

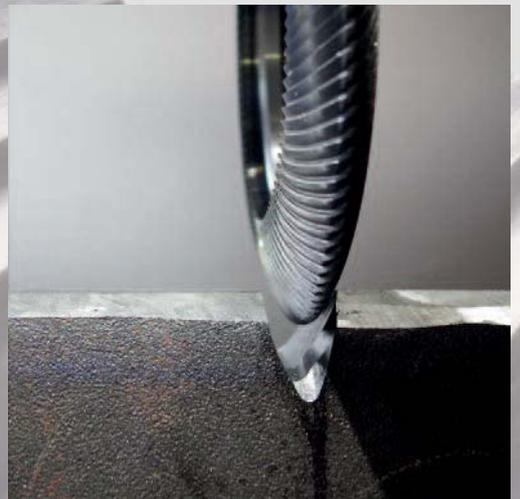
maiija
Frästechnik
GmbH



MAIJA MILLING DISCS
MAIJA-FRÄSRINGE



MAIJA DOUBLE SIDED MILLING DISCS
MAIJA-SCHWEISSNAHTWURZELÖFFNER



DEPRAG TURBINE ANGLE MILLER

A matching model for any range of application for the Maija milling discs and double sided milling discs – on the whole, there are six different turbine angle miller models with EU conformity declaration.

Each meeting all the requirements:

- low rotational speed
- pneumatic drive train
- constant 4kW output
- planetary gear

BENEFITS AT A GLANCE



in-place milling



flexible usage, handy



use existing equipment



increased working speed



chips instead of swarf, no abrasives



improved quality, no cavities



resharpener up to seven times



very long service life



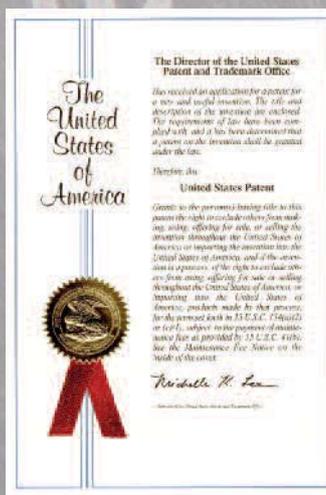
recycling of the chips



you will save money each day



Angle miller for Maija milling discs



UNITED STATES PATENT

For our own security and that of our customers, we have protected our innovative technology by patent for the American market.

Therefore, you can be sure to hold our premium and reliable original product in your own hands.

MAIJA MILLING TECHNOLOGY

EFFECTIVE, SUSTAINABLE, CONVINCING MADE IN GERMANY

15 YEARS OF EXPERIENCE AT MILLING FREEHAND

For special demands in i.e. ship-building, mechanical engineering and aircraft construction, **Maija Frästechnik GmbH** has developed innovative tools. With the **Maija milling disc** and **double sided milling disc**, on-site milling with all its advantages is possible at last. They are available in diameters of 70mm, 116mm, 125mm, 150mm and therefore for any purpose.

Moreover, in cooperation with DEPRAG high-performance ergonomic turbine angle millers have been developed, which are perfectly adapted for the use along with our milling discs.



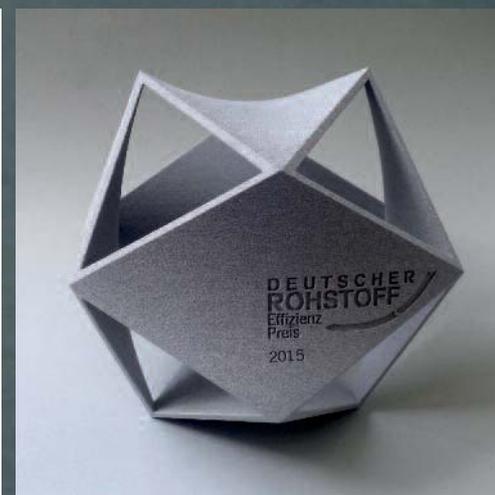
Double sided milling disc and its produced marks

GERMAN PRIZE FOR RESOURCE EFFICIENCY 2015

The Federal Ministry of Economics and Technology honored Maija-Frästechnik GmbH for the efficient use of limited resources in 2015.

Ministry and experts were convinced about the recyclability of the milling chips, which – other than conductive swarf – can be reused without major effort.

”Milling instead of grinding“, even Sigmar Gabriel subscribes this.





Features:

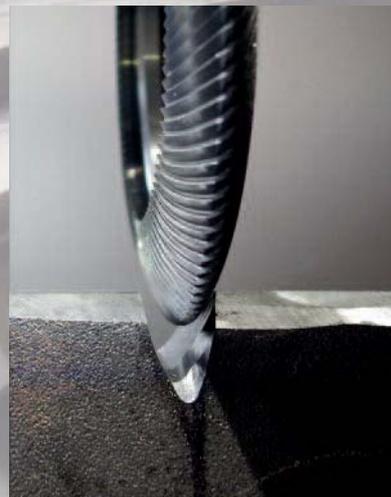
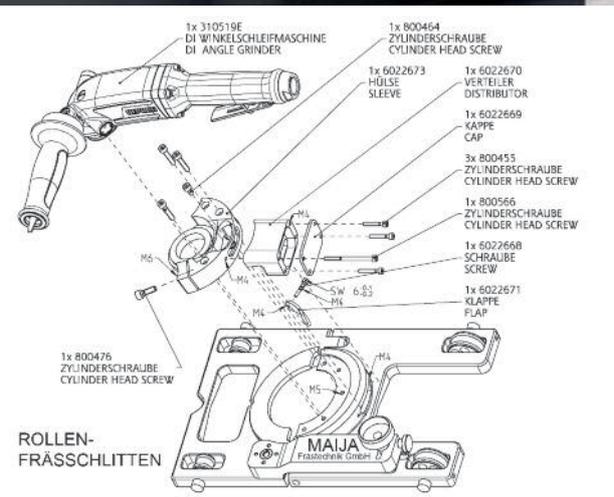
- made of solid carbide
- workpiece remains cold
- standard milling disc and coarse milling disc for stronger removal

Advantages:

- long service life with constant external diameter
- chips instead of swarf
- frequent disc change unnecessary
- metallic blank welding seam preparation, thus no shrinking cavitation (when grinding)

Practical effects:

- substantial time saving
- high quality weld seam (also see radiograph on the next page)
- waste prevention: chips and tools are fully recyclable



Double sided milling disc with its marks



Work on an aluminium hull

Milling carriage with wheels for process-reliable weld seam machining

MILLING INSTEAD OF GRINDING THE ADVANTAGES ARE OBVIOUS

MAIJA MILLING DISC AND DOUBLE SIDED MILLING DISC (DMD) FOR USE WITH ALUMINIUM

You may be familiar with this topic
from your daily work routine:

Welding seams have to be prepared or undone. The workpiece is firmly attached to the complete object and cannot be transported to a CNC mill. For about 70 years now, an angle grinder traditionally has been employed in this situation.

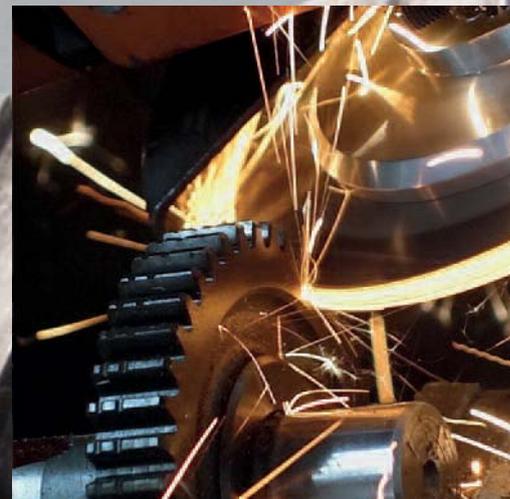
For this special purpose, **Maija Frästechnik GmbH** has developed a new tool. The **double sided milling disc** opens the range of milling benefits to on-site- and hand-milling. For example, two closely juxtaposed components can be equipped with a v-shaped welding preparation.

Maija milling discs and **double sided dilling discs**
are used for:

- shipbuilding
- tank construction
- railed vehicle construction
- cooler production
- aircraft construction
- arms industry



Baux-Fluid minimal
quantity adherent



Milling disc in action



Milling disc while milling a chamfer



Features:

- made of solid carbide
- cuts on both sides with a predefined radius
- workpiece remains cold

Advantages:

- very easy handling, stability of positioning
- long service life with constant external diameter
- chips instead of swarf
- metallic blank welding seam preparation, thus no shrinking cavitation (when grinding)
- freehand welding seam preparation of two adjacent workpieces

Profits:

- time saving
- high quality weld seam (see radiograph below)
- waste prevention: Chips and tools are fully recyclable

Schweißnahtwurzel Oeffner - 1 SC [R] 27.03.20



Right side: Abeking & Rasmussen provided this weld seam radiograph according to DIN-EN-ISO 10042 valuation group-B-, which is showing a weld seam without cavitations that connects two aluminium sheets (ALMG 4.5).

C7705 27.03.20

FREEHAND STEEL MILLING

WE MAKE IT POSSIBLE!

MAIJA MILLING DISC AND DOUBLE SIDED MILLING DISC (DMD) FOR USE WITH STEEL, STAINLESS STEEL AND TITANIUM

Also for steel, stainless steel, titan, other metals and other materials, the above-mentioned conditions for the processing apply equally. For these purposes **Maija Frästechnik GmbH** developed special milling discs and double sided milling discs, which are tailored to characteristics of the respective material.

Maija milling discs and **double sided milling discs** are used for:

- apparatus construction
- tool engineering
- shipbuilding
- foundries
- aircraft construction
- arms industry



Demonstration of the DMD



Double sided milling disc (DMD)



Turbine angle miller with mounted milling disc

ALUMINUM

Ø	Article No.	Description
Milling discs		
70mm	010070014	Milling disc 70mm – 40 Teeth
70mm	010070015	Milling disc 70mm – 36 Teeth
116mm	010116017	Milling disc 116mm – 50 Teeth
116mm	010116015	Milling disc 116mm – 55 Teeth
116mm	010116014	Milling disc 116mm – 65 Teeth
125mm	010125017	Milling disc 125mm – 43 Teeth
125mm	010125016	Milling disc 125mm – 55 Teeth
125mm	010125013	Milling disc 125mm – 75 Teeth
150mm	010150019	Milling disc 150mm – 48 Teeth
150mm	010150015	Milling disc 150mm – 55 Teeth
Double sided milling discs (DMD)		
70mm	010070214	DMD 70mm – 12mm thick – 36 Teeth
70mm	010070215	DMD 70mm – 10mm thick – 36 Teeth
116mm	010116214	DMD 116mm – 14mm thick – 55 Teeth
125mm	010125213	DMD 125mm – 14mm thick – 55 Teeth
125mm	010125214	DMD 125mm – 14mm thick – 59 Teeth
125mm	010125212	DMD 125mm – 10mm thick – 55 Teeth
125mm	010125215	DMD 125mm – 10mm thick – 59 Teeth
150mm	010150214	DMD 150mm – 16mm thick – 43 Teeth
150mm	010150215	DMD 150mm – 16mm thick – 55 Teeth
Doubleworker (DW)		
70mm	010070217	Doubleworker 70mm – 12mm thick – 36 Teeth
70mm	010070218	Doubleworker 70mm – 10mm thick – 36 Teeth
116mm	010116217	Doubleworker 116mm – 14mm thick – 55 Teeth
125mm	010125217	Doubleworker 125mm – 14mm thick – 50 Teeth
125mm	010125216	Doubleworker 125mm – 14mm thick – 55 Teeth
125mm	010125218	Doubleworker 125mm – 10mm thick – 55 Teeth
150mm	010150216	Doubleworker 150mm – 16mm thick – 43 Teeth



GA 607-050 BXS/S2 „BAUXTEEN“

Ø	70mm
Material	Aluminum
Drive	Vane motor
Power	500 W
Speed	15.300 rpm
Air Pressure	6,3 Bar
Air Flow Rate	850 L/min
Air Inlet Thread	1/4"
Tool holder	M14
Weight (plus ring)	1,3 Kg
Article No.	MF810061



GAT 812-221 BX/S3 „BAUXMASTER“

Ø	116mm, 125mm
Material	Aluminum
Drive	Turbine
Power	2,2 kW
Speed	12.000 rpm
Air Pressure	6,3 Bar
Air Flow Rate	2.000 L/min
Air Inlet Thread	1/2"
Tool holder	Universal
Weight (plus ring)	2,8 Kg
Article No.	MF812221.B3

PRODUCT RANGE

MAIJA-MILLING DISCS AND DOUBLE SIDED MILLING DISCS

STEEL

Ø	Article No.	Description
Milling Discs		
70mm	020070015.BA	Milling disc 70mm – 60 Teeth – coated
116mm	020116013.BA	Milling disc 116mm – 100 Teeth – coated
125mm	020125018.BA	Milling disc 125mm – 56 Teeth – coated
125mm	020125013.BA	Milling disc 125mm – 85 Teeth – coated
125mm	020125015.BA	Milling disc 125mm – 100 Teeth – coated
150mm	020150014.BA	Milling disc 150mm – 70 Teeth – coated
Double sided milling discs (DMD)		
70mm	020070215.BA	DMD 70mm – 12mm thick – 50 Teeth – coated
70mm	020070216.BA	DMD 70mm – 10mm thick – 50 Teeth – coated
116mm	020116216.BA	DMD 116mm – 14mm thick – 100 Teeth – coated
116mm	020116214.BA	DMD 116mm – 14mm thick – 110 Teeth – coated
125mm	020125212.BA	DMD 125mm – 14mm thick – 85 Teeth – coated
125mm	020125214.BA	DMD 125mm – 14mm thick – 100 Teeth – coated
125mm	020125215.BA	DMD 125mm – 10mm thick – 100 Teeth – coated
150mm	020150215.BA	DMD 150mm – 16mm thick – 100 Teeth – coated
Doubleworker (DW)		
70mm	020070218.BA	Doubleworker 70mm – 12mm thick – 50 Teeth – coated
125mm	020125220.BA	Doubleworker 125mm – 14mm thick – 70 Teeth – coated
125mm	020125222.BA	Doubleworker 125mm – 10mm thick – 70 Teeth – coated
150mm	020150216.BA	Doubleworker 150mm – 16mm thick – 70 Teeth – coated



GAT 112-221 BX/S1 „FERRUMMASTER“

Ø	116mm, 125mm
Material	Steel, Stainless steel
Drive	Turbine
Power	2,2 kW
Speed	1.800 rpm
Air Pressure	6,3 Bar
Air Flow Rate	2.000 L/min
Air Inlet Thread	1/2“
Tool holder	Universal
Weight (plus ring)	3,1 Kg
Article No.	MF112221.S1



GAT 218-451 BX/S1 „FERRUMMASTER BIG/230“

Ø	150mm, 180mm, 230mm
Material	Steel, Stainless steel, Aluminum
Drive	Turbine
Power	4,5 kW
Speed	1.800 rpm
Air Pressure	6,3 Bar
Air Flow Rate	3.300 L/min
Air Inlet Thread	1/2“
Tool holder	Universal
Weight (plus ring)	8,7 Kg
Article No.	MF218451.S2

STAINLESS STEEL

Ø	Article No.	Description
Milling discs		
70mm	021070016.BA	Milling disc 70mm – 77 Teeth – coated
116mm	021116015.BA	Milling disc 116mm – 85 Teeth – coated
116mm	021116014.BA	Milling disc 116mm – 110 Teeth – coated
125mm	021125016.BA	Milling disc 125mm – 85 Teeth – coated
125mm	021125015.BA	Milling disc 125mm – 110 Teeth – coated
150mm	021150015.BA	Milling disc 150mm – 70 Teeth – coated
Double sided milling discs (DMD)		
70mm	021070216.BA	DMD 70mm – 12mm thick – 50 Teeth – coated
116mm	021116212.BA	DMD 116mm – 14mm thick – 85 Teeth – coated
116mm	021116215.BA	DMD 116mm – 14mm thick – 110 Teeth – coated
125mm	021125218.BA	DMD 125mm – 14mm thick – 85 Teeth – coated
125mm	021125220.BA	DMD 125mm – 14mm thick – 100 Teeth – coated
125mm	021125216.BA	DMD 125mm – 14mm thick – 110 Teeth – coated
125mm	021125217.BA	DMD 125mm – 10mm thick – 85 Teeth – coated
Doubleworker (DW)		
125mm	021125221.BA	Doubleworker 125mm – 14mm thick – 70 Teeth – coated
150mm	021150215.BA	Doubleworker 150mm – 16mm thick – 70 Teeth – coated



FERRUMMASTER TEEN DY70

Ø	70mm
Material	Steel, Stainless steel, Titan
Drive	Vane motor
Power	298 W
Speed	3.200 rpm
Air Pressure	6,3 Bar
Air Flow Rate	680 L/min
Air Inlet Thread	1/4"
Tool holder	M14
Weight (plus ring)	1,1 Kg
Article No.	MF810067



FERRUMMASTER DY125

Ø	116mm, 125mm
Material	Steel, Stainless steel
Drive	Vane motor
Power	746 W
Speed	1.800 rpm
Air Pressure	6,3 Bar
Air Flow Rate	1.189 L/min
Air Inlet Thread	3/8"
Tool holder	M14
Weight (plus ring)	2,35 Kg
Article No.	MF810068

PRODUCT RANGE

MAIJA-MILLING DISCS AND DOUBLE SIDED MILLING DISCS

TITAN

Ø	Article No.	Description
Milling discs		
70mm	040070024.BA	Milling disc 70mm – 42 Teeth – coated
125mm	040125017.BA	Milling disc 125mm – 60 Teeth – coated
Double sided milling discs (DMD)		
125mm	040125215.BA	DMD 125mm – 14mm thick – 60 Teeth – coated



FERRUMMASTER DY125

Ø	116mm, 125mm
Material	Steel, Stainless steel
Drive	Vane motor
Power	746 W
Speed	1.250 rpm
Air Pressure	6,3 Bar
Air Flow Rate	1.189 L/min
Air Inlet Thread	3/8"
Tool holder	M14
Weight (plus ring)	2,35 Kg
Article No.	MF810066

TOOL HOLDER

Tool holder available for the following sizes (each separately for single and double-sided discs):

70mm	3/8", M14	
116mm	M14, Universal	
125mm	M14, Universal	identical for 116mm and 125mm Discs
150mm	M14, Universal	

WEIGHT (DISCS)

Type	Size	70mm	116mm	125mm	150mm
Milling disc		0,30 Kg	0,65 Kg	0,95 Kg	1,50 Kg
DMD/Doubleworker (thin)		0,31 Kg	–	0,65 Kg	–
DMD/Doubleworker (thick)		0,35 Kg	0,80 Kg	0,90 Kg	2,10 Kg
Tool holder		+0,10 Kg	+0,20 Kg	+0,20 Kg	+0,25 Kg

See our products in action:

- www.maija-fraestechnik.de
- www.youtube.com/user/mai jagmbh



CONFIGURATION POSSIBILITIES

You would like to optimize the milling discs for your respective production conditions and material?

- Your material tends to "grease"?
- Your workpiece has to be milled at an extremely high temperature?
- You would like to optimize the service time?

We would be glad to give you advice on coating, cut, disc size or minimum quantity lubricant.

Thanks to our years of experience, we can jointly make milling even more efficient for your respective product. Ask for our experience and benefit from our Know-How.

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