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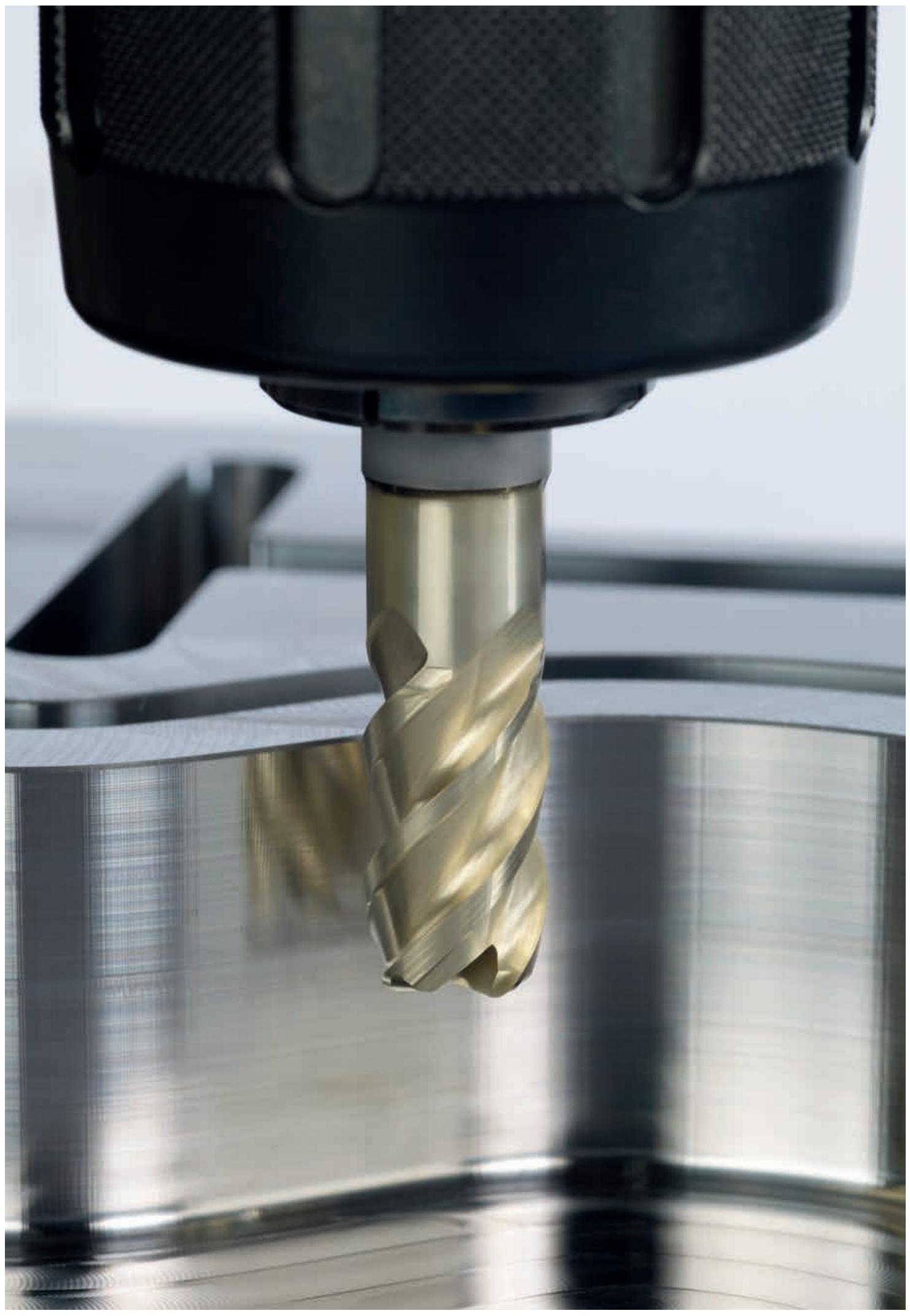
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Designed for Dynamic milling.

NEW

NEW ADDITION TO THE PRODUCT RANGE

- MD133 Supreme solid carbide milling cutter family

Two new grades:

- WJ30RD for ISO P
(secondary application:
ISO K, N)
- WJ30RA for ISO M
(secondary application:
ISO S)

THE APPLICATION

- Specially designed for dynamic milling
(low a_e , high a_p , large L_c)

Requirements:

- Dynamic machine
- CAD/CAM system
- Dynamic tools

Machining different materials:

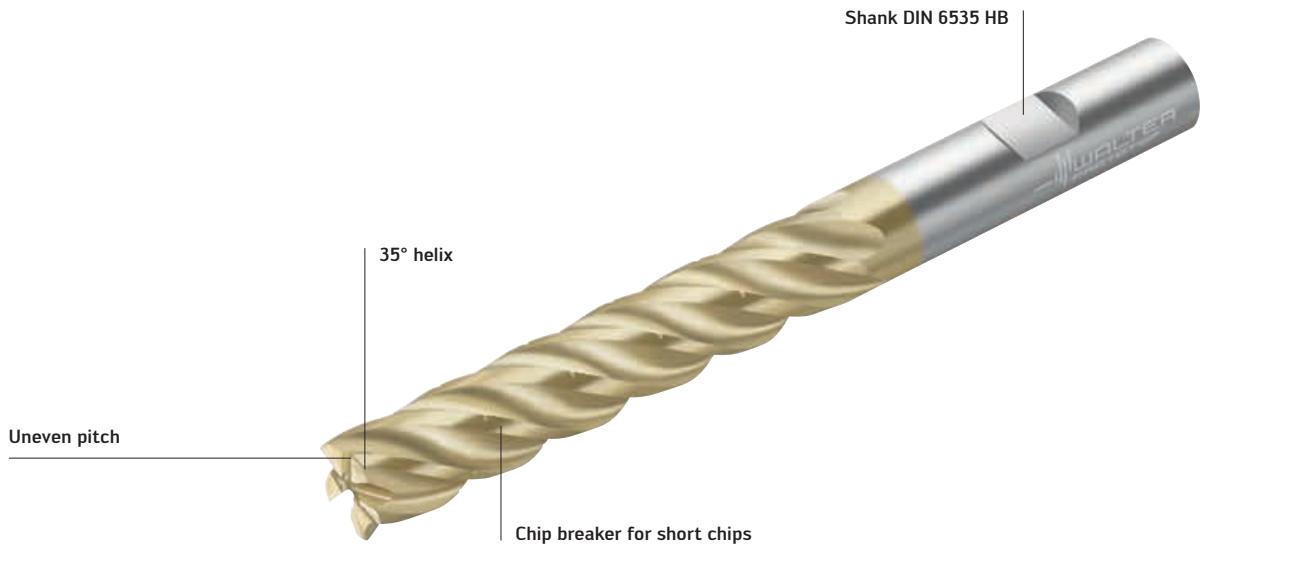
- a_e depends on the material

THE TOOL

- Diameter range 6–12 mm (1/4-1/2 inch)/ $z = 5$
Diameter range 16–20 mm (5/8 inch)/ $z = 6$

Geometry:

- No center cutting edge
- Defined protection radius
- Cutting length L_c :
 - $3 \times D_c$
 - $3 \times D_c$ (with neck for depths up to $4 \times D_c$)
 - $5 \times D_c$



MD133 Supreme solid carbide milling cutter

Fig.: WJ30RD

BENEFITS FOR YOU

- High process reliability in unmanned machining
- High productivity due to optimal metal removal rate with reduced machining times
- Maximum tool life as the entire cutting length is used and wear behavior is uniform
- High flexibility in different cavities on the component thanks to machining with only one tool diameter
- No problems working with difficult-to-cut materials or under unstable conditions
(machine, workpiece, clamping)

Ordering information
from page 154.

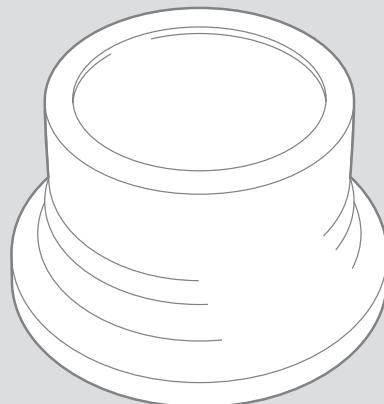


MD133 Supreme solid carbide milling cutter

Fig.: WJ30RD and WJ30RA

APPLICATION EXAMPLE

Flange

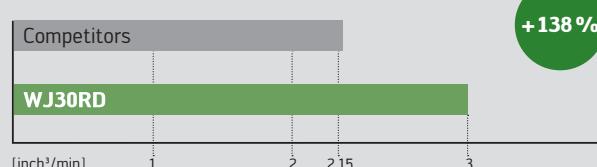


Machine: Okuma MU400
 Adaptor: ISO 40
 Material: Corrax Stainless Steel [44 HRC]

Cutting data:

	Competitors	Walter Prototyp MD133 Supreme 12.0W5L060J-WJ30RD
z	4	5
Chip breaker	No	Yes
WOC ae	0.032 inch	0.032 inch
φ	30°	30°
DOC a_p	1.378 inch	1.378 inch
Cutting speed v_c	360 SFM	394 SFM
Feed per tooth f_z	0.0039 inch	0.0043
Metal removal rate Q	2.16 inch ³ /min	3 inch ³ /min
t	33 min	99 min

Comparison: Q = Metal removal rate [inch³/min]



Watch the product animation:
 Scan this QR code or go directly to
<http://goo.gl/kDsZqQ>



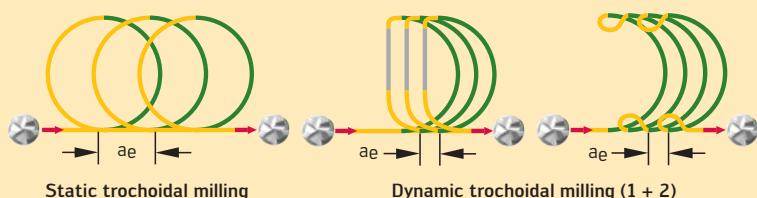
RELIABLE. PRODUCTIVE. COST-EFFICIENT.

Dynamic milling with the MD133 Supreme – process reliability and maximum efficiency.

Modern CAD/CAM systems and machine tools are making milling operations more and more efficient. In comparison with conventional methods such as High Performance Cutting (HPC), High Dynamic Cutting (HDC) is impressive thanks to its low constant mechanical load and significantly reduced contact times between the cutting edge and the material. The result: High process reliability, higher cutting parameters and an optimal metal removal rate – as well as low tool wear.

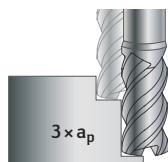
Trochoidal milling

In static trochoidal milling operations (from “trochos” meaning “wheel”), the milling cutter moves along circular (trochoidal) paths. The tool paths are optimally adapted to the workpiece in dynamic milling strategies and free travel is avoided, leading to an increase in the metal removal rate.

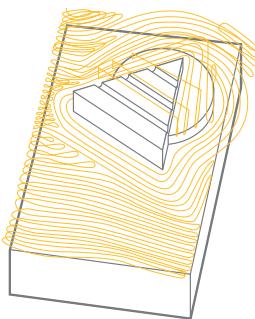
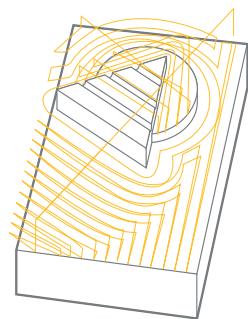
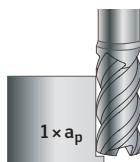


Dynamic or conventional? Compare the strategies:

High Performance Cutting (HPC)

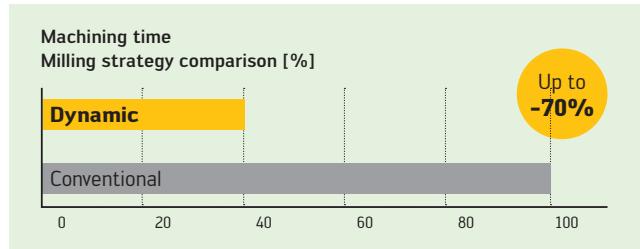


High Dynamic Cutting (HDC)



High Performance Cutting (HPC) and High Dynamic Cutting (HDC) are both milling strategies for roughing operations. The component geometry and task determine which strategy is used.

Features	HPC	HDC
Radial engagement (a_e)	Large	Low
Depth of cut (a_p)	Low	Large
Engagement angle	Large (up to 180°)	Low
Machining forces	High	Low
Machine	Powerful	Dynamic
Software	Machine control unit	CAD/CAM system
Thermal load on the tool	High	Average



Dynamic milling can reduce the machining time by up to 70%. Process reliability and the tool life are increased.

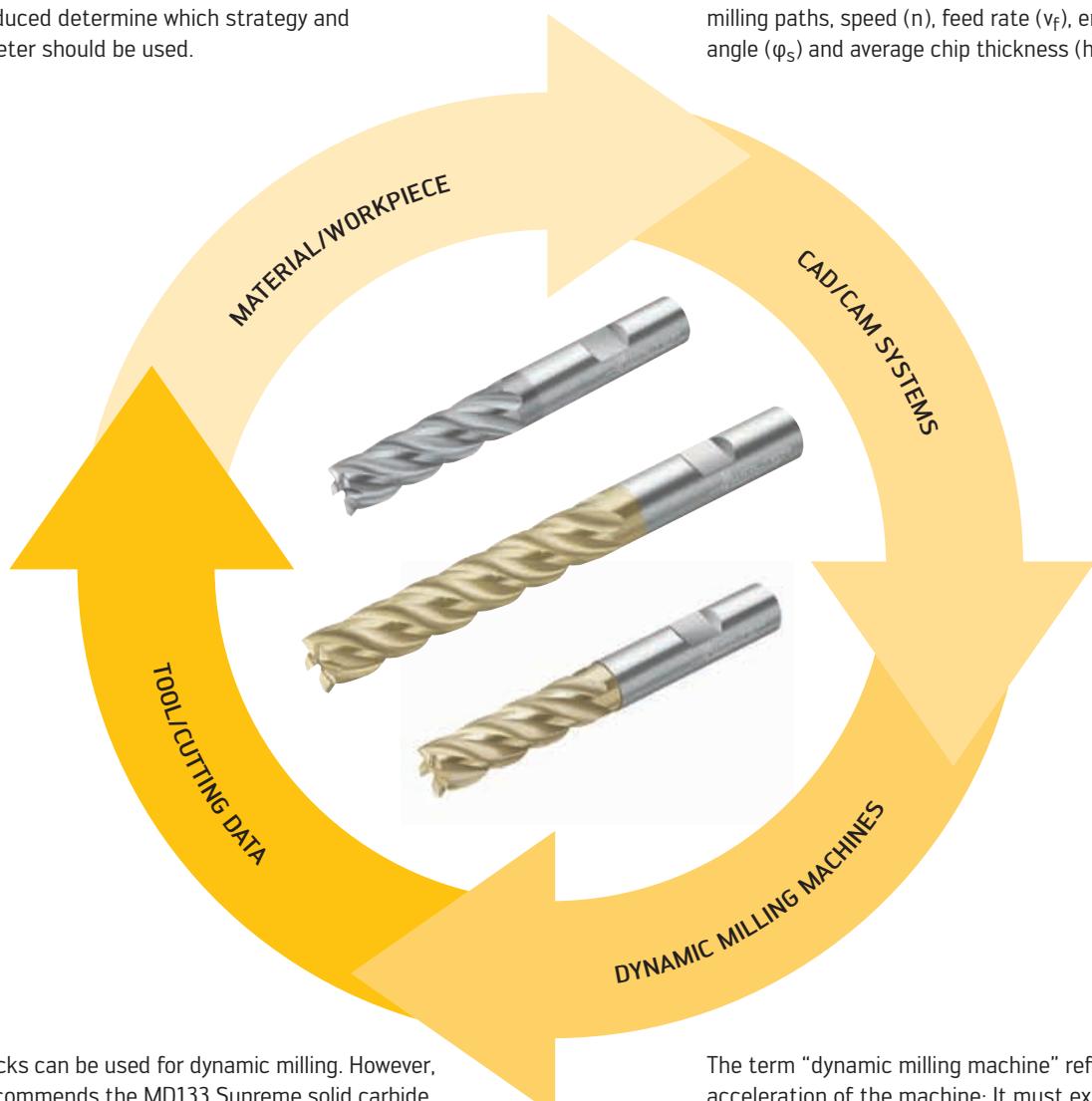
Watch the video



What conditions are required for dynamic milling?

The material decides the cutting data for the milling tools – that is, the radial cut width (a_e) and the engagement angle (φ_s). The dimensions of the pockets and cavities to be produced determine which strategy and tool diameter should be used.

Most CAD/CAM systems provide the elements necessary for dynamic milling. The software avoids full-depth cuts and collisions, calculating all of the key parameters such as the milling direction, optimal milling paths, speed (n), feed rate (v_f), engagement angle (φ_s) and average chip thickness (h_m).



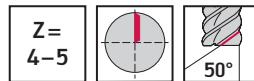
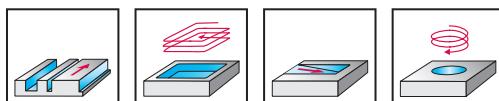
Most chucks can be used for dynamic milling. However, Walter recommends the MD133 Supreme solid carbide milling cutter with Weldon shank.

The milling cutter's cutting length (L_c) and diameter (D_c) are defined by the geometry of the workpiece. Specific recommendations for the tool data and cutting data of the task, machine and component in question can be determined using Walter GPS*.

The term "dynamic milling machine" refers to the acceleration of the machine: It must exhibit sufficiently high acceleration behavior and high rapid traverse and feed rates, as well as a wide speed range and short calculating and switching times.

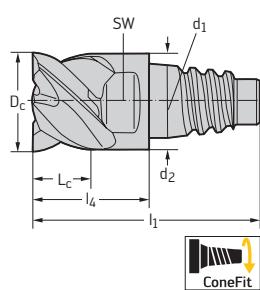
* Find Walter GPS at: walter-tools.com/us

Solid carbide shoulder/slot milling cutter MC326 / MC326 inch



	P	M	K	N	S	H	O
WJ30TF	● ●	●	●		●		

P Standard



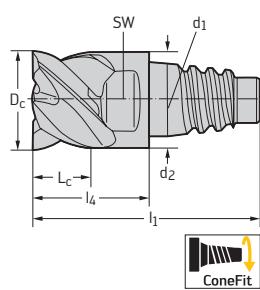
Slot milling $a_p \leq 0.5 \times D_c$

Shoulder milling $a_e \leq 0.5 \times D_C$

Ordering example for the WJ30TF grade: MC326-10.0E4P-WJ30TF

 New addition to the product range

P Standard



Slot milling $a_p \leq 0.5 \times D_c$

Shoulder milling $a_e \leq 0.05 \times D_C$

Ordering example for the WJ30TF grade: MC326.9.53E4P-WJ30TF

Continued

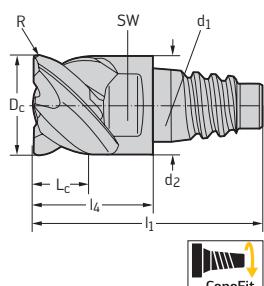
 New addition to the product range



Continued

P Standard

ConeFit



Designation	D _c h9 mm	R mm	L _c mm	d ₂ mm	l ₁ mm	l ₄ mm	SW mm	d ₁ mm	Z	WJ30TF
MC326-10.0E4P050-	10	0.5	5.5	9.7	23.6	12.4	8	E10	4	😊
MC326-10.0E4P100-	10	1	5.5	9.7	23.6	12.4	8	E10	4	😊
MC326-10.0E4P150-	10	1.5	5.5	9.7	23.6	12.4	8	E10	4	😊
MC326-10.0E4P200-	10	2	5.5	9.7	23.6	12.4	8	E10	4	😊
MC326-10.0E4P300-	10	3	5.5	9.7	23.6	12.4	8	E10	4	😊
MC326-12.0E4P050-	12	0.5	6.5	11.7	28.3	14.5	10	E12	4	😊
MC326-12.0E4P100-	12	1	6.5	11.7	28.3	14.5	10	E12	4	😊
MC326-12.0E4P150-	12	1.5	6.5	11.7	28.3	14.5	10	E12	4	😊
MC326-12.0E4P200-	12	2	6.5	11.7	28.3	14.5	10	E12	4	😊
MC326-12.0E4P300-	12	3	6.5	11.7	28.3	14.5	10	E12	4	😊
MC326-12.0E4P400-	12	4	6.5	11.7	28.3	14.5	10	E12	4	😊
MC326-16.0E4P050-	16	0.5	8.5	15.5	35.7	18.7	12	E16	4	😊
MC326-16.0E4P100-	16	1	8.5	15.5	35.7	18.7	12	E16	4	😊
MC326-16.0E4P150-	16	1.5	8.5	15.5	35.7	18.7	12	E16	4	😊
MC326-16.0E4P200-	16	2	8.5	15.5	35.7	18.7	12	E16	4	😊
MC326-16.0E4P300-	16	3	8.5	15.5	35.7	18.7	12	E16	4	😊
MC326-16.0E4P400-	16	4	8.5	15.5	35.7	18.7	12	E16	4	😊
MC326-20.0E4P050-	20	0.5	11	19.3	40.8	21.3	16	E20	4	😊
MC326-20.0E4P100-	20	1	11	19.3	40.8	21.3	16	E20	4	😊
MC326-20.0E4P150-	20	1.5	11	19.3	40.8	21.3	16	E20	4	😊
MC326-20.0E4P200-	20	2	11	19.3	40.8	21.3	16	E20	4	😊
MC326-20.0E4P300-	20	3	11	19.3	40.8	21.3	16	E20	4	😊
MC326-20.0E4P400-	20	4	11	19.3	40.8	21.3	16	E20	4	😊
MC326-25.0E5P100-	25	1	13.5	24.2	49.6	25.6	20	E25	5	😊
MC326-25.0E5P150-	25	1.5	13.5	24.2	49.6	25.6	20	E25	5	😊
MC326-25.0E5P200-	25	2	13.5	24.2	49.6	25.6	20	E25	5	😊
MC326-25.0E5P300-	25	3	13.5	24.2	49.6	25.6	20	E25	5	😊
MC326-25.0E5P400-	25	4	13.5	24.2	49.6	25.6	20	E25	5	😊

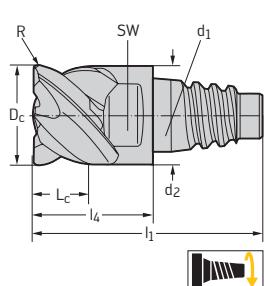
Slot milling $a_p \leq 0.5 \times D_c$ Shoulder milling $a_e \leq 0.5 \times D_c$

Ordering example for the WJ30TF grade: MC326-10.0E4P050-WJ30TF

😊 😊 😊 New addition to the product range

P Standard

ConeFit



Designation	D _c h9 inch	R inch	L _c inch	d ₂ inch	l ₁ inch	l ₄ inch	SW inch	d ₁ inch	Z	WJ30TF
MC326.9.53E4P038-	3/8	0.015	0.209	0.364	0.929	0.488	0.315	E10	4	😊
MC326.9.53E4P076-	3/8	0.030	0.209	0.364	0.929	0.488	0.315	E10	4	😊
MC326.12.7E4P038-	1/2	0.015	0.276	0.484	1.114	0.575	0.394	E12	4	😊
MC326.12.7E4P076-	1/2	0.030	0.276	0.484	1.114	0.575	0.394	E12	4	😊
MC326.12.7E4P152-	1/2	0.060	0.276	0.484	1.114	0.575	0.394	E12	4	😊
MC326.15.9E4P152-	5/8	0.060	0.335	0.610	1.406	0.736	0.472	E16	4	😊
MC326.19.1E4P152-	3/4	0.060	0.413	0.728	1.606	0.839	0.630	E20	4	😊
MC326.19.1E4P318-	3/4	0.125	0.413	0.728	1.606	0.839	0.630	E20	4	😊
MC326.25.4E5P152-	1	0.060	0.551	0.965	1.953	1.008	0.787	E25	5	😊
MC326.25.4E5P318-	1	0.125	0.551	0.965	1.953	1.008	0.787	E25	5	😊

Slot milling $a_p \leq 0.5 \times D_c$ Shoulder milling $a_e \leq 0.5 \times D_c$

Ordering example for the WJ30TF grade: MC326.9.53E4P038-WJ30TF

😊 😊 😊 New addition to the product range



Best tool for
machining conditions

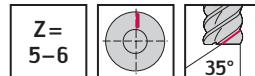
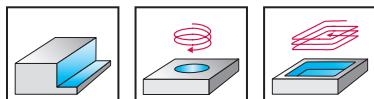
Primary
application
•
Other
application



Solid carbide shoulder milling cutters MD133 Supreme inch

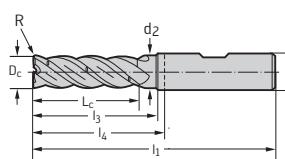


- Chip breaker



	P	M	K	N	S	H	O
WJ30RA		●●			●		
WJ30RD	●●		●	●			

P STANDARD L



Shoulder milling $a_e \leq 0.10 \times D_c$ for ISO P

Shoulder milling $a_e \leq 0.05 \times D_c$ for ISO M and ISO S

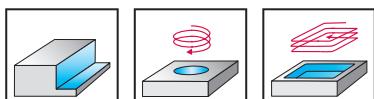
Ordering example for the WJ30RD grade: MD133.6.35W5L038D-WJ30RD



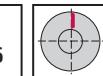
Solid carbide shoulder milling cutters MD133 Supreme



– Chip breaker



Z =
5–6



35°

	P	M	K	N	S	H	O
WJ30RA	••				●		
WJ30RD	••		●	●			

P STANDARD L

Designation	D _c h10 mm	R mm	L _c mm	l ₁ mm	l ₄ mm	d ₁ h6 mm	Z	WJ30RA	WJ30RD
Shank DIN 6535 HB									
MD133-06.0W5L030J-	6	0.3	19	65	29	6	5	●	●
MD133-08.0W5L040J-	8	0.4	25	68	32	8	5	●	●
MD133-10.0W5L050J-	10	0.5	32	80	40	10	5	●	●
MD133-12.0W5L060J-	12	0.6	38	93	48	12	5	●	●
MD133-16.0W6L080J-	16	0.8	50	115	62	16	6	●	●
MD133-20.0W6L100J-	20	1	63	125	75	20	6	●	●

Shoulder milling $a_e \leq 0.10 \times D_c$ for ISO P

Shoulder milling $a_e \leq 0.05 \times D_c$ for ISO M and ISO S

Ordering example for the WJ30RD grade: MD133-06.0W5L030J-WJ30RD

● ● ● New addition to the product range

P STANDARD L

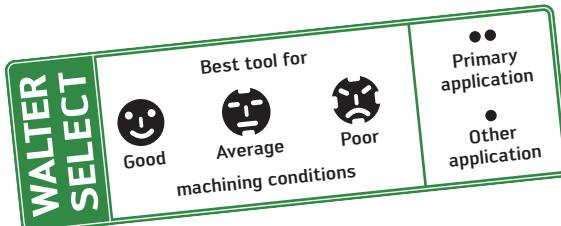
Designation	D _c h10 mm	R mm	L _c mm	l ₃ mm	d ₂ mm	l ₁ mm	l ₄ mm	d ₁ h6 mm	Z	WJ30RA	WJ30RD
Shank DIN 6535 HB											
MD133-06.0W5L030D-	6	0.3	19	27	5.5	65	29	6	5	●	●
MD133-08.0W5L040D-	8	0.4	25	30	7.5	68	32	8	5	●	●
MD133-10.0W5L050D-	10	0.5	32	38	9.5	80	40	10	5	●	●
MD133-12.0W5L060D-	12	0.6	38	46	11.4	93	48	12	5	●	●
MD133-16.0W6L080D-	16	0.8	50	60	15.2	115	62	16	6	●	●
MD133-20.0W6L100D-	20	1	63	73	19	125	75	20	6	●	●

Shoulder milling $a_e \leq 0.10 \times D_c$ for ISO P

Shoulder milling $a_e \leq 0.05 \times D_c$ for ISO M and ISO S

Ordering example for the WJ30RD grade: MD133-06.0W5L030D-WJ30RD

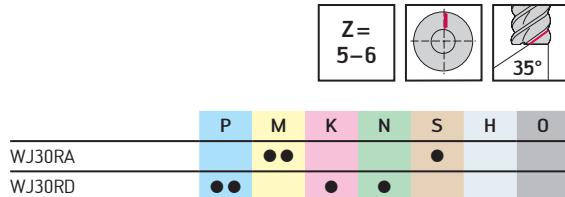
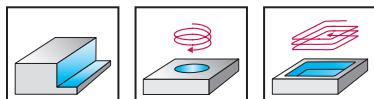
● ● ● New addition to the product range



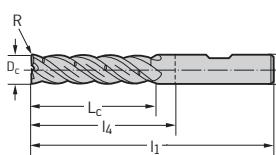
Solid carbide shoulder milling cutters MD133 Supreme / MD133 Supreme inch



- Chip breaker



P STANDARD XL



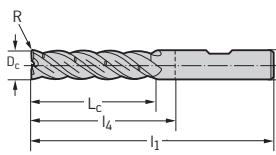
Shoulder milling $a_e \leq 0.05 \times D_c$ for ISO P

Shoulder milling $a_e \leq 0.025 \times D_c$ for ISO M and ISO S

Ordering example for the WJ30RD grade: MD133.6.35W5X038L-WJ30RD

 New addition to the product range

P STANDARD XL



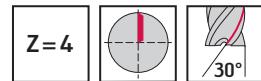
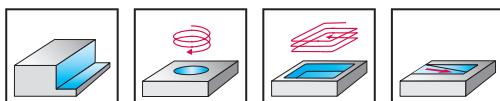
Shoulder milling $a_e \leq 0.05 \times D_c$ for ISO P

Shoulder milling $a_e \leq 0.025 \times D_c$ for ISO M and ISO S

Ordering example for the WJ30RD grade: MD133-06.0W5X030L-WJ30RD

 New addition to the product range

Solid carbide shoulder milling cutters MC11 Advance inch

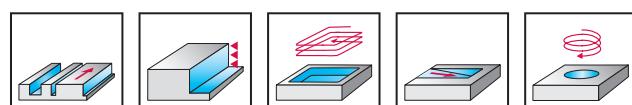


P	M	K	N	S	H	O
● ●	●	●	●	●	●	●

STANDARD	Designation	D _c h10 inch	L _c inch	l ₁ inch	l ₄ inch	d ₁ h6 inch	Z	WJ30TF
Shank DIN 6535 HA	MC111.2.38A4D-	3/32	0.375	2.500	1.083	0.250	4	●
	MC111.3.18A4D-	1/8	0.500	2.500	1.083	0.250	4	●
	MC111.4.76A4D-	3/16	0.625	2.500	1.083	0.250	4	●
	MC111.6.35A4D-	1/4	0.750	2.500	1.083	0.250	4	●
	MC111.7.94A4D-	5/16	0.813	3.000	1.437	0.375	4	●
	MC111.9.53A4D-	3/8	0.875	3.000	1.437	0.375	4	●
	MC111.12.7A4D-	1/2	1.000	3.500	1.717	0.500	4	●
	MC111.15.9A4D-	5/8	1.250	3.500	1.594	0.625	4	●
	MC111.19.1A4D-	3/4	1.500	4.000	1.969	0.750	4	●

Slot milling $a_p \leq 0.3 \times D_c$ Shoulder milling $a_g \leq 0.3 \times D_c$

Ordering example for the WJ30TF grade: MC111.2.38A4D-WJ30TF

Solid carbide milling cutters
AH2034217 / AH2038217 inch
Proto-max™ Inox

Z=4


P	M	K	N	S	H	O
●●				●		

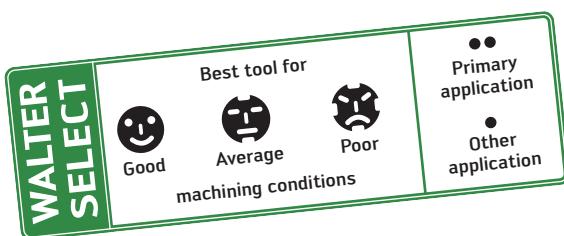
P Standard

Designation TAA	D _c h10 inch/no.	L _c inch	l ₁ inch	l ₄ inch	d ₁ h5 inch	Z
Shank DIN 6535 HA						
AH2034217-1/4	1/4	0.750	2.500	1.083	0.250	4
AH2034217-5/16	5/16	0.813	3.000	1.437	0.375	4
AH2034217-3/8	3/8	0.875	3.000	1.437	0.375	4
AH2034217-7/16	7/16	1.000	3.500	1.717	0.500	4
AH2034217-1/2	1/2	1.000	3.500	1.717	0.500	4
AH2034217-5/8	5/8	1.250	3.500	1.594	0.625	4
AH2034217-3/4	3/4	1.500	4.000	1.969	0.750	4
AH2034217-1	1	1.500	5.000	2.717	1.000	4

P Standard

Designation TAA	D _c h9 inch/no.	R inch	L _c inch	l ₁ inch	l ₄ inch	d ₁ h5 inch	Z
Shank DIN 6535 HA							
AH2038217-1/4-0.020	1/4	0.020	0.750	2.500	1.083	0.250	4
AH2038217-5/16-0.020	5/16	0.020	0.813	3.000	1.437	0.375	4
AH2038217-3/8-0.020	3/8	0.020	0.875	3.000	1.437	0.375	4
AH2038217-3/8-0.060	3/8	0.060	0.875	3.000	1.437	0.375	4
AH2038217-7/16-0.020	7/16	0.020	1.000	3.500	1.717	0.500	4
AH2038217-7/16-0.060	7/16	0.060	1.000	3.500	1.717	0.500	4
AH2038217-1/2-0.030	1/2	0.030	1.000	3.500	1.717	0.500	4
AH2038217-1/2-0.060	1/2	0.060	1.000	3.500	1.717	0.500	4
AH2038217-1/2-0.120	1/2	0.120	1.000	3.500	1.717	0.500	4
AH2038217-5/8-0.030	5/8	0.030	1.250	3.500	1.594	0.625	4
AH2038217-5/8-0.060	5/8	0.060	1.250	3.500	1.594	0.625	4
AH2038217-5/8-0.090	5/8	0.090	1.250	3.500	1.594	0.625	4
AH2038217-5/8-0.120	5/8	0.120	1.250	3.500	1.594	0.625	4
AH2038217-3/4-0.030	3/4	0.030	1.500	4.000	1.969	0.750	4
AH2038217-3/4-0.060	3/4	0.060	1.500	4.000	1.969	0.750	4
AH2038217-3/4-0.090	3/4	0.090	1.500	4.000	1.969	0.750	4
AH2038217-3/4-0.120	3/4	0.120	1.500	4.000	1.969	0.750	4
AH2038217-1.00-0.030	1	0.030	1.500	5.000	2.717	1.000	4
AH2038217-1-0.060	1	0.060	1.500	5.000	2.717	1.000	4
AH2038217-1-0.120	1	0.120	1.500	5.000	2.717	1.000	4

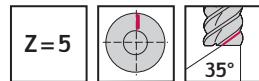
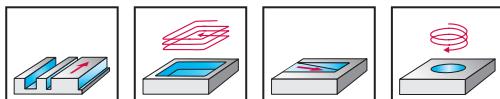
★ New addition to the product range



Solid carbide shoulder/slot milling cutter AH4135217 inch / AH4137217 inch



Proto·max™ ST



TAZ	P	M	K	N	S	H	O
	••	•					

STANDARD	Designation TAZ	D _c h9 inch	L _c inch	l ₁ inch	l ₄ inch	d ₁ h6 inch	Z
Shank DIN 6535 HB	★ AH4135217-3/8	3/8	0.875	3.000	1.437	0.375	5
	★ AH4135217-1/2	1/2	1.063	3.500	1.717	0.500	5
	★ AH4135217-5/8	5/8	1.250	3.500	1.594	0.625	5
	★ AH4135217-3/4	3/4	1.500	4.000	1.969	0.750	5

Slot milling $a_p \leq 1.0 \times D_c$
Shoulder milling $a_e \leq 0.6 \times D_c$

★ New addition to the product range

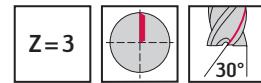
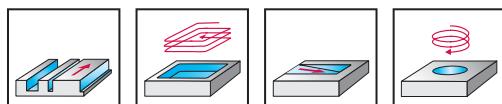
STANDARD	Designation TAZ	D _c h9 inch	R inch	L _c inch	l ₁ inch	l ₄ inch	d ₁ h6 inch	Z
Shank DIN 6535 HB	★ AH4137217-3/8-0.030	3/8	0.030	0.875	3.000	1.437	0.375	5
	★ AH4137217-1/2-0.030	1/2	0.030	1.063	3.500	1.717	0.500	5
	★ AH4137217-1/2-0.060	1/2	0.060	1.063	3.500	1.717	0.500	5
	★ AH4137217-3/4-0.030	3/4	0.030	1.500	4.000	1.969	0.750	5
	★ AH4137217-3/4-0.060	3/4	0.060	1.500	4.000	1.969	0.750	5

Slot milling $a_p \leq 1.0 \times D_c$
Shoulder milling $a_e \leq 0.6 \times D_c$

★ New addition to the product range



Solid carbide shoulder/slot milling cutter MB266 Supreme inch



Z=3



30°

P	M	K	N	S	H	O
WJ30UU		●●				

P STANDARD XL

Designation	D _c h9 inch	R inch	L _c inch	l ₃ inch	d ₂ inch	l ₁ inch	l ₄ inch	d ₁ h5 inch	Z	WJ30UU
Shank DIN 6535 HA										
MB266.6.35A3X038B-	1/4	0.015	0.375	1.500	0.236	3.000	1.583	0.250	3	😊
MB266.6.35A3X076B-	1/4	0.030	0.375	1.500	0.236	3.000	1.583	0.250	3	😊
MB266.9.53A3X038B-	3/8	0.015	0.500	1.550	0.355	3.250	1.687	0.375	3	😊
MB266.9.53A3X076B-	3/8	0.030	0.500	1.550	0.355	3.250	1.687	0.375	3	😊
MB266.12.7A3X038B-	1/2	0.015	0.625	2.125	0.470	4.000	2.217	0.500	3	😊
MB266.12.7A3X038C-	1/2	0.015	1.250	3.125	0.470	5.000	3.217	0.500	3	😊
MB266.12.7A3X076B-	1/2	0.030	0.625	2.125	0.470	4.000	2.217	0.500	3	😊
MB266.12.7A3X076C-	1/2	0.030	1.250	3.125	0.470	5.000	3.217	0.500	3	😊
MB266.12.7A3X152C-	1/2	0.060	1.250	3.125	0.470	5.000	3.217	0.500	3	😊
MB266.12.7A3X305C-	1/2	0.120	1.250	3.125	0.470	5.000	3.217	0.500	3	😊
MB266.15.9A3X038C-	5/8	0.015	1.625	3.125	0.600	5.000	3.148	0.625	3	😊
MB266.15.9A3X076C-	5/8	0.030	1.625	3.125	0.600	5.000	3.148	0.625	3	😊
MB266.15.9A3X152C-	5/8	0.060	1.625	3.125	0.600	5.000	3.148	0.625	3	😊
MB266.15.9A3X305C-	5/8	0.120	1.625	3.125	0.600	5.000	3.148	0.625	3	😊
MB266.19.1A3X038C-	3/4	0.015	1.625	3.125	0.715	5.000	3.156	0.750	3	😊
MB266.19.1A3X076B-	3/4	0.030	1.000	2.125	0.715	4.000	2.156	0.750	3	😊
MB266.19.1A3X076C-	3/4	0.030	1.625	3.125	0.715	5.000	3.156	0.750	3	😊
MB266.19.1A3X152B-	3/4	0.060	1.000	2.125	0.715	4.000	2.156	0.750	3	😊
MB266.19.1A3X305C-	3/4	0.120	1.625	3.125	0.715	5.000	3.156	0.750	3	😊
MB266.25.4A3X038B-	1	0.015	1.250	2.125	0.955	5.000	2.717	1.000	3	😊
MB266.25.4A3X076B-	1	0.030	1.250	2.125	0.955	5.000	2.717	1.000	3	😊
MB266.25.4A3X152B-	1	0.060	1.250	2.125	0.955	5.000	2.717	1.000	3	😊
MB266.25.4A3X305B-	1	0.120	1.250	2.125	0.955	5.000	2.717	1.000	3	😊

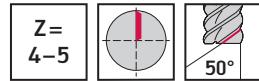
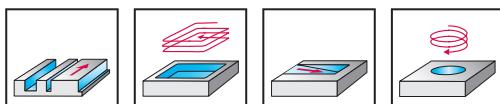
 Slot milling $a_p \leq 0.9 \times D_c$

 Shoulder milling $a_e \leq 0.6 \times D_c$

Ordering example for the WJ30UU grade: MB266.6.35A3X038B-WJ30UU

😊 😌 😍 New addition to the product range

Solid carbide shoulder/slot milling cutter MC326 Supreme inch



P	M	K	N	S	H	O
●●	●	●	●	●	●	●

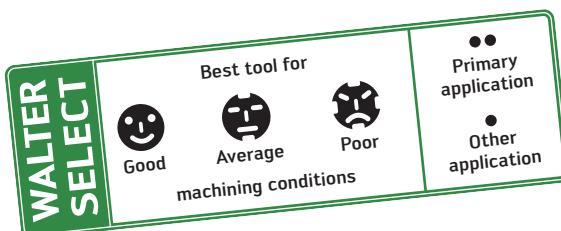
P STANDARD L

Designation	D _c h9 inch	R inch	L _c inch	l ₃ inch	d ₂ inch	l ₁ inch	l ₄ inch	d ₁ h6 inch	Z	WK40TF
Shank DIN 6535 HA										
MC326.3.18A4L051C-	1/8	0.020	0.500	1.188	0.119	3.000	1.583	0.250	3	😊
MC326.4.76A4L051C-	3/16	0.020	0.625	1.125	0.178	3.000	1.583	0.250	3	😊
MC326.6.35A4L076C-	1/4	0.030	0.750	1.375	0.237	3.000	1.583	0.250	4	😊
MC326.6.35A4L102C-	1/4	0.040	0.750	1.375	0.237	3.000	1.583	0.250	4	😊
MC326.7.94A4L076C-	5/16	0.030	0.813	1.500	0.297	3.500	1.937	0.375	4	😊
MC326.7.94A4L203C-	5/16	0.080	0.813	1.500	0.297	3.500	1.937	0.375	4	😊
MC326.9.53A4L076C-	3/8	0.030	0.875	1.500	0.356	3.500	1.937	0.375	4	😊
MC326.9.53A4L152C-	3/8	0.060	0.875	1.500	0.356	3.500	1.937	0.375	4	😊
MC326.9.53A4L203C-	3/8	0.080	0.875	1.500	0.356	3.500	1.937	0.375	4	😊
MC326.11.1A4L076C-	7/16	0.030	1.000	2.875	0.416	4.750	2.967	0.500	4	😊
MC326.11.1A4L203C-	7/16	0.080	1.000	2.875	0.416	4.750	2.967	0.500	4	😊
MC326.12.7A4L076C-	1/2	0.030	1.000	2.875	0.475	4.750	2.967	0.500	4	😊
MC326.12.7A4L152C-	1/2	0.060	1.000	2.875	0.475	4.750	2.967	0.500	4	😊
MC326.12.7A4L305C-	1/2	0.120	1.000	2.875	0.475	4.750	2.967	0.500	4	😊
MC326.15.9A4L076C-	5/8	0.030	1.250	3.000	0.594	5.000	3.217	0.625	4	😊
MC326.15.9A4L152C-	5/8	0.060	1.250	3.000	0.594	5.000	3.217	0.625	4	😊
MC326.15.9A4L318C-	5/8	0.125	1.250	3.000	0.594	5.000	3.094	0.625	4	😊
MC326.19.1A4L152C-	3/4	0.060	1.500	3.000	0.713	5.250	3.219	0.750	4	😊
MC326.19.1A4L318C-	3/4	0.125	1.500	3.000	0.713	5.250	3.219	0.750	4	😊
MC326.19.1A4L406C-	3/4	0.160	1.500	3.000	0.713	5.250	3.219	0.750	4	😊
MC326.25.4A5L152C-	1	0.060	1.625	3.250	0.960	5.500	3.217	1.000	5	😊
MC326.25.4A5L318C-	1	0.120	1.625	3.250	0.960	5.500	3.217	1.000	5	😊

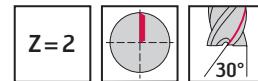
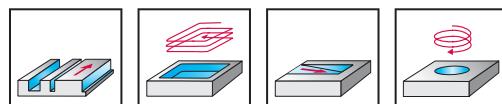
Slot milling $a_p \leq 0.9 \times D_c$ Shoulder milling $a_e \leq 0.3 \times D_c$

Ordering example for the WK40TF grade: MC326.6.35A4L076C-WK40TF

New addition to the product range



Solid carbide shoulder/slot milling cutter MC216 Advance inch



P	M	K	N	S	H	O
● ●	●	●		●		

STANDARD

Designation	D _c h10 inch	L _c inch	l ₁ inch	l ₄ Inches	d ₁ h6 inch	Z	WJ30TF
Shank DIN 6535 HA							
MC216.2.38A2D-	3/32	0.375	2.500	1.083	0.250	2	⊖
MC216.3.18A2D-	1/8	0.500	2.500	1.083	0.250	2	⊖
MC216.4.76A2D-	3/16	0.625	2.500	1.083	0.250	2	⊖
MC216.6.35A2D-	1/4	0.750	2.500	1.083	0.250	2	⊖
MC216.7.94A2D-	5/16	0.813	3.000	1.437	0.375	2	⊖
MC216.9.53A2D-	3/8	0.875	3.000	1.437	0.375	2	⊖
MC216.12.7A2D-	1/2	1.000	3.500	1.717	0.500	2	⊖
MC216.15.9A2D-	5/8	1.250	3.500	1.594	0.625	2	⊖
MC216.19.1A2D-	3/4	1.500	4.000	1.969	0.750	2	⊖

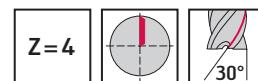
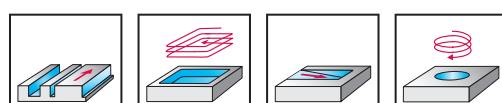
Slot milling $a_p \leq 0.5 \times D_c$

Shoulder milling $a_e \leq 0.3 \times D_c$

Ordering example for the WJ30TF grade: MC216.2.38A2D-WJ30TF

⊕ ⊕ ⊕ New addition to the product range

Solid carbide shoulder/slot milling cutter MC213 Advance inch



P	M	K	N	S	H	O
● ●	●	●		●		

P STANDARD L

Designation	D _c h10 inch	R inch	L _c inch	l ₃ inch	d ₂ inch	l ₁ inch	l ₄ inch	d ₁ h6 inch	Z	WJ30TF
Shank DIN 6535 HA										
MC213.6.35A4L038C-	1/4	0.015	0.750	1.375	0.237	3.000	1.583	0.250	4	⊖
MC213.6.35A4L076C-	1/4	0.030	0.750	1.375	0.237	3.000	1.583	0.250	4	⊖
MC213.9.53A4L038C-	3/8	0.015	0.875	1.500	0.356	3.500	1.937	0.375	4	⊖
MC213.9.53A4L076C-	3/8	0.030	0.875	1.500	0.356	3.500	1.937	0.375	4	⊖
MC213.12.7A4L076C-	1/2	0.030	1.000	2.875	0.475	4.750	2.967	0.500	4	⊖
MC213.12.7A4L152C-	1/2	0.060	1.000	2.875	0.475	4.750	2.967	0.500	4	⊖
MC213.12.7A4L305C-	1/2	0.120	1.000	2.875	0.475	4.750	2.967	0.500	4	⊖
MC213.15.9A4L076C-	5/8	0.030	1.250	3.000	0.594	5.000	3.094	0.625	4	⊖
MC213.15.9A4L152C-	5/8	0.060	1.250	3.000	0.594	5.000	3.094	0.625	4	⊖
MC213.19.1A4L152C-	3/4	0.060	1.500	3.000	0.713	5.250	3.219	0.750	4	⊖
MC213.19.1A4L305C-	3/4	0.120	1.500	3.000	0.713	5.250	3.219	0.750	4	⊖

Slot milling $a_p \leq 0.5 \times D_c$

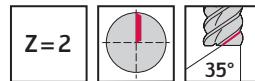
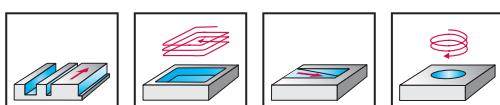
Shoulder milling $a_e \leq 0.5 \times D_c$

Ordering example for the WJ30TF grade: MC213.6.35A4L038C-WJ30TF

⊕ ⊕ ⊕ New addition to the product range



Solid carbide shoulder/slot milling cutter MC232 Perform/MC232 Perform inch



P	M	K	N	S	H	O
●●	●	●				

DIN 6527 L	Designation	D _c h12 mm	L _c mm	l ₁ mm	l ₄ mm	d ₁ h6 mm	Z	WJ30ED
Shank DIN 6535 HA	MC232-02.0A2B-	2	6	57	29	4	2	⊕⊕
	MC232-02.5A2B-	2.5	7	57	29	4	2	⊕⊕
	MC232-03.0A2B-	3	7	57	29	4	2	⊕⊕
	MC232-03.5A2B-	3.5	7	57	29	4	2	⊕⊕
	MC232-04.0A2B-	4	8	57	29	4	2	⊕⊕
Shank DIN 6535 HB	MC232-05.0W2B-	5	10	57	21	6	2	⊕⊕
	MC232-06.0W2B-	6	10	57	21	6	2	⊕⊕
	MC232-08.0W2B-	8	16	63	27	8	2	⊕⊕
	MC232-10.0W2B-	10	19	72	32	10	2	⊕⊕
	MC232-12.0W2B-	12	22	83	38	12	2	⊕⊕
	MC232-16.0W2B-	16	26	92	44	16	2	⊕⊕
	MC232-20.0W2B-	20	32	104	54	20	2	⊕⊕

Slot milling $a_p \leq 0.5 \times D_c$ Shoulder milling $a_g \leq 0.5 \times D_c$

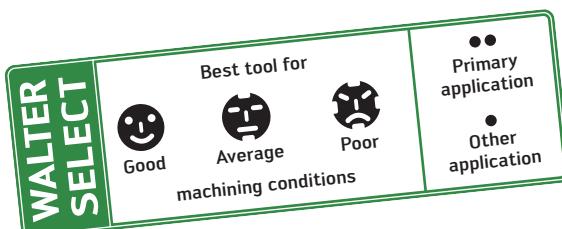
Ordering example for the WJ30ED grade: MC232-02.0A2B-WJ30ED

STANDARD	Designation	D _c h12 inch	L _c inch	l ₁ inch	l ₄ inch	d ₁ h6 inch	Z	WJ30ED
Shank DIN 6535 HA	MC232.3.18A2D-	1/8	0.500	2.500	1.083	0.250	2	⊕⊕
	MC232.6.35A2D-	1/4	0.750	2.500	1.083	0.250	2	⊕⊕
Shank DIN 6535 HB	MC232.9.53W2D-	3/8	0.875	3.000	1.437	0.375	2	⊕⊕
	MC232.12.7W2D-	1/2	1.000	3.500	1.717	0.500	2	⊕⊕
	MC232.15.9W2D-	5/8	1.250	3.500	1.594	0.625	2	⊕⊕

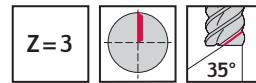
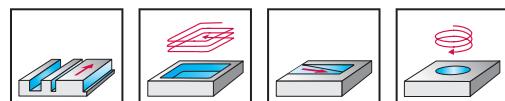
Slot milling $a_p \leq 0.5 \times D_c$ Shoulder milling $a_g \leq 0.5 \times D_c$

Ordering example for the WJ30ED grade: MC232.3.18A2D-WJ30ED

⊕⊕⊕ New addition to the product range



Solid carbide shoulder/slot milling cutter MC232 Perform/MC232 Perform inch



P	M	K	N	S	H	O
● ●	●	●				

DIN 6527 L

Designation	D_c h12 mm	L_c mm	l_1 mm	l_4 mm	d_1 h6 mm	Z	WJ30ED
Shank DIN 6535 HA	MC232-02.0A3B-	2	6	57	29	4	3
	MC232-02.5A3B-	2.5	7	57	29	4	3
	MC232-03.0A3B-	3	7	57	29	4	3
	MC232-03.5A3B-	3.5	7	57	29	4	3
	MC232-04.0A3B-	4	8	57	29	4	3
Shank DIN 6535 HB	MC232-05.0W3B-	5	10	57	21	6	3
	MC232-06.0W3B-	6	10	57	21	6	3
	MC232-08.0W3B-	8	16	63	27	8	3
	MC232-10.0W3B-	10	19	72	32	10	3
	MC232-12.0W3B-	12	22	83	38	12	3
	MC232-16.0W3B-	16	26	92	44	16	3
	MC232-20.0W3B-	20	32	104	54	20	3

Slot milling $a_p \leq 0.5 \times D_c$

Shoulder milling $a_e \leq 0.5 \times D_c$

Ordering example for the WJ30ED grade: MC232-02.0A3B-WJ30ED

STANDARD

Designation	D_c h12 inch	L_c inch	l_1 inch	l_4 inch	d_1 h6 inch	Z	WJ30ED
Shank DIN 6535 HA	MC232.3.18A3D-	1/8	0.500	2.500	1.083	0.250	3
	MC232.6.35A3D-	1/4	0.750	2.500	1.083	0.250	3
Shank DIN 6535 HB	MC232.9.53W3D-	3/8	0.875	3.000	1.437	0.375	3
	MC232.12.7W3D-	1/2	1.000	3.500	1.717	0.500	3
	MC232.15.9W3D-	5/8	1.250	3.500	1.594	0.625	3

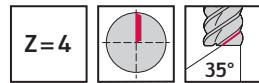
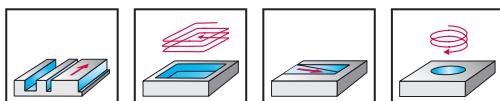
Slot milling $a_p \leq 0.5 \times D_c$

Shoulder milling $a_e \leq 0.5 \times D_c$

Ordering example for the WJ30ED grade: MC232.3.18A3D-WJ30ED

New addition to the product range

Solid carbide shoulder/slot milling cutter MC232 Perform/MC232 Perform inch



P	M	K	N	S	H	O
●●	●	●				

DIN 6527 L

Designation	D_c h12 mm	L_c mm	l_1 mm	l_4 mm	d_1 h6 mm	Z	WJ30ED
Shank DIN 6535 HA	MC232-02.0A4B-	2	7	57	4	4	⊕⊕
	MC232-02.5A4B-	2.5	8	57	4	4	⊕⊕
	MC232-03.0A4B-	3	8	57	4	4	⊕⊕
	MC232-03.5A4B-	3.5	10	57	4	4	⊕⊕
	MC232-04.0A4B-	4	11	57	4	4	⊕⊕
Shank DIN 6535 HB	MC232-05.0W4B-	5	13	57	6	4	⊕⊕
	MC232-06.0W4B-	6	13	57	6	4	⊕⊕
	MC232-08.0W4B-	8	19	63	8	4	⊕⊕
	MC232-10.0W4B-	10	22	72	10	4	⊕⊕
	MC232-12.0W4B-	12	26	83	12	4	⊕⊕
	MC232-16.0W4B-	16	32	92	16	4	⊕⊕
	MC232-20.0W4B-	20	38	104	20	4	⊕⊕

Slot milling $a_p \leq 0.5 \times D_c$ Shoulder milling $a_e \leq 0.5 \times D_c$

Ordering example for the WJ30ED grade: MC232-02.0A4B-WJ30ED

STANDARD

Designation	D_c h12 inch	L_c inch	l_1 inch	l_4 inch	d_1 h6 inch	Z	WJ30ED	
Shank DIN 6535 HA	MC232.3.18A4D-	1/8	0.500	2.500	1.083	0.250	4	⊕⊕
	MC232.6.35A4D-	1/4	0.750	2.500	1.083	0.250	4	⊕⊕
Shank DIN 6535 HB	MC232.9.53W4D-	3/8	0.875	3.000	1.437	0.375	4	⊕⊕
	MC232.12.7W4D-	1/2	1.000	3.500	1.717	0.500	4	⊕⊕
	MC232.15.9W4D-	5/8	1.250	3.500	1.594	0.625	4	⊕⊕

Shoulder milling $a_e \leq 0.5 \times D_c$ Slot milling $a_p \leq 0.5 \times D_c$

Ordering example for the WJ30ED grade: MC232.3.18A4D-WJ30ED

New addition to the product range

