

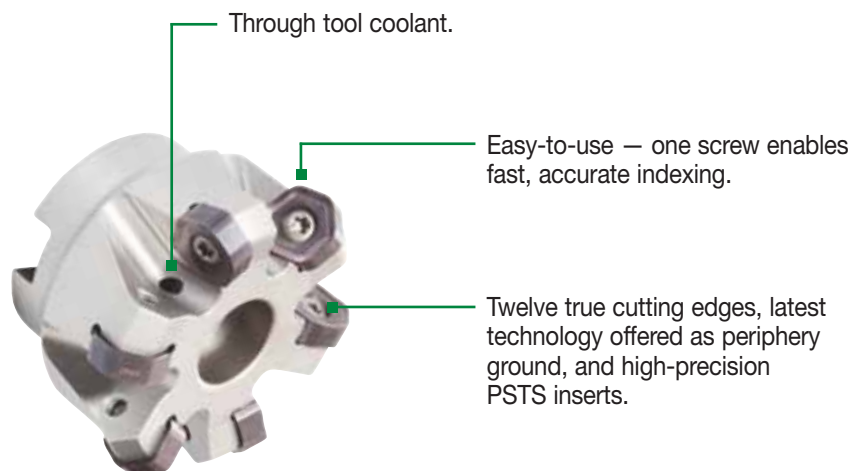
One Series Meets Every Face Milling Need • **M1200 Series**

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.

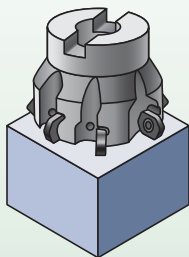


M1200

- 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.

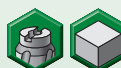
Insert Geometry		Recommended Use
	GD	First choice for general machining in steel and cast iron. Best option for general-purpose use.
	HD	First choice for heavy machining.
	43HD	Optimisation for heavy machining when greater protection required. Strong corner radius in place of wiper facet.
	LDJ3W	Wiper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

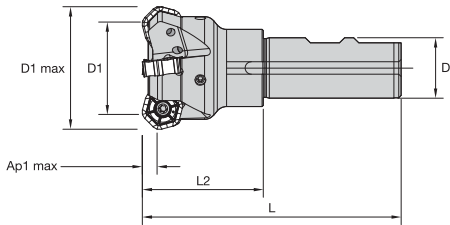
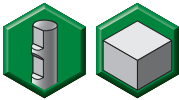
Insert Geometry		Recommended Use
	GD	First choice for high-feed face milling in stainless steel and super alloys.
	HD	Alternate choice for high-feed face milling in steel and cast iron.
	43HD	First choice for high-feed face milling in steel and cast iron. Strong corner radius. Best option for general-purpose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

Face Mills • Victory™ M1200 Series

Victory M1200 Tool Bodies



- Twelve cutting edges.
- First choice for general face milling.
- Low cutting forces for maximum productivity.



Victory M1200

order number	catalogue number	D1	D1 max	D	L	L2	Ap1 max	Z	max RPM	coolant supply	kg
3325310	M1200D040Z03B25HN09	40	51	25	107	50	4,5	3	15800	Yes	0,5
3325311	M1200D040Z04B25HN09	40	51	25	107	50	4,5	4	15800	Yes	0,5

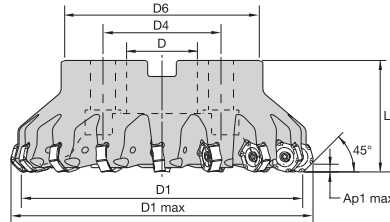
Victory M1200 • Spare Parts

D1	insert screw	Nm	Torx driver	set screw
40	12146034500	3,5	12148082400	12148577000

- Twelve cutting edges.
- First choice for general face milling.
- Low cutting forces for maximum productivity.



■ Victory M1200



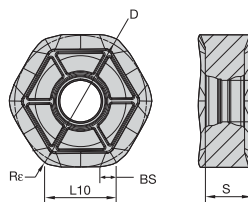
order number	catalogue number	D1	D1 max	D	D4	D6	L	Ap1 max	Z	max RPM	coolant supply	kg
3957970	M1200D040Z03HN09	40	51	22	—	39	40	4,4	3	15800	Yes	0,3
3957971	M1200D040Z04HN09	40	51	22	—	39	40	4,4	4	15800	Yes	0,3
3325312	M1200D050Z04HN09	50	61	22	—	38	40	4,5	4	12700	Yes	0,3
3325693	M1200D050Z05HN09	50	61	22	—	38	40	4,5	5	12700	Yes	0,3
3650535	M1200D063Z04HN09	63	74	22	—	50	40	4,5	4	10100	Yes	0,6
3093594	M1200D063Z06HN09	63	74	22	—	50	40	4,5	6	10100	Yes	0,6
3025376	M1200D063Z07HN09	63	74	22	—	50	40	4,5	7	10100	Yes	0,6
3650536	M1200D080Z05HN09	80	91	27	—	60	50	4,5	5	7900	Yes	1,1
3081507	M1200D080Z06HN09	80	91	27	—	60	50	4,5	6	7900	Yes	1,1
3025377	M1200D080Z09HN09	80	91	27	—	60	50	4,5	9	7900	Yes	1,1
3650537	M1200D100Z06HN09	100	111	32	—	80	50	4,5	6	6300	Yes	1,7
3325694	M1200D100Z08HN09	100	111	32	—	80	50	4,5	8	6300	Yes	1,7
3025378	M1200D100Z11HN09	100	111	32	—	80	50	4,5	11	6300	Yes	1,7
3650538	M1200D125Z08HN09	125	136	40	—	90	63	4,5	8	5050	Yes	2,8
3081508	M1200D125Z10HN09	125	136	40	—	90	63	4,5	10	5050	Yes	2,8
3093593	M1200D125Z14HN09	125	136	40	—	90	63	4,5	14	5050	Yes	2,9
3066118	M1200D160Z12HN09	160	171	40	66,7	110	63	4,5	12	3900	Yes	4,6
3066119	M1200D160Z16HN09	160	171	40	66,7	110	63	4,5	16	3900	Yes	4,7
3957972	M1200D200Z16HN09	200	211	60	101,6	130	63	4,5	16	3180	Yes	6,4
3957993	M1200D250Z20HN09	250	261	60	101,6	130	63	4,5	20	2550	Yes	9,9
3957994	M1200D315Z24HN09	315	326	60	101,6	230	80	4,5	24	2020	Yes	22,9

■ Victory M1200 • Spare Parts

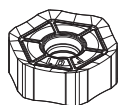
D1	insert screw	Nm	Torx driver	coolant lock screw	coolant cap	SHCS with coolant groove
40	12146034500	3,5	12148082400	—	—	12146109200
50	12146034500	3,5	12148082400	—	—	12146101900
63	12146034500	3,5	12148082400	—	—	12146101000
80	12146034500	3,5	12148082400	—	—	12146101800
100	12146034500	3,5	12148082400	12146109400	—	—
125	12146034500	3,5	12148082400	12146107000	12146111000	—
160	12146034500	3,5	12148082400	12146107000	12146111100	—
200	12146034500	3,5	12148082400	—	12146111200	—
250	12146034500	3,5	12148082400	—	12146111300	—
315	12146034500	3,5	12148082400	—	12146111400	—

Face Mills • Victory™ M1200 Series

Victory M1200 Inserts



■ HNGJ-LDJ

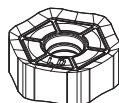


- first choice
- alternate choice

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

catalogue number	cutting edges	D	L10	S	BS	Rε	hm	TN6501	THM-U
HNGJ0905ANFNLDJ	12	15,88	9,00	5,56	1,80	1,2	0,08	●	●

■ HNGJ-LD



- first choice
- alternate choice

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

catalogue number	cutting edges	D	L10	S	BS	Rε	hm	TN5515	TN6520	TN6525	TN6540	TN7535
HNGJ0905ANENLD	12	15,88	9,00	5,56	1,80	1,2	0,10	●	●	●	●	●

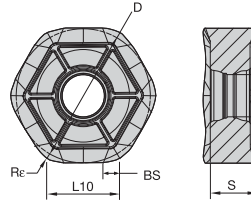
■ HNPJ-GD



- first choice
- alternate choice

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

catalogue number	cutting edges	D	L10	S	BS	Rε	hm	TN5515	TN6520	TN6540	TN7535
HNPJ0905ANSNGD	12	15,88	8,58	5,56	1,80	1,2	0,15	●	●	●	●

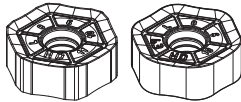

■ HNGJ-GD

VICTORY

- first choice
- alternate choice

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

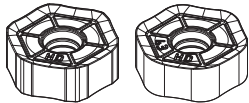
catalogue number	cutting edges	D	L10	S	BS	Rε	hm	TN5515	TN6520	TN6525	TN6540	TN7535
HNGJ0905ANSNGD	12	15,88	9,00	5,56	1,80	1,2	0,15	●	●	●	●	●

■ HNPJ-HD

VICTORY

- first choice
- alternate choice

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

catalogue number	cutting edges	D	L10	S	BS	Rε	hm	TN5515	TN6520	TN6540
HNPJ0905ANSNHD	12	15,88	8,59	5,46	1,66	1,2	0,20	●	●	●
HNPJ090543ANSNHD	12	15,88	8,50	5,44	—	4,3	0,20	●	●	●

■ HNGJ-HD

VICTORY

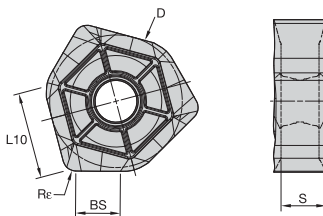
- first choice
- alternate choice

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

catalogue number	cutting edges	D	L10	S	BS	Rε	hm	TN5515	TN6520	TN6525	TN6540
HNGJ0905ANSNHD	12	15,88	8,59	5,46	1,66	1,2	0,20	●	●	●	●
HNGJ090543ANSNHD	12	15,88	8,50	5,44	—	4,4	0,20	●	●	●	●

Face Mills • Victory™ M1200 Series

Victory M1200 Inserts



■ XNGJ-LDJ3 Wiper




- first choice
- alternate choice

P	■	■	■	■
M	■	■	■	■
K	■	●	■	■
N	■	■	■	●
S	■	■	■	■
H	■	■	■	■
			TN6501	THM-U

catalogue number	cutting edges*	D	L10	S	BS	Rε	TN6501	THM-U
XNGJ0905ANFNLDJ3W	3	15,88	9,60	6,35	6,00	1,6	●	●

*3 RH and 3 LH cutting edges.

■ XNGJ-GD3 Wiper




- first choice
- alternate choice

P	■	■	■	■	●	●
M	■	■	■	■	○	●
K	■	■	●	■	○	○
N	■	■	■	■	■	■
S	■	■	■	■	■	●
H	■	■	■	■	■	■
			TN6510	TN6520	TN6525	TN6540

catalogue number	cutting edges*	D	L10	S	BS	Rε	TN6510	TN6520	TN6525	TN6540
XNGJ0905ANSNGD3W	3	15,88	9,60	6,35	6,00	1,6	●	●	●	●

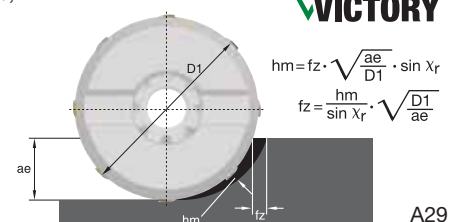
*3 RH and 3 LH cutting edges.

		TN5515	TN6501	TN6510	TN6520	TN6525	TN6540	TN7535	THM-U
Edge Geometry		feed per tooth fz (mm)							
..LDJ			0,08 0,12 0,30						0,08 0,12 0,30
..LD		0,12 0,20 0,40		0,13 0,22 0,44	0,14 0,23 0,46	0,10 0,17 0,33	0,13 0,22 0,44	0,12 0,20 0,40	
..GD		0,15 0,25 0,50		0,17 0,28 0,55	0,17 0,29 0,58	0,12 0,21 0,41	0,17 0,28 0,55	0,15 0,25 0,50	
..HD		0,20 0,30 0,60		0,22 0,33 0,66	0,23 0,35 0,69	0,17 0,25 0,50	0,22 0,33 0,66	0,20 0,30 0,60	
Material Group		vc (m/min)							
P	1					350 270 230	290 220 190	360 280 240	
	2					240 180 160	200 150 130	250 190 165	
	3					200 150 130	170 130 110	210 160 140	
	4					210 160 130	170 130 110	215 165 140	
	5					170 130 110	140 100 90	180 130 110	
	6					228 170 140	190 140 120	240 180 150	
	7					170 130 120	140 110 100	180 140 120	
	8					150 120 100	130 100 80	160 120 100	
	9					130 100 80	110 80 60	140 100 80	
	10					170 140 130	140 120 100	180 145 130	
	11					120 90 70	100 70 60	120 90 70	
	12					220 170 140	180 140 120	230 175 150	
	13.1					190 140 120	160 120 100	200 145 120	
	13.2					96 70 60	80 60 50	100 75 60	
M	14.1					190 120 90	160 100 70	200 120 90	
	14.2					150 90 70	130 80 60	160 95 70	
	14.3					120 70 50	100 60 40	120 70 55	
	14.4					100 60 40	80 50 40	100 60 45	
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		420 280 210	340 220 170	240 180 160	200 150 130	250 190 165	
	18	300 220 170		270 200 150	220 160 120	200 150 130	170 130 110	210 160 140	
	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						1800 950 590
	22		980 550 450						880 500 405
	23		1800 950 600						1600 860 540
	24		1050 650 500						950 590 450
	25		750 500 350						680 450 315
	26		— — —						670 500 310
	27		— — —						700 610 500
	28		— — —						750 660 540
	29		— — —						750 650 530
	30		— — —						700 655 500
S	31						60 50 45		
	32						50 40 35		
	33						35 25 20		
	34						30 20 15		
	35						30 20 15		
	36						80 50 40		
	37						70 45 35		
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

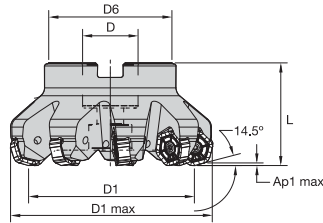
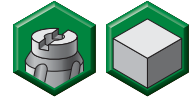


Face Mills • Victory™ M1200 Series

Victory M1200HF Tool Bodies



- Twelve cutting edges.
- High feed rates for rough face milling.
- Use standard M1200 inserts.

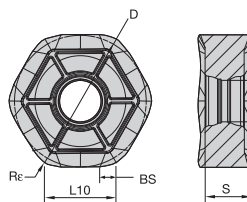


■ Victory M1200HF

order number	catalogue number	D1	D1 max	D	D6	L	Ap1 max	Z	max RPM	coolant supply	kg
3750370	M1200HF050Z04HN09	50	68	22	38	40	2,2	4	11400	Yes	0,7
3750372	M1200HF063Z05HN09	63	81	22	50	40	2,2	5	8950	Yes	0,7
3750434	M1200HF080Z06HN09	80	98	27	60	50	2,2	6	7300	Yes	1,2
3750435	M1200HF100Z08HN09	100	118	32	80	50	2,2	8	5900	Yes	1,9
3750436	M1200HF125Z09HN09	125	143	40	90	63	2,2	9	4800	Yes	3,2
3957969	M1200HF160Z12HN09	160	178	40	110	63	2,2	12	3900	Yes	5,1

■ Victory M1200HF • Spare Parts

D1	insert screw	Nm	Torx driver	coolant lock screw	coolant cap	SHCS with coolant groove
50	12146034500	3,5	12148082400	—	—	12146101000
63	12146034500	3,5	12148082400	—	—	12146101000
80	12146034500	3,5	12148082400	—	—	12146101800
100	12146034500	3,5	12148082400	12146109400	—	—
125	12146034500	3,5	12148082400	12146107000	12146111000	—
160	12146034500	3,5	12148082400	12146107000	12146111100	—

■ HNGJ-LDJ

VICTORY

- first choice
- alternate choice

P				
M				
K				
N				
S				
H				

catalogue number	cutting edges	D	L10	S	BS	Re	hm	TN6501	THM-U
HNGJ0905ANFNLDJ	12	15,88	9,00	5,56	1,80	1,2	0,08	●	●

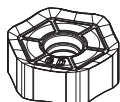
■ HNPJ-GD

VICTORY

- first choice
- alternate choice

P				
M				
K				
N				
S				
H				

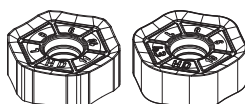
catalogue number	cutting edges	D	L10	S	BS	Re	hm	TN5515	TN6520	TN6540	TN7535
HNPJ0905ANSNGD	12	15,88	8,58	5,56	1,80	1,2	0,15	●	●	●	●

■ HNGJ-GD

VICTORY

- first choice
- alternate choice

P				
M				
K				
N				
S				
H				

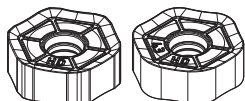
catalogue number	cutting edges	D	L10	S	BS	Re	hm	TN5515	TN6520	TN6525	TN6540	TN7535
HNGJ0905ANSNGD	12	15,88	9,00	5,56	1,80	1,2	0,15	●	●	●	●	●

■ HNPJ-HD

VICTORY

- first choice
- alternate choice

P				
M				
K				
N				
S				
H				

catalogue number	cutting edges	D	L10	S	BS	Re	hm	TN5515	TN6520	TN6540
HNPJ0905ANSNHD	12	15,88	8,59	5,46	1,66	1,2	0,20	●	●	●
HNPJ090543ANSNHD	12	15,88	8,50	5,44	—	4,3	0,20	●	●	●

■ HNGJ-HD

VICTORY

- first choice
- alternate choice

P				
M				
K				
N				
S				
H				

catalogue number	cutting edges	D	L10	S	BS	Re	hm	TN5515	TN6520	TN6525	TN6540
HNGJ0905ANSNHD	12	15,88	8,59	5,46	1,66	1,2	0,20	●	●	●	●
HNGJ090543ANSNHD	12	15,88	8,50	5,44	—	4,4	0,20	●	●	●	●

Face Mills • Victory™ M1200 Series

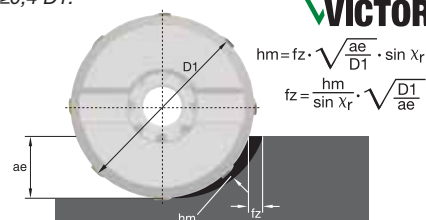
Victory M1200HF Cutting Data



		TN5515	TN6501	TN6510	TN6520	TN6525	TN6540	TN7535	THM-U
Edge Geometry		feed per tooth fz (mm)							
..LDJ			0,20 0,45 1,00						0,20 0,45 1,00
..GD		0,50 0,85 1,80		0,55 0,95 1,95	0,60 1,00 2,00	0,40 0,75 1,50	0,55 1,00 2,00	0,50 0,85 1,80	
..HD		0,65 1,20 2,50		0,70 1,30 2,75	0,75 1,35 2,80	0,55 1,00 2,00	0,70 1,30 2,80	0,65 1,20 2,50	
Material Group		vc (m/min)							
P	1					350 270 230	290 220 190	360 280 240	
	2					240 180 160	200 150 130	250 190 165	
	3					200 150 130	170 130 110	210 160 140	
	4					210 160 130	170 130 110	215 165 140	
	5					170 130 110	140 100 90	180 130 110	
	6					228 170 140	190 140 120	240 180 150	
	7					170 130 120	140 110 100	180 140 120	
	8					150 120 100	130 100 80	160 120 100	
	9					130 100 80	110 80 60	140 100 80	
	10					170 140 130	140 120 100	180 145 130	
	11					120 90 70	100 70 60	120 90 70	
	12					220 170 140	180 140 120	230 175 150	
	13.1					190 140 120	160 120 100	200 145 120	
	13.2					96 70 60	80 60 50	100 75 60	
M	14.1					190 120 90	160 100 70	200 120 90	
	14.2					150 90 70	130 80 60	160 95 70	
	14.3					120 70 50	100 60 40	120 70 55	
	14.4					100 60 40	80 50 40	100 60 45	
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		420 280 210	340 220 170	240 180 160	200 150 130	250 190 165	
	18	300 220 170		270 200 150	220 160 120	200 150 130	170 130 110	210 160 140	
	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						1800 950 590
	22		980 550 450						880 500 405
	23		1800 950 600						1600 860 540
	24		1050 650 500						950 590 450
	25		750 500 350						680 450 315
	26		— — —						670 500 310
	27		— — —						700 610 500
	28		— — —						750 660 540
	29		— — —						750 650 530
	30		— — —						700 655 500
S	31						60 50 45		
	32						50 40 35		
	33						35 25 20		
	34						30 20 15		
	35						30 20 15		
	36						80 50 40		
	37						70 45 35		
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



VICTORY