

More performance with nesting
DP-router cutters from Aigner

Aigner

PRECISION IN BEST TIME



DP-ROUTER CUTTER NESTING FAMILY

Nesting CNC machines are becoming increasingly important in the woodworking industry. To ensure that these systems operate at a high level of performance, well thought-out milling tool solutions are required which can meet the typical applications on a nesting system.

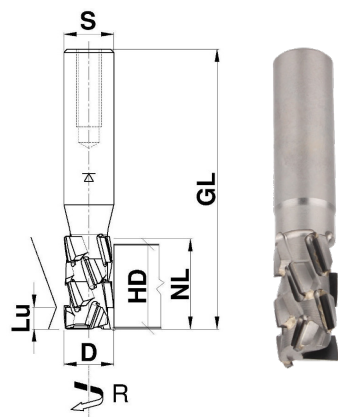
With its DP nesting cutter family, Aigner Werkzeuge provides performance-ready tools that are adapted to common material thicknesses and even for the use on nesting turbines. Common materials such as coated chipboard or various types of plywood can be machined with two different performance classes. For the heaviest milling jobs, support heads made of heavy metal are available.

A different number of teeth can be configured on the nesting grooving cutters. This allows a feed range adapted to the application at any time and thus protects your wallet through economical tool life.

For the right choice of tools, our trained technical advisors are available for you and gladly advise you on site!

DP-Router cutter Nesting

C440 Z3+3



Uncompromising performance characterizes our DIA grooving cutter C440. Suitable for feed rates of 12-20 m/min, this milling cutter fulfills every wish on your nesting CNC system. Even materials that are difficult to mill such as multiplex pose no problem for the C440. This type of milling cutter is suitable to be used without a turbine on a heat shrink chuck or a comparable clamping device with best concentricity properties.

Design:

Carrying body made of Densimet; With DP drilling edge Z3+3; Up to 2x resharpenable; Deep chip spaces for better chip collection; Shank fit h6

Application:

Grooving, jointing, rebating, formatting (cut-off milling) in the nesting process of melamine coated particle boards, multiplex boards, plywood, MDF, OSB, etc.

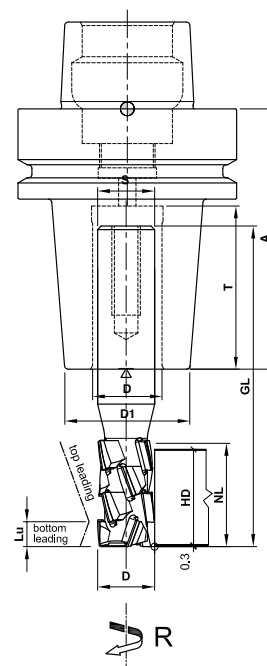
Range of use: Speed range 18000-24000 rpm; Feed range: 12-20 m/min.

Article no.	Z	D	NL	HD	GL	S	LR
C440-1427R	3+3 + B	14	27	22	75	16	R
C440-1427R-M1	3+3 + B	14	27	22	75	16	R
C440-1427R-M2	3+3 + B	14	27	22	75	16	R
C440-1629R	3+3 + B	16	29	24	84	16	R
C440-1629R-M1	3+3 + B	16	29	24	84	16	R
C440-1629R-M2	3+3 + B	16	29	24	84	16	R

Also optionally assembled (MS):

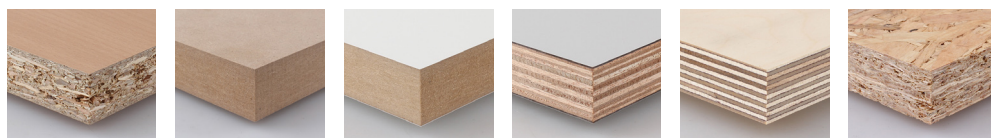
Assembled in shrink chuck HSK-F 63 (C915):-M1

Assembled in collet chuck HSK-F 63 (C910):-M2



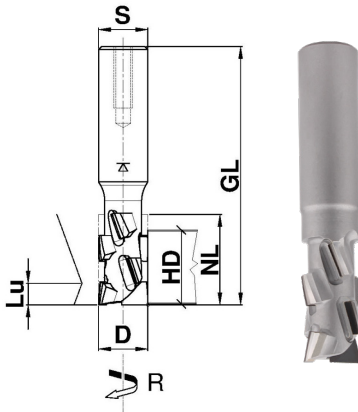
SPARE PARTS

Article no.	Description	D	A dimension	T
C915-1675BN	heat shrink chuck HSK F-63	16	75	44
C910-76R	collet chuck HSK F-63		76	
C945-OZ25160	collet type OZ25	16		
C985	hook wrench 58/62 for C910			



DP-Router cutter Nesting

C441 Z2+2



Those who want to combine economical and low-cost milling with high quality, use our DIA grooving cutter C441. The nesting cutter with steel support body covers the medium feed range of 6-12 m/min. Due to the two-tooth design, small parts can also be machined very well in the nest without the typical burn marks on the material and cutting edges. This type of milling cutter is also suitable for use without a turbine on a heat-shrink chuck or a comparable clamping device with best concentricity properties.

Design:

Support body in steel design; With DP drilling edge Z2+2; Can be resharpened up to 2x; Deep chip spaces for better chip collection; Shank fit h6

Application:

Grooving, jointing, rebating, formatting (cut-off milling) in the nesting process of melamine coated particle boards, multiplex boards, plywood, MDF, OSB, etc.

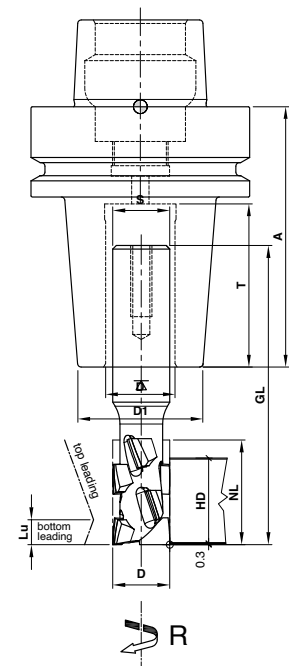
Range of use: Speed range 18000-24000 rpm; Feed range: 12-20 m/min.

Article no.	Z	D	NL	HD	GL	S	LR
C441-1427R	2+2 + B	14	27	22	75	16	R
C441-1427R-M1	2+2 + B	14	27	22	75	16	R
C441-1427R-M2	2+2 + B	14	27	22	75	16	R
C441-1629R	2+2 + B	16	29	24	84	16	R
C441-1629R-M1	2+2 + B	16	29	24	84	16	R
C441-1629R-M2	2+2 + B	16	29	24	84	16	R

Also optionally assembled (MS):

Assembled in shrink chuck HSK-F 63 (C915):-M1

Assembled in collet chuck HSK-F 63 (C910):-M2



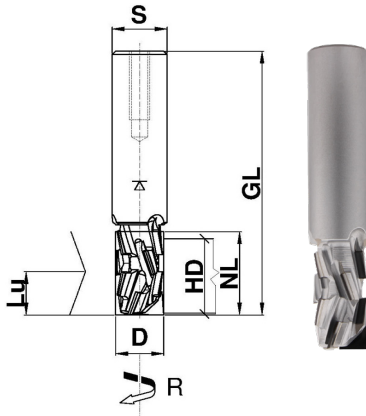
SPARE PARTS

Article no.	Description	D	A dimension	T
C915-1675BN	heat shrink chuck HSK F-63	16	75	44
C910-76R	collet chuck HSK F-63		76	
C945-OZ25160	collet type OZ25	16		
C985	hook wrench 58/62 for C910			



DP-Router cutter Nesting

C443 Z3+3 for Aerotech, milling turbine



Uncompromising performance characterizes our DIA router cutter C443. Suitable for feed rates of 12-20 m/min, this milling cutter leaves nothing to be desired on your nesting CNC machine. Even materials that are difficult to mill such as multiplex pose no problem for the C443. This type of milling cutter is also suitable for use on Cruing Aerotech extraction turbines and is specially adapted to the respective material thicknesses and the required clamping length of the turbine. Important: The distance from the bottom of the turbine to the plate surface, in relation to the turbine diameter, directly influences the suction performance of your turbine. Two material thicknesses can be combined with one effective length. We strongly recommend selecting the effective length to match the material.

Design:

Support body in steel design; With DP drilling edge Z3+3; Can be resharpened up to 2x; Deep chip spaces for better chip collection; Shank fit h6.

Application:

Grooving, jointing, rebating, formatting (cut-off milling) in the nesting process of melamine coated particle boards, multiplex boards, plywood, MDF, OSB etc.

Range of use: speed range 18000-24000 rpm; feed range: 12-20 m/min.

Article no.	Z	D	NL	HD	GL	S	LR
C443-11420R	3+3 + B	14	20.3	15-18	73	16	R
C443-11420R-M1	3+3 + B	14	20.3	15-18	73	16	R
C443-11420R-M2	3+3 + B	14	20.3	15-18	73	16	R
C443-11424R	3+3 + B	14	24.3	19-22	77	16	R
C443-11424R-M1	3+3 + B	14	24.3	19-22	77	16	R
C443-11424R-M2	3+3 + B	14	24.3	19-22	77	16	R

Suitable for the following milling turbines = AER-41A, AER-41F, AER-55A, AER-55F

Also optionally assembled (MS):

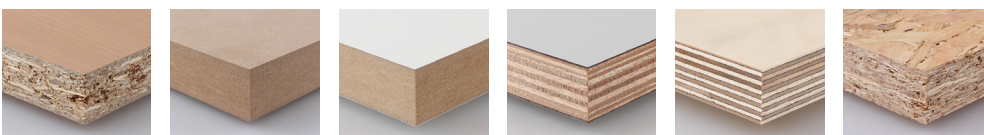
Assembled in shrink chuck HSK-F 63 (C915):-M1

Assembled in collet chuck HSK-F 63 (C910):-M2

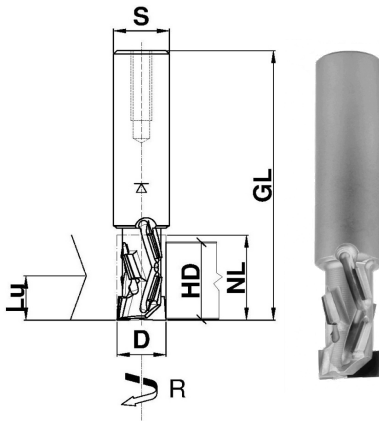


SPARE PARTS

Article no.	Description	D	A dimension	T
C915-1675BN	heat shrink chuck HSK F-63	16	75	44
C910-76R	collet chuck HSK F-63		76	
C945-OZ25160	collet type OZ25	16		
C985	hook wrench 58/62 for C910			



DP-Router cutter Nesting C442 Z2+2 for Aerotech, milling turbine



If you want to combine economical and low-cost milling with high quality, use our DIA nesting cutter C442. The nesting cutter with steel body covers the medium feed range of 6-12 m/min. Due to the two-tooth design, small parts can also be machined very well in the nest without leaving the typical burn marks on the material and cutting edges. This type of cutter is also suitable for use on Cruising Aerotech suction turbines and is specially matched by the shank and effective lengths to the respective material thicknesses and the required clamping length of the turbine. Important: The distance from the bottom of the turbine to the plate surface, as a function of the turbine diameter, directly influences the suction power of your turbine. Two material thicknesses can be combined with one effective length. We strongly recommend selecting the effective length to match the material.

Design:

Support body in steel design; With DP drilling edge Z2+2; Can be resharpened up to 2x; Deep chip spaces for better chip collection; Shank fit h6.

Application:

Grooving, jointing, rebating, formatting (cut-off milling) in the nesting process of melamine coated particle boards, multiplex boards, plywood, MDF, OSB etc. Range of use: speed range 18000-24000 rpm; feed range: 12-20 m/min.

Article no.	Z	D	NL	HD	GL	S	LR
C442-11420R	2+2 + B	14	20.3	15-18	73	16	R
C442-11420R-M1	2+2 + B	14	20.3	15-18	73	16	R
C442-11420R-M2	2+2 + B	14	20.3	15-18	73	16	R
C442-11424R	2+2 + B	14	24.3	19-22	77	16	R
C442-11424R-M1	2+2 + B	14	24.3	19-22	77	16	R
C442-11424R-M2	2+2 + B	14	24.3	19-22	77	16	R

Suitable for the following milling turbines = AER-41A, AER-41F, AER-55A, AER-55F

Also optionally assembled (MS):

Assembled in shrink chuck HSK-F 63 (C915):-M1

Assembled in collet chuck HSK-F 63 (C910):-M2

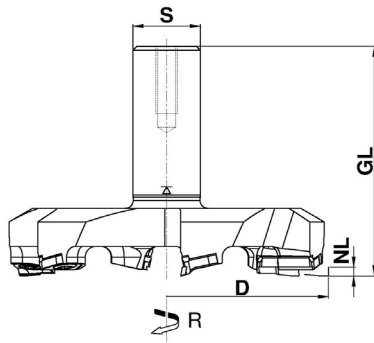


SPARE PARTS

Article no.	Description	D	A dimension	T
C915-1675BN	heat shrink chuck HSK F-63	16	75	44
C910-76R	collet chuck HSK F-63		76	
C945-OZ25160	collet type OZ25	16		
C985	hook wrench 58/62 for C910			



DP-Planing cutter Konstantin® C181



If you want to planarize cover boards at high speed after nesting, you need a good planing cutter with PCD cutting edges! The turbo among the face milling cutters is the Aigner Konstantin® C181, the cutter equipped with the revolutionary Konstantin® DIA cutting system is suitable for almost all feed ranges. Fast-as-an-arrow feed rates of over 20 m/min can be achieved with this face mill. For low feed ranges, simply use 3 blind cutters instead of 6 full cutters. This ensures that the quality and at the same time the tool life are right. Equipped with the corresponding DIA quality of the built-in cutting blades, this face milling cutter can even be used for machining hard plastics such as HPL.

Design:

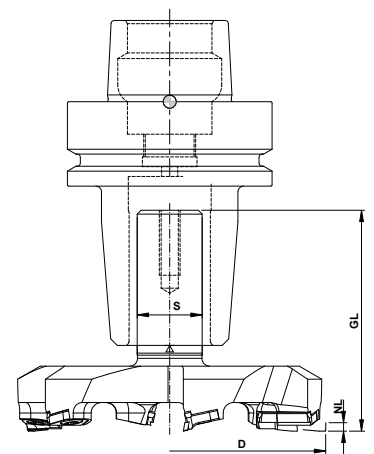
Supporting body in steel design; With DP constant cutting edges Z3 or Z6 optional; Up to 2x resharpenable; Axis angle face cutting edges bottom leading; Shank fit h6.

Application:

Face milling of HDF and MDF boards and plastic materials such as HPL with a maximum infeed of up to 3 mm/operation (depending on material)

Range of use depending on the size of the diameter: speed range 13000-18000 rpm; Feed range: 6-20 m/min.

Article no.	Z	D	NL	N-Max	GL	S	LR
C181-080325	3(6)	80	3.3	18000	85	25	R
C181-080325-M1	3(6)	80	3.3	18000	85	25	R
C181-080325-M2	3(6)	80	3.3	18000	85	25	R
C181-120325	3(6)	120	3.3	13000	85	25	R
C181-120325-M1	3(6)	120	3.3	13000	85	25	R
C181-120325-M2	3(6)	120	3.3	13000	85	25	R

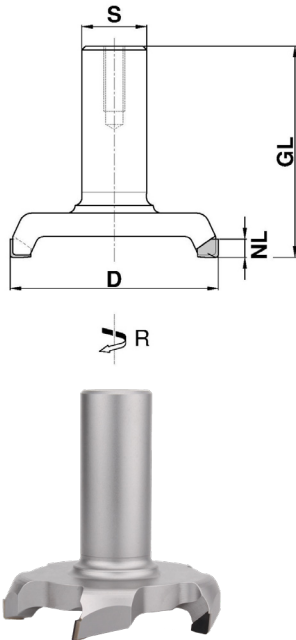


SPARE PARTS

Article no.	Description	D	A dimension	T
C915-2575BN	heat shrink chuck HSK F-63	25	75	44
C910-76R	collet chuck HSK F-63		76	
C945-OZ25250	collet type OZ25	25		
C985	hook wrench 58/62 for C910			
KW.93706.4-14	clamping screw - M6 x 14 / Torx 25			
KW.21723.7/B02	DP face cutting edge			
04.12736.7	dummy knives „System – Konstantin“			
C986-D315	torque wrench 3-15Nm			



DP-Planing cutter C180



If you want to face cover boards after the nest you need a good planing cutter which is equipped with DIA cutting edges! The C180 planing cutter in a fixed version is an extremely economical solution that can convince with a good price-performance ratio. Fast feed rates of up to 15 m/min can be achieved with this milling tool without any problems. The face milling cutter reaches its optimal milling quality with panel materials such as MDF or HDF and can also be used with various plastics (HPL).

Execution:

Supporting body in steel design; With DP cutting edges in Z5 design; Can be resharpened several times; Axis angle face cutting edges bottom leading; Shank fit h6.

Application:

Face milling of HDF and MDF boards and plastic materials such as HPL with a maximum infeed of up to 3 mm/operation (depending on the material)

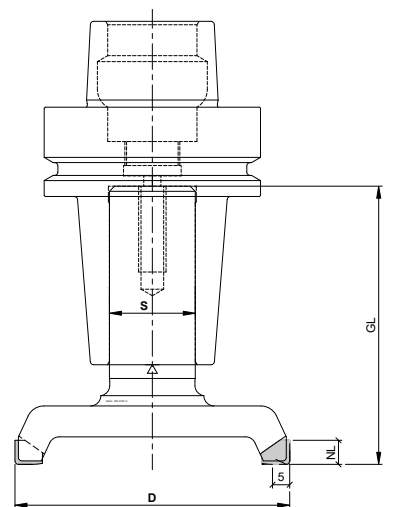
Range of use depending on the size of the diameter: speed range 13000-18000 rpm; feed range: 6-15 m/min.

Article no.	Z	D	NL	N-Max	GL	S	LR
C180-080725	5	80	7.0	18000	81	25	R
C180-080725-M1	5	80	7.0	18000	81	25	R
C180-080725-M2	5	80	7.0	18000	81	25	R
C180-120725	5	120	7.0	13000	81	25	R
C180-120725-M1	5	120	7.0	13000	81	25	R
C180-120725-M2	5	120	7.0	13000	81	25	R

Also optionally assembled (MS):

Assembled in shrink chuck HSK-F 63 (C915):-M1

Assembled in collet chuck HSK-F 63 (C910):-M2



SPARE PARTS

Article no.	Description	D	A dimension	T
C915-2575BN	heat shrink chuck HSK F-63	25	75	44
C910-76R	collet chuck HSK F-63		76	
C945-OZ25200	collet type OZ25	25		
C985	hook wrench 58/62 for C910			



The DP-Router cutter with many advantages:

- + High performance due to optimized chip spaces and adapted number of teeth
- + For the machining of extreme materials, a densimet version of C440 is available
- + Optimum diamond types for abrasive materials
- + Different feed ranges due to different numbers of teeth are selectable
- + Specially matched nesting cutters for Cruising Aerotech turbines available

DP-Planing cutter with many advantages:

- Planing at turbo speed possible +
- Faster planing due to different available diameters possible +
- With the Konstantin® face milling cutter the user can change the exchange the cutting edges (DIY) +
- With the use of dummy blades or full blades at the C181, the number of teeth Z3 and Z6 can be selected +

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