

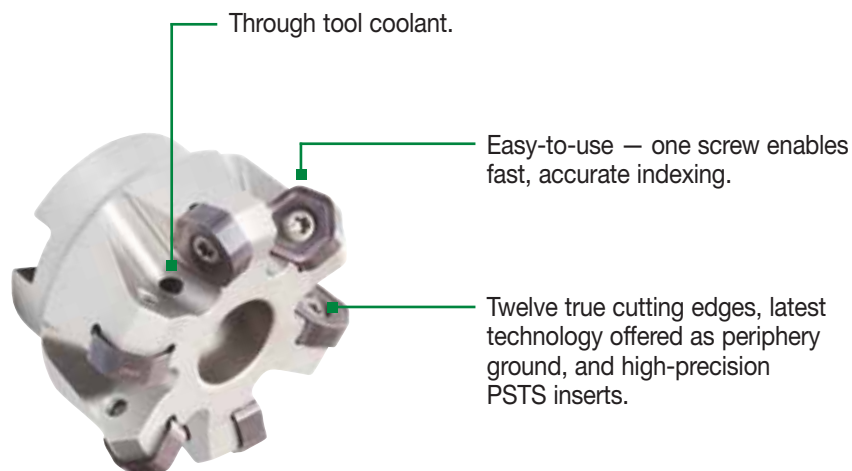
One Series Meets Every Face Milling Need • **M1200 Series**

The WIDIA M1200 Face Mill Series, the global leader in face milling technology, offers the M1200, M1200 Mini, and M1200 High-Feed product lines that ensure maximum productivity.

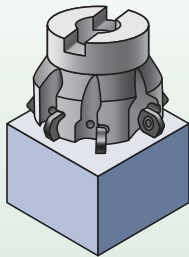


M1200

- Lower cutting forces and shorter cycle times.
- Tailor-made for all material groups.
- Longer tool life and enhanced performance.



Face Mills

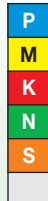


Victory M1200 Mini

Max depth of cut:
3,5mm

Lead angle: 45°
Indexes per insert: 12
Diameter: 25mm–100mm

Pages: A16–A23



Insert Geometry		Recommended Use
	LDJ	First choice for aluminium and non-ferrous machining. Periphery ground with polished rake face.
	LD	First choice for light machining and machining stainless steels.
	32LD	Optimisation for light machining when greater corner protection required. Strong corner radius in place of wiper facet.

Insert Geometry		Recommended Use
	GD	First choice for general machining in steel and cast iron. Best option for general-purpose use.
	HD	First choice for heavy machining.
	32HD	Optimisation for heavy machining when greater protection required. Strong corner radius in place of wiper facet.
	LDJ3W	Wiper insert for finishing aluminium and non-ferrous materials.
	LD3W	Wiper insert for finishing steel, stainless steel, and cast iron.

Victory M1200

Max depth of cut:
4,5mm

Lead angle: 45°
Indexes per insert: 12
Diameter: 40mm–315mm

Pages: A24–A29



Insert Geometry		Recommended Use
	LDJ	First choice for non-ferrous materials. Periphery ground with polished rake face.
	LD	First choice for light machining. Low cutting forces.

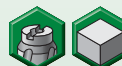
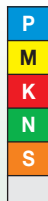
Insert Geometry		Recommended Use
	GD	First choice for general machining in steel and cast iron. Best option for general-purpose use.
	HD	First choice for heavy machining.
	43HD	Optimisation for heavy machining when greater protection required. Strong corner radius in place of wiper facet.
	LDJ3W	Wiper insert for finishing aluminium and non-ferrous materials.
	GD3W	Wiper insert for finishing steel, stainless steel, and cast iron.

Victory M1200HF

Max depth of cut:
2,2mm

Lead angle: 14,5°
Indexes per insert: 12
Diameter: 50mm–160mm

Pages: A30–A32



Insert Geometry		Recommended Use
	LDJ	First choice for non-ferrous materials. Periphery ground with polished rake face.

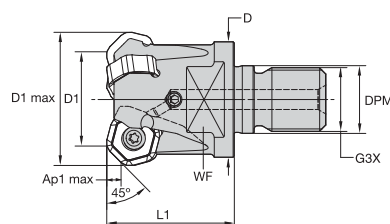
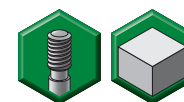
Insert Geometry		Recommended Use
	GD	First choice for high-feed face milling in stainless steel and super alloys.
	HD	Alternate choice for high-feed face milling in steel and cast iron.
	43HD	First choice for high-feed face milling in steel and cast iron. Strong corner radius. Best option for general-purpose use.

Face Mills • Victory™ M1200 Series

Victory M1200 Mini Tool Bodies



- Twelve cutting edges.
- First choice for low depth of cut face milling.
- Maximum number of teeth per diameter.

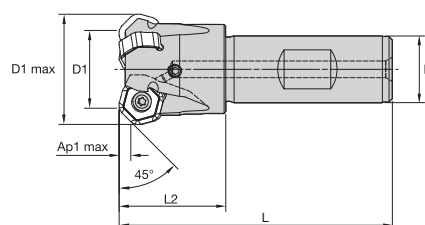
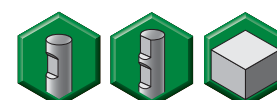


Victory M1200 Mini

order number	catalogue number	D1	D1 max	D	DPM	G3X	L1	WF	Ap1 max	Z	max RPM	coolant supply	kg
3957839	M1200D025Z02M16HN07	25	34	29	17,0	M16	32	22	3,5	2	20000	Yes	0,1
3957840	M1200D025Z03M16HN07	25	34	29	17,0	M16	32	22	3,5	3	20000	Yes	0,1
3957841	M1200D032Z03M16HN07	32	41	29	17,0	M16	40	22	3,5	3	17600	Yes	0,2
3957842	M1200D032Z04M16HN07	32	41	29	17,0	M16	40	22	3,5	4	17600	Yes	0,2
3957963	M1200D040Z04M16HN07	40	49	29	17,0	M16	40	22	3,5	4	15800	Yes	0,2
3957964	M1200D040Z05M16HN07	40	49	29	17,0	M16	40	22	3,5	5	15800	Yes	0,3

Victory M1200 Mini • Spare Parts

D1	insert screw	Nm	Torx driver
25	12146034500	3,5	12148082400
32	12146034500	3,5	12148082400
40	12146034500	3,5	12148082400



Victory M1200 Mini

order number	catalogue number	D1	D1 max	D	L	L2	Ap1 max	Z	max RPM	coolant supply	kg
3958011	M1200D025Z02B20HN07	25	34	20	82	32	3,5	2	20000	Yes	0,2
3958012	M1200D025Z03B20HN07	25	34	20	82	32	3,5	3	20000	Yes	0,2
3958023	M1200D032Z03B25HN07	32	41	25	97	40	3,5	3	17600	Yes	0,4
3958024	M1200D032Z04B25HN07	32	41	25	97	40	3,5	4	17600	Yes	0,4

Victory M1200 Mini • Spare Parts

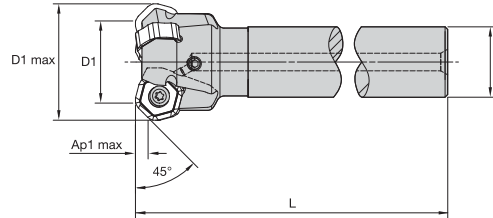
D1	insert screw	Nm	Torx driver
25	12146034500	3,5	12148082400
32	12146034500	3,5	12148082400



- Twelve cutting edges.
- First choice for low depth of cut face milling.
- Maximum number of teeth per diameter.



■ Victory M1200 Mini



Indexable Milling • Face Mills

order number	catalogue number	D1	D1 max	D	L	Ap1 max	Z	max RPM	coolant supply	kg
3958025	M1200D025Z02A20HN07L120	25	34	20	120	3,5	2	20000	Yes	0,3
3958026	M1200D025Z03A20HN07L120	25	34	20	120	3,5	3	20000	Yes	0,3
3958029	M1200D025Z02A25HN07L200	25	34	25	200	3,5	2	20000	Yes	0,7
3958030	M1200D025Z03A25HN07L200	25	34	25	200	3,5	3	20000	Yes	0,7
3958027	M1200D032Z03A25HN07L130	32	41	25	130	3,5	3	17600	Yes	0,5
3958028	M1200D032Z04A25HN07L130	32	41	25	130	3,5	4	17600	Yes	0,5

■ Victory M1200 Mini • Spare Parts

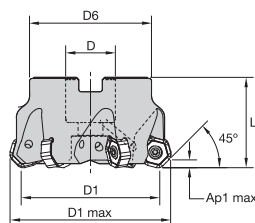
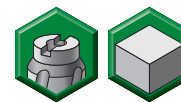
D1	insert screw	Nm	Torx driver
25	12146034500	3,5	12148082400
32	12146034500	3,5	12148082400

Face Mills • Victory™ M1200 Series

Victory M1200 Mini Tool Bodies



- Twelve cutting edges.
- First choice for low depth of cut face milling.
- Maximum number of teeth per diameter.

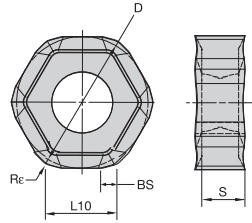


■ Victory M1200 Mini

order number	catalogue number	D1	D1 max	D	D6	L	Ap1 max	Z	max RPM	coolant supply	kg
3957995	M1200D040Z04HN07	40	49	22	38	40	3,5	4	15800	Yes	0,3
3957996	M1200D040Z05HN07	40	49	22	38	40	3,5	5	15800	Yes	0,3
3957997	M1200D050Z04HN07	50	59	22	38	40	3,5	4	12700	Yes	0,4
3957998	M1200D050Z05HN07	50	59	22	38	40	3,5	5	12700	Yes	0,4
3957999	M1200D050Z06HN07	50	59	22	38	40	3,5	6	12700	Yes	0,4
3958000	M1200D063Z04HN07	63	72	22	50	40	3,5	4	10100	Yes	0,6
3958001	M1200D063Z06HN07	63	72	22	50	40	3,5	6	10100	Yes	0,7
3958002	M1200D063Z08HN07	63	72	22	50	40	3,5	8	10100	Yes	0,6
3958003	M1200D080Z05HN07	80	89	27	60	50	3,5	5	7900	Yes	1,1
3958004	M1200D080Z08HN07	80	89	27	60	50	3,5	8	7900	Yes	1,2
3958005	M1200D080Z10HN07	80	89	27	60	50	3,5	10	7900	Yes	1,2
3958006	M1200D100Z06HN07	100	109	32	80	50	3,5	6	6300	Yes	1,7
3958007	M1200D100Z09HN07	100	109	32	80	50	3,5	9	6300	Yes	1,8
3958008	M1200D100Z12HN07	100	109	32	80	50	3,5	12	6300	Yes	1,8

■ Victory M1200 Mini • Spare Parts

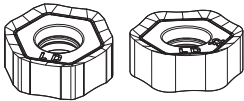
D1	insert screw	Nm	Torx driver	coolant lock screw	SHCS with coolant groove
40	12146034500	3,5	12148082400	—	12146109200
50	12146034500	3,5	12148082400	—	12146101000
63	12146034500	3,5	12148082400	—	12146101000
80	12146034500	3,5	12148082400	—	12146101800
100	12146034500	3,5	12148082400	12146109400	—


■ HNGJ-LDJ


- first choice
- alternate choice

P					
M					
K					
N					
S					
H					
					TN6501
					THM-U

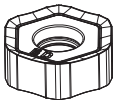
catalogue number	cutting edges	D	L10	S	BS	R _ε	hm	
HNGJ0704ANFNLDJ	12	12,70	6,80	4,48	1,60	1,2	0,08	●

■ HNGJ-LD


- first choice
- alternate choice

P								
M								
K								
N								
S								
H								
								TN5515
								TN6505
								TN6510
								TN6520
								TN6525
								TN6540

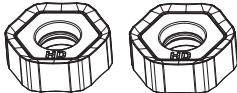
catalogue number	cutting edges	D	L10	S	BS	R _ε	hm	
HNGJ0704ANENLD	12	12,70	6,80	4,43	1,60	1,2	0,08	●
HNGJ070432ANENLD	12	12,70	6,80	4,48	—	3,2	0,08	●

■ HNPJ-GD


- first choice
- alternate choice

P								
M								
K								
N								
S								
H								
								TN5515
								TN6510
								TN6520
								TN6540
								TN7535

catalogue number	cutting edges	D	L10	S	BS	R _ε	hm	
HNPJ0704ANSNGD	12	12,70	6,80	4,45	1,27	1,2	0,10	●

■ HNPJ-HD


- first choice
- alternate choice

P								
M								
K								
N								
S								
H								
								TN5515
								TN6510
								TN6520
								TN6540
								TN7535

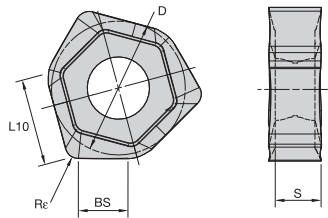
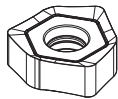
catalogue number	cutting edges	D	L10	S	BS	R _ε	hm	
HNPJ0704ANSNHD	12	12,70	6,80	4,41	1,25	1,2	0,14	●
HNPJ070432ANSNHD	12	12,70	6,80	4,42	—	3,2	0,14	●

Face Mills • Victory™ M1200 Series

Victory M1200 Mini Inserts

VICTORY

■ XNGJ-LDJ-3 Wiper



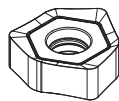
- first choice
○ alternate choice

P	■	■	■	■
M	■	■	■	■
K	■	■	■	■
N	■	●	●	●
S	■	■	■	■
H	■	■	■	■

catalogue number	cutting edges*	D	L10	S	BS	Re	TN6501	THM-U
XNGJ0704ANFNLDJ3W	3	12,70	6,78	4,47	6,78	1,3	●	●

*3 RH and 3 LH cutting edges.

■ XNGJ-LD3 Wiper



- first choice
○ alternate choice

P	■	■	■	■	●	●
M	■	■	■	■	○	●
K	■	●	●	●	○	○
N	■	■	■	■	■	■
S	■	■	■	■	■	●
H	■	■	■	■	■	■

catalogue number	cutting edges*	D	L10	S	BS	Re	TN5515	TN6510	TN6520	TN6525	TN6540
XNGJ0704ANENLD3W	3	12,70	6,78	4,47	6,78	1,3	●	●	●	●	●

*3 RH and 3 LH cutting edges.

WIN WITH WIDIA™

WIDIA 



Victory™ M1200 Face Mill Series

M1200 45° | M1200 High-Feed | M1200 Mini

Twelve cutting edges per insert — run quieter at higher speeds and feeds, using far less power versus ANY competitive double-sided platform.

Productivity: Exceptional chip forming and evacuation in any material.

Performance: Superb surface finishes.

Value: Extraordinary tool life — in all workpieces and cutting conditions.

M1200 High-Feed

- Feed rates up to 2,5mm per tooth.
- 15° lead angle enables superior chip-thinning.

M1200 Mini

- Ideal for low depth of cut work.
- Axial depth of cut up to 3,5mm.

To learn more about our innovations, contact your local Authorised Distributor or visit www.widia.com.

 **WIDIA
VICTORY**
Win with Widia™

Face Mills • Victory™ M1200 Series

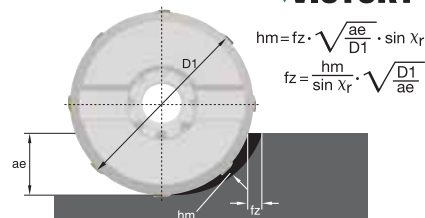
Victory M1200 Mini Cutting Data



		TN5515			TN6501			TN6505			TN6510			TN6520		
Edge Geometry		feed per tooth fz (mm)														
..LDJ					0,06	0,10	0,30									
..LD		0,08	0,15	0,25				0,08	0,10	0,25	0,09	0,17	0,28	0,09	0,17	0,29
..GD		0,12	0,20	0,35							0,13	0,22	0,39	0,14	0,23	0,40
..HD		0,18	0,25	0,55							0,20	0,28	0,61	0,21	0,29	0,64
Material Group		vc (m/min)														
P	1							460	350	300						
	2							310	230	210						
	3							260	200	170						
	4							270	210	170						
	5							220	170	140						
	6							300	220	180						
	7							220	170	160						
	8							200	160	130						
	9							170	130	100						
	10							220	180	170						
	11							160	120	90						
	12							290	220	180						
	13.1							250	180	160						
13.2							130	90	80							
M	14.1															
	14.2															
	14.3															
	14.4															
K	15	530	390	280				—	—	—	480	350	250	380	280	200
	16	410	310	230				—	—	—	370	280	210	300	220	170
	17	460	310	230				310	230	210	420	280	210	340	220	170
	18	300	220	170				260	200	170	270	200	150	220	160	120
	19	370	290	220				—	—	—	340	260	200	270	210	160
	20	310	230	180				—	—	—	280	210	160	220	170	130
N	21				2000	1050	650									
	22				980	550	450									
	23				1800	950	600									
	24				1050	650	500									
	25				750	500	350									
	26				—	—	—									
	27				—	—	—									
	28				—	—	—									
	29				—	—	—									
	30				—	—	—									
S	31															
	32															
	33															
	34															
	35															
	36															
	37															
H	38.1															
	38.2															
	39.1															
	39.2															

First choice starting feed (fz) is in **bold** type. Use corresponding speed (vc). fz and vc are valid for ae ≥ 0,4 D1.
For smaller ae, fz and vc should be multiplied by the factor given below:

ae/D1 =	0,1	0,2	0,3	0,4
fz-Factor	2	1,5	1,3	1
vc-Factor	1,4	1,3	1,2	1,1



TN6525			TN6540			TN7535			THM-U				
			feed per tooth fz (mm)									Edge Geometry	
									0,06	0,10	0,30	..LDJ	
0,08	0,12	0,25	0,11	0,17	0,33	0,10	0,15	0,30				..LD	
0,10	0,17	0,29	0,13	0,22	0,39	0,12	0,20	0,35				..GD	
0,15	0,21	0,50	0,20	0,28	0,66	0,18	0,25	0,60				..HD	
vc (m/min)											Material Group		
350	270	228	290	220	190	360	280	240				1	P
240	180	160	200	150	130	250	190	165				2	
200	150	130	170	130	110	210	160	140				3	
210	160	130	170	130	110	215	165	140				4	
170	130	110	140	100	90	180	130	110				5	
228	170	140	190	140	120	240	180	150				6	
170	130	120	140	110	100	180	140	120				7	
150	120	100	130	100	80	160	120	100				8	
130	100	80	110	80	60	140	100	80				9	
170	140	130	140	120	100	180	145	130				10	
120	90	70	100	70	60	120	90	70				11	
220	170	140	180	140	120	230	175	150				12	
190	140	120	160	120	100	200	145	120				13.1	
96	70	60	80	60	50	100	75	60				13.2	
190	120	90	160	100	70	200	120	90				14.1	M
150	90	70	130	80	60	160	95	70				14.2	
120	70	50	100	60	40	120	70	55				14.3	
100	60	40	80	50	40	100	60	45				14.4	
—	—	—	—	—	—	—	—	—				15	K
—	—	—	—	—	—	—	—	—				16	
240	180	160	200	150	130	250	190	165				17	
200	150	130	170	130	110	210	160	140				18	
—	—	—	—	—	—	—	—	—				19	
—	—	—	—	—	—	—	—	—				20	
									1800	950	590	21	N
									880	500	405	22	
									1600	860	540	23	
									950	590	450	24	
									680	450	315	25	
									670	500	310	26	
									700	610	500	27	
									750	660	540	28	
									750	650	530	29	
									700	655	500	30	
			60	50	45							31	S
			50	40	35							32	
			35	25	20							33	
			30	20	15							34	
			30	20	15							35	
			80	50	40							36	
			70	45	35							37	
												38.1	H
												38.2	
												39.1	
												39.2	