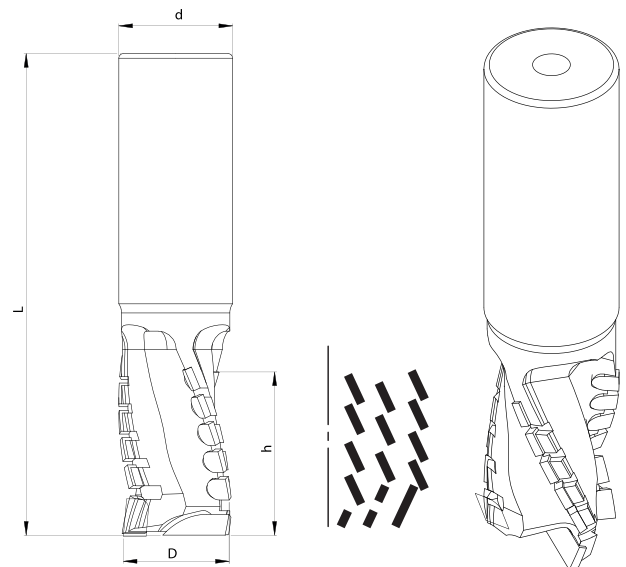
**Specification:**

- high performance in roughing and finishing,
- very high cutting quality on bottom and top edge of the machined material thanks to alternative cutting angles,
- sharpening zone 3 mm,
- $P_{max}$  in splitting = 15 m/min.
- $P_{max}$  in formatting = 20 m/min.
- $N_{max}$  = 24 000 r.p.m.



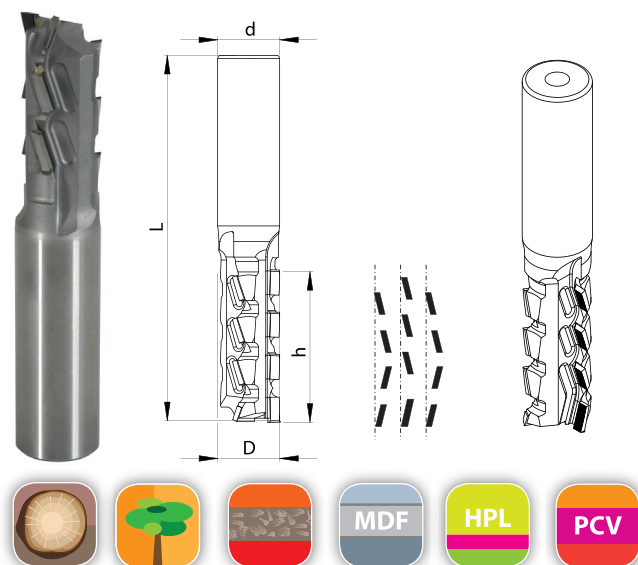
Minimum rebate size of laminated material.

# TDT-01



Catalogue number	Type	D mm	h mm	d mm	L mm	z	↗	
TDT01.018C	TDT-01	18	40	25	122	3+3	R	+
TDT01.018CL	TDT-01	18	40	25	122	3+3	L	+
TDT01.025	TDT-01	25	40	25	122	3+3	R	+
TDT01.025L	TDT-01	25	40	25	122	3+3	L	+
TDT01.02025	TDT-01	20	40	25	122	3+3	R	+
TDT01.02025L	TDT-01	20	40	25	122	3+3	L	+

## TDT-04



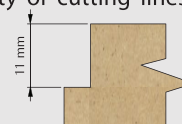
Turbo shank cutter type **TDT-04** designed for roughing and finishing.

**Type of work:** roughing and finishing.

**Material:** solid hardwood, exotic hardwood, MDF, HPL, veneered board, plastics.

**Specification:**

- PKD drilling blade,
- on request we offer increased density of cutting lines  
z=4+4 with Ø more than 20 mm,
- $P_{max} = 12 - 16 \text{ m/min}$ ,
- $N_{max} = 24\,000 \text{ r.p.m.}$



Minimum rebate size of laminated material.



Catalogue number	Type	D mm	h mm	d mm	L mm	z	↗
TDT04.601	TDT-04	18	40	20	103	3+3	R +
TDT04.601L	TDT-04	18	40	20	103	3+3	L +
TDT04.602	TDT-04	20	40	20	103	3+3	R +
TDT04.602L	TDT-04	20	40	20	103	3+3	L +
TDT04.603	TDT-04	20	50	20	113	3+3	R +
TDT04.603L	TDT-04	20	50	20	113	3+3	L +
TDT04.605	TDT-04	25	50	25	103	3+3	R +
TDT04.605L	TDT-04	25	50	25	103	3+3	L +
TDT04.702	TDT-04	25	50	25	113	3+3	R +
TDT04.702L	TDT-04	25	50	25	113	3+3	L +

## TDT-06



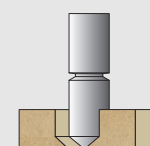
Turbo shank cutter type **TDT-06** designed for roughing and finishing.

**Type of work:** roughing and finishing.

**Material:** solid hardwood, exotic hardwood, MDF, HPL, veneered board, plastics.

**Specification:**

- PKD drilling blade,
- On request we offer increased density of cutting lines  
z=4+4 with Ø more than 20 mm.



Catalogue number	Type	D mm	h mm	d mm	L mm	z	↗
TDT06.007	TDT-06	25	57	25	120	3+3	R +
TDT06.007L	TDT-06	25	57	25	120	3+3	L +

Highly efficient turbo shank cutter type **TDT-07** designed for formatting and splitting on CNC routers.

**Type of work:** formatting and splitting.

**Material:** chipboard, MDF, melamine and laminated boards.

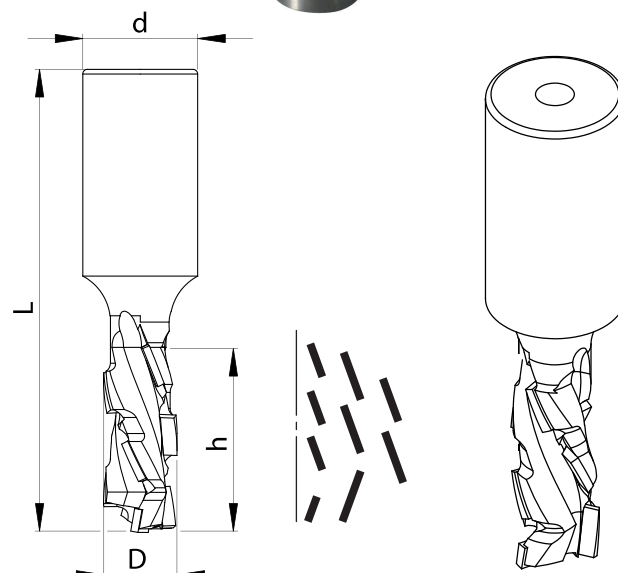
**Specification:**

- optimal chip flow,
- HM drilling blade,
- $P_{\max} = 12 \text{ m/min.}$
- $N_{\max} = 24\,000 \text{ r.p.m.}$



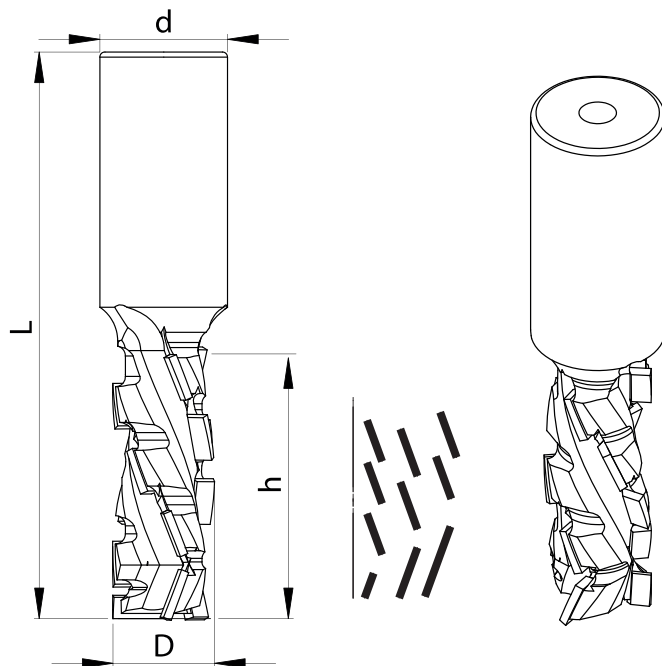
Minimum rebate size of laminated material.

# TDT-07



Catalogue number	Type	D mm	h mm	d mm	L mm	z		
TDT07.008A	TDT-07	16	30	25	105	3+3	R	+
TDT07.008AL	TDT-07	16	30	25	105	3+3	L	+
TDT07.005	TDT-07	18	30	25	105	3+3	R	+
TDT007.005L	TDT-07	18	30	25	105	3+3	L	+
TDT07.002	TDT-07	18	40	25	110,5	3+3	R	+
TDT07.002L	TDT-07	18	40	25	110,5	3+3	L	+
TDT07.0031	TDT-07	20	40	25	110,5	3+3	R	+
TDT07.0031L	TDT-07	20	40	25	110,5	3+3	L	+
TDT007.0070	TDT-07	20	48	25	118,5	3+3	R	+
TDT007.0070L	TDT-07	20	48	25	118,5	3+3	L	+

## TDT-09



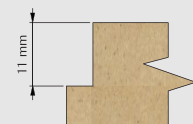
Highly efficient turbo shank cutter type **TDT-09** for formatting, splitting, grooving and copying on CNC routers.

**Type of work:** formatting, splitting, grooving, copying.

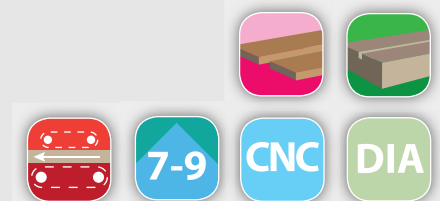
**Material:** chipboard, MDF, laminates.

**Specification:**

- big helix line angle guaranteeing high cutting quality and life of the tool,
- gentle chip flow,
- PKD drilling blade,
- $P_{max} = 14 \text{ m/min}$ ,
- $N_{max} = 24\,000 \text{ r.p.m.}$



Minimum rebate size  
of laminated material.



Catalogue number	Type	D mm	h mm	d mm	L mm	z	↙	
TDT09.0050	TDT-09	18	25	20	84,5	3+3	R	•
TDT09.0050L	TDT-09	18	25	20	84,5	3+3	L	+
TDT09.0010	TDT-09	18	30	20	93	3+3	R	+
TDT09.0010L	TDT-09	18	30	20	93	3+3	L	+
TDT09.0130	TDT-09	18	35	20	98	3+3	R	+
TDT09.0130L	TDT-09	18	35	20	98	3+3	L	+
TDT09.0140	TDT-09	18	43	20	101	3+3	R	•
TDT09.0140L	TDT-09	18	43	20	101	3+3	L	+
TDT09.0090	TDT-09	18	52	20	115	3+3	R	+
TDT09.0090L	TDT-09	18	52	20	115	3+3	L	+
TDT09.0030	TDT-09	20	25	20	84,5	3+3	R	+
TDT09.0030L	TDT-09	20	25	20	84,5	3+3	L	+
TDT09.0040	TDT-09	20	30	20	93	3+3	R	+
TDT09.0040L	TDT-09	20	30	20	93	3+3	L	+
TDT09.0060	TDT-09	20	35	20	98	3+3	R	+
TDT09.0060L	TDT-09	20	35	20	98	3+3	L	+
TDT09.0020	TDT-09	20	43	20	101	3+3	R	+
TDT09.0020L	TDT-09	20	43	20	101	3+3	L	+
TDT09.0150	TDT-09	20	52	20	115	3+3	R	+
TDT09.0150L	TDT-09	20	52	20	115	3+3	L	+

Turbo shank cutter type **TDT-15** designed for formatting and splitting on CNC routers with vacuum bed.

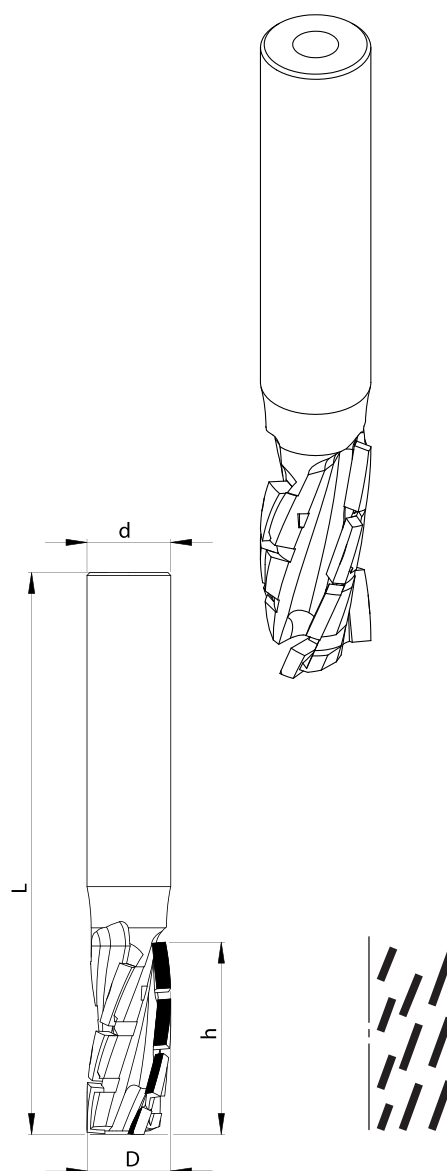
**Type of work:** formatting, splitting.


**Material:** chipboard, MDF, HDF.

**Specification:**

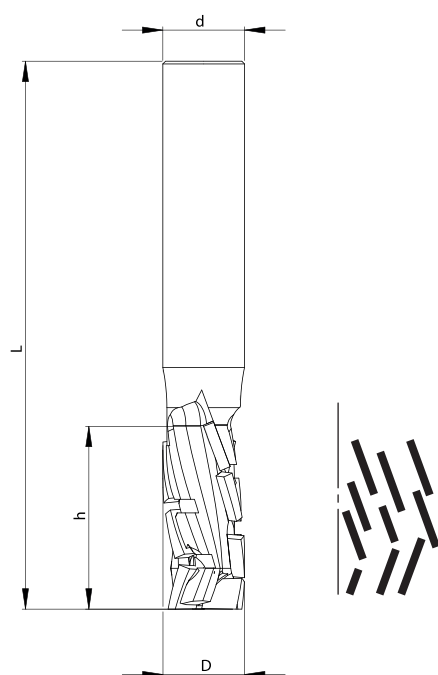
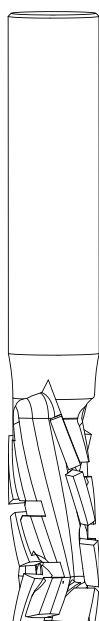
- used in highly efficient machining of raw material,
- chip flow up,
- D = 12, D= 16 resharable 2-3 times,
- D = 20 resharable 4-6 times,
- $P_{max} = 10-18 \text{ m/min}$ ,
- $N_{max} = 24\,000 \text{ r.p.m.}$

# TDT-15



Catalogue number	Type	D mm	h mm	d mm	L mm	z		
TDT015.0020	TDT-15	12	25	12	75	3	R	+
TDT015.0040	TDT-15	16	25	16	75	3	R	+
TDT015.0070	TDT-15	20	40	25	106	3	R	+
TDT015.0021	TDT-15	12	25	25	106	3	R	+
TDT015.0110	TDT-15	12	35	12	88	3	R	+
TDT015.0120	TDT-15	16	25	25	106	3	R	+
TDT015.0130	TDT-15	16	35	25	106	3	R	+
TDT015.0140	TDT-15	16	43	25	106	3	R	+
TDT015.0150	TDT-15	20	25	25	106	3	R	+
TDT015.0160	TDT-15	20	35	25	106	3	R	+
TDT015.0170	TDT-15	20	43	25	106	3	R	+
TDT015.0180	TDT-15	20	60	25	106	3	R	+

## TDT-0151



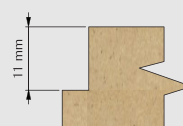
Turbo shank cutter type **TDT-0151** designed for formatting and splitting on CNC routers with vacuum bed.

**Type of work:** formatting, splitting.

**Material:** chipboard, MDF, HDF.

**Specification:**

- used in highly efficient machining of laminated material material: HDF, MDF, chipboard,
- very high cutting quality on bottom and top edge of the machined material thanks to alternative cutting angles,
- D = 12, D = 16 resharable 2-3 times,
- D = 20 resharable 4-6 times,
- $P_{max} = 10-18 \text{ m/min}$ ,
- $N_{max} = 24\,000 \text{ r.p.m.}$



Minimum rebate size of laminated material.



Catalogue number	Type	D mm	h mm	d mm	L mm	z	↺	
TDT0151.5010	TDT-0151	12	25	12	75	3	R	+
TDT0151.5020	TDT-0151	12	35	12	90	3	R	+
TDT0151.5030	TDT-0151	16	25	16	80	3	R	+
TDT0151.5040	TDT-0151	16	35	16	90	3	R	+
TDT0151.5050	TDT-0151	16	43	16	100	3	R	+
TDT0151.5060	TDT-0151	20	25	20	80	3	R	+
TDT0151.5070	TDT-0151	20	35	20	90	3	R	+
TDT0151.5080	TDT-0151	20	43	20	100	3	R	+

Highly efficient turbo shank cutter z=4+4 type **TDT-10** designed for formatting, splitting, grooving and copying on CNC routers.

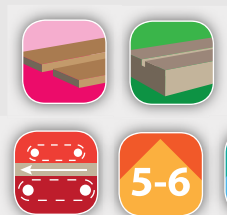
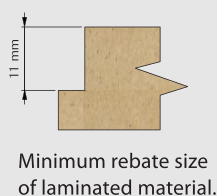
**Type of work:** formatting, splitting, grooving, copying.

**Material:** solid hardwood, exotic hardwood, chipboard, MDF, HDF, raw boards, melamine and paper, HPL, veneer, materials coated with finish foil.

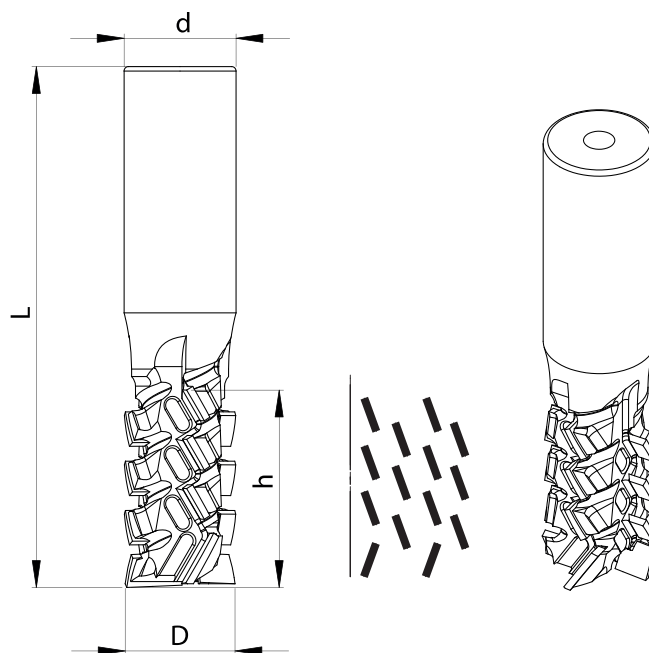
Innovative construction of shank tools with increased density of cutting blades positioned spirally at a big angle. The cutters are designed for very efficient work with the highest quality of the machined material. Four simultaneously cutting blades are positioned at a very big shear angle. It guarantees very long life as well as quiet and stable work of the tool. Spirally arranged 4 cutting lines perfectly remove chip leaving the machined elements clean.

#### Specification:

- D = 20 resharppable 5-6 times,
- D = 22, D = 25 resharppable 7-9 times,
- two PKD drilling blades,
- $P_{max} = 20-25 \text{ m/min}$ ,
- $N_{max} = 24\,000 \text{ r.p.m.}$

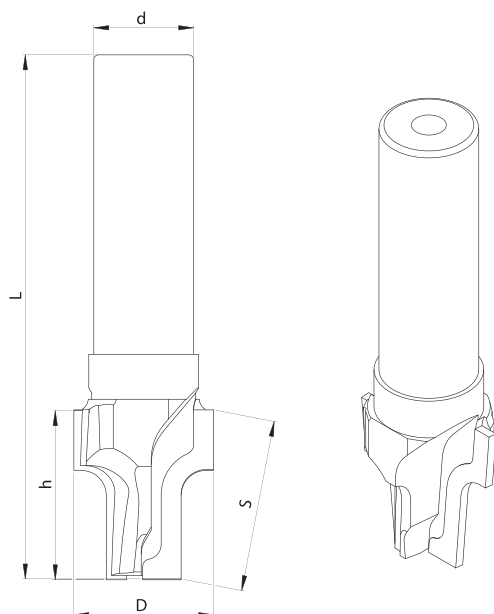


## TDT-10



Catalogue number	Type	D mm	h mm	d mm	L mm	z	↗	
TDT010.0040	TDT-10	20	25	20	87	4+4	R	•
TDT010.0040L	TDT-10	20	25	20	87	4+4	L	+
TDT010.0050	TDT-10	20	35	20	97	4+4	R	+
TDT010.0050L	TDT-10	20	35	20	97	4+4	L	+
TDT010.0030	TDT-10	22	43	16	105	4+4	R	•
TDT010.0030L	TDT-10	22	43	16	105	4+4	L	+
TDT010.0020	TDT-10	25	43	25	116	4+4	R	•
TDT010.0020L	TDT-10	25	43	25	116	4+4	L	+

## TPD-05 R or L



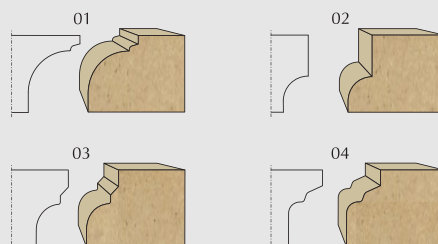
Profile shank cutter type **TPD-05** right or left designed for profiling on CNC machines.

**Type of work:** profiling.

**Material:** chipboard, plywood, MDF.

**Specification:**

- $P_{max} = 8-12 \text{ m/min}$ ,
- $N_{max} = 18\,000 \text{ r.p.m.}$

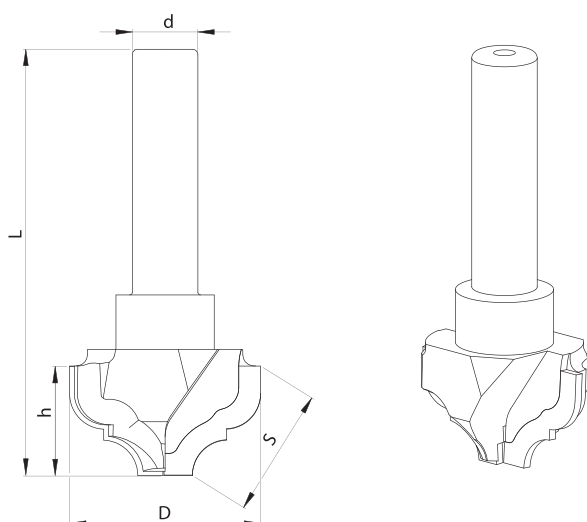


Example profiles.



Type	D mm	h mm	d mm	L mm	s mm	z	$n_{max}$	
TPD-05	26	28	20	68	29,2	2	18000	+

## TPD-07 R or L



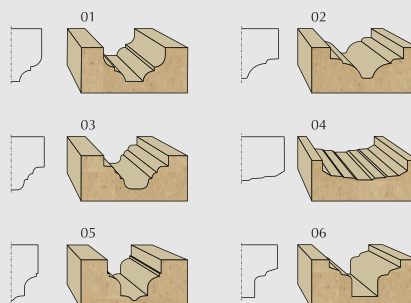
Profile shank cutter type **TPD-07** right or left designed for profiling on CNC machines.

**Type of work:** profiling.

**Material:** chipboard, plywood, MDF.

**Specification:**

- $P_{max} = 8-12 \text{ m/min}$ ,
- $N_{max} = 18\,000 \text{ r.p.m.}$



Example profiles.



Type	D mm	h mm	d mm	L mm	s mm	z	$n_{max}$	
TPD-07	34	24	12	55	25,8	2	18000	+

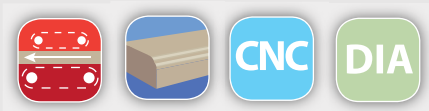
Profile shank cutter type **TPD-08** right or left designed for profiling on CNC machines.

**Type of work:** profiling.

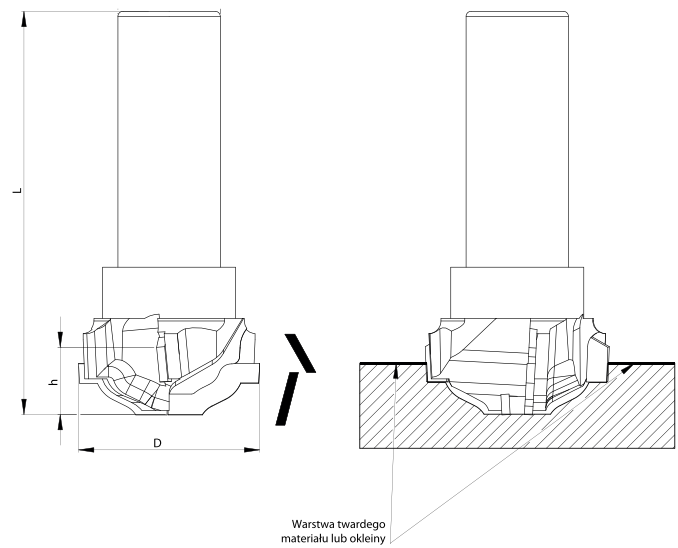
**Material:** chipboard, plywood, MDF.

**Specification:**

- profile shank cutters are designed for very precise machining,
- tools are equipped with additional blades directing chip down,
- $P_{\max} = 8-12 \text{ m/min}$ ,
- $N_{\max} = 24\,000 \text{ r.p.m.}$



## TPD-08 R or L



Type	D mm	h mm	d mm	L mm	z	$n_{\max}$	
TPD-08	35,4	12	20	78	2+2	18000	+

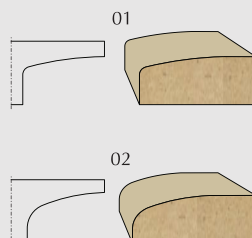
Profile shank cutter type **TPD-10** right or left designed for profiling on CNC machines.

**Type of work:** profiling.

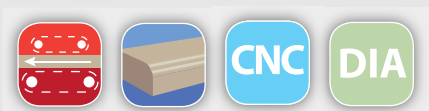
**Material:** chipboard, plywood, MDF.

**Specification:**

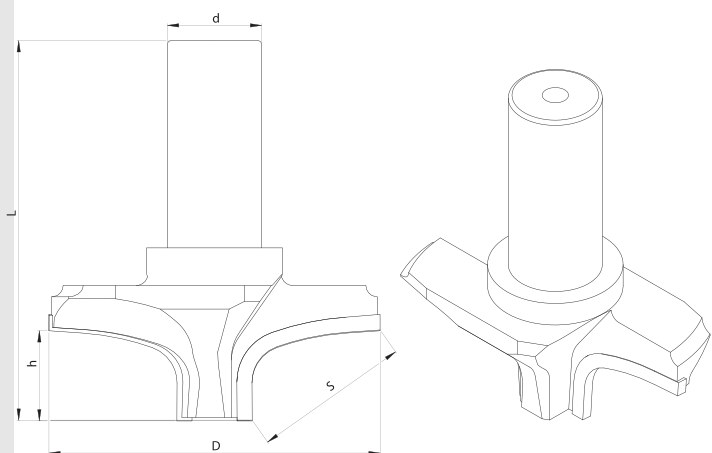
- $P_{\max} = 8-12 \text{ m/min}$ ,
- $N_{\max} = 18\,000 \text{ r.p.m.}$



Example profiles.

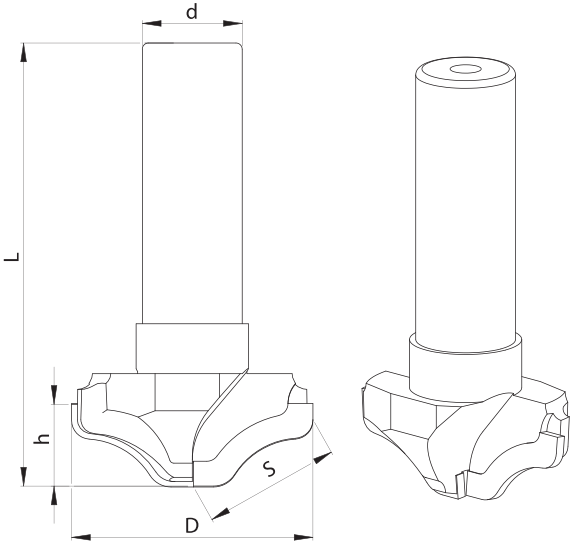


## TPD-10 R or L



Type	D mm	h mm	d mm	L mm	s mm	z	$n_{\max}$	
TPD-10	81	21	16	75	37	2	18000	+

TPD-13 R or L



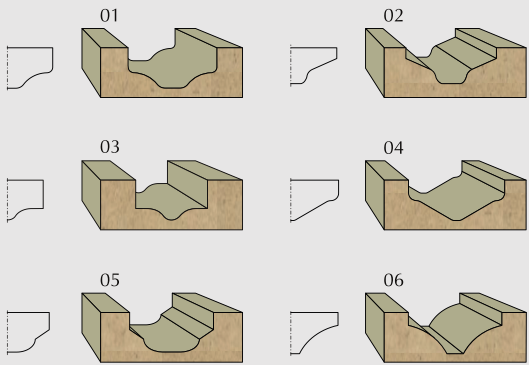
Profile shank cutter type **TPD-13** right or left designed for profiling on CNC machines.

**Type of work:** profiling.

**Material:** chipboard, plywood, MDF.

**Specification:**

- $P_{max} = 8-12 \text{ m/min}$ ,
- $N_{max} = 24\,000 \text{ r.p.m.}$



Example profiles.



Type	D mm	h mm	d mm	L mm	s mm	z	n <sub>max</sub>	
TPD-13	36	12	25	53,6	21,6	2	18000	+

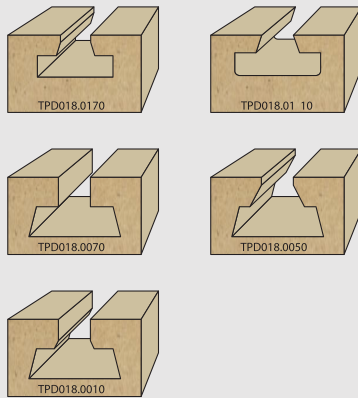
Profile shank cutter type **TPD-18** designed for T-grooving.

**Type of work:** profiling.

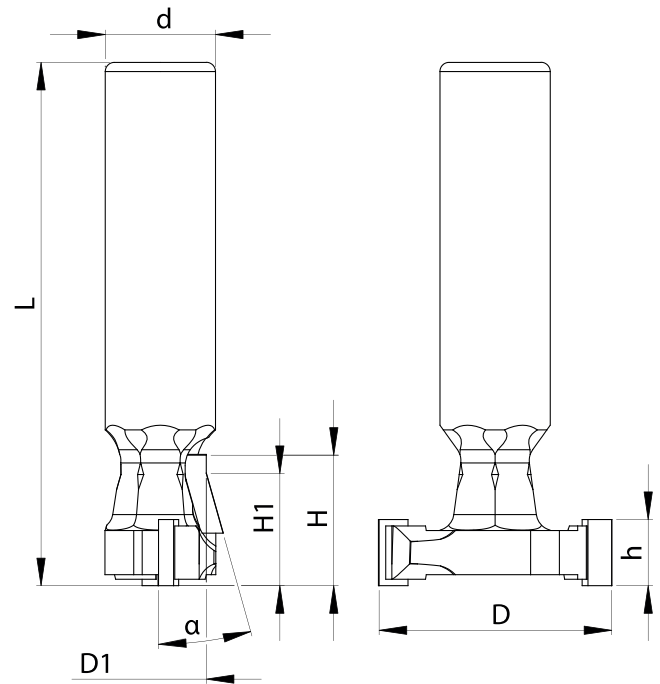
**Material:** chipboard, plywood, MDF.


**Specification:**

- highly efficient machining quality thank to properly selected construction and PKD type,
- tools offered also in special versions (on request),
- sharpening zone 2 mm,
- $P_{max} = 3-5 \text{ m/min.}$
- $N_{max} = 24\,000 \text{ r.p.m.}$



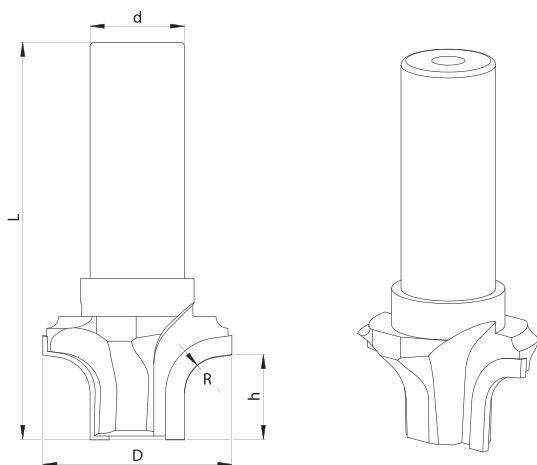
# TPD-18



Catalogue number	Type	D mm	h mm	d mm	L mm	z		
TPD018.0170	TPD-18	25,40	7,20	12	60	2+1	R	+
TPD018.0110	TPD-18	27,40	7,60	16	63	2+1	R	+
TPD018.0070	TPD-18	34,30	10,50	12	60	2+1	R	+
TPD018.0050	TPD-18	36,00	7,00	10	60	2+1	R	+
TPD018.0010	TPD-18	37,75	9,15	25	90	2+1	R	+

D mm	h mm	d mm	D <sub>1</sub> mm	H mm	H <sub>1</sub> mm	α
25,40	7,20	12	10,50	14,20	12,20	15,6°
27,40	7,60	16	10,50	13,50	7,60	20°
34,30	10,50	12	29,60	20,50		
36,00	7,00	10	32,25	14,00	11,00	45°
37,75	9,15	25	27,85	17,80	12,35	20°

## TPD-20 R or L



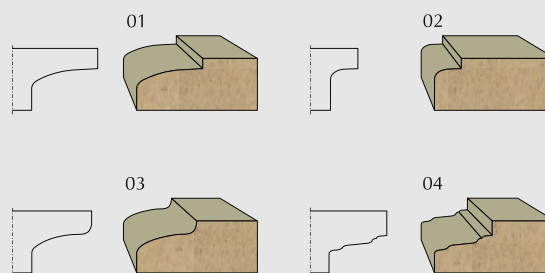
Profile shank cutter type **TPD-20** designed for profiling on CNC machines.

**Type of work:** profiling.

**Material:** chipboard, plywood, MDF.

**Specification:**

- $P_{max} = 8-12$  m/min,
- $N_{max} = 24\,000$  r.p.m.

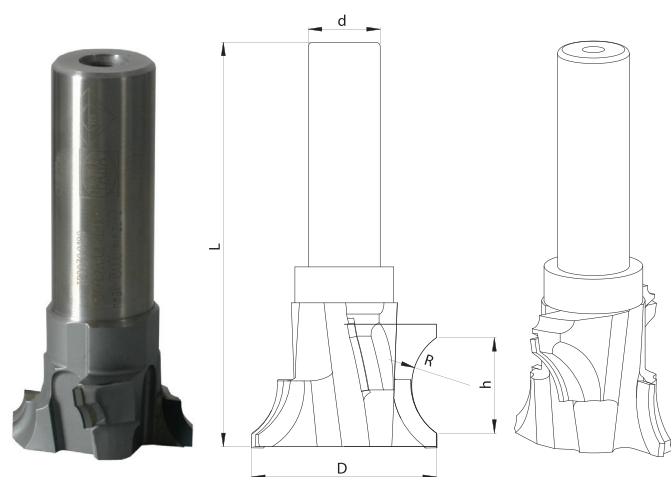


Example profiles.



Type	D mm	h mm	d mm	L mm	R mm	z	n <sub>max</sub>
TPD-20	42	22	20	75	8	2	18000 +

## TPD-30 R or L



Profile shank cutter type **TPD-30** designed for profiling on CNC machines.

**Type of work:** profiling.

**Material:** chipboard, plywood, MDF.

**Specification:**

- $P_{max} = 8-12$  m/min,
- $N_{max} = 24\,000$  r.p.m.



Type	D mm	h mm	d mm	L mm	R mm	z	n <sub>max</sub>
TPD-30	52	40	25	105	26	4	18000 +

Straight brazed cutter type **FD-01**.

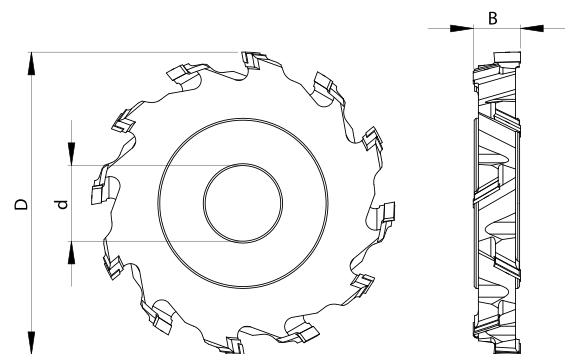
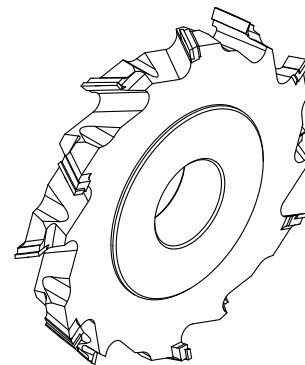
**Type of work:** formatting.

**Material:** chipboard, plywood, MDF, HDF.

**Specification:**

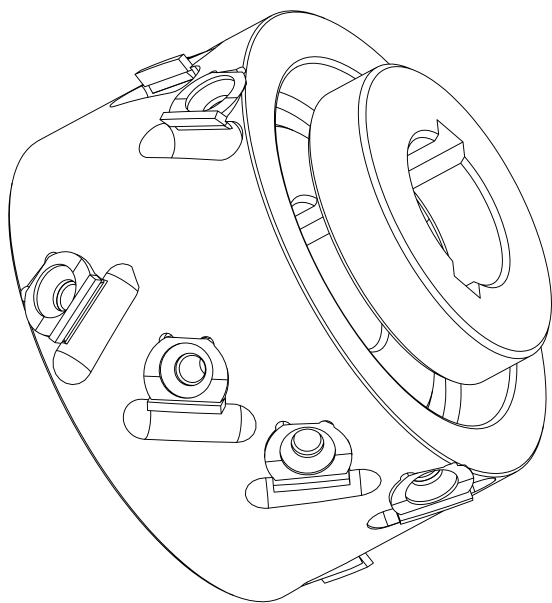
- $P_{\max} = 20\text{--}30\text{ m/min}$ ,
- $N_{\max} = 9\,000\text{ r.p.m.}$

# FD-01



Catalogue number	Type	D mm	B mm	d mm	z	$n_{\max}$	
FD01.012	FD-01	50	20	16	4+4	9000	+
FD01.005	FD-01	70	10	20	3+3	9000	+
FD01.0020	FD-01	100	22	25	3+3	9000	+
FD01.030	FD-01	125	8	40	4+4	9000	+
FD01.009	FD-01	125	12	30	6+6	9000	+
FD01.022	FD-01	125	15	30	4+4	9000	+
FD001.0260	FD-01	125	20	30	4+4	9000	+
FD001.0270	FD-01	125	25	30	4+4	9000	+
FD01.011	FD-01	125	28	30	4+4	9000	+
FD01.014	FD-01	125	30	30	4+4	9000	+
FD01.018	FD-01	125	45	30	4+4	9000	+
FD01.002	FD-01	160	15	30	4+4	9000	+
FD01.0026	FD-01	160	15	30	6+6	9000	+
FD001.0230	FD-01	160	17	40	8+8	9000	+
FD001.0280	FD-01	160	20	30	4+4	9000	+
FD001.0290	FD-01	160	25	30	4+4	9000	+
FD001.0100	FD-01	180	10,5	40	8+8	9000	+
FD001.0130	FD-01	180	16	30	4+4	9000	+
FD01.008	FD-01	200	25	30	6+6	9000	+

## FDKA



Cutter head **FDKA** with aluminum body and exchangeable inserts. Multi-use aluminum body and exchangeable blades give significantly lower maintenance costs after a couple of life cycles.

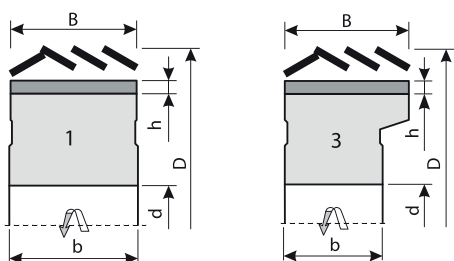
Aluminum body results in tool weight lower by 60%. It significantly reduces spindle work load compared to steel body tools. Lower tool weight means also noise reduction and stable machine work.

**Type of work:** formatting.

**Material:** veneered chipboard covered with laminate, foil or paper.

**Specification:**

- $P_{max} = 20-25 \text{ m/min}$ ,
- $N_{max} = 16\,500 \text{ r.p.m.}$



Catalogue number	Type	D mm	B mm	b mm	d mm	z	Nr	$n_{max}$	
FDKA.0010	FDKA	100	44	40,6	30	3+3	3	16 500	R •
FDKA.0010L	FDKA	100	44	40,6	30	3+3	3	16 500	L •

**Spare parts for cutter heads FDKA**

Cat. nr	Name	Dimensions		
PD.FDKA.0010	Spacer ring	60 x 13 x 30,1		+
P.FDKA	Insert (not sharpened)	16 x 4		+

Cat. nr	Name	Dimensions		
WHAS00006	Screw TOR 1128	M6x10		•

Additional ring makes cutter more universal.

Option Nr. 1 b=53,6mm with additional ring PD.FDKA.0010.

Straight brazed cutter type **FD-002**, designed for surface formatting on edge banders and formatting machines with mechanical feed. Helically arranged blades, positioned at a big angle guarantee very efficient and high quality machining.

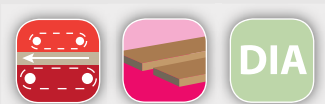
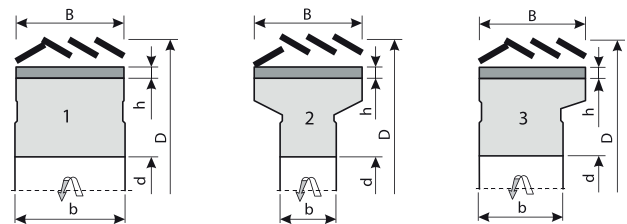
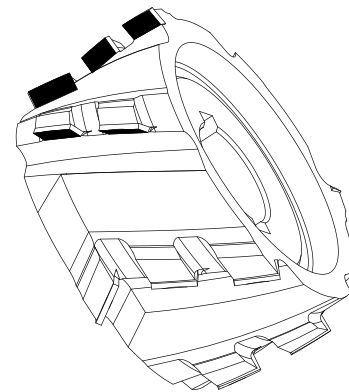
**Type of work:** formatting.

**Material:** veneered chipboard covered with laminate, foil or paper.

**Specification:**

- sharpening zone for DIA = 3 mm is 2 mm,
- sharpening zone for DIA = 5 mm is 4 mm,
- big shear angle guarantees high machining quality,
- $P_{max} = 20-26 \text{ m/min}$ ,
- $N_{max} = 15\,000 \text{ r.p.m.}$

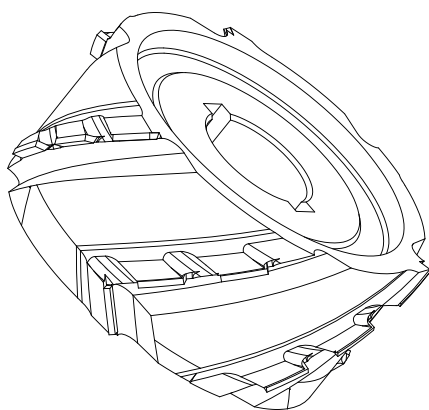
## FD-002



Machine	Type	D mm	B mm	b mm	d mm	z	Keyway mm	Nr	DIA h=3mm	DIA h=5mm
IMA/Brandt	FD-002	100	34	37,6	30	3+3	3x8	1	+	+
IMA/Brandt	FD-002	100	43	40,6	30	3+3	3x8	3	+	+
	FD-002	100	43	45	30	3+3	3x8	1	+	+
IMA/Brandt	FD-002	100	48	40,6	30	3+3	3x8	3	+	+
HolzHer	FD-002	100	48	25	30	3+3	3x8	2	+	+
	FD-002	100	48	50	30	3+3	3x8	1	+	+
HolzHer	FD-002	100	63	25	30	3+3	3x8	2	+	+
Homag	FD-002	125	34	37,6	30	3+3	3x8	1	+	+
Homag	FD-002	125	63	40,6	30	3+3	3x8	2	+	+
IMA	FD-002	125	63	40,6	30	3+3	3x8	3	+	+

Catalogue number	Type	Machine	D mm	B mm	b mm	d mm	z	Nr	DIA h mm	↗
FD002.1560	FD-002	IMA/Brandt	100	43,5	40,6	30	3+3	3	3	R •
FD002.1560L	FD-002	IMA/Brandt	100	43,5	40,6	30	3+3	3	3	L •
FD002.1600	FD-002	IMA/Brandt	100	48	40,6	30	3+3	3	3	R •
FD002.1600L	FD-002	IMA/Brandt	100	48	40,6	30	3+3	3	3	L •

## FD-025



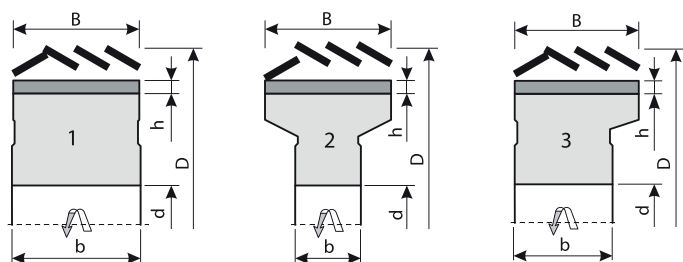
Straight brazed cutter type **FD-025**, designed for surface formatting on edge banders and formatting machines with mechanical feed. Helically arranged blades, positioned at a big angle guarantee very efficient and high quality machining of hard-machinable materials.

**Type of work:** formatting.

**Material:** veneered chipboard covered with laminate, foil or paper.

**Specification:**

- sharpening zone for DIA = 3 mm is 2 mm,
- sharpening zone for DIA = 5 mm is 4 mm,
- **very big shear angle** guarantees high machining quality,
- $P_{max} = 22-26 \text{ m/min}$
- $N_{max} = 15\,000 \text{ r.p.m.}$



Machine	Type	D mm	B mm	b mm	d mm	z	Keyway mm	Nr	DIA h=3mm	DIA h=5mm
IMA/Brandt	FD-025	100	34	37,6	30	3+3	3x8	1	+	+
IMA/Brandt	FD-025	100	43	40,6	30	3+3	3x8	3	+	+
IMA/Brandt	FD-025	100	48	40,6	30	3+3	3x8	3	+	+
HolzHer	FD-025	100	48	25	30	3+3	3x8	2	+	+
HolzHer	FD-025	100	63	25	30	3+3	3x8	2	+	+
Homag	FD-025	125	34	37,6	30	3+3	3x8	1	+	+
Homag	FD-025	125	63	40,6	30	3+3	3x8	2	+	+
IMA	FD-025	125	63	40,6	30	3+3	3x8	3	+	+

Straight brazed cutter type **FD-021**, designed for surface formatting on edge banders and formatting machines with mechanical feed.

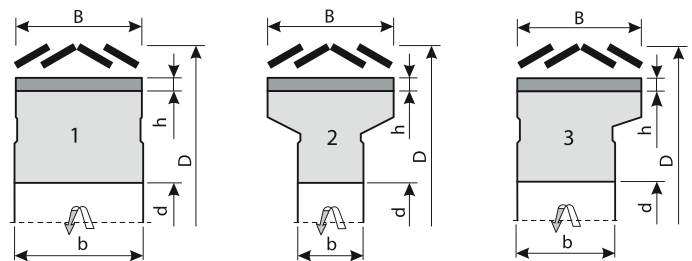
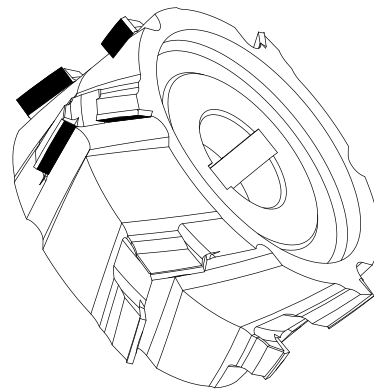
**Type of work:** formatting.

**Material:** chipboard, plywood, MDF, HDF.

**Specification:**

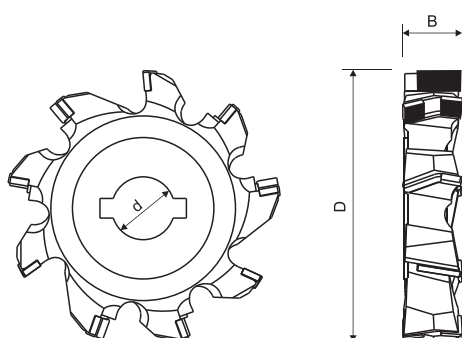
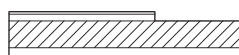
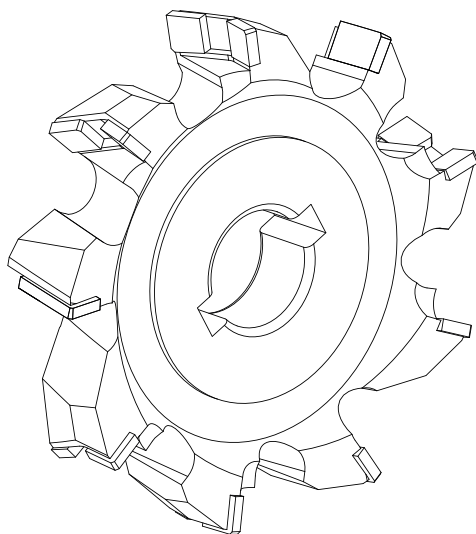
- symmetrically arranged blades,
- $P_{\max} = 22\text{--}26 \text{ m/min}$ ,
- $N_{\max} = 15\,000 \text{ r.p.m.}$

# FD-021



Machine	Catalogue number	Type	D mm	B mm	b mm	d mm	z	Keyway mm	Nr	
OTT	FD021.0010	FD-021	85	45	45	30	3+3	8x3	1	+
IMA/Brandt	FD021.0020	FD-021	100	34	37,6	30	3+3	8x3	1	+
HolzHer	FD021.0030	FD-021	100	48	25	30	3+3	8x3	2	+
IMA/Brandt	FD021.0041	FD-021	100	43,6	40,6	30	3+3	8x3	2	+
HolzHer	FD021.0051	FD-021	100	52	25	30	3+3	8x3	2	+
Homag	FD021.0060	FD-021	100	34	37,6	30	3+3	8x3	1	+
Homag	FD021.0180	FD-021	125	43	40,6	30	3+3	8x3	1	+
Homag	FD021.0170	FD-021	125	63	40,6	30	3+3	8x3	2	+

## FD-03



Straight brazed cutter type **FD-03**, designed for pre-cutting, before profiling veneered elements

FD-03 cutter is used when thick layer of the removed material does not allow for obtaining high quality edges on edge banders and production lines.

**Type of work:** pre-cutting.

**Material:** chipboard, MDF.

**Specification:**

- $P_{\max} = 18 \text{ m/min}$ ,
- $N_{\max} = 9\,000 \text{ r.p.m.}$



Catalogue number	Type	D mm	B mm	d mm	z	$n_{\max}$	
FD003.0010	FD-03	70	15	16	9+3+3	9000	+
FD003.0020	FD-03	70	25	20	9+3+3	9000	+

High-efficient straight brazed cutter type **FD-04**, designed for finishing formatting of double-sidedly veneered materials.

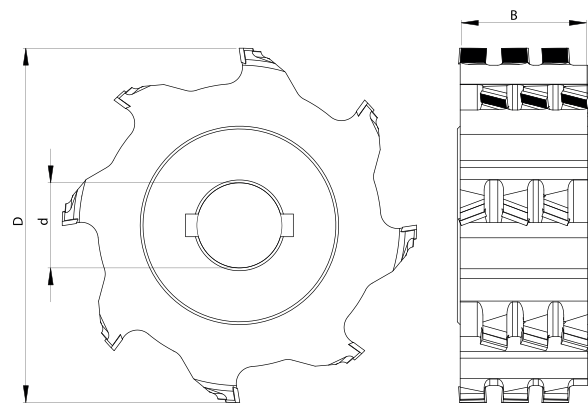
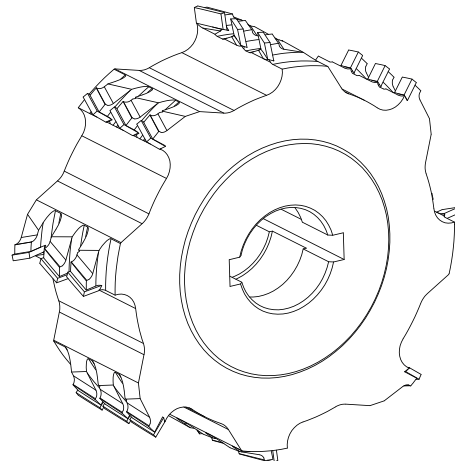
**Type of work:** formatting.

**Material:** chipboard, plywood, MDF, HDF.

**Specification:**

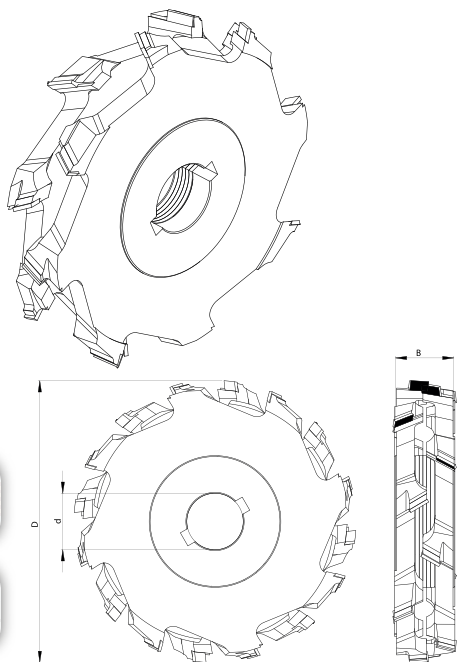
- high quality of the machined edge,
- standard version of the tool 8-10 times resharpenable and economical version 3-5 times resharpenable,
- $P_{\max} = 22-26 \text{ m/min}$ ,
- $N_{\max} = 9\,000 \text{ r.p.m.}$

# FD-04



Catalogue number	Type	D mm	B mm	d mm	z	n <sub>max</sub>	
FD004.0260	FD-04	80	33	30	4+4	9000	+
FD004.0120	FD-04	80	45	30	4+4	9000	+
FD004.0032	FD-04	100	40	30	2+2	9000	+
FD004.0040	FD-04	110	40	30	3+3	9000	+
FD04.020	FD-04	125	23	30	4+4	9000	+
FD04.017	FD-04	125	25	30	4+4	9000	+
FD04.019	FD-04	125	30	30	4+4	9000	+
FD04.022	FD-04	125	30	35	4+4	9000	+
FD004.0460	FD-04	125	45	30	4+4	9000	+
FD04.025	FD-04	140	23	30	4+4	9000	+
FD004.0450	FD-04	140	28	30	4+4	9000	+
FD004.0500	FD-04	140	33	30	4+4	9000	+
FD004.0090	FD-04	140	45	40	4+4	9000	+
FD004.0480	FD-04	140	50	40	4+4	9000	+

## ZFD-01



Set of straight brazed cutters type **ZFD-01** designed for formatting machines.

**Type of work:** formatting.

**Material:** chipboard, plywood, MDF, HDF.

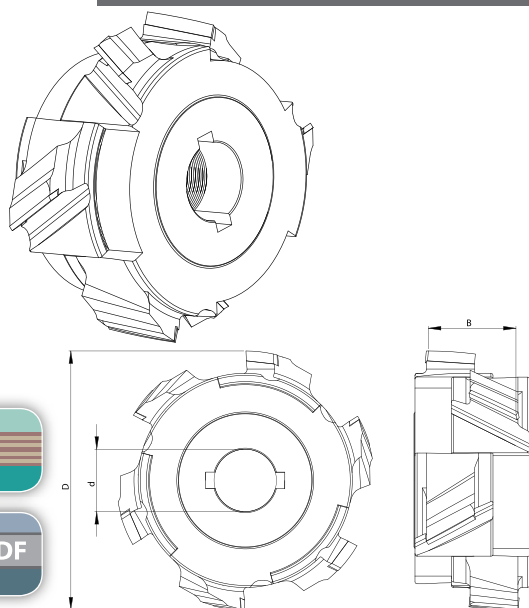
**Specification:**

- variable sharpening zone,
- machining materials with various width,
- $P_{max} = 35 \text{ m/min}$ ,
- $N_{max} = 9\,000 \text{ r.p.m.}$



Catalogue number	Type	D mm	B mm	d mm	z	$n_{max}$	
ZFD001.0060	ZFD-01	120	24÷36	30	6+6	9000	+
ZFD01.001	ZFD-01	125	24÷36	30	6+6	9000	+
ZFD001.0040	ZFD-01	125	24÷45	30	6+6	9000	+
ZFD01.003	ZFD-01	140	34÷60	30	6+6	9000	+
ZFD001.0070	ZFD-01	160	24÷36	30	6+6	9000	+

## ZFD-02



Set of straight brazed cutters type **ZFD-02** designed for formatting machines.

**Type of work:** formatting.

**Material:** chipboard, plywood, MDF, HDF.

**Specification:**

- variable sharpening zone,
- machining materials with various width,
- $P_{max} = 20\text{-}25 \text{ m/min}$ .
- $N_{max} = 9\,000 \text{ r.p.m.}$



Catalogue number	Type	D mm	B mm	d mm	z	$n_{max}$	
ZFD02.020	ZFD-02	120	24÷36	30	3+3	9000	+
ZFD02.021	ZFD-02	125	24÷36	30	3+3	9000	+
ZFD02.022	ZFD-02	125	24÷45	30	3+3	9000	+

Set of straight brazed cutters type **ZFD-01** designed for formatting machines.

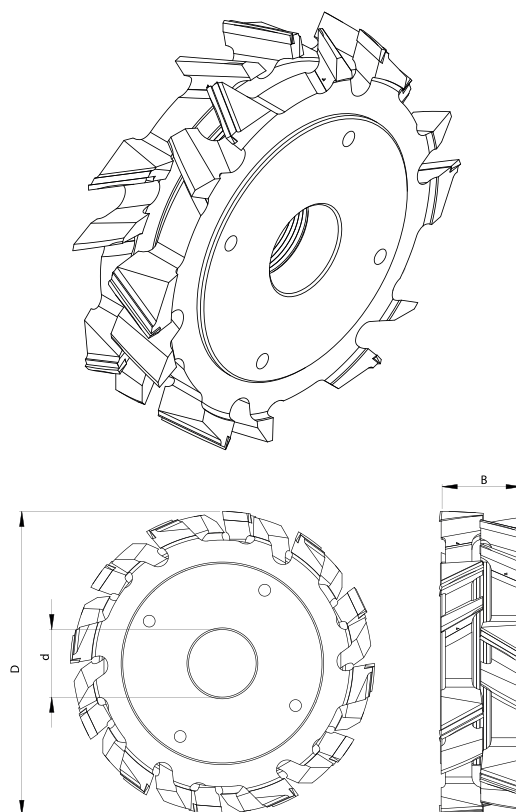
**Type of work:** formatting.

**Material:** chipboard, plywood, MDF, HDF.

**Specification:**

- optionally offered with anti-kickback system and blade protection against removed material,
- machining materials with various width possible thanks to axial regulation of working part width,
- very long life of tools thanks to variable cutting points zone,
- $P_{\max} = 30 \text{ m/min.}$
- $N_{\max} = 6\,000 \text{ r.p.m.}$

## ZFD-002



Catalogue number	Type	D mm	B mm	d mm	z	n <sub>max</sub>	
ZFD002.2010	ZFD-002	180	22÷32	30	4+4	6000	+
ZFD002.2020	ZFD-002	180	24÷36	30	4+4	6000	+
ZFD002.2030	ZFD-002	180	34÷42	30	4+4	6000	+
ZFD002.2040	ZFD-002	180	22÷32	40	4+4	6000	+
ZFD002.2050	ZFD-002	180	24÷36	40	4+4	6000	+
ZFD002.2060	ZFD-002	180	34÷42	40	4+4	6000	+

## FPD-102 R or L

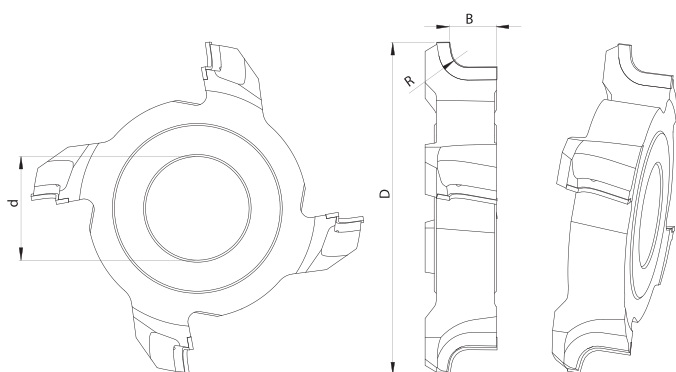
Set of profile brazed cutters type **FPD-102** right or left designed for profiling machines.

**Type of work:** profiling.

**Material:** chipboard, plywood, MDF.

**Specification:**

- $P_{\max} = 25 \text{ m/min}$ ,
- $N_{\max} = 9\,000 \text{ r.p.m.}$



Catalogue number	Type	D mm	B mm	R mm	d mm	z	$n_{\max}$	
FPD102.0020L	FPD-102	160	30	10	35	4	9000	+
FPD102.0030L	FPD-102	160	30	12	35	4	9000	+
FPD102.0040L	FPD-102	160	30	14	35	4	9000	+
FPD102.0050L	FPD-102	160	30	16	35	4	9000	+

## FPD-116

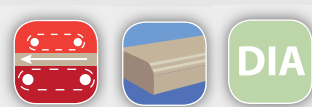
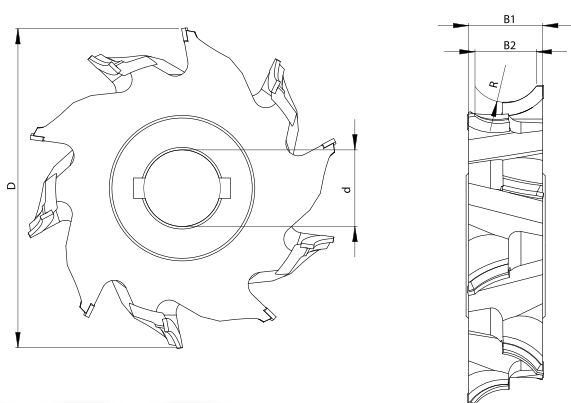
Set of profile brazed cutters type **FPD-116** right or left designed for profiling machines.

**Type of work:** profiling.

**Material:** chipboard, plywood, MDF.

**Specification:**

- $P_{\max} = 18-25 \text{ m/min}$ ,
- $N_{\max} = 9\,000 \text{ r.p.m.}$



Catalogue number	Type	D mm	B <sub>1</sub> mm	B <sub>2</sub> mm	R mm	d mm	z	$n_{\max}$	
FPD116.0020	FPD-116	100	30	26	18	30	4+4	9000	+
FPD116.0090	FPD-116	125	56	40	20	30	3+3	9000	+
FPD116.0010	FPD-116	160	18	17	9	35	6+6	9000	+
FPD116.0500	FPD-116	180	30	24	16	35	4+4	9000	+
FPD116.0510	FPD-116	180	48	40	25	35	4+4	9000	+
FPD116.0520	FPD-116	180	64	56	35	35	4+4	9000	+

Profile brazed cutters **FPD-300** with PD blades.

**Type of work:** postforming.

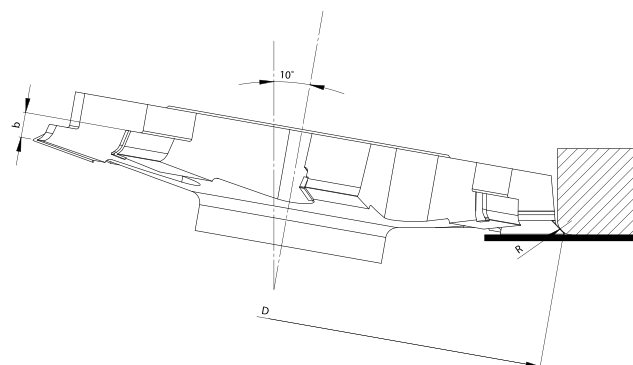
**Material:** chipboard, plywood, MDF.

**Specification:**

- for Homag and IMA machines,
- $P_{max} = 25 \text{ m/min}$ ,
- $N_{max} = 9\,000 \text{ r.p.m.}$



## FPD-300



Catalogue number	Type	D mm	R mm	d mm	z	
FPD300.3010	FPD-300	180	3	35	4+4	+
FPD300.3020	FPD-300	180	4	35	4+4	+
FPD300.3030	FPD-300	180	5	35	4+4	+
FPD300.3040	FPD-300	180		35	4+4	+
FPD300.3050	FPD-300	200		35	4+4	+

Profile brazed cutters **FD-500** designed for edge beveling.

**Type of work:** edge machining.

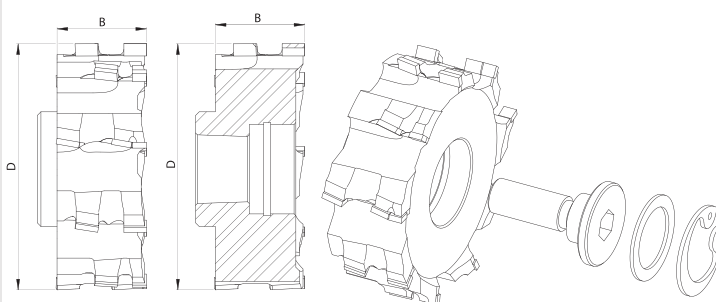
**Material:** solid hardwood, veneered board, plastics.

**Specification:**

- for Homag and IMA machines,
- safety ring HSK25R guarantees minimum radial runout and precise balancing of the tools for optimal cutting quality,
- blade with shear angle,
- $N_{max} = 18\,000 \text{ r.p.m.}$

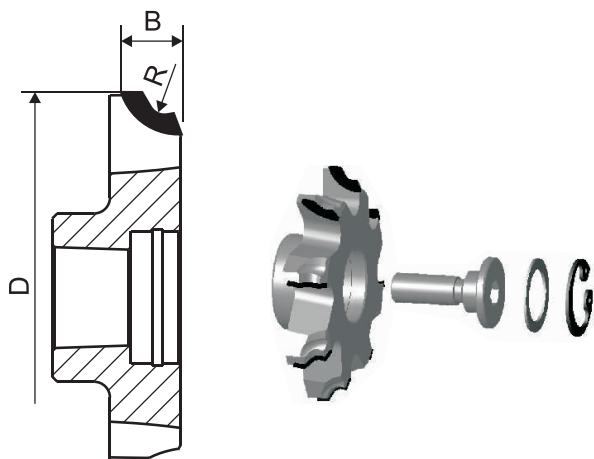


## FD-500



Catalogue number	Type	D mm	B mm	d mm	z	$n_{max}$	↙	
FD500.0130	FD-500	70	20	HSK25	9+3+3	18000	R	+
FD500.0101	FD-500	70	50	HSK25	9+3+3+3	18000	R	+
FD500.0101L	FD-500	70	50	HSK25	9+3+3+3	18000	L	+
FD500.0110P	FD-500	75	22	20	12+4	18000	R	+
FD500.0110	FD-500	75	22	20	12+4	18000	L	+
FD500.0140L	FD-500	75	25	HSK25	12+4	18000	L	+

## FPD-500.01 R or L



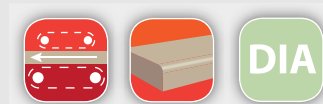
Profile brazed cutters **FPD-500.01** designed for edge beveling.

**Type of work:** edge machining.

**Material:** solid hardwood, veneered board, plastics.

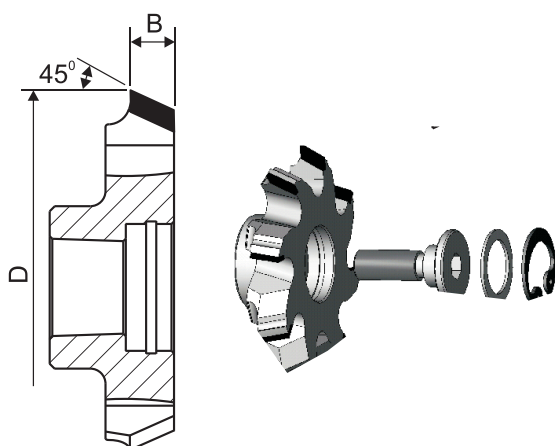
**Specification:**

- for Homag and IMA machines,
- safety ring HSK25R guarantees minimum radial runout and precise balancing of the tools for optimal cutting quality,
- blade with shear angle,
- $N_{max} = 18\,000$  r.p.m.



Catalogue number	Type	D mm	B mm	R mm	d mm	z	$n_{max}$	
FPD500.01	FPD-500.01	78	11,3	3	HSK25	8	18000	+
FPD500.011	FPD-500.01	78	11,3	3	HSK25	4	18000	+

## FPD-500.03 R or L



Profile brazed cutters **FPD-500.03** designed for edge beveling.

**Type of work:** edge machining.

**Material:** solid hardwood, veneered board, plastics.

**Specification:**

- for Homag and IMA machines,
- safety ring HSK25R guarantees minimum radial runout and precise balancing of the tools for optimal cutting quality,
- blade with shear angle,
- $N_{max} = 18\,000$  r.p.m.



Catalogue number	Type	D mm	B mm		d mm	z	$n_{max}$	
FPD500.03	FPD-500.03	78	8,5	45°	HSK25	8	18000	+
FPD500.031	FPD-500.03	78	8,5	45°	HSK25	4	18000	+

Profile brazed cutters **FPD-520** designed for edge beveling.

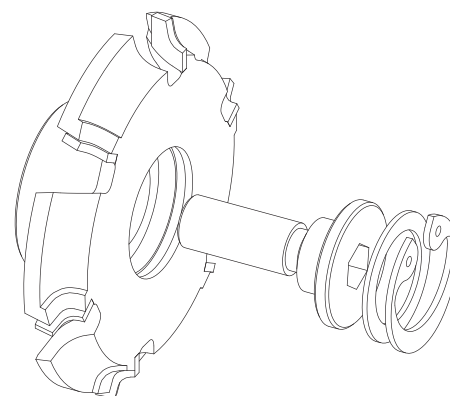
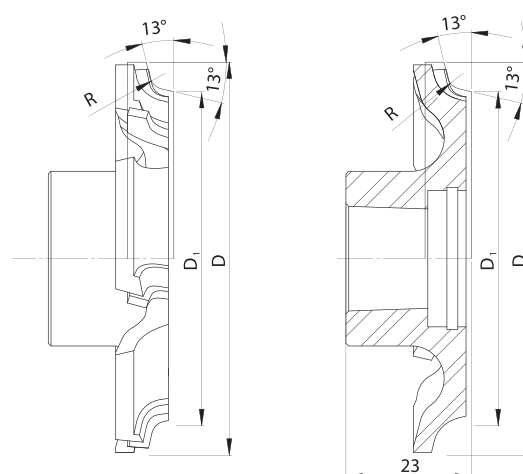
**Type of work:** edge machining.

**Material:** solid hardwood, veneered board, plastics.

**Specification:**

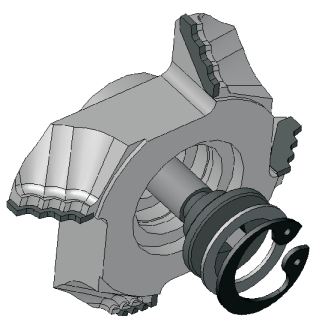
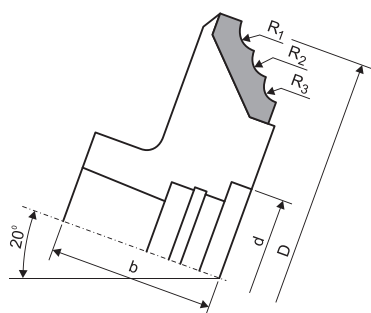
- for Homag and IDM machines,
- safety ring HSK25R guarantees minimum radial runout and precise balancing of the tools for optimal cutting quality,
- blade with shear angle,
- $N_{\max} = 18\,000$  r.p.m.

## FPD-520



Catalogue number	Type	D mm	D <sub>1</sub> mm	R mm		z	n <sub>max</sub>	
FPD520.0010	FPD-520	80	74	1,5	HSK25	4	18000	+
FPD520.0020	FPD-520	80	74	1,5	HSK25	6	18000	+
FPD520.0030	FPD-520	80	74	1,5	HSK32	4	18000	+
FPD520.0040	FPD-520	80	74	1,5	HSK32	6	18000	+
FPD520.0110	FPD-520	80	74	2,0	HSK25	4	18000	+
FPD520.0120	FPD-520	80	74	2,0	HSK25	6	18000	+
FPD520.0130	FPD-520	80	74	2,0	HSK32	4	18000	+
FPD520.0140	FPD-520	80	74	2,0	HSK32	6	18000	+
FPD520.0210	FPD-520	80	74	2,5	HSK25	4	18000	+
FPD520.0220	FPD-520	80	74	2,5	HSK25	6	18000	+
FPD520.0230	FPD-520	80	74	2,5	HSK32	4	18000	+
FPD520.0240	FPD-520	80	74	2,5	HSK32	6	18000	+

# FPD-550 L



Profile brazed cutters **FPD-550 L** designed for edge beveling.

**Type of work:** edge machining.

**Material:** solid hardwood, veneered board, plastics.

## Specification:

- for Homag and IMA machines,
- safety ring HSK25R guarantees minimum radial runout and precise balancing of the tools for optimal cutting quality,
- blade with shear angle,
- $N_{\max} = 18\,000$  r.p.m.



Catalogue number	Type	D mm	R <sub>1</sub> mm	R <sub>2</sub> mm	R <sub>3</sub> mm		z	
FPD550.0010	FPD-550	84	1,5	2,0	3,0	HSK25	4	+
FPD550.0020	FPD-550	84	1,5	2,0	3,0	HSK25	6	+
FPD550.0110	FPD-550	84	3,0	2,0		HSK25	4	+
FPD550.0120	FPD-550	84	3,0	2,0		HSK25	6	+

Inserted hogger type **GFD-01** with radial tooth shape.

**Type of work:** edge machining.

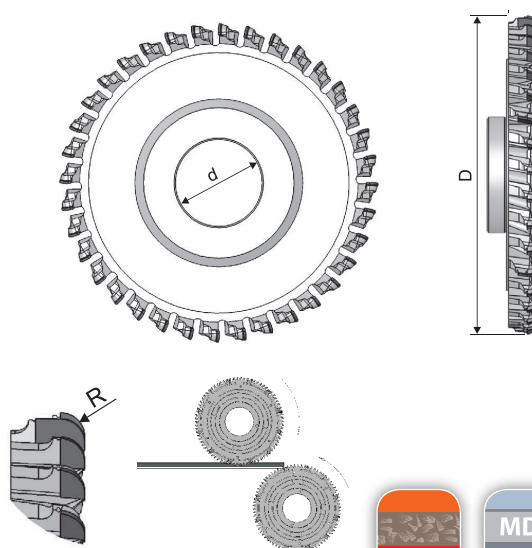
**Material:** chipboard, MDF, HPL.

**Specification:**

- for Homag, IMA and IDM machines,
- high cutting quality thanks to precise positioning,
- increased life,
- concurrent working system cutter head / cutter head,
- sharpening zone 6 mm,
- $N_{max} = 6\,000$  r.p.m.



## GFD-01



Type	D mm	B mm	d mm	z	$n_{max}$	
GFD-01	200	12,5	60	24+6	6000	+
GFD-01	215	12,5	60	36+6	6000	+
GFD-01	250	12,5	60	30+6	6000	+

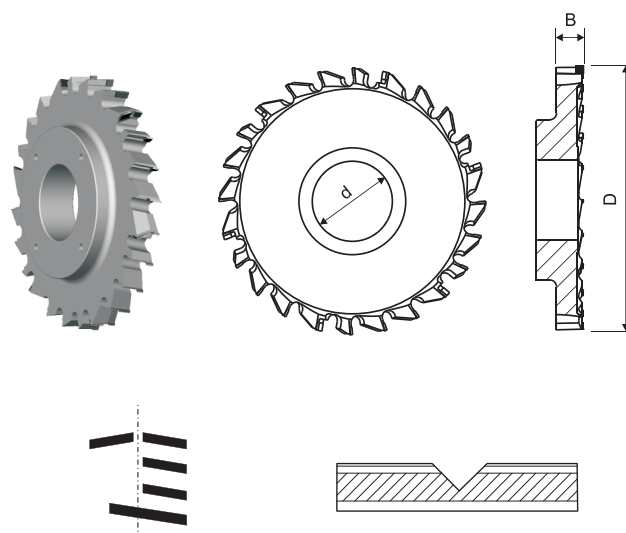
Inserted hogger type **GFD-02** designed for drawer band production.

**Specification:**

- shear angle increases tool life and reduces noise,
- sharpening zone 4,5 mm,
- $N_{max} = 9\,000$  r.p.m.

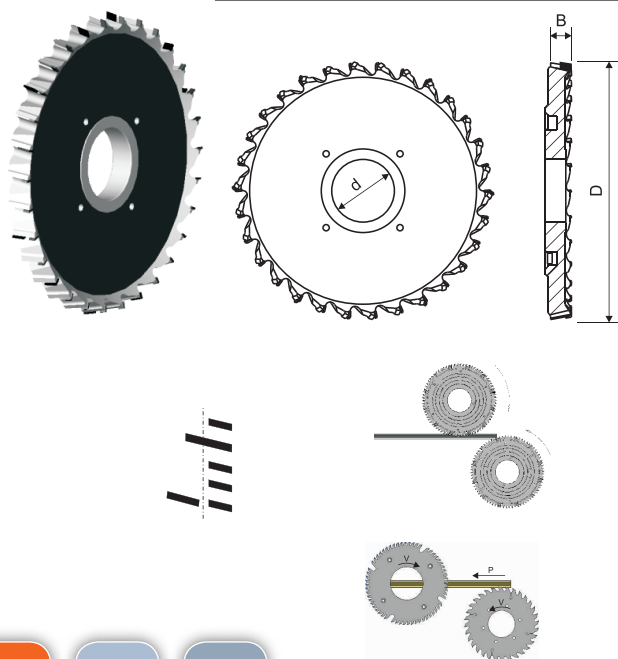


## GFD-02



Type	D mm	B mm	d mm	z	$n_{max}$	
GFD-02	200	20	60	24+6+6	9000	+
GFD-02	200	22	80	24+6+6	9000	+
GFD-02	250	20	60	32+8+8	9000	+
GFD-02	250	22	80	32+6+6	9000	+
GFD-02	260	20	60	36+9+9	9000	+
GFD-02	280	20	60	40+10+10	9000	+

## GFD-03



Inserted hogger type **GFD-03** with trapezoidal tooth shape.

**Type of work:** formatting.

**Material:** chipboard, MDF, HDF.

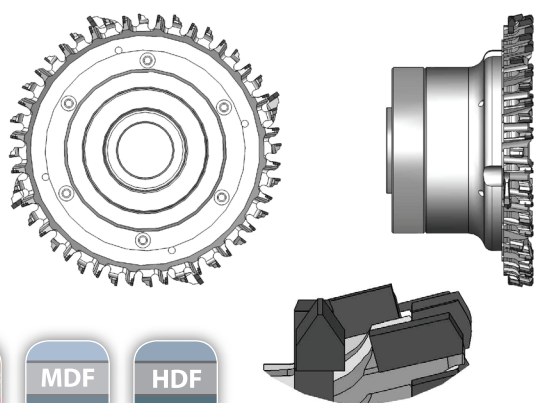
**Specification:**

- for Homag, IMA and IDM machines,
- high cutting quality thanks to precise positioning,
- minimum machine retooling time thanks to increased life,
- concurrent working system cutter head / cutter head,
- scorer / cutter head working system,
- shear angle increases tool life,
- sharpening zone 4,5 mm.
- $N_{\max} = 6\,000$  r.p.m.



Type	D mm	B mm	d mm	z	n <sub>max</sub>	
GFD-03	250	20	60	30+6+6	6000	+

## GFD-04



Inserted hogger type **GFD-04** with special construction guaranteeing highest edge quality and long life.

**Type of work:** formatting.

**Material:** chipboard, MDF, HDF.

**Specification:**

- special barrel-shaped (smoothing) edge,
- concurrent working system cutter head / cutter head,
- additional teeth with high excess material (option),
- sharpening zone 4,5 mm,
- $N_{\max} = 6\,000$  r.p.m.



Catalogue number	Type	D mm	B mm	d mm	z	↙	
GFD04.021	GFD-04	200	14,5	60	24+24+4	R	+
GFD04.021L	GFD-04	200	14,5	60	24+24+4	L	+
GFD04.021T	GFD-04	200	14,5	60	24+24+4	R+T	+
GFD04.021TL	GFD-04	200	14,5	60	24+24+4	L+T	+
GFD04.015S	GFD-04	250	14,5	60	18+18	R	+
GFD04.015SL	GFD-04	250	14,5	60	18+18	L	+
GFD04.022A	GFD-04	250	14,5	80	24+24+8	R	+
GFD04.022AL	GFD-04	250	14,5	80	24+24+8	L	+

Inserted hogger FINISH-LINE type **GFD-05**.

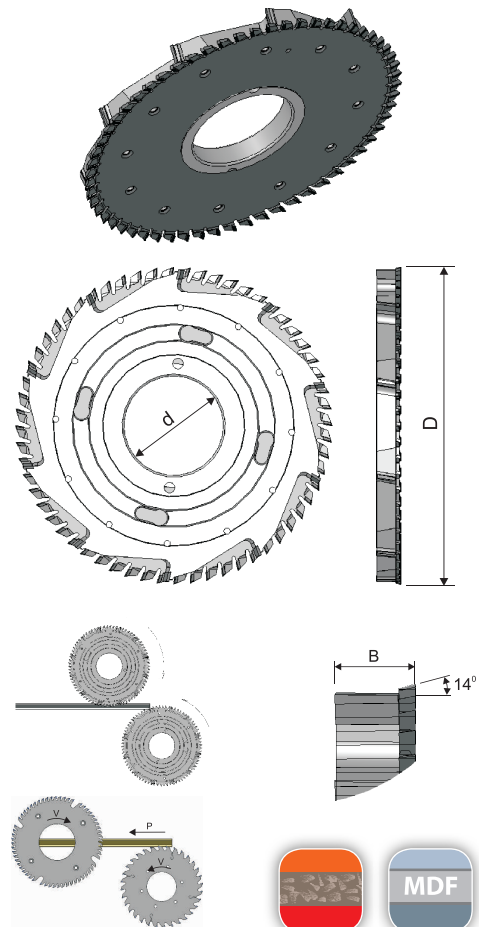
**Type of work:** formatting.

**Material:** chipboard, MDF, HDF.

#### Specification:

- for Homag, IMA and IDM machines,
- very aggressive blade geometry guarantees highest quality cutting,
- concurrent working system cutter head / cutter head,
- scorer / cutter head working system,
- sharpening zone 4,5 mm,
- shear angle guarantees quiet and stable work,
- $N_{max} = 6\ 000$  r.p.m.

## GFD-05



Catalogue number	Type	D mm	B mm	d mm	z	↗	
GFD05.007	GFD-05	200	22	35	24+4	R	+
GFD05.007L	GFD-05	200	22	35	24+4	L	+
GFD05.003P	GFD-05	250	18	80	56+6x4	R	+
GFD05.009	GFD-05	250	20	35	36+6	R	+
GFD05.009L	GFD-05	250	20	35	36+6	L	+
GFD05.003	GFD-05	250	20	80	56+6x4	R	+
GFD05.003L	GFD-05	250	20	80	56+6x4	L	+
GFD05.011	GFD-05	255	19	80	60+10	R	+
GFD05.011L	GFD-05	255	19	80	60+10	L	+
GFD05.015	GFD-05	255	19	80	60+10	R (GT)	+
GFD05.015L	GFD-05	255	19	80	60+10	R (GW)	+
GFD05.006	GFD-05	255	19	80	66+10	R	+
GFD.006L	GFD-05	255	19	80	66+10	L	+
GFD05.0070	GFD-05	255	32,33	60	48+4	R	+
GFD05.0070L	GFD-05	255	32,33	60	48+4	L	+
	GFD-05	250	14,5	60	48		+
	GFD-05	250	14,5	80	48		+
	GFD-05	250	14,5	60	54		+
	GFD-05	250	14,5	80	54		+
	GFD-05	250	14,5	60	60		+
	GFD-05	250	14,5	80	60		+

## GFD-08

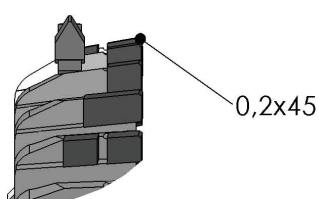
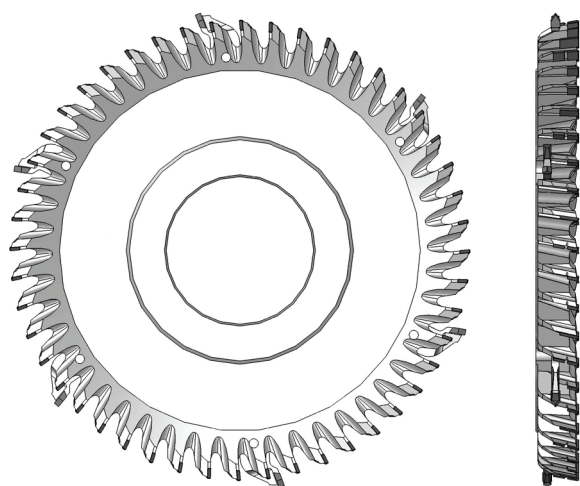
Inserted hogger type **GFD-08** with trapezoidal tooth shape.


**Type of work:** formatting.

**Material:** chipboard, MDF, HDF.

**Specification:**

- for Homag, IMA and IDM machines,
- special blade construction allows for soft formatting and finishing of the machined edge,
- high cutting quality thanks to precise positioning,
- minimum machine retooling time thanks to increased life,
- maximum thickness of the formatted element 60 mm,
- concurrent working system cutter head / cutter head,
- scorer / cutter head working system,
- shear angle increases tool life,
- sharpening zone 4,5 mm,
- $N_{\max} = 6\,000$  r.p.m.



Catalogue number	Type	D mm	B mm	d mm	z		
GFD08.0010	GFD-08	250	10	60	33+11	R	+
GFD08.0010L	GFD-08	250	10	60	33+11	L	+
GFD08.0050	GFD-08	250	10	80	48+12	R	+
GFD08.0050L	GFD-08	250	10	80	48+12	L	+
	GFD-08	250	10	60	20+20		+
	GFD-08	250	14	60	20+20		+
	GFD-08	250	10	80	20+20		+
	GFD-08	250	10	80	20+20		+

Inserted hogger type **GFD-08** with trapezoidal tooth shape.

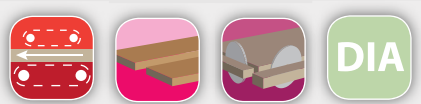
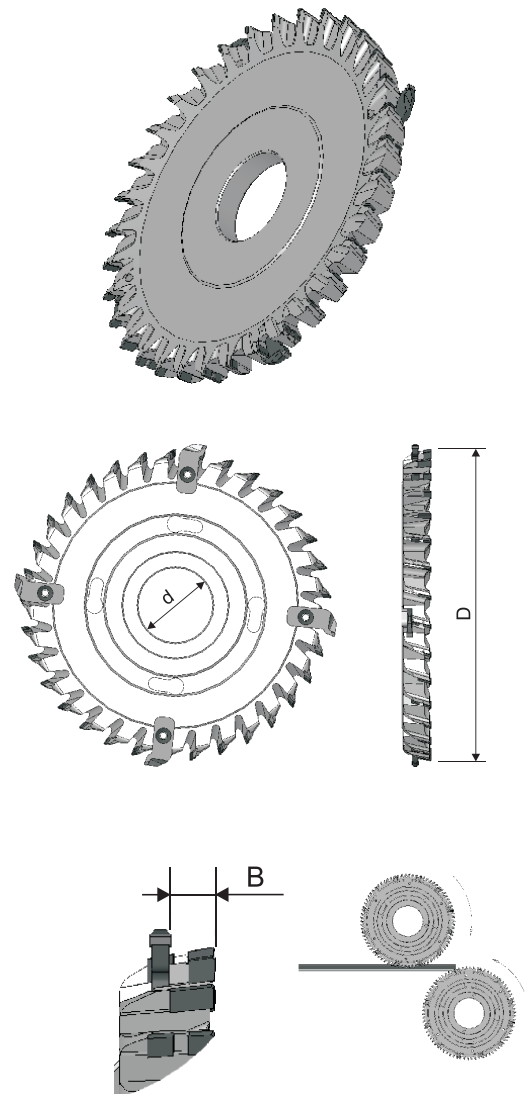
**Type of work:** formatting, cross and longitudinal cutting.

**Material:** chipboard, MDF, HDF.

#### Specification:

- for Homag, IMA and IDM machines,
- special construction allows for very soft formatting of long elements with high excess material,
- high cutting quality thanks to precise positioning,
- minimum machine retooling time thanks to increased life,
- maximum thickness of formatted element 50 mm,
- concurrent working system cutter head / cutter head,
- scorer / cutter head working system,
- shear angle increases tool life,
- sharpening zone 4,5 mm,
- $N_{max} = 6\ 000$  r.p.m.

## GFD-008

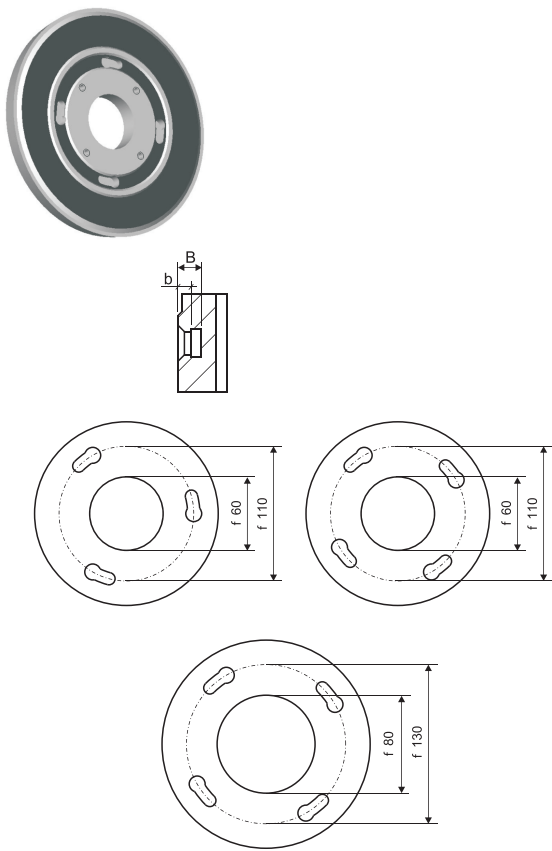


Type	D mm	B mm	d mm	z	
GFD-008	250	10	60	33+11	+
GFD-008	250	10	80	33+11	+
GFD-008	250	10	60	48+12	+
GFD-008	250	10	80	48+12	+
GFD-008	250	10	60	36+6	+
GFD-008	250	10	80	36+6	+

UGF-01

Fast mounting system type **UGF-01** designed for machines with hydraulic clamping.

Orders for cutter heads and brazed cutters equipped with this system should look as follows: GFD-03 + UGF-01.



Type	D mm	d mm	N	
UGF-01	110	60	3	+
UGF-01	110	60	4	+
UGF-01	130	80	4	+

Scoring saw blade with polycrystalline diamond DP (DIA) with straight teeth (GM) type **PD-403**, designed for cutting homogenous materials without impurities, used on automatic lines with pneumatic clamping systems.

**Type of cut:** cross and longitudinal.

**Material:** laminated chipboard, MDF, HDF.



## PD-403



Type	D mm	B mm	d mm	z		
PD-403	180	3,2	50	36	GM	+
PD-403	180	3,2	50	48	GM	+
PD-403	200	3,2	50	36	GM	+
PD-403	200	3,2	50	48	GM	+
PD-403	200	3,2	50	60	GM	+

Scoring and formatting saw blade with straight (GM) or top bevel (GW or GT) teeth type **PD-404**, with polycrystalline diamond DP (DIA) tips designed for cutting homogenous materials without impurities, used on automatic lines, mounted on sleeves.

**Type of cut:** cross and longitudinal.

**Material:** laminated chipboard, MDF, HDF.

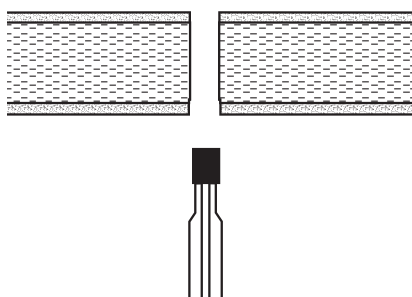


## PD-404



Type	D mm	B mm	b mm	d mm	z	nx <sub>d1</sub>	D <sub>1</sub>	
PD-404	180	3,2	2,2	65	32	6x6,5	90	+
PD-404	180	3,2	2,2	65	48	6x6,5	90	+
PD-404	180	4,0	2,2	65	32	6x6,5	90	+
PD-404	180	4,0	2,2	65	48	6x6,5	90	+
PD-404	200	3,2	2,2	80	32	4x6,5	140	+
PD-404	200	3,2	2,2	80	48	4x6,5	140	+
PD-404	200	4,0	3,0	80	32	4x6,5	140	+
PD-404	200	4,0	3,0	80	48	4x6,5	140	+

# PD-405



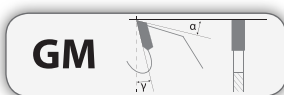
Set of scoring saw blades type **PD-405** with adjustable width, polycrystalline diamond DP (DIA) tips and straight teeth - GM.

**Type of cut:** scoring.

**Material:** laminated chipboard, laminates, MDF, HDF.

Width is regulated with the following spacers:

- 0,05 mm - 1 pc.
- 0,1 mm - 1 pc.
- 0,2 mm - 2 pcs.
- 0,3 mm - 1 pc.



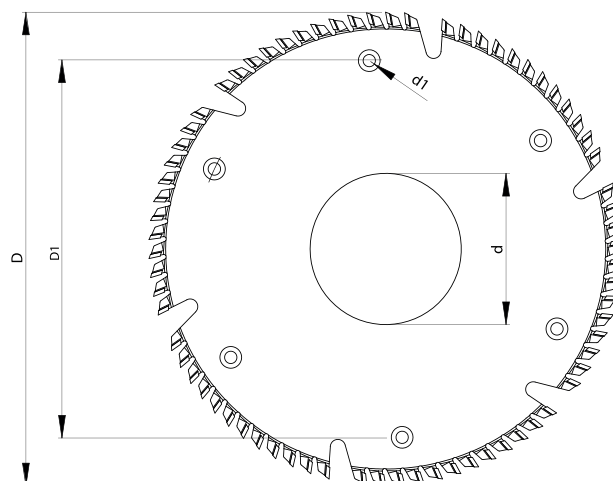
Catalogue number	Type	D mm	B mm	d mm	z		
D4050008	PD-405	100	2,8÷3,6	20	2x10	GM	+
D4050009	PD-405	100	2,8÷3,6	22	2x10	GM	+
D4050010	PD-405	120	2,8÷3,6	20	2x10	GM	+
D4050019	PD-405	120	2,8÷3,6	22	2x10	GM	+
D4050004	PD-405	125	2,8÷3,6	20	2x10	GM	+
D4050021	PD-405	125	2,8÷3,6	22	2x10	GM	+
D4050013	PD-405	125	2,8÷3,6	20	2x12	GM	+
D4050013.4	PD-405	125	2,8÷3,6	20	2x12	GM	•
D4050012	PD-405	125	2,8÷3,6	22	2x12	GM	+

Scoring saw blades width straight (GM) or top bevel (GW or GT) teeth, type **PD-406** with polycrystalline diamond DP (DIA) tips designed for formatting.

**Type of cut:** cross and longitudinal.

**Material:** laminated chipboard, laminates, MDF, HDF.

# PD-406



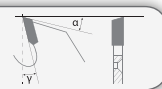
**GM**



**GW**

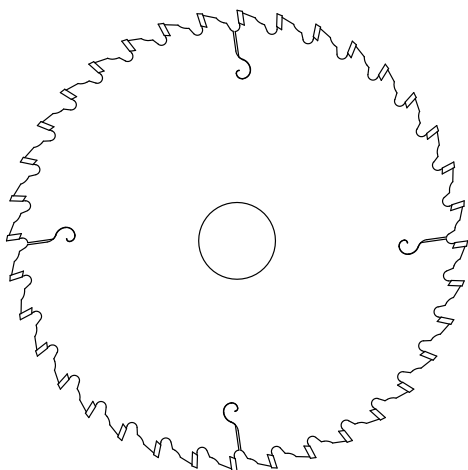


**GT**



Type	D mm	B mm	b mm	d mm	z	nxd <sub>1</sub>	D <sub>1</sub>	
PD-406	250	4,0	3,0	80	48	6x6,5	200	+
PD-406	250	4,0	3,0	80	54	6x6,5	200	+
PD-406	250	4,0	3,0	80	72	6x6,5	200	+
PD-406	250	4,0	3,0	100	48	6x6,5	200	+
PD-406	250	4,0	3,0	100	54	6x6,5	200	+
PD-406	250	4,0	3,0	100	72	6x6,5	200	+

# PD-408



Scoring saw blade type **PD-408** with conical-flat and conical-alternate bevel (GR/GM, GR/GS) teeth, with polycrystalline diamond DP (DIA) tips designed for scoring chipboard, laminated board, MDF, HDF and other homogenous materials, used on manual formatting machines and automatic lines.

**Type of cut:** scoring.

**Material:** laminated chipboard, MDF, HDF.



**DIA**

Catalogue number	Type	D mm	B <sub>1</sub> /B <sub>2</sub> mm	b mm	d mm	z		
D4080082	PD-408	100	3,2/4,3	2,5	20	20	GR/GM	+
D4080082A	PD-408	100	3,2/4,3	2,5	22	20	GR/GM	+
D4080088	PD-408	125	2,8/3,6	2,2	20	24	GR/GM	+
D4080085	PD-408	125	2,8/3,6	2,2	22	24	GR/GM	+
D4080697	PD-408	125	3,1/4,2	2,5	20	24	GR/GM	•
D4080079	PD-408	125	3,2/4,3	2,5	20	24	GR/GM	+
D4080023	PD-408	125	3,2/4,3	2,5	22	24	GR/GM	+
D4080382	PD-408	125	3,2/4,3	2,5	45	24	GR/GM	+
D4080304	PD-408	150	4,4/5,4	3,0	30	24	GR/GM	+
D4080301	PD-408	150	4,4/5,4	3,0	30	36	GR/GM	+
D4080383	PD-408	160	4,4/5,4	3,0	45	36	GR/GM	+
D4080083	PD-408	180	4,4/5,6	3,4	45	36	GR/GM	•
D4080384	PD-408	200	3,2/4,0	2,2	30	36	GR/GM	+
D4080385	PD-408	200	3,2/4,3	2,2	30	36	GR/GM	+
D4080089	PD-408	200	4,4/5,4	3,0	30	36	GR/GM	+
D4080053A	PD-408	200	4,4/5,4	3,0	45	36	GR/GM	+

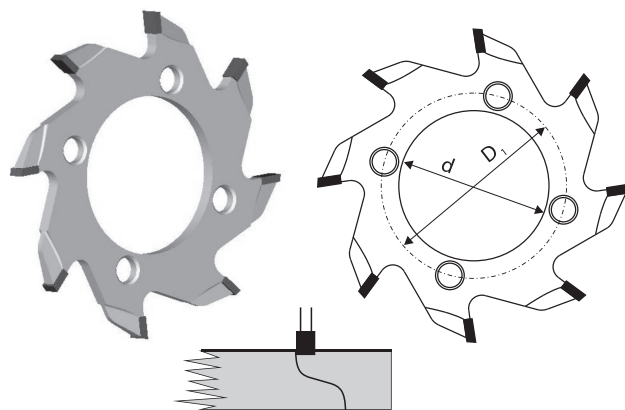
Scoring saw blade type **PD-409** with polycrystalline diamond DP (DIA) tips designed for scoring laminated materials before profiling. Used mainly on HOMAG machines.

**Type of cut:** laminate scoring.

**Material:** chipboard, MDF, HDF.



## PD-409

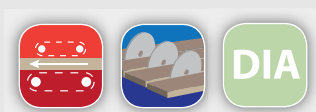


Type	D mm	B mm	b mm	d mm	z	nxd <sub>1</sub>	D <sub>1</sub>	
PD-409	70	4,0	3,0	34	8	4x5,5	42	+

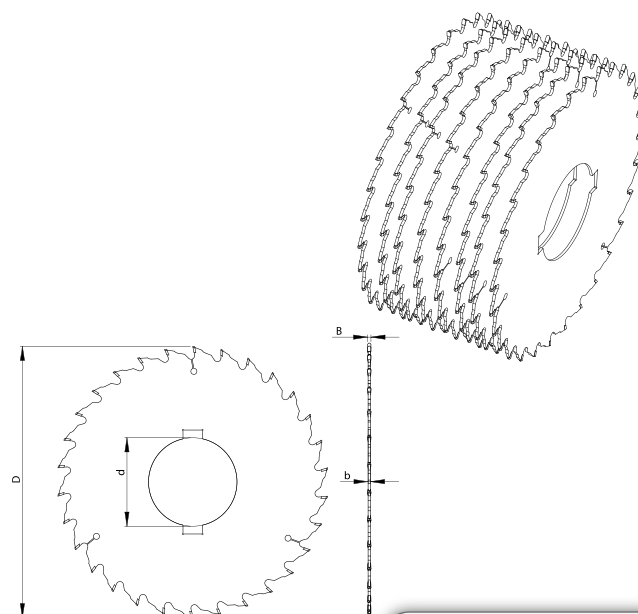
Scoring saw blade type **PD-502** with polycrystalline diamond DP (DIA) tips designed for multi-rip machines.

**Type of cut:** multi-rip scoring.

**Material:** chipboard, plywood, MDF, HDF.

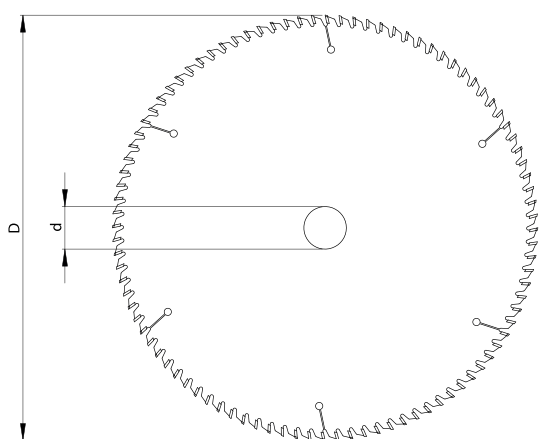


## PD-502



Type	D mm	B mm	b mm	d mm	z		
PD-502	210	2,4	1,8	75	30	GR/GM	+
PD-502	230	2,8	2,2	75	30	GR/GM	+
PD-502	250	3,2	2,2	75	24	GR/GM	+

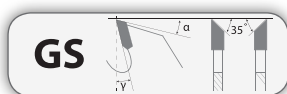
## PD-505



Universal saw blade with medium number of alternate top bevel teeth (GS), type **PD-505**, with polycrystalline diamond DP (DIA) tips designed for cross and longitudinal cutting of glued wood, plywood, chipboard, used on manual formatting machines and automatic lines.

**Type of cut:** single, cross and longitudinal.

**Material:** glued wood, plywood, MDF chipboard, laminated chipboard.



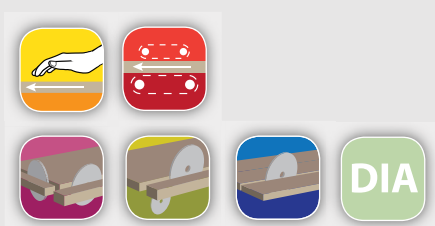
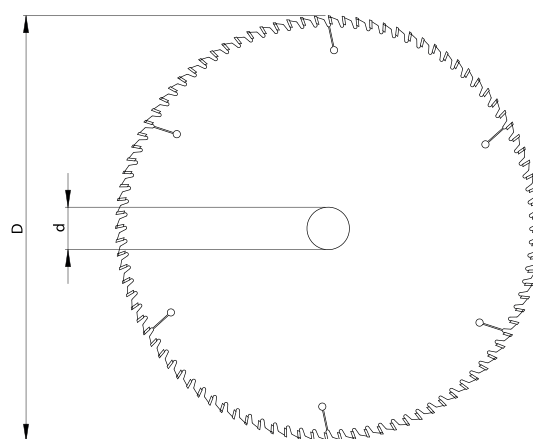
Type	D mm	B mm	b mm	d mm	z		
PD-505	250	3,2	2,3	30	60	GS	+
PD-505	250	3,2	2,3	30	80	GS	+
PD-505	300	3,2	2,5	30	60	GS	+
PD-505	300	3,2	2,5	30	72	GS	+
PD-505	300	3,2	2,5	30	96	GS	+
PD-505	350	3,5	2,5	30	60	GS	+
PD-505	350	3,5	2,5	30	72	GS	+
PD-505	350	3,5	2,5	30	96	GS	+
PD-505	350	4,0	3,0	30	60	GS	+
PD-505	350	4,0	3,0	30	72	GS	+
PD-505	350	4,0	3,0	30	96	GS	+

Saw blade, type **PD-506** with polycrystalline diamond DP (DIA) tips designed for cutting chipboard, laminated board, MDF, HDF and other homogenous materials without impurities, used on manual formatting machines and automatic lines.

**Type of cut:** single, cross and longitudinal.

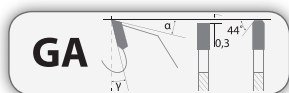
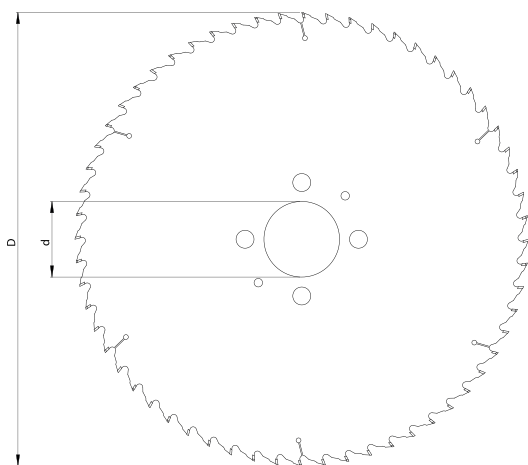
**Material:** laminated chipboard, MDF, HDF.

## PD-506



Type	D mm	B mm	b mm	d mm	z		
PD-506	250	3,2	2,3	30	60	GA	+
PD-506	250	3,2	2,3	30	80	GA	+
PD-506	300	3,2	2,4	30	60	GA	+
PD-506	300	3,2	2,4	30	72	GA	+
PD-506	300	3,2	2,4	30	96	GA	+
PD-506	350	3,5	2,5	30	60	GA	+
PD-506	350	3,5	2,5	30	72	GA	+
PD-506	350	3,5	2,5	30	96	GA	+
PD-506	350	4,0	3,0	30	60	GA	+
PD-506	350	4,0	3,0	30	72	GA	+
PD-506	350	4,0	3,0	30	96	GA	+

## PD-521



Saw blade, type **PD-521** with polycrystalline diamond DP (DIA) tips and triple chip + flat teeth (GA) designed for cutting in stack chipboard, laminated board, MDF, HDF and other homogenous materials without impurities, used on manual formatting machines and automatic lines.

**Type of cut:** in stack, cross and longitudinal.

**Material:** chipboard, laminated chipboard, MDF, HDF.



Type	D mm	B mm	b mm	d mm	z		
PD-521	300	4,4	3,0	30/60/75/80	60	GA	+
PD-521	300	4,4	3,0	30/60/75/80	72	GA	+
PD-521	350	4,4	3,2	30/60/75/80	60	GA	+
PD-521	350	4,4	3,2	30/60/75/80	72	GA	+
PD-521	380	4,4	3,2	30/60/75/80	60	GA	+
PD-521	380	4,4	3,2	30/60/75/80	72	GA	+
PD-521	400	4,4	3,2	30/60/75/80	60	GA	+
PD-521	400	4,4	3,2	30/60/75/80	72	GA	+
PD-521	450	4,4	3,2	30/60/75/80	60	GA	+
PD-521	450	4,4	3,2	30/60/75/80	72	GA	+
PD-521	480	4,6	3,6	30/60/75/80	60	GA	+
PD-521	480	4,6	3,6	30/60/75/80	72	GA	+
PD-521	480	4,8	3,6	30/60/75/80	60	GA	+
PD-521	480	4,8	3,6	30/60/75/80	72	GA	+