

Selecting Tool Body, Insert, and Cutting Data

4. Choose the tool body:

Choose diameter (D1) and pitch (Z) of tool body.

NOTE: Make sure you select the correct shank style for your toolholder. For toolholders, visit .

Face Mills • Victory™ M1200 Series
Victory M1200 HF • Shell Mills

WIDIA

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

■ Shell Mills

order number	catalogue number	D1	D1 max	D	D1	L	Ap1 max	Z	max RPM	coolant supply	kg
3750370	M1200HF050204HN08	50	67,8	22	38	40	2,2	4	11400	Yes	0,65

5. Choose the inserts with the WIDIA™ insert selection guide:

A Determine light machining, general purpose, or heavy machining according to workpiece material. See the Material Overview at the end of the catalogue for material descriptions.

B Select the grade given in the insert selection guide. Use the six digit order number to easily place your order.

■ Insert Selection Guide

Material Group	Light Machining		General Purpose		Heavy Machining	
	Geometry	Grade	Geometry	Grade 5A	Geometry	Grade
P1-P2	.E...LD	WP40PM	.S..GD	WP40PM	.S..HD	WP40PM
P3-P4	.E...LD	WP25PM	.S..GD	WP35CM	.S..HD	WP35CM
P5-P6	.E...LD	WP25PM	.S..GD	WP35CM	.S..HD	WP35CM

● first choice
○ alternate choice

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

■ HNGJ-GD

catalogue number	cutting edges	D	L10	S	BS	Re	hm	TN6520	TN6525	TN6540	TN7535	WK15CM	WP25PM	WS30PM	WP35CM	WP40PM
HNGJ0905ANSNGD	12	16	8,58	5,56	1,80	1,20	0,10	3119541	3614650	3037586	3093721	5427370	5228974	5885349	5885350	5885350

6. Determine cutting data – with the WIDIA Recommended Speeds and Feeds tables:

A Choose the recommended speed value according to the workpiece material and grade.

B Choose the recommended starting feed rate according to the insert geometry and % of radial engagement ae.

Starting values are given in **bold**.

■ Recommended Starting Speeds [SFM]

Material Group		WP25PM		WP35CM			WS30PM			WP40PM			TN6501	THM-U		
		1	2	3	4	5	6	1	2	3	4	5	6	1	2	3
6A P	1	395	340	325	545	475	445	-	-	-	355	310	295	-	-	-
	2	330	290	240	335	305	275	-	-	-	300	260	215	-	-	-
	3	305	260	210	305	275	245	-	-	-	275	235	190	-	-	-
	4	270	220	180	230	210	190	-	-	-	245	205	160	-	-	-
	5	220	205	180	310	275	250	-	-	-	205	185	160	-	-	-
	6	200	150	120	190	160	130	-	-	-	180	140	110	-	-	-
M	1	245	215	200	245	220	185	270	240	220	235	205	185	-	-	-
	2	220	190	155	220	190	170	245	215	175	210	180	150	-	-	-
	3	170	145	115	175	155	140	185	160	125	155	140	110	-	-	-
6A K	1	275	245	220	355	320	290	-	-	-	-	-	-	-	-	-
	2	215	190	180	280	250	230	-	-	-	-	-	-	-	-	-
	3	180	160	145	235	210	190	-	-	-	-	-	-	-	-	-

■ Recommended Starting Feeds [mm]

Insert Geometry	Programmed Feed per Tooth (fz) as a % of Radial Depth of Cut (ae)												Insert Geometry			
	5%			10%			20%			30%				40-100%		
.F.LDJ	0,17	0,32	0,65	0,13	0,23	0,47	0,09	0,17	0,35	0,08	0,15	0,31	0,08	0,14	0,28	.F.LDJ
.E..LD	0,17	0,50	1,00	0,13	0,36	0,72	0,09	0,27	0,54	0,08	0,23	0,47	0,08	0,21	0,43	.E..LD
.S..GD	0,33	0,84	1,35	0,24	0,60	0,97	0,18	0,45	0,72	0,16	0,39	0,63	0,14	0,36	0,57	.S..GD
.S..HD	0,33	0,84	1,35	0,24	0,60	0,97	0,18	0,45	0,72	0,16	0,39	0,63	0,14	0,36	0,57	.S..HD

NOTE: Use "Light Machining" value as starting feed rate.