

➤ Mill 4-11™

One tool for all applications.

The Mill 4™ series is specially engineered to achieve excellent surface quality and higher metal removal rates in shoulder milling applications. Its unique design allows you to apply the tool in multiple passes (stepping down) with outstanding results.

From roughing to finishing operations, the Mill 4 series is applicable in a wide range of workpiece materials: steel, cast iron, stainless steel, non-ferrous materials, and high-temp alloys.

Features and Benefits

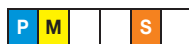
- Double-sided strong insert with 4 cutting edges.
- High positive geometry for lower cutting forces.
- Superior wall and surface finish capabilities.
- “Stepless” solution for multiple-pass operations.
- Comprehensive offering to cover all applications in all material groups.

-ELEJ



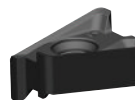
For non-ferrous materials.

-EGE



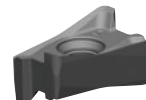
1st choice for stainless steel.
Lower cutting forces.

-SGE



First choice for the Mill 4 platform, especially when machining steels.

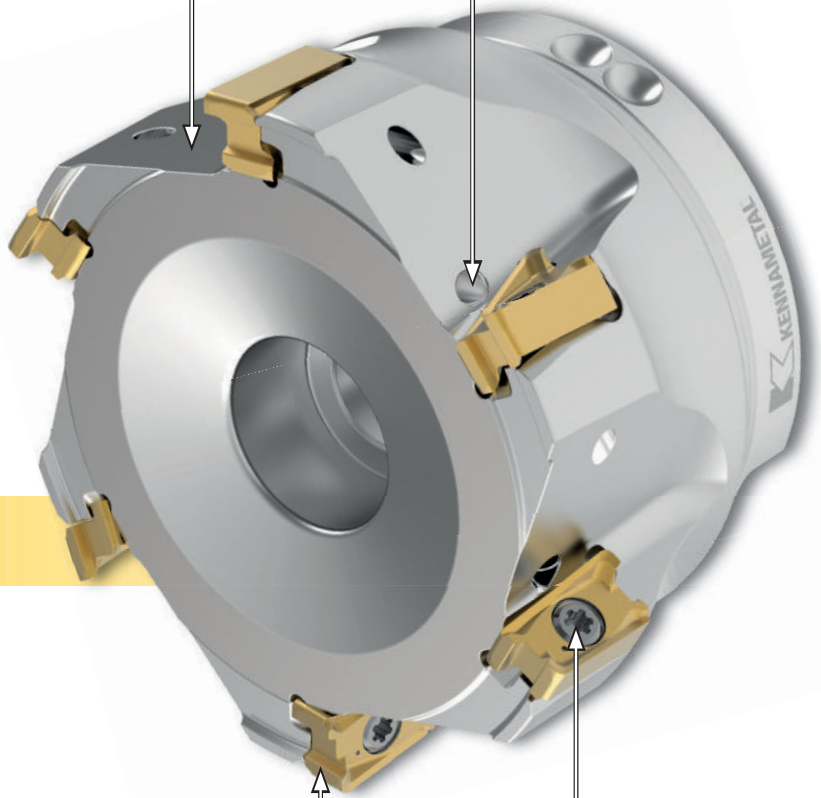
-SGEM



1st choice for cast iron.
Strongest cutting edge.

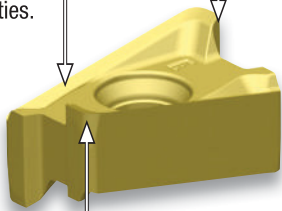
Uneven pocket spacing.

Screw-on, end mills, and shell mill cutter with internal coolant.



Up to 11mm Ap capabilities.

Integrated wiper facet for best-in-class floor finisher.



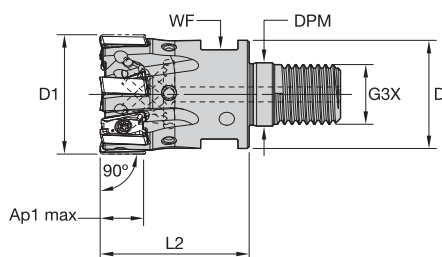
Multiple corner nose radii available from 0,4mm up to 1,6mm.

TP9 insert screw (M3) to provide higher reliability and safe processes.

Double-sided insert with 4 cutting edges.



- One tool for all applications: from roughing to finishing.
- Superior wall and surface finishing capabilities. Best choice for stepping down operations.
- Up to 11mm depth of cut.
- Screw-on cutters provide better rigidity and stability when used with small spindles: BT30, BT40, DV40, HSK50, HSK63, etc.
- Screw-on cutters can be less expensive when compared to cylindrical shank cutters due to their higher flexibility through multiple holder combinations.



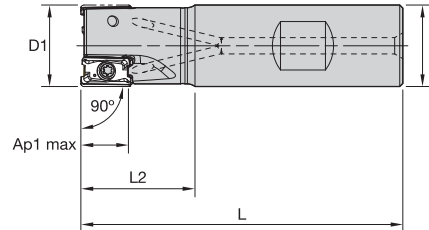
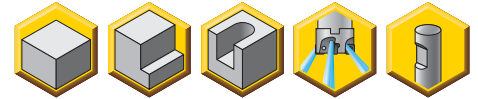
■ Screw-On End Mills

order number	catalogue number	D1	D	DPM	G3X	L2	WF	Ap1 max	Z	kg	max RPM
6136738	M4D016Z02M08LN11	16	13	8,5	M8	25	10	11,0	2	0,03	48000
6131682	M4D020Z03M10LN11	20	18	10,5	M10	28	15	11,0	3	0,06	40200
6131686	M4D025Z04M12LN11	25	21	12,5	M12	40	17	11,0	4	0,10	34300
6136793	M4D032Z05M16LN11	32	29	17,0	M16	40	24	11,0	5	0,20	29200
6134187	M4D032Z06M16LN11	32	29	17,0	M16	40	24	11,0	6	0,19	29200

■ Spare Parts

D1	insert screw	Nm	Torx Plus driver
16	MS2263	1,5	DT9IP
20	MS2263	1,5	DT9IP
25	MS2263	1,5	DT9IP
32	MS2263	1,5	DT9IP

- One tool for all applications: from roughing to finishing.
- Superior wall and surface finishing capabilities.
- Best choice for stepping down operations.
- Up to 11mm depth of cut.



Weldon End Mills

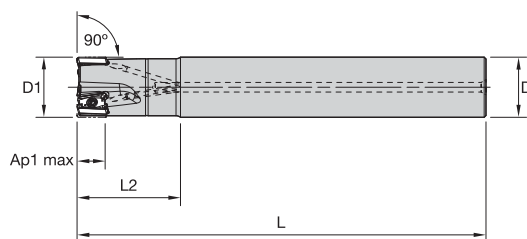
order number	catalogue number	D1	D	L	L2	Ap1 max	Z	kg	max RPM
6131628	M4D016Z02B16LN11	16	16	74	25	11,0	2	0,09	48000
6131630	M4D020Z02B20LN11	20	20	79	28	11,0	2	0,17	40200
6136740	M4D020Z03B20LN11	20	20	79	28	11,0	3	0,16	42000
6131684	M4D025Z03B25LN11	25	25	89	32	11,0	3	0,29	34300
6134185	M4D032Z04B32LN11	32	32	110	49	11,0	4	0,60	29200
6136795	M4D040Z05B32LN11	40	32	110	49	11,0	5	0,66	25400

Spare Parts

D1	insert screw	Nm	Torx Plus driver
16	MS2263	1,5	DT9IP
20	MS2263	1,5	DT9IP
25	MS2263	1,5	DT9IP
32	MS2263	1,5	DT9IP
40	MS2263	1,5	DT9IP



- One tool for all applications: from roughing to finishing.
- Superior wall and surface finishing capabilities.
- Best choice for stepping down operations.
- Up to 11mm depth of cut.



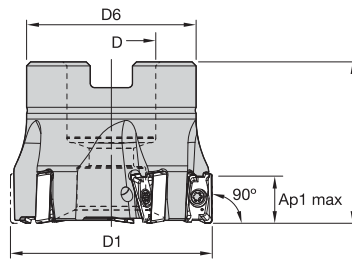
■ Cylindrical End Mills

order number	catalogue number	D1	D	L	L2	Ap1 max	Z	kg	max RPM
6131627	M4D016Z02A16LN11L090	16	16	90	25	11,0	2	0,12	48000
6136737	M4D016Z02A16LN11L150	16	16	150	25	11,0	2	0,21	48000
6131629	M4D020Z02A20LN11L150	20	20	150	28	11,0	2	0,33	40200
6131681	M4D020Z03A20LN11L090	20	20	90	28	11,0	3	0,21	40200
6136739	M4D020Z03A20LN11L150	20	20	150	28	11,0	3	0,33	40200
6131683	M4D025Z03A25LN11L170	25	25	170	43	11,0	3	0,63	34300
6131685	M4D025Z04A25LN11L100	25	25	100	43	11,0	4	0,33	34300
6136791	M4D025Z04A25LN11L170	25	25	170	43	11,0	4	0,59	34300
6134184	M4D032Z04A32LN11L200	32	32	200	49	11,0	4	1,16	29200
6134186	M4D032Z05A32LN11L110	32	32	110	49	11,0	5	0,61	29200
6136792	M4D032Z05A32LN11L200	32	32	200	49	11,0	5	1,17	29200

■ Spare Parts

D1	insert screw	Nm	Torx Plus driver
16	MS2263	1,5	DT9IP
20	MS2263	1,5	DT9IP
25	MS2263	1,5	DT9IP
32	MS2263	1,5	DT9IP

- One tool for all applications: from roughing to finishing.
- Superior wall and surface finishing capabilities.
- Best choice for stepping down operations.
- Up to 11mm depth of cut.



■ Shell Mills

order number	catalogue number	D1	D	D6	L	Ap1 max	Z	kg	max RPM
6134188	M4D040Z04S16LN11	40	16	37	40	11,0	4	0,23	25400
6134189	M4D040Z06S16LN11	40	16	37	40	11,0	6	0,22	25400
6136796	M4D040Z07S16LN11	40	16	37	40	11,0	7	0,23	25400
6134190	M4D050Z05S22LN11	50	22	42	40	11,0	5	0,31	22300
6134231	M4D050Z07S22LN11	50	22	42	40	11,0	7	0,32	22300
6136797	M4D050Z09S22LN11	50	22	42	40	11,0	9	0,32	22300
6134232	M4D063Z06S22LN11	63	22	50	40	11,0	6	0,56	19500
6134233	M4D063Z09S22LN11	63	22	50	40	11,0	9	0,56	19500
6134234	M4D080Z08S27LN11	80	27	60	50	11,0	8	1,12	17100
6136798	M4D080Z10S27LN11	80	27	60	50	11,0	10	1,11	17100

■ Spare Parts

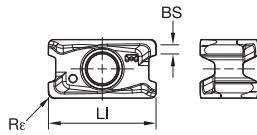


D1	insert screw	Nm	Torx Plus driver	socket-head cap screw
40	MS2263	1,5	DT9IP	125.825
50	MS2263	1,5	DT9IP	125.025
63	MS2263	1,5	DT9IP	125.025
80	MS2263	1,5	DT9IP	125.230



- ◆◆ first choice with coolant
- ◇◇ first choice without coolant
- ◆ alternate choice with coolant
- ◇ alternate choice without coolant

P1-P2			◇/◆	◆◆		◇◇						
P3-P4			◇/◆	◆◆		◇	◇◇					
P5-P6			◇/◆	◆◆		◇	◇◇					
M1-M2			◇/◆	◆			◆				◆◆	
M3			◇/◆	◆								◆◆
K1-K2		◆◆				◇◇						
K3		◆◆					◇◇					
N1	◆◆											
N2	◆◆											
S1						◆						◆◆
S2						◆						◆◆
S3						◆	◆					◆◆
S4						◆	◆					◆◆



ISO catalogue number	LI	BS	Re	KC422M	KC520M	KC522M	KC725M	KCK15	KCPK30	KCPM40	KCSM40
Light Machining											
LNGU110404ERGE	12,16	1,40	0,4	-	-	-	6131514	-	-	6131516	-
LNGU110408ERGE	12,16	1,00	0,8	-	-	6131542	6131541	-	-	6131543	6201354
LNGU110412ERGE	12,17	0,60	1,2	-	-	-	-	-	-	6201353	6201351
General Machining											
LNGU110404ERLEJ	12,16	1,40	0,4	6201292	-	-	-	-	-	-	-
LNGU110408ERLEJ	12,16	1,00	0,8	6131556	-	-	-	-	-	-	-
LNGU110404SRGE	12,16	1,40	0,4	-	-	-	-	-	-	6201280	6201291
LNGU110408SRGE	12,16	1,00	0,8	-	-	6132022	6132024	6132026	6132025	6132023	6165397
LNPU110408SRGE	12,10	0,90	0,8	-	6131506	6131502	6131504	6131507	6131505	6131503	-
LNPU110412SRGE	12,10	0,50	1,2	-	6131512	-	6131430	-	-	6131429	-
LNPU110416SRGE	12,10	0,02	1,6	-	-	-	6131559	-	6131560	6131558	-
Heavy Machining											
LNGU110408SRGEM	12,16	0,90	0,8	-	6131604	-	-	6131602	6131603	6131606	-
LNGU110412SRGEM	12,16	0,60	1,2	-	6131425	-	-	-	-	6131426	-
LNGU110416SRGEM	12,16	0,10	1,6	-	6201021	-	-	-	6200730	6201022	-

Recommended Starting Feeds

■ Recommended Starting Feeds [mm]

Light Machining	General Purpose	Heavy Machining
-----------------	-----------------	-----------------

Insert Geometry	Recommended Starting Feed per Tooth (Fz) in Relation to % of Radial Engagement (ae)															Insert Geometry
	5%			10%			20%			30%			40-100%			
.E..LEJ	0,13	0,35	0,58	0,09	0,25	0,42	0,07	0,19	0,31	0,06	0,17	0,27	0,06	0,15	0,25	.E..LEJ
.E..GE	0,23	0,43	0,59	0,17	0,31	0,43	0,13	0,23	0,32	0,11	0,20	0,28	0,10	0,18	0,25	.E..GE
.S..GE	0,23	0,46	0,65	0,17	0,33	0,47	0,13	0,25	0,35	0,11	0,22	0,31	0,10	0,20	0,28	.S..GE
.S..GEM	0,23	0,46	0,71	0,17	0,33	0,51	0,13	0,25	0,38	0,11	0,22	0,33	0,10	0,20	0,30	.S..GEM

LNG...: Ground inserts; high versatility for all finishing applications and difficult-to-machine stainless steels and high-temp alloys.
 LNP...: Pressed; lower cost per edge for most roughing to semi-finishing operations.

- .E..LEJ: For aluminium and other non-ferrous alloys.
- .E..GE: First choice for stainless steel and high-temp alloys. For highest finishing requirements in light machining.
- .S..GE: Universal geometry. First choice for steel.
- .S..GEM: First choice for cast iron machining and all heavy applications.

Material Group		KC422M*			KC520M			KC522M			KC725M		
P	1	-	-	-	-	-	-	330	285	270	260	230	215
	2	-	-	-	-	-	-	275	240	200	220	190	160
	3	-	-	-	-	-	-	255	215	175	200	170	140
	4	-	-	-	-	-	-	225	185	150	180	150	120
	5	-	-	-	-	-	-	185	170	150	150	135	120
	6	-	-	-	-	-	-	165	125	100	130	100	80
M	1	-	-	-	-	-	-	205	180	165	170	150	135
	2	-	-	-	-	-	-	185	160	130	155	130	110
	3	-	-	-	-	-	-	140	120	95	115	100	80
K	1	-	-	-	270	245	215	230	205	185	-	-	-
	2	-	-	-	210	190	175	180	160	150	-	-	-
	3	-	-	-	175	160	145	150	135	120	-	-	-
N	1	-	-	-	-	-	-	-	-	-	-	-	-
	2	-	-	-	-	-	-	-	-	-	-	-	-
	3	-	-	-	-	-	-	-	-	-	-	-	-
S	1	-	-	-	-	-	-	-	-	-	-	-	-
	2	-	-	-	-	-	-	-	-	-	-	-	-
	3	-	-	-	-	-	-	-	-	-	-	-	-
	4	-	-	-	-	-	-	-	-	-	-	-	-
H	1	-	-	-	-	-	-	120	90	70	-	-	-
	2	-	-	-	-	-	-	-	-	-	-	-	-
	3	-	-	-	-	-	-	-	-	-	-	-	-

Material Group		KCK15			KCPK30			KCPM40			KCSM40		
P	1	-	-	-	455	395	370	295	260	245	260	230	215
	2	-	-	-	280	255	230	250	215	180	220	190	160
	3	-	-	-	255	230	205	230	195	160	200	170	140
	4	-	-	-	190	175	160	205	170	135	180	150	120
	5	-	-	-	260	230	210	170	155	135	150	135	120
	6	-	-	-	160	135	125	150	115	90	130	100	80
M	1	-	-	-	205	185	155	195	170	155	170	150	135
	2	-	-	-	185	160	140	175	150	125	155	130	110
	3	-	-	-	145	130	115	130	115	90	115	100	80
K	1	420	385	340	295	265	240	-	-	-	-	-	-
	2	335	295	275	235	210	190	-	-	-	-	-	-
	3	280	250	230	195	175	160	-	-	-	-	-	-
N	1	-	-	-	-	-	-	-	-	-	-	-	-
	2	-	-	-	-	-	-	-	-	-	-	-	-
	3	-	-	-	-	-	-	-	-	-	-	-	-
S	1	-	-	-	-	-	-	-	-	-	-	-	-
	2	-	-	-	-	-	-	-	-	-	-	-	-
	3	-	-	-	-	-	-	-	-	-	-	-	-
	4	-	-	-	-	-	-	-	-	-	-	-	-
H	1	-	-	-	-	-	-	-	-	-	-	-	-
	2	-	-	-	-	-	-	-	-	-	-	-	-
	3	-	-	-	-	-	-	-	-	-	-	-	-

*Recommended for wet machining only.

NOTE: FIRST choice starting speeds are in **bold** type.

As the average chip thickness increases, the speed should be decreased.

Dry

Wet



Material Group		KC422M			KC520M			KC522M			KC725M		
P	1	-	-	-	-	-	-	265	230	215	210	185	170
	2	-	-	-	-	-	-	220	190	160	175	150	130
	3	-	-	-	-	-	-	205	170	140	160	135	110
	4	-	-	-	-	-	-	180	150	120	145	120	95
	5	-	-	-	-	-	-	150	135	120	120	110	95
	6	-	-	-	-	-	-	130	100	80	105	80	65
M	1	-	-	-	-	-	-	165	145	130	135	120	110
	2	-	-	-	-	-	-	150	130	105	125	105	90
	3	-	-	-	-	-	-	110	95	75	90	80	65
K	1	-	-	-	215	195	170	185	165	150	-	-	-
	2	-	-	-	170	150	140	145	130	120	-	-	-
	3	-	-	-	140	130	115	120	110	95	-	-	-
N	1	860	755	700	-	-	-	-	-	-	-	-	-
	2	755	700	610	-	-	-	-	-	-	-	-	-
	3	755	700	610	-	-	-	-	-	-	-	-	-
S	1	-	-	-	-	-	-	30	30	20	30	25	20
	2	-	-	-	-	-	-	30	30	20	30	25	20
	3	-	-	-	-	-	-	40	30	20	35	30	20
	4	-	-	-	-	-	-	55	40	30	45	35	25
H	1	-	-	-	-	-	-	95	70	55	-	-	-
	2	-	-	-	-	-	-	-	-	-	-	-	-
	3	-	-	-	-	-	-	-	-	-	-	-	-

Material Group		KCK15			KCPK30			KCPM40			KCSM40		
P	1	-	-	-	365	315	295	285	250	235	-	-	-
	2	-	-	-	225	205	185	240	210	170	-	-	-
	3	-	-	-	205	185	165	220	190	150	-	-	-
	4	-	-	-	150	140	130	195	165	130	-	-	-
	5	-	-	-	210	185	170	165	150	130	135	115	95
	6	-	-	-	130	110	100	145	110	90	120	90	65
M	1	-	-	-	165	150	125	190	165	150	170	135	110
	2	-	-	-	150	130	110	170	145	120	145	115	95
	3	-	-	-	115	105	90	125	110	90	115	90	70
K	1	335	310	270	235	210	190	-	-	-	-	-	-
	2	270	235	220	190	170	150	-	-	-	-	-	-
	3	225	200	185	155	140	130	-	-	-	-	-	-
N	1	-	-	-	-	-	-	-	-	-	-	-	-
	2	-	-	-	-	-	-	-	-	-	-	-	-
	3	-	-	-	-	-	-	-	-	-	-	-	-
S	1	-	-	-	-	-	-	40	30	30	30	30	20
	2	-	-	-	-	-	-	40	30	30	30	30	20
	3	-	-	-	-	-	-	50	40	30	40	30	20
	4	-	-	-	55	40	25	65	50	30	50	40	25
H	1	-	-	-	-	-	-	-	-	-	-	-	-
	2	-	-	-	-	-	-	-	-	-	-	-	-
	3	-	-	-	-	-	-	-	-	-	-	-	-

NOTE: FIRST choice starting speeds are in **bold** type.
As the average chip thickness increases, the speed should be decreased.

Dry
 Wet

KNOW-HOW IS THE KEY TO SUCCESS!

The key to being successful and abreast with competition is “Technical Training”.



You will learn all about cost reduction, quality and efficiency improvement, competitiveness, and state-of-the-art processing techniques. This goes hand-in-hand with increasing digitization.

TRAINING CONTENTS

- Drilling, turning, and internal machining
- Milling with indexable inserts
- Fundamentals of materials science and cutting materials
- Milling with solid carbide tools
- Fundamentals of metalworking
- Tapping and tap forming
- Reaming process
- Insert failure analysis

TRAINING SCHEDULE & REGISTRATION

Two-day courses — online, at your site or at our Kennametal Centers in the EMEA region

Participants: max. 15–25
Training location: In local country.
Language: Please contact us for further information in local language

INFORMATION ABOUT OUR COURSE

Information about our courses can be found at: kennametal.com



WEBINARS & E-LEARNING

Join our webinars & e-learning!
Different topics, different languages.

CONTACT DETAILS HOW TO FIND US:

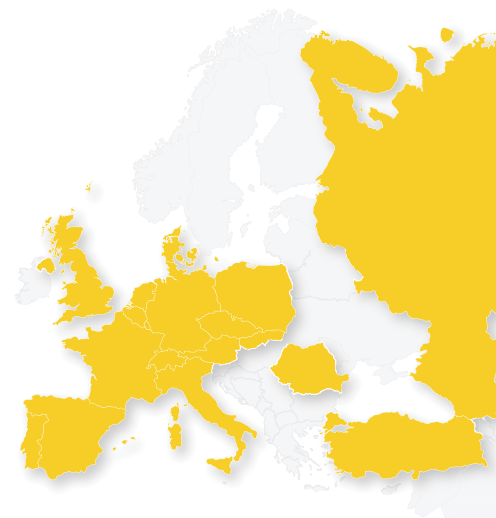


Kennametal Shared Services GmbH
Technology Center Europe
Wehlauer Straße 73
D-90766 Fürth
Tel.: +49 911 / 97 35 299
E-Mail: de-knowledge.center@kennametal.com

We offer technical training in the following countries:

Austria, Benelux, Czech Republic, Denmark, France, Germany, Italy, Poland, Portugal, Romania, Russia, Slovakia, Spain, Switzerland, Turkey, and the UK.
The training will be held in the local language.

Contact us by email or phone.



➤ Mill 4-15™ • Double-Sided Shoulder Milling

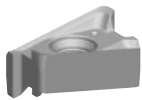
Primary Application

The Mill 4-15 series is specially engineered to achieve excellent surface quality and higher material removal rates in shoulder milling applications. Its unique design enables multiple passes (stepping down) with outstanding results. The Mill 4™ platform is applicable in a wide range of workpiece materials: steel, cast iron, stainless steel, and titanium, from roughing to finishing operations.

Features and Benefits

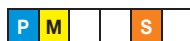
- Double-sided strong insert with 4 cutting edges.
- High positive geometry for lower cutting forces.
- Superior wall and surface finish capabilities.
- “Stepless” solution. No mismatch when machining walls in different steps.

-EGEJ



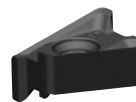
For non-ferrous materials.

-EGE



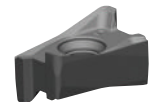
1st choice for stainless steel.
Lower cutting forces.

-SGE

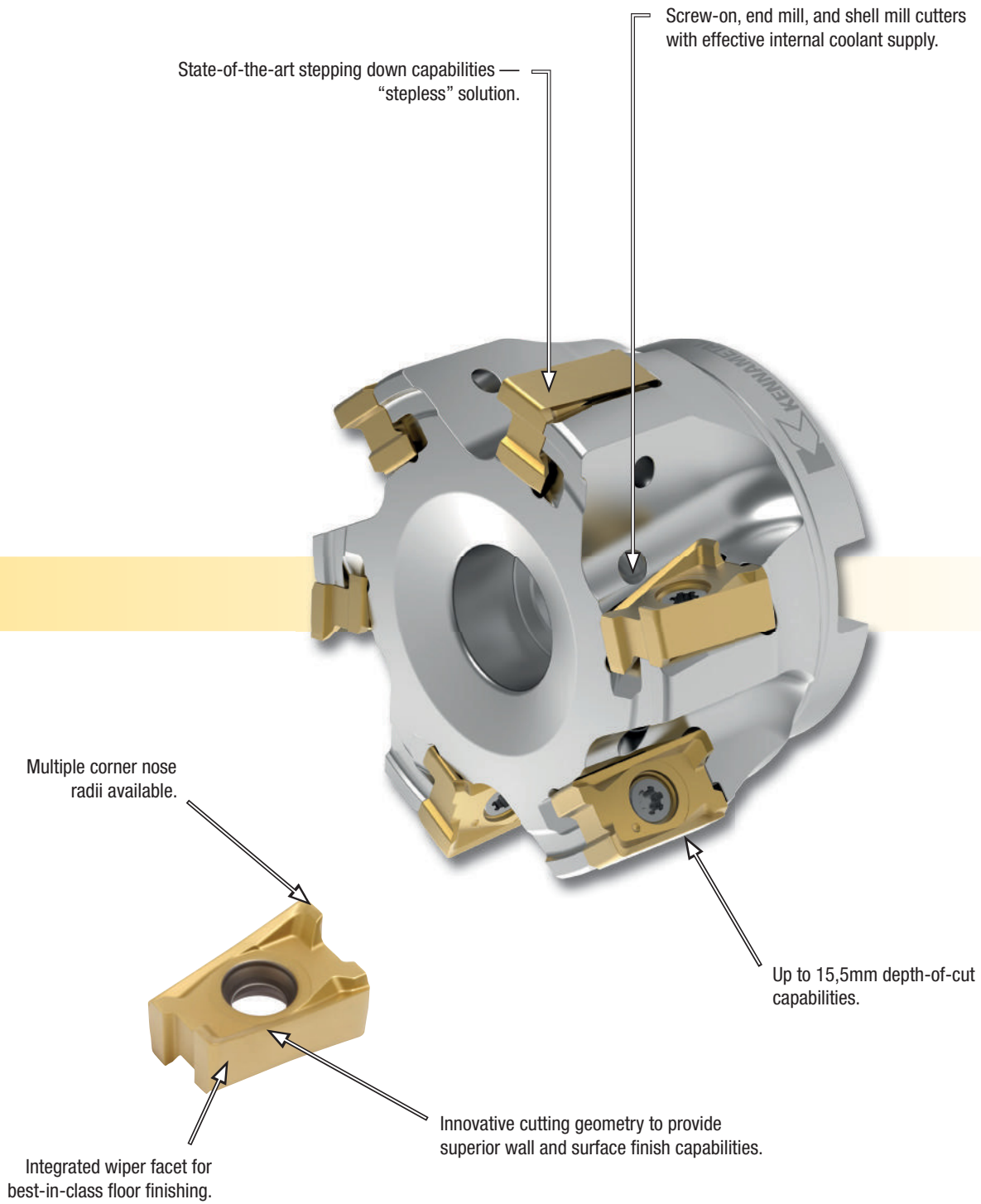


First choice for the Mill 4 platform, especially when machining steels.

-SGEM



1st choice for cast iron.
Strongest cutting edge.



State-of-the-art stepping down capabilities —
“stepless” solution.

Screw-on, end mill, and shell mill cutters
with effective internal coolant supply.

Multiple corner nose
radii available.

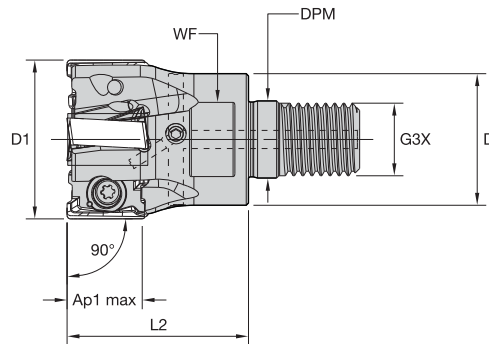
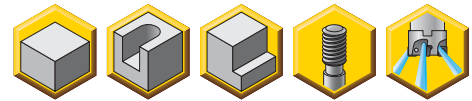
Up to 15,5mm depth-of-cut
capabilities.

Integrated wiper facet for
best-in-class floor finishing.

Innovative cutting geometry to provide
superior wall and surface finish capabilities.



- Superior wall and surface finish capabilities.
- True 90° capabilities. Stepless solution when using multiple steps.
- Engineered to run up to 15,5mm depth of cut.
- Effective internal coolant feature, reaching the cutting edge precisely.



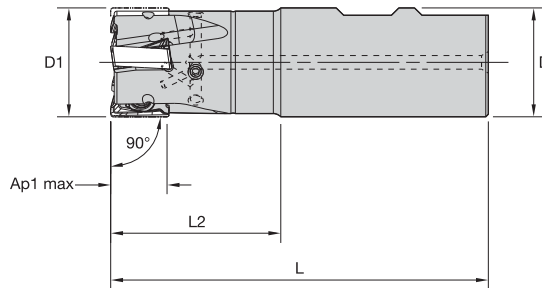
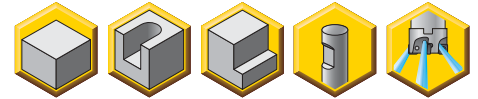
■ Screw-On End Mills

order number	catalogue number	D1	D	DPM	G3X	L2	WF	Ap1 max	Z	kg	max RPM
5531911	M4D025Z02M12LN15	25	21	12,5	M12	32	17	15,5	2	0,08	26700
5531912	M4D032Z03M16LN15	32	29	17,0	M16	40	24	15,5	3	0,18	22000
5555606	M4D032Z04M16LN15	32	29	17,0	M16	40	24	15,5	4	0,18	22000
5528599	M4D035Z04M16LN15	35	29	17,0	M16	40	24	15,5	4	0,19	20600
5531913	M4D040Z05M16LN15	40	29	17,0	M16	40	24	15,5	5	0,23	18800

■ Spare Parts

D1	insert screw	Nm	Torx Plus driver
25	MS-2071	3,5	DT15IP
32	MS-2071	3,5	DT15IP
35	MS-2071	3,5	DT15IP
40	MS-2071	3,5	DT15IP

- Superior wall and surface finish capabilities.
- True 90° capabilities. Stepless solution when using multiple steps.
- Engineered to run up to 15,5mm depth of cut.
- Effective internal coolant feature, reaching the cutting edge precisely.



Weldon End Mills

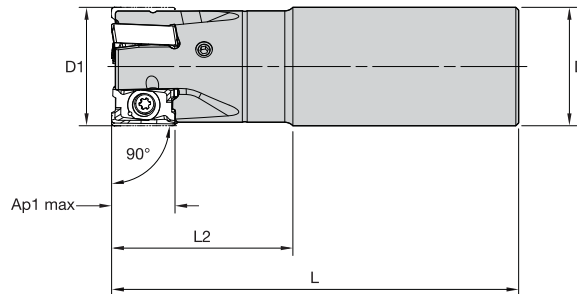
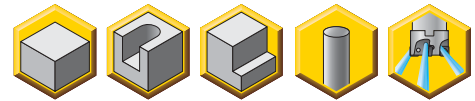
order number	catalogue number	D1	D	L	L2	Ap1 max	Z	kg	max RPM
5528630	M4D025Z02B25LN15	25	25	89	32	15,5	2	0,28	26700
5528631	M4D032Z03B32LN15	32	32	111	50	15,5	3	0,58	22000
5531914	M4D040Z03B32LN15	40	32	111	50	15,5	3	0,65	18800
5555607	M4D040Z04B32LN15	40	32	111	50	15,5	4	0,65	18800

Spare Parts

D1	insert screw	Nm	Torx Plus driver
25	MS-2071	3,5	DT15IP
32	MS-2071	3,5	DT15IP
40	MS-2071	3,5	DT15IP



- Superior wall and surface finish capabilities.
- True 90° capabilities. Stepless solution when using multiple steps.
- Engineered to run up to 15,5mm depth of cut.
- Effective internal coolant feature, reaching the cutting edge precisely.



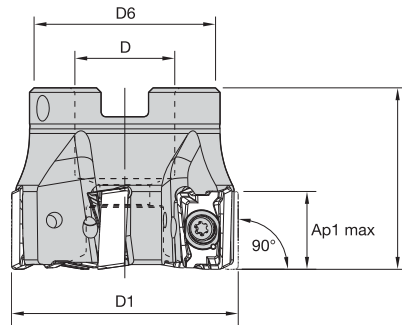
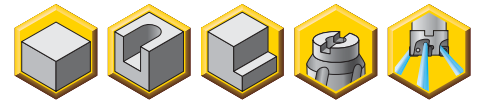
■ Cylindrical End Mills

order number	catalogue number	D1	D	L	L2	Ap1 max	Z	kg	max RPM
5531915	M4D025Z02A25LN15L100	25	25	100	43	15,5	2	0,28	26700
5531916	M4D025Z02A25LN15L170	25	25	170	43	15,5	2	0,58	26700
5531917	M4D032Z03A32LN15L110	32	32	110	49	15,5	3	0,58	22000
5531918	M4D032Z03A32LN15L200	32	32	200	50	15,5	3	1,14	22000
5555608	M4D032Z04A32LN15L110	32	32	110	49	15,5	4	0,58	22000
5555609	M4D032Z04A32LN15L200	32	32	200	50	15,5	4	1,14	22000
5555800	M4D040Z04A32LN15L200	40	32	200	50	15,5	4	1,20	18800

■ Spare Parts

D1	insert screw	Nm	Torx Plus driver
25	MS-2071	3,5	DT15IP
32	MS-2071	3,5	DT15IP
40	MS-2071	3,5	DT15IP

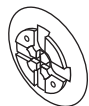
- Superior wall and surface finish capabilities.
- True 90° capabilities. Stepless solution when using multiple steps.
- Engineered to run up to 15,5mm depth of cut.
- Effective internal coolant feature, reaching the cutting edge precisely.



Shell Mills

order number	catalogue number	D1	D	D6	L	Ap1 max	Z	kg	max RPM
5528632	M4D040Z04S16LN15	40	16	37	40	15,5	4	0,20	18800
5555801	M4D040Z05S16LN15	40	16	37	40	15,5	5	0,19	18800
5698436	M4D050Z04S22LN15	50	22	42	40	15,5	4	0,28	16300
5528633	M4D050Z05S22LN15	50	22	42	40	15,5	5	0,28	16300
5528634	M4D050Z06S22LN15	50	22	42	40	15,5	6	0,27	16300
5698437	M4D063Z05S22LN15	63	22	50	40	15,5	5	0,50	14200
5528635	M4D063Z06S22LN15	63	22	50	40	15,5	6	0,49	14200
5528636	M4D063Z07S22LN15	63	22	50	40	15,5	7	0,50	14200
5698438	M4D080Z05S27LN15	80	27	60	50	15,5	5	1,03	12300
5528637	M4D080Z07S27LN15	80	27	60	50	15,5	7	1,02	12300
5555802	M4D080Z09S27LN15	80	27	60	50	15,5	9	1,04	12300
5698439	M4D100Z06S32LN15	100	32	80	50	15,5	6	1,58	10900
5528638	M4D100Z08S32LN15	100	32	80	50	15,5	8	1,57	10900
5555803	M4D100Z11S32LN15	100	32	80	50	15,5	11	1,64	10900
5698490	M4D125Z07S40LN15	125	40	90	63	15,5	7	2,96	9600
5555804	M4D125Z09S40LN15	125	40	90	63	15,5	9	2,98	9600
5532000	M4D125Z12S40LN15	125	40	90	63	15,5	12	3,00	9600
5698491	M4D160Z08S40LN15	160	40	110	63	15,5	8	4,67	8400
5555805	M4D160Z12S40LN15	160	40	110	63	15,5	12	4,78	8400
5555806	M4D160Z16S40LN15	160	40	110	63	15,5	16	4,75	8400

Spare Parts

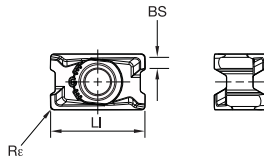


D1	insert screw	Nm	Torx Plus driver	socket-head cap screw	coolant lock screw assembly	coolant lock screw	coolant cap
40	MS-2071	3,5	DT15IP	MS1294	—	—	—
50	MS-2071	3,5	DT15IP	125.025	—	—	—
63	MS-2071	3,5	DT15IP	125.025	—	—	—
80	MS-2071	3,5	DT15IP	MS2038	—	—	—
100	MS-2071	3,5	DT15IP	—	MS2189C	—	—
125	MS-2071	3,5	DT15IP	—	MS2187C	—	—
160	MS-2071	3,5	DT15IP	—	—	420.200	470.233

NOTE: Coolant lock screw assembly and coolant cap must be ordered separately.



- ◆◆ first choice with coolant
- ◇◇ first choice without coolant
- ◆ alternate choice with coolant
- ◇ alternate choice without coolant



P1-P2			◇/◆	◆◆		◇◇						
P3-P4			◇/◆	◆◆		◇	◇◇					
P5-P6			◇/◆	◆◆		◇	◇◇					
M1-M2			◇/◆	◆			◆				◆◆	
M3			◇/◆	◆								◆◆
K1-K2		◆◆					◇◇					
K3		◆◆					◇◇					
N1	◆◆											
N2	◆◆											
S1						◆						◆◆
S2						◆						◆◆
S3						◆	◆					◆◆
S4						◆	◆					◆◆

ISO catalogue number	LI	BS	Re	KC422M	KC520M	KC522M	KC725M	KCK15	KCPK30	KCPM40	KCSM40
Light Machining											
LNGU15T604ERGE	17,01	2,20	0,4	-	-	-	5588513	-	-	5588515	-
LNGU15T608ERGE	17,01	1,80	0,8	-	-	5588388	5588385	-	-	5588387	6165422
LNGU15T612ERGE	17,01	1,40	1,2	-	-	-	5588517	-	-	5588519	6165423
LNGU15T616ERGE	17,01	1,07	1,6	-	-	-	5627789	-	-	5627871	-

General Machining											
LNPU15T604SRGE	16,90	2,20	0,4	-	5608034	-	5608036	-	-	-	-
LNGU15T604ERGEJ	17,00	2,20	0,4	6001231	-	-	-	-	-	-	-
LNGU15T604SRGE	17,00	2,20	0,4	-	5516073	-	5516075	-	-	-	-
LNPU15T608SRGE	16,90	1,80	0,8	-	5547848	5547849	5548040	5548041	5548042	5684657	-
LNGU15T608ERGEJ	17,00	1,80	0,8	6001232	-	-	-	-	-	-	-
LNGU15T608SRGE	17,01	1,80	0,8	-	5515759	5515890	5515891	5515892	5515893	-	6165400
LNPU15T612SRGE	16,90	1,50	1,2	-	5607996	-	5607998	-	-	5976169	-
LNGU15T612SRGE	17,01	1,40	1,2	-	5515746	-	5515748	-	-	-	6165421
LNPU15T616SRGE	16,90	1,10	1,6	-	6019501	-	6019503	-	6019505	6019506	-
LNGU15T616SRGE	17,01	1,07	1,6	-	5627784	-	5627786	-	5627788	-	-
LNPU15T620SRGE	16,92	0,70	2,0	-	-	-	6001233	-	-	6001236	-

Heavy Machining											
LNGU15T608SRGEM	17,01	1,70	0,8	-	5575827	-	-	5575828	5575829	5976170	-
LNGU15T612SRGEM	17,01	1,30	1,2	-	5947280	-	-	-	-	5976671	-
LNGU15T616SRGEM	17,01	0,95	1,6	-	5630018	-	-	-	5630070	5976672	-
LNGU15T620SRGEM	17,01	0,34	2,0	-	-	-	-	-	-	6019510	-

Recommended Starting Feeds

■ Recommended Starting Feeds [mm]

Light Machining	General Purpose	Heavy Machining
-----------------	-----------------	-----------------

Insert Geometry	Recommended Starting Feed per Tooth (Fz) in Relation to % of Radial Engagement (ae)															Insert Geometry
	5%			10%			20%			30%			40-100%			
.E..GEJ	0,12	0,47	0,84	0,08	0,34	0,60	0,06	0,26	0,45	0,06	0,22	0,39	0,05	0,20	0,36	.E..GEJ
.E..GE	0,23	0,54	0,93	0,17	0,39	0,67	0,13	0,29	0,50	0,11	0,25	0,44	0,10	0,23	0,40	.E..GE
.S..GE	0,23	0,59	0,95	0,17	0,43	0,68	0,13	0,32	0,51	0,11	0,28	0,44	0,10	0,25	0,41	.S..GE
.S..GEM	0,23	0,59	0,95	0,17	0,43	0,68	0,13	0,32	0,51	0,11	0,28	0,44	0,10	0,25	0,41	.S..GEM

LNG...: Ground inserts; high versatility for all finishing applications and difficult-to-machine stainless steels and high-temp alloys.

LNP...: Pressed; lower cost per edge for most roughing to semi-finishing operations.

.E..LEJ: For aluminium and other non-ferrous alloys.

.E..GE: First choice for stainless steel and high-temp alloys. For highest finishing requirements in light machining.

.S..GE: Universal geometry. First choice for steel.

.S..GEM: First choice for cast iron machining and all heavy applications.

Material Group		KC422M*			KC520M			KC522M			KC725M		
P	1	-	-	-	-	-	-	330	285	270	260	230	215
	2	-	-	-	-	-	-	275	240	200	220	190	160
	3	-	-	-	-	-	-	255	215	175	200	170	140
	4	-	-	-	-	-	-	225	185	150	180	150	120
	5	-	-	-	-	-	-	185	170	150	150	135	120
	6	-	-	-	-	-	-	165	125	100	130	100	80
M	1	-	-	-	-	-	-	205	180	165	170	150	135
	2	-	-	-	-	-	-	185	160	130	155	130	110
	3	-	-	-	-	-	-	140	120	95	115	100	80
K	1	-	-	-	270	245	215	230	205	185	-	-	-
	2	-	-	-	210	190	175	180	160	150	-	-	-
	3	-	-	-	175	160	145	150	135	120	-	-	-
N	1	-	-	-	-	-	-	-	-	-	-	-	-
	2	-	-	-	-	-	-	-	-	-	-	-	-
	3	-	-	-	-	-	-	-	-	-	-	-	-
S	1	-	-	-	-	-	-	-	-	-	-	-	-
	2	-	-	-	-	-	-	-	-	-	-	-	-
	3	-	-	-	-	-	-	-	-	-	-	-	-
	4	-	-	-	-	-	-	-	-	-	-	-	-
H	1	-	-	-	-	-	-	120	90	70	-	-	-
	2	-	-	-	-	-	-	-	-	-	-	-	-
	3	-	-	-	-	-	-	-	-	-	-	-	-

Material Group		KCK15			KCPK30			KCPM40			KCSM40		
P	1	-	-	-	455	395	370	295	260	245	260	230	215
	2	-	-	-	280	255	230	250	215	180	220	190	160
	3	-	-	-	255	230	205	230	195	160	200	170	140
	4	-	-	-	190	175	160	205	170	135	180	150	120
	5	-	-	-	260	230	210	170	155	135	150	135	120
	6	-	-	-	160	135	125	150	115	90	130	100	80
M	1	-	-	-	205	185	155	195	170	155	170	150	135
	2	-	-	-	185	160	140	175	150	125	155	130	110
	3	-	-	-	145	130	115	130	115	90	115	100	80
K	1	420	385	340	295	265	240	-	-	-	-	-	-
	2	335	295	275	235	210	190	-	-	-	-	-	-
	3	280	250	230	195	175	160	-	-	-	-	-	-
N	1	-	-	-	-	-	-	-	-	-	-	-	-
	2	-	-	-	-	-	-	-	-	-	-	-	-
	3	-	-	-	-	-	-	-	-	-	-	-	-
S	1	-	-	-	-	-	-	-	-	-	-	-	-
	2	-	-	-	-	-	-	-	-	-	-	-	-
	3	-	-	-	-	-	-	-	-	-	-	-	-
	4	-	-	-	-	-	-	-	-	-	-	-	-
H	1	-	-	-	-	-	-	-	-	-	-	-	-
	2	-	-	-	-	-	-	-	-	-	-	-	-
	3	-	-	-	-	-	-	-	-	-	-	-	-

*Recommended for wet machining only.

NOTE: FIRST choice starting speeds are in **bold** type.

As the average chip thickness increases, the speed should be decreased.

Dry

Wet



Material Group		KC422M			KC520M			KC522M			KC725M		
P	1	-	-	-	-	-	-	265	230	215	210	185	170
	2	-	-	-	-	-	-	220	190	160	175	150	130
	3	-	-	-	-	-	-	205	170	140	160	135	110
	4	-	-	-	-	-	-	180	150	120	145	120	95
	5	-	-	-	-	-	-	150	135	120	120	110	95
	6	-	-	-	-	-	-	130	100	80	105	80	65
M	1	-	-	-	-	-	-	165	145	130	135	120	110
	2	-	-	-	-	-	-	150	130	105	125	105	90
	3	-	-	-	-	-	-	110	95	75	90	80	65
K	1	-	-	-	215	195	170	185	165	150	-	-	-
	2	-	-	-	170	150	140	145	130	120	-	-	-
	3	-	-	-	140	130	115	120	110	95	-	-	-
N	1	860	755	700	-	-	-	-	-	-	-	-	-
	2	755	700	610	-	-	-	-	-	-	-	-	-
	3	755	700	610	-	-	-	-	-	-	-	-	-
S	1	-	-	-	-	-	-	30	30	20	30	25	20
	2	-	-	-	-	-	-	30	30	20	30	25	20
	3	-	-	-	-	-	-	40	30	20	35	30	20
	4	-	-	-	-	-	-	55	40	30	45	35	25
H	1	-	-	-	-	-	-	95	70	55	-	-	-
	2	-	-	-	-	-	-	-	-	-	-	-	-
	3	-	-	-	-	-	-	-	-	-	-	-	-

Material Group		KCK15			KCPK30			KCPM40			KCSM40		
P	1	-	-	-	365	315	295	285	250	235	-	-	-
	2	-	-	-	225	205	185	240	210	170	-	-	-
	3	-	-	-	205	185	165	220	190	150	-	-	-
	4	-	-	-	150	140	130	195	165	130	-	-	-
	5	-	-	-	210	185	170	165	150	130	135	115	95
	6	-	-	-	130	110	100	145	110	90	120	90	65
M	1	-	-	-	165	150	125	190	165	150	170	135	110
	2	-	-	-	150	130	110	170	145	120	145	115	95
	3	-	-	-	115	105	90	125	110	90	115	90	70
K	1	335	310	270	235	210	190	-	-	-	-	-	-
	2	270	235	220	190	170	150	-	-	-	-	-	-
	3	225	200	185	155	140	130	-	-	-	-	-	-
N	1	-	-	-	-	-	-	-	-	-	-	-	-
	2	-	-	-	-	-	-	-	-	-	-	-	-
	3	-	-	-	-	-	-	-	-	-	-	-	-
S	1	-	-	-	-	-	-	40	30	30	30	30	20
	2	-	-	-	-	-	-	40	30	30	30	30	20
	3	-	-	-	-	-	-	50	40	30	40	30	20
	4	-	-	-	55	40	25	65	50	30	50	40	25
H	1	-	-	-	-	-	-	-	-	-	-	-	-
	2	-	-	-	-	-	-	-	-	-	-	-	-
	3	-	-	-	-	-	-	-	-	-	-	-	-

NOTE: FIRST choice starting speeds are in bold type.
As the average chip thickness increases, the speed should be decreased.

Dry
 Wet