

# ➤ Mill 4-15™ •

## Double-Sided Shoulder Milling

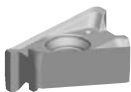
### Primary Application

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

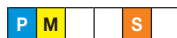
- Double-sided strong insert with 4 cutting edges.
- High positive geometry for lower cutting forces.
- Superior wall and surface finish capabilities.
- “Stepless” solution. No mismatch when machining walls in different steps.

-EGEJ



For non-ferrous materials.

-EGE



1st choice for stainless steel.  
Lower cutting forces.

-SGE

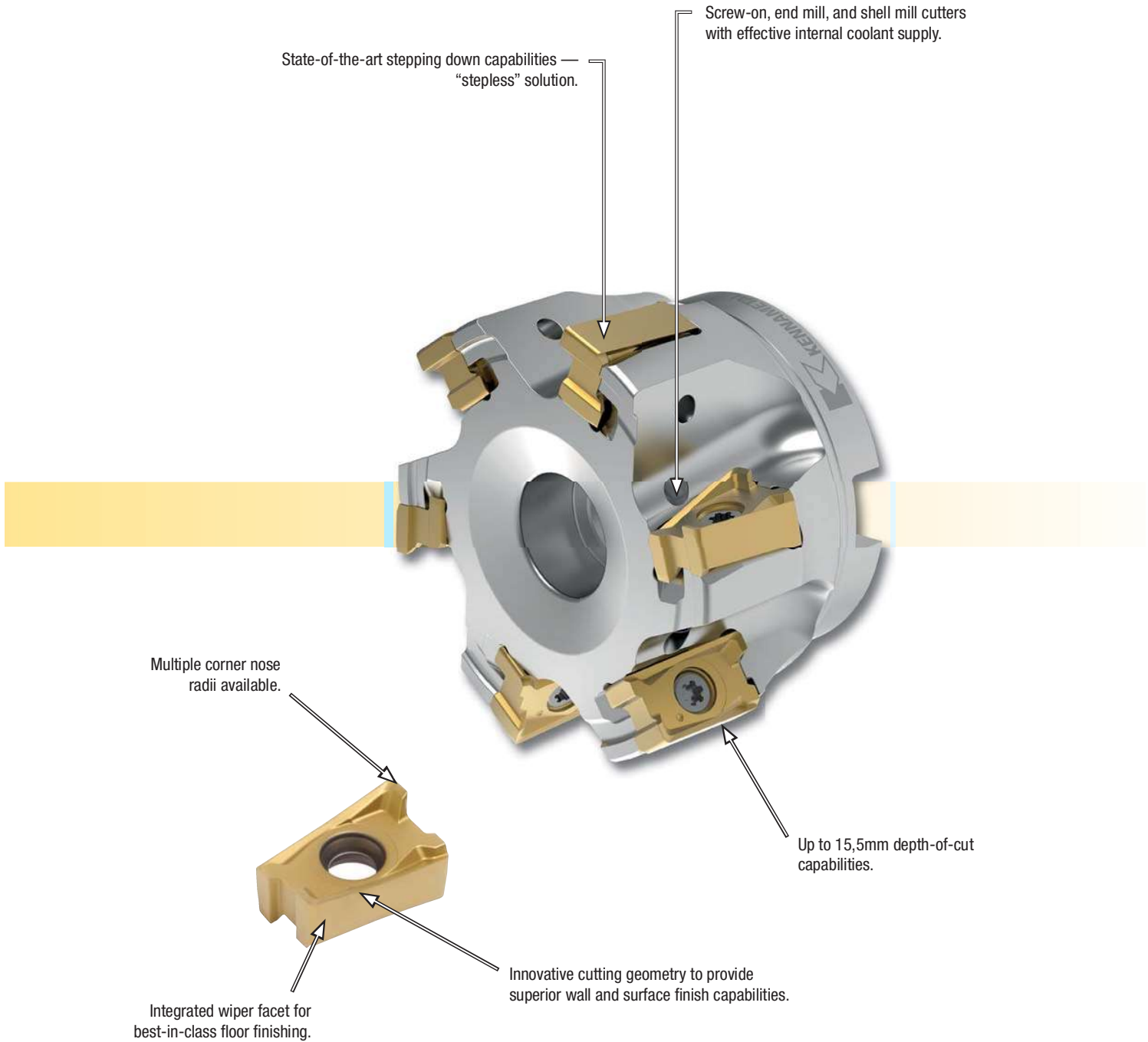


**First choice for the Mill 4 platform,**  
especially when machining steels.

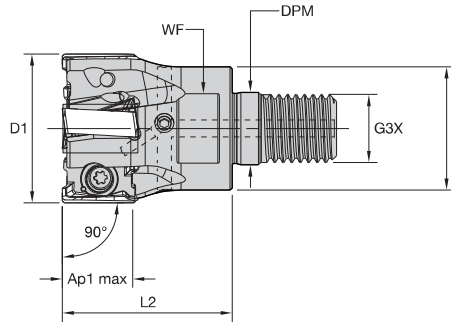
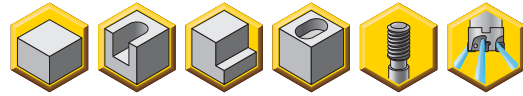
-SGEM



1st choice for cast iron.  
Strongest cutting edge.



- 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

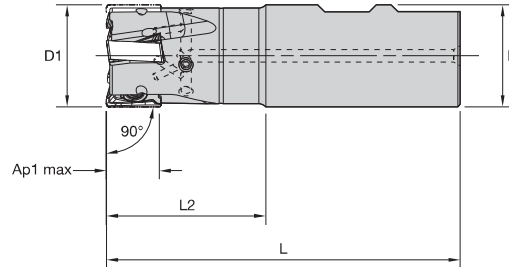
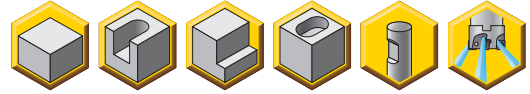
■ Spare Parts



Shoulder Milling

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



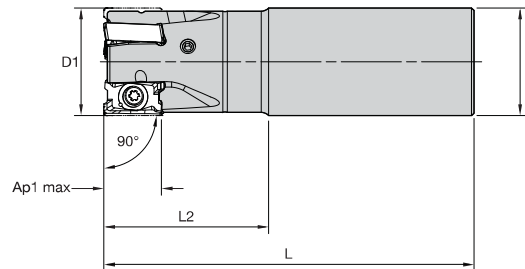
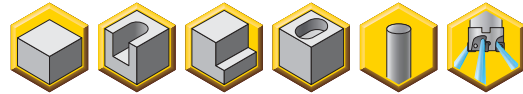
D1	insert screw	Nm	Torx Plus driver
25	MS-2071	3,5	DT15IP
32	MS-2071	3,5	DT15IP
40	MS-2071	3,5	DT15IP

NOTE: Weldon type not recommended for finishing operations.



Shoulder Milling

- 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
5531919	M4D040Z03A32LN15L200	40	32	200	50	15,5	3	1,21	18800
5555800	M4D040Z04A32LN15L200	40	32	200	50	15,5	4	1,20	18800

■ Spare Parts

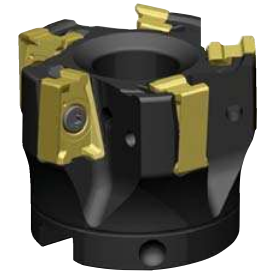
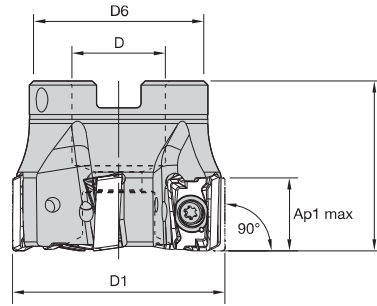
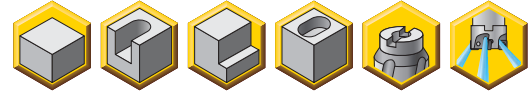


Shoulder Milling



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.



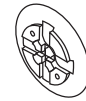
### ■ Shell Mills

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



Shoulder Milling

### ■ 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	125.825	—	—	—
50	MS-2071	3,5	DT15IP	125.025	—	—	—
63	MS-2071	3,5	DT15IP	125.025	—	—	—
80	MS-2071	3,5	DT15IP	125.230	—	—	—
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.

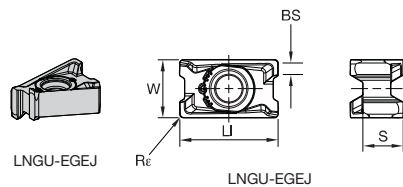
Insert Selection Guide

Material Group	Light Machining (Light geometry)		General Purpose		Heavy Machining (Strong geometry)	
	wear resistance ↔ toughness					
	Geometry	Grade	Geometry	Grade	Geometry	Grade
P1-P2	.E..GE	KCPM40	.S..GE	KCPM40	.S..GEM	KCPM40
P3-P4	.E..GE	KCPM40	.S..GE	KCPK30	.S..GEM	KCPK30
P5-P6	.E..GE	KC725M	.S..GE	KC725M	.S..GEM	KCPK30
M1-M2	.E..GE	KCSM40	.S..GE	KCSM40	.S..GEM	KCPM40
M3	.E..GE	KCPM40	.S..GE	KCPM40	.S..GEM	KCPM40
K1-K2	.S..GE	KC520M	.S..GE	KCK15	.S..GEM	KC520M
K3	.S..GE	KC520M	.S..GE	KCK15	.S..GEM	KC520M
N1-N2	.E..GEJ	KC422M	.E..GEJ	KC422M	.E..GEJ	KC422M
N3	.E..GEJ	KC422M	.E..GEJ	KC422M	.E..GEJ	KC422M
S1-S2	.E..GE	KC725M	.S..GE	KC725M	.S..GE	KC725M
S3	.E..GE	KCSM40	.S..GE	KCSM40	.S..GE	KCSM40
S4	.E..GE	KCSM40	.S..GE	KCSM40	.S..GE	KCSM40
H1	-	-	-	-	-	-

Indexable Inserts • Mill 4-15™

- EGEJ is the first choice for roughing and finishing of aluminium and other non-ferrous alloys.

- first choice
- alternate choice



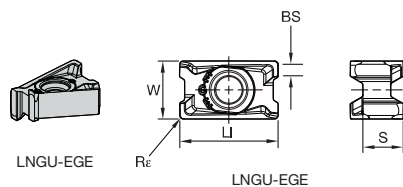
LNGU15-EGEJ • For Aluminium and Other Non-Ferrous Alloys

catalogue number	LI	S	W	BS	Re	hm	cutting edges	KC422M	KC520M	KC522M	KC725M	KCK15	KCPK30	KCPM40	KCSM30	KCSM40
LNGU15T604ERGEJ	17,00	6,96	10,00	2,20	0,4	0,03	4	●	-	-	-	-	-	-	-	-
LNGU15T608ERGEJ	17,00	6,96	10,00	1,80	0,8	0,03	4	●	-	-	-	-	-	-	-	-

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

Shoulder Milling

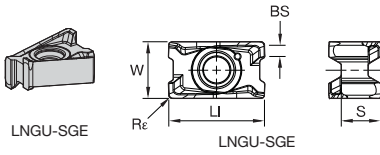
- EGE is the first choice for stainless steel and high-temp alloys.
- Best choice for finishing operations in steels, stainless steels, and high-temp alloys.



LNGU15-EGE • Precision Ground • For Stainless Steel and High-Temp Alloys

catalogue number	LI	S	W	BS	Re	hm	cutting edges	KC422M	KC520M	KC522M	KC725M	KCK15	KCPK30	KCPM40	KCSM30	KCSM40
LNGU15T604ERGE	17,01	6,96	10,00	2,20	0,4	0,08	4	-	-	●	●	-	-	●	●	-
LNGU15T608ERGE	17,01	6,96	10,00	1,80	0,8	0,08	4	-	-	●	●	-	-	●	●	-
LNGU15T612ERGE	17,01	6,96	10,00	1,40	1,2	0,08	4	-	-	●	●	-	-	●	●	-
LNGU15T616ERGE	17,01	6,96	10,00	1,07	1,6	0,08	4	-	-	●	●	-	-	●	●	-

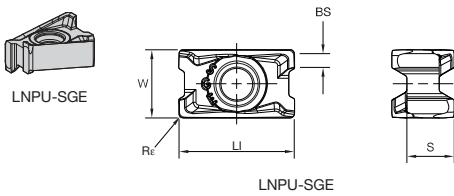
- SGE is the universal geometry for Mill 4-15.
- First choice when machining steel.
- Suitable for stainless steel and high-temp alloys in medium-heavy applications.



**LNGU15-SGE • Precision Ground • For Steel Machining, Finishing, and Light Roughing**

catalogue number	LI	S	W	BS	Re	hm	cutting edges
LNGU15T604SRGE	17,00	6,96	10,00	2,20	0,4	0,10	4
LNGU15T608SRGE	17,01	6,96	10,00	1,80	0,8	0,10	4
LNGU15T612SRGE	17,01	6,96	10,00	1,40	1,2	0,10	4
LNGU15T616SRGE	17,01	6,96	10,00	1,07	1,6	0,10	4

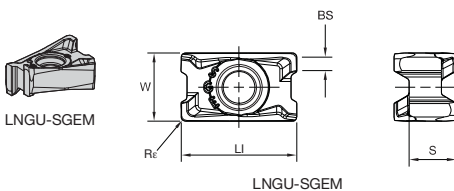
- SGE is the universal geometry for Mill 4-15. First choice when machining steel, as well as stainless steel and high-temp alloys in heavy applications.



**LNPU15-SGE • Precision Pressed • For Steel Machining in Medium-Heavy Roughing**

catalogue number	LI	S	W	BS	Re	hm	cutting edges
LNPU15T604SRGE	16,90	6,96	10,00	2,20	0,4	0,10	4
LNPU15T608SRGE	16,90	6,96	10,00	1,80	0,8	0,10	4
LNPU15T612SRGE	16,90	6,96	10,00	1,50	1,2	0,10	4
LNPU15T616SRGE	16,90	6,96	10,00	1,10	1,6	0,10	4
LNPU15T620SRGE	16,92	6,96	10,00	0,70	2,0	0,10	4

- SGEM geometry is the first choice for cast iron machining in medium and heavy applications.



**LNGU15-SGEM • For Cast Iron Machining**

catalogue number	LI	S	W	BS	Re	hm	cutting edges
LNGU15T608SGEM	17,01	6,96	10,00	1,70	0,8	0,10	4
LNGU15T612SGEM	17,01	6,96	10,00	1,30	1,2	0,10	4
LNGU15T616SGEM	17,01	6,96	10,00	0,95	1,6	0,10	4
LNGU15T620SGEM	17,01	6,96	10,00	0,34	2,0	0,10	4



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

- first choice
- alternate choice

cutting edges	KC422M	KC520M	KC522M	KC725M	KCK15	KCPK30	KCPM40	KCSM30	KCSM40
4	-	●	●	●	●	●	-	-	-
4	-	●	●	●	●	●	-	-	●
4	-	●	●	●	●	●	-	-	●
4	-	●	●	●	●	●	-	-	-



Shoulder Milling





## Mill 4-15 Starter Kits

Order one of our starting kits and test the performance of our new Mill 4 platform. The kits are set up to serve the majority of shoulder milling applications and workpiece materials, delivered with a cutter body as well as 20 inserts from a premium Kennametal grade.

**Order one Mill 4™ kit, and experience the next level of shoulder milling!**

Detailed order information can be found in the table below:

### ■ Mill 4-15 Metric Starter Kits



material group	order number	catalogue number	cutter kit	application range	content				
					cutter	qty	insert	grade	qty
P	5956817	M4KITD25Z02A25SGEKCPM40	D25z2	∇∇	M4D025Z02A25LN15L100	1	LNPU15T608SRGE	KCPM40	20
P	5956818	M4KITD32Z03A32SGEKCPM40	D32z3	∇∇	M4D032Z03A32LN15L110	1	LNPU15T608SRGE	KCPM40	20
P	5956819	M4KITD40Z04S16SGEKCPM40	D40z4	∇∇	M4D040Z04S16LN15	1	LNPU15T608SRGE	KCPM40	20
P	5956820	M4KITD50Z05S22SGEKCPM40	D50z5	∇∇	M4D050Z05S22LN15	1	LNPU15T608SRGE	KCPM40	20
P	5956872	M4KITD50Z06S22SGEKCPM40	D50z6	∇∇	M4D050Z06S22LN15	1	LNPU15T608SRGE	KCPM40	20
P	5956873	M4KITD63Z06S22SGEKCPM40	D63z6	∇∇	M4D063Z06S22LN15	1	LNPU15T608SRGE	KCPM40	20
P	5956874	M4KITD80Z07S27SGEKCPM40	D80z7	∇∇	M4D080Z07S27LN15	1	LNPU15T608SRGE	KCPM40	20
P	5956875	M4KITD100Z08S32SGEKCPM40	D100z8	∇∇	M4D100Z08S32LN15	1	LNPU15T608SRGE	KCPM40	20
M + S	5956876	M4KITD25Z02A25EGEKC725M	D25z2	∇∇∇	M4D025Z02A25LN15L100	1	LNGU15T608ERGE	KC725M	20
M + S	5956877	M4KITD32Z03A32EGEKC725M	D32z3	∇∇∇	M4D032Z03A32LN15L110	1	LNGU15T608ERGE	KC725M	20
M + S	5956878	M4KITD40Z04S16EGEKC725M	D40z4	∇∇∇	M4D040Z04S16LN15	1	LNGU15T608ERGE	KC725M	20
M + S	5956879	M4KITD50Z05S22EGEKC725M	D50z5	∇∇∇	M4D050Z05S22LN15	1	LNGU15T608ERGE	KC725M	20
M + S	5956880	M4KITD50Z06S22EGEKC725M	D50z6	∇∇∇	M4D050Z06S22LN15	1	LNGU15T608ERGE	KC725M	20
M + S	5956891	M4KITD63Z06S22EGEKC725M	D63z6	∇∇∇	M4D063Z06S22LN15	1	LNGU15T608ERGE	KC725M	20
M + S	5956892	M4KITD80Z07S27EGEKC725M	D80z7	∇∇∇	M4D080Z07S27LN15	1	LNGU15T608ERGE	KC725M	20
K	5956893	M4KITD25Z02A25SGEMKC520M	D25z2	∇	M4D025Z02A25LN15L100	1	LNGU15T608SRGEM	KC520M	20
K	5956894	M4KITD32Z03A32SGEMKC520M	D32z3	∇	M4D032Z03A32LN15L110	1	LNGU15T608SRGEM	KC520M	20
K	5956896	M4KITD40Z04S16SGEMKC520M	D40z4	∇	M4D040Z04S16LN15	1	LNGU15T608SRGEM	KC520M	20
K	5956897	M4KITD50Z05S22SGEMKC520M	D50z5	∇	M4D050Z05S22LN15	1	LNGU15T608SRGEM	KC520M	20
K	5956898	M4KITD50Z06S22SGEMKC520M	D50z6	∇	M4D050Z06S22LN15	1	LNGU15T608SRGEM	KC520M	20
K	5956899	M4KITD63Z07S22SGEMKC520M	D63z7	∇	M4D063Z07S22LN15	1	LNGU15T608SRGEM	KC520M	20
K	5956900	M4KITD80Z09S27SGEMKC520M	D80z9	∇	M4D080Z09S27LN15	1	LNGU15T608SRGEM	KC520M	20
K	5956901	M4KITD100Z11S32SGEMKC520M	D100z11	∇	M4D100Z11S32LN15	1	LNGU15T608SRGEM	KC520M	20

∇ Heavy/Roughing  
∇∇ Medium  
∇∇∇ Light machining/Finishing