

BELCAR PRODUCTS

MILLING CUTTERS AND INSERTS

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MILLING INSERTS

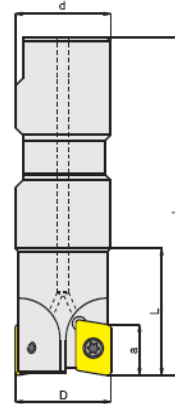
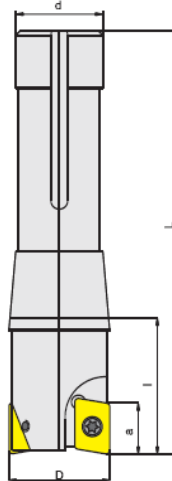
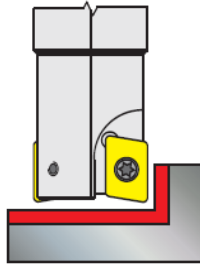
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End Mills, APKT
Right Hand Cut, with Weldon or R8 Shanks

Tool Angles:

Cutting, Radial and Axial Angles:
 See below

Setting Angle: 90°

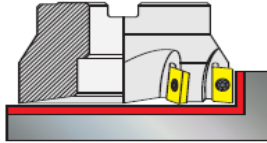


- 90° Multi-Purpose End Mill for low HP machines
- APKT 1003 and 1604 inserts
- Thru-hole coolant styles available
- Excellent replacement for standard HSS, Cobalt and Carbide round offerings
- Rigid, chatterless performance on CNC and conventional milling machines
- R8 drawbar thread: 7/16" – 20

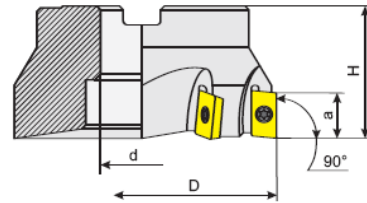
Dia. D	OAL L	Cutting Length I	Shank Dia. d	Cutting Depth a	No. of Inserts	Insert Style	Cutting Rake Angle	Axial Rake Angle	Radial Rake Angle	Stock No.
WELDON SHANK										
3/8	2-21/32	1-3/32	3/8	3/8	1	APKT1003	-20	0	-20	AP90-.3751-10-W.375
1/2	2-7/8	1-3/32	1/2	3/8	1	APKT1003	-17	0	-17	AP90-.5001-10-W.500
5/8	3	1-3/32	5/8	3/8	2	APKT1003	-10	2, 2	-10	AP90-.6252-10-W.625
3/4	3-5/16	1-9/32	3/4	3/8	2	APKT1003	-6	2, 2	-6	AP90-.7502-10-W.750
7/8	3-5/16	1-9/32	3/4	3/8	3	APKT1003	-6	2, 4	-6	AP90-.8752-10-W.750
1	3-11/16	1-21/32	3/4	5/8	2	APKT1604	-11	4, 6	-11	AP90-1.002-16-W.750
1	3-15/16	1-21/32	1	5/8	2	APKT1604	-11	4, 6	-11	AP90-1.002-16-W1.00
1-1/4	3-11/16	1-31/32	3/4	5/8	3	APKT1604	-10	6, 8, 6	-10	AP90-1.203-16-W.750
1-1/4	3-15/16	1-31/32	1	5/8	3	APKT1604	-10	6, 8, 6	-10	AP90-1.203-16-W1.00
1-1/4	3-15/16	1-21/32	1-1/4	5/8	3	APKT1604	-10	6, 8, 6	-10	AP90-1.203-16-W1.25
1-1/2	4	1-31/32	3/4	5/8	4	APKT1604	-12	6, 8, 6, 8	-12	AP90-1.504-16-W.750
1-1/2	4-1/4	1-31/32	1	5/8	4	APKT1604	-12	6, 8, 6, 8	-12	AP90-1.504-16-W1.00
1-1/2	4-1/4	1-31/32	1-1/4	5/8	4	APKT1604	-12	6, 8, 6, 8	-12	AP90-1.504-16-W1.25
2	4-1/4	1-31/32	1	5/8	5	APKT1604	-10	6, 8, 6, 8, 6	-10	AP90-2.005-16-W1.00
2	4-1/4	1-31/32	1-1/4	5/8	5	APKT1604	-10	6, 8, 6, 8, 6	-10	AP90-2.005-16-W1.25
2	4-11/16	2	1-1/2	5/8	5	APKT1604	-10	6, 8, 6, 8, 6	-10	AP90-2.005-16-W1.50
2	5-1/4	2	2	5/8	5	APKT1604	-10	6, 8, 6, 8, 6	-10	AP90-2.005-16-W2.00
2-1/2	4-1/4	1-31/32	1	5/8	6	APKT1604	-8	6, 8, 6, 8, 6, 8	-8	AP90-2.506-16-W1.00
2-1/2	4-1/4	1-31/32	1-1/4	5/8	6	APKT1604	-8	6, 8, 6, 8, 6, 8	-8	AP90-2.506-16-W1.25
2-1/2	4-11/16	2	1-1/2	5/8	6	APKT1604	-8	6, 8, 6, 8, 6, 8	-8	AP90-2.506-16-W1.50
2-1/2	5-1/4	2	2	5/8	6	APKT1604	-8	6, 8, 6, 8, 6, 8	-8	AP90-2.506-16-W2.00
R8 SHANK										
1	5-27/32	1-43/64	R8	5/8	2	APKT1604	-11	4, 6	-11	AP90-1.002-16-R8
1-1/4	5-27/32	1-43/64	R8	5/8	3	APKT1604	-10	6, 8, 6	-10	AP90-1.203-16-R8
1-1/2	6-1/8	1-61/64	R8	5/8	4	APKT1604	-12	6, 8, 6, 8	-12	AP90-1.504-16-R8
2	6-1/8	1-61/64	R8	5/8	5	APKT1604	-10	6, 8, 6, 8, 6	-10	AP90-2.005-16-R8
2-1/2	6-1/8	1-61/64	R8	5/8	6	APKT1604	-8	6, 8, 6, 8, 6, 8	-8	AP90-2.506-16-R8



Face Milling Cutters, APKT Right Hand Cut



Tool Angles:
 Cutting Rake Angle: -12° to -6°
 Radial Rake Angle: -12° to -6°
 Axial Rake Angle: 7° to 10°
 Setting Angle: 90°

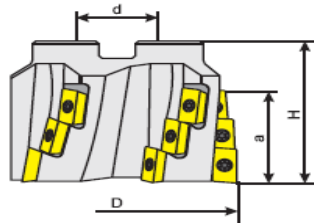


Dia. D	Arbor Holed	Height H	a	No. of Inserts	Inserts	Stock No.
1-1/2	1/2	1-37/64	5/8	4	APKT 1604	AP90-1.504-16-AH.500
* 2	3/4	1-37/64	5/8	5	APKT 1604	AP90-2.005-16-AH.750
* 3	1	1-31/32	5/8	6	APKT 1604	AP90-3.006-16-AH1.00
* 4	1-1/4	1-31/32	5/8	8	APKT 1604	AP90-4.008-16-AH1.25
* 4	1-1/2	1-31/32	5/8	8	APKT 1604	AP90-4.008-16-AH1.50
5	1-1/2	2-31/64	5/8	9	APKT 1604	AP90-5.009-16-AH1.50
6	2	2-31/64	5/8	10	APKT 1604	AP90-6.010-16-AH2.00
8	2-1/2	2-31/64	5/8	12	APKT 1604	AP90-8.012-16-AH2.50

• Irregularly spaced flutes allow faster stock removal, reduced harmonics and chattering, thus minimizing heat and friction.



Helical Shell End Mills, APKT Right Hand Cut, Heavy Duty 90° Lead Angle

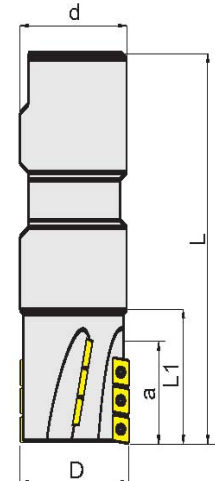


- 90° Heavy Duty Deep Slotting, Side Milling and Finish Pocketing Cutter.
- Helical flutes are ideal for High Speed machining with low power consumption.

Dia. D	Arbor Holed	Height H	Length of Cut a	No. of Flutes	No. of Inserts	Inserts	Stock No.
2	1	2-3/8	1	3	6	APKT 1604	AP90-2.006-16-HF-AH1.00
2-1/2	1	2-3/8	1-1/2	4	12	APKT 1604	AP90-2.512-16-HF-AH1.00
3	1-1/4	2-3/8	1-1/2	5	15	APKT 1604	AP90-3.015-16-HF-AH1.25
4	1-1/2	2-3/8	1-1/2	6	18	APKT 1604	AP90-4.018-16-HF-AH1.50
5	1-1/2	2-3/8	1-1/2	7	21	APKT 1604	AP90-5.021-16-HF-AH1.50
6	2	3-9/64	2	8	32	APKT 1604	AP90-6.032-16-HF-AH2.00
8	2-1/2	3-9/64	2	10	40	APKT 1604	AP90-8.040-16-HF-AH2.50

Maxi-Mizer, APKT Long Edge End Mills Right Hand, Heavy Duty, with Weldon or CAT Shanks

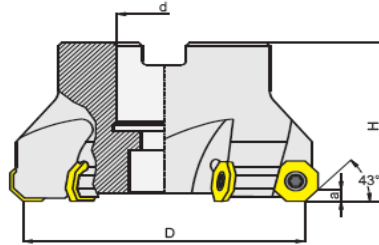
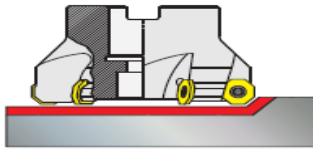
90° Heavy Duty Deep Slotting
Side Milling and Finish Pocketing Cutters
APKT 1003 and 1604 inserts
Tapers are AT3, ANSI draw bar threads
Ideal for High Speed Machining with low power consumption
Also available with NST shank



Dia. D	OAL L	Cutting Length I	Projection Length L1	Shank Dia. d	No. of Flutes	No. of Inserts	Insert Style	Stock No.
WELDON SHANK								
1.000	4.250	1.469	1.969	1.000	2	8	APKT 1003	AP90-1.008-10-HFS-W1.00
1.250	4.500	1.828	2.219	1.250	3	15	APKT 1003	AP90-1.215-10-HFS-W1.25
1.500	5.000	2.203	2.719	1.250	4	24	APKT 1003	AP90-1.524-10-HFS-W1.25
1.250	4.000	1.000	1.719	1.250	2	4	APKT 1604	AP90-1.204-16-HFS-W1.25
1.500	4.500	1.500	2.219	1.250	2	6	APKT 1604	AP90-1.506-16-HFS-W1.25
1.750	5.156	2.000	2.469	1.500	2	8	APKT 1604	AP90-1.708-16-HFS-W1.50
2.000	5.406	2.281	2.719	1.500	3	12	APKT 1604	AP90-2.012-16-HFS-W1.50
2.000	5.938	2.813	3.250	1.500	3	15	APKT 1604	AP90-2.015-16-HFS-W1.50
2.000	6.500	2.813	2.250	2.000	3	15	APKT 1604	AP90-2.015-16-HFS-W2.00
2.500	6.469	3.344	3.719	1.500	4	24	APKT 1604	AP90-2.524-16-HFS-W1.50
2.500	6.938	3.344	3.719	2.000	4	24	APKT 1604	AP90-2.524-16-HFS-W2.00
3.000	6.906	3.781	4.219	1.500	5	35	APKT 1604	AP90-3.035-16-HFS-W1.50
3.000	7.469	3.781	4.219	2.000	5	35	APKT 1604	AP90-3.035-16-HFS-W2.00
R8 SHANK								
2.000	7.438	2.281	4.750	CAT-40	3	12	APKT 1604	AP90-2.012-16-HFS-R-C40
2.000	9.500	2.813	5.500	CAT-50	3	15	APKT 1604	AP90-2.015-16-HFS-R-C50
2.500	10.500	3.344	6.500	CAT-50	4	24	APKT 1604	AP90-2.524-16-HFS-R-C50
3.000	11.062	3.906	7.062	CAT-50	5	35	APKT 1604	AP90-3.035-16-HFS-R-C50



Maxi-Mizer Face Milling Cutters, OFCW Right Hand Cut

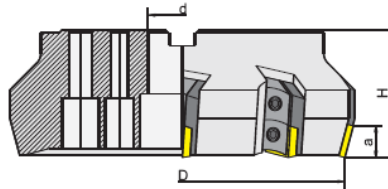
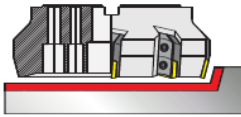


• 43° setting angle uses a screw down 1/2" IC 8 edge insert creating a positive free cutting face mill.

Dia. D	Arbor Holed	Height H	a	No. of Inserts	Inserts	Stock No.
1-1/4	1/2	1-37/64	9/64	3	OFCW 5T3SN	OF43-1.203-5T3-AH.500
1-1/2	1/2	1-37/64	9/64	3	OFCW 5T3SN	OF43-1.503-5T3-AH.500
2	3/4	1-37/64	9/64	4	OFCW 5T3SN	OF43-2.004-5T3-AH.750
2-1/2	3/4	1-37/64	9/64	5	OFCW 5T3SN	OF43-2.505-5T3-AH.750
3	1	1-31/32	9/64	5	OFCW 5T3SN	OF43-3.005-5T3-AH1.00
4	1-1/4	1-31/32	9/64	7	OFCW 5T3SN	OF43-4.007-5T3-AH1.25
5	1-1/2	2-31/64	9/64	8	OFCW 5T3SN	OF43-5.008-5T3-AH1.50
6	2	2-31/64	9/64	10	OFCW 5T3SN	OF43-6.010-5T3-AH2.00



Heavy-Duty Face Milling Cutters, SPC/SPA



Tool Angles:

Setting Angle: 15°

Cutting Rake Angle: 2°

Axial Rake Angle: 7°

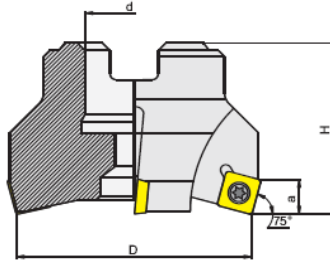
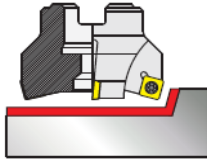
- Rigid and chatterless performance on CNC and con machines.
- Excellent for heavy-duty stock removal.

Dia. D	Height H	Arbor Hole d	Cutting Depth a	No. of inserts	Stock No.	
					RH	LH
SPC 42E Utility or SPA 42E Precision - 1/2 I.C.						
3	1-31/32	1	23/64	6	SP15-3.006-42-AH1.00WR	SP15-3.006-42-AH1.00WL
4	1-31/32	1-1/4	23/64	8	SP15-4.008-42-AH1.25WR	SP15-4.008-42-AH1.25WL
5	2-31/64	1-1/2	23/64	8	SP15-5.008-42-AH1.50WR	SP15-5.008-42-AH1.50WL
6	2-31/64	2	23/64	10	SP15-6.010-42-AH2.00WR	SP15-6.010-42-AH2.00WL
8	2-31/64	2-1/2	23/64	12	SP15-6.012-42-AH2.50WR	SP15-6.012-42-AH2.50WL
10	2-31/64	2-1/2	23/64	16	SP15-10.16-42-AH2.50WR	SP15-10.16-42-AH2.50WL
12	3-5/32	2-1/2	23/64	20	SP15-12.20-42-AH2.50WR	SP15-12.20-42-AH2.50WL
16	3-5/32	2-1/2	23/64	26	SP15-16.26-42-AH2.50WR	SP15-16.26-42-AH2.50WL
20	3-5/32	2-1/2	23/64	34	SP15-20.34-42-AH2.50WR	SP15-20.34-42-AH2.50WL
SPC 53E Utility or SPA 53E Precision -5/8 I.C.						
5	2-31/64	1-1/2	15/32	8	SP15-5.008-53-AH1.50WR	SP15-5.008-53-AH1.50WL
6	2-31/64	2	15/32	10	SP15-6.010-53-AH2.00WR	SP15-6.010-53-AH2.00WL
8	2-31/64	2-1/2	15/32	12	SP15-6.012-53-AH2.50WR	SP15-6.012-53-AH2.50WL
10	2-31/64	2-1/2	15/32	16	SP15-10.16-53-AH2.50WR	SP15-10.16-53-AH2.50WL
12	3-5/32	2-1/2	15/32	20	SP15-12.20-53-AH2.50WR	SP15-12.20-53-AH2.50WL
16	3-5/32	2-1/2	15/32	26	SP15-16.26-53-AH2.50WR	SP15-16.26-53-AH2.50WL
20	3-5/32	2-1/2	15/32	34	SP15-20.34-53-AH2.50WR	SP15-20.34-53-AH2.50WL

SC15- SE45- CUTTERS



Maxi-Mizer Face Milling Cutters, SCMT Right Hand Cut



Tool Angles:

Cutting Rake Angle: 0°

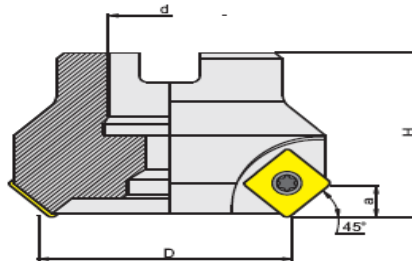
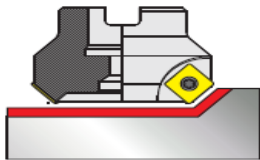
Radial Rake Angle: 0° Axial Rake Angle: 4°

Lead Angle: 15°

- 15° pocket setting takes a standard 1/2" IC square, screw down insert, and allows this cutter to increase stock removal.

Dia. D	Arbor Holed	Height H	a	No. of Inserts	Inserts	Stock No.
2	3/4	1-37/64	11/32	4	SCMT 432	SC15-2.004-43-AH.750
2-1/2	1	1-37/64	11/32	4	SCMT 432	SC15-2.504-43-AH1.00
3	1	1-31/32	11/32	5	SCMT 432	SC15-3.005-43-AH1.00

Maxi-Mizer Face Milling Cutters, SEHT Right Hand Cut, 45° Setting Angle



Tool Angles:

Setting Angle: 45°

Cutting Rake Angle: +10°

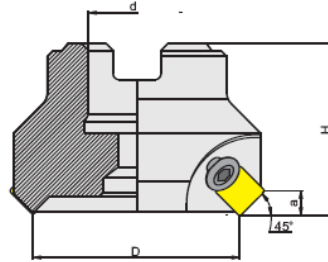
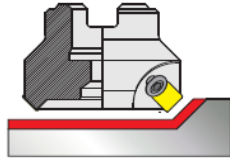
Radial Rake Angle: -9° Axial Rake Angle: +20°

- 45° Lead angle utilizes a standard 1/2 IC square screw down insert making it a multi-purpose high speed face mill and 45 chamfer cutter.
- Versatile cutter for difficult machining conditions.

Dia. D	Arbor Holed	Height H	a	No. of Inserts	Inserts	Stock No.
2	3/4	1-37/64	15/64	4	SEHT 1204	SE45-2.004-1204-AH.750
2-1/2	3/4	1-37/64	15/64	5	SEHT 1204	SE45-2.505-1204-AH.750
3	1	1-31/32	15/64	5	SEHT 1204	SE45-3.005-1204-AH1.00
4	1-1/4	1-31/32	15/64	6	SEHT 1204	SE45-4.006-1204-AH1.25
5	1-1/2	2-31/64	15/64	7	SEHT 1204	SE45-5.007-1204-AH1.50
6	2	2-31/64	15/64	8	SEHT 1204	SE45-6.008-1204-AH2.00



All-Purpose Face Milling Cutters, SEAN/SEKN Right Hand Cut

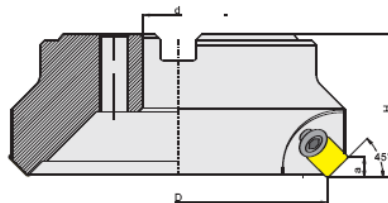
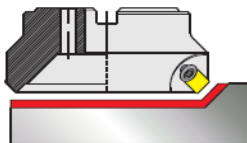


Tool Angles:
 Setting Angle: 45°
 Cutting Rake Angle: 10°
 Radial Rake Angle: -9°
 Axial Rake Angle: 20°

• 45° setting angle, utilizes a square utility 1/2" IC lock down insert. Versatile and economical face mill.

Dia. D	Height H	Arbor Holed	a	No. of Inserts	Inserts	Stock No.
1-1/2	2-3/32	3/4	15/64	3	SEAN-42AFN or SEKN-42AFN	SE45-1.503-42-AH.750S
2	1-57/64	3/4	15/64	4		SE45-2.004-42-AH.750S
2-1/2	1-37/64	3/4	15/64	5		SE45-2.505-42-AH.750S
3	1-31/32	1	15/64	6		SE45-3.006-42-AH1.00S
4	1-31/32	1-1/4	15/64	6		SE45-4.006-42-AH1.25S

Maxi-Mizer Face Milling Cutters, SEAN/SEKN Right Hand Cut



Tool Angles:
 Setting Angle: 45°
 Cutting Rake Angle: 10°
 Radial Rake Angle: -9°
 Axial Rake Angle: 20°

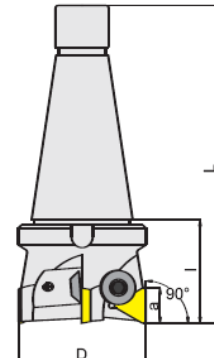
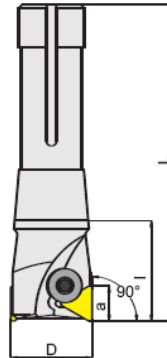
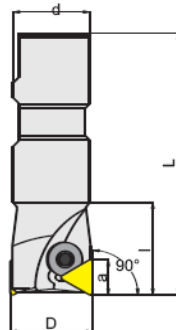
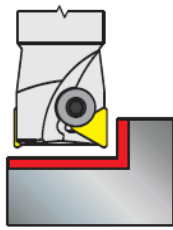
• 45° setting angle, utilizes a square utility 1/2" IC lock down insert. Versatile and economical face mill.

Dia. D	Height H	Arbor Holed	a	No. of Inserts	Inserts	Stock No.
2-1/2	1-37/64	3/4	15/64	5	SEAN-42AFN or SEKN-42AFN	SE45-2.505-42-AH.750SS
3	1-31/32	1	15/64	6		SE45-3.006-42-AH1.00SS
4	1-31/32	1-1/4	15/64	6		SE45-4.006-42-AH1.25SS
5	2-31/64	1-1/2	15/64	7		SE45-5.007-42-AH1.50SS
6	2-31/64	2	15/64	7		SE45-6.007-42-AH2.00SS
8	2-31/64	2-1/2	15/64	8		SE45-8.008-42-AH2.50SS
10	2-31/64	2-1/2	15/64	10		SE45-10.10-42-AH2.50SS



End Mills, TPG

Right Hand Cut, with Weldon, NST or R8 Shanks



- 90° setting angle.
- Standard triangular utility lock-down inserts makes cutter a good, economical, general purpose choice.

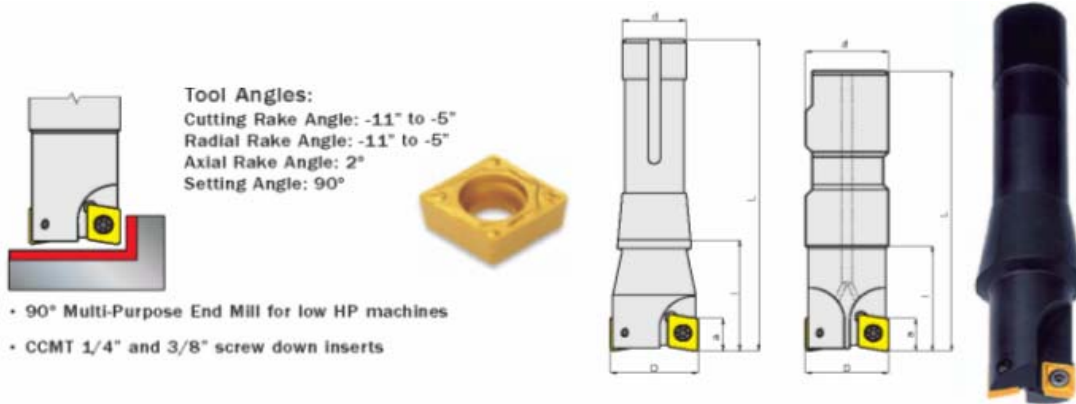
Tool Angles:
 Setting Rake: 90°
 Cutting Rake Angle: 0°
 Axial Rake Angle: 0°

Dia. D	OAL L	Cutting Length I	Shank Type	a	No. of Inserts	Insert Style	Stock No.
WELDON SHANK							
1/2	2-25/32	1	1/2	7/16	1	TPG/TPU-21	TP90-.5001-21-W.500
3/4	3-1/4	1-7/32	3/4	21/32	1	TPG/TPU/TPC-32	TP90-.7501-32-W.750
3/4	3-1/4	1-7/32	3/4	7/16	2	TPG/TPU-21	TP90-.7502-21-W.750
7/8	3-1/4	1-7/32	3/4	7/16	2	TPG/TPU-22	TP90-.8752-22-W.750
1	3-1/4	1-7/32	3/4	7/16	2	TPG/TPU-22	TP90-1.002-22-W.750
1-1/4	3-1/4	1-7/32	3/4	21/32	2	TPG/TPU/TPC-32	TP90-1.202-32-W.750
1-3/8	3-1/4	1-7/32	3/4	21/32	2	TPG/TPU/TPC-32	TP90-1.302-32-W.750
1-1/2	3-1/4	1-7/32	3/4	21/32	3	TPG/TPU/TPC-32	TP90-1.503-32-W.750
1-5/8	3-1/4	1-7/32	3/4	21/32	3	TPG/TPU/TPC-32	TP90-1.603-32-W.750
1-3/4	3-1/4	1-7/32	3/4	21/32	3	TPG/TPU/TPC-32	TP90-1.703-32-W.750
2	3-1/4	1-7/32	3/4	21/32	3	TPG/TPU/TPC-32	TP90-2.003-32-W.750
1	3-31/64	1-13/64	1	7/16	2	TPC/TPU-22	TP90-1.002-22-W1.00
1-1/4	3-11/16	1-13/32	1	21/32	2	TPG/TPU/TPC-32	TP90-1.202-32-W1.00
1-3/8	3-11/16	1-13/32	1	21/32	2	TPG/TPU/TPC-32	TP90-1.302-32-W1.00
1-1/2	3-11/16	1-13/32	1	21/32	3	TPG/TPU/TPC-32	TP90-1.503-32-W1.00
1-5/8	3-11/16	1-13/32	1	21/32	3	TPG/TPU/TPC-32	TP90-1.603-32-W1.00
1-3/4	3-11/16	1-13/32	1	21/32	3	TPG/TPU/TPC-32	TP90-1.703-32-W1.00
2	3-11/16	1-13/32	1	21/32	3	TPG/TPU/TPC-32	TP90-2.003-32-W1.00
2-1/2	3-11/16	1-13/32	1-1/4	21/32	4	TPG/TPU/TPC-32	TP90-2.504-32-W1.25
3	3-11/16	1-13/32	1-1/4	21/32	5	TPG/TPU/TPC-32	TP90-2.005-32-W1.25
NST SHANK							
2	5	2-19/64	NST-30	21/32	3	TPG/TPU/TPC-32	TP90-2.003-32-NST30
2	5-63/64	2-9/32	NST-40	21/32	3	TPG/TPU/TPC-32	TP90-2.003-32-NST40
2-1/2	5-63/64	2-9/32	NST-40	21/32	4	TPG/TPU/TPC-32	TP90-2.504-32-NST40
3	5-63/64	2-9/32	NST-40	21/32	5	TPG/TPU/TPC-32	TP90-3.005-32-NST40
R8 SHANK							
1	5-3/8	1-21/64	R8	7/16	2	TPG/TPU-22	TP90-1.002-22-R8
1-1/4	5-37/64	1-33/64	R8	21/32	2	TPG/TPU/TPC-32	TP90-1.202-32-R8
1-3/8	5-37/64	1-33/64	R8	21/32	2	TPG/TPU/TPC-32	TP90-1.302-32-R8
1-1/2	5-37/64	1-33/64	R8	21/32	3	TPG/TPU/TPC-32	TP90-1.503-32-R8
1-5/8	5-37/64	1-33/64	R8	21/32	3	TPG/TPU/TPC-32	TP90-1.603-32-R8
1-3/4	5-37/64	1-33/64	R8	21/32	3	TPG/TPU/TPC-32	TP90-1.703-32-R8
2	5-37/64	1-33/64	R8	21/32	3	TPG/TPU/TPC-32	TP90-2.003-32-R8
2-1/2	5-37/64	1-33/64	R8	21/32	4	TPG/TPU/TPC-32	TP90-2.504-32-R8
3	5-37/64	1-33/64	R8	21/32	5	TPG/TPU/TPC-32	TP90-2.005-32-R8



End Mills, CCMT

Right Hand Cut, with Weldon or R8 Shanks



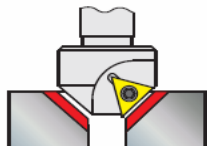
- 90° Multi-Purpose End Mill for low HP machines
- CCMT 1/4" and 3/8" screw down inserts

Dia. D	OAL L	Cutting Length I	Shank Dia. d	A	No. of Inserts	Insert Style	Stock No.
WELDON SHANK							
0.500	2.813	1.031	0.500	0.234	1	CCMT 21.51	CC90-.5001-2151-W.500
0.625	2.969	1.062	0.625	0.234	2		CC90-.6252-2151-W.625
0.750	3.281	1.250	0.750	0.234	2		CC90-.7502-2151-W.750
0.875	3.281	1.250	0.875	0.344	2	CCMT 32.52	CC90-.8752-3252-W.875
1.000	3.938	1.656	1.000	0.344	2		CC90-1.002-3252-W1.00
1.250	3.938	1.656	1.250	0.344	3		CC90-1.203-3252-W1.25
1.000	5.688	1.516	R8	0.344	2		CC90-1.002-3252-R8
1.250	5.688	1.516	R8	0.344	3		CC90-1.203-3252-R8



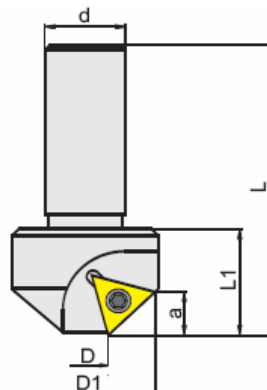
End Mills, TDGW

Right Hand Cut, with Weldon Shanks



Tool Angles:
Cutting Rake Angle: +15°
Axial Rake Angle: 0°
Radial Rake Angle: 0°

- 15° Positive triangular screw down inserts.
- Ideal upgrade from current HSS, Cobalt and Solid Carbide offerings.
- 45°, 60°, 82°, and 90° RH Cut



ANGLE	D MIN	D1 MAX	SHANK DIA. D	OAL L	L1	A	INSERTS	INSERT STYLE	STOCK NUMBER
45	0.250	9/16	0.375	2.25	1.000	.355	1	TDGW-21.51	TD45-.2501-2151-W.375
45	0.500	31/32	0.500	2.5	1.000	.559	1	TDGW-321	TD45-.5001-32-W.500
45	0.750	1-15/64	0.750	3.5	1.250	.559	1	TDGW-321	TD45-.7501-32-W.750
60	0.250	21/32	0.375	2.25	1.000	.335	1	TDGW-21.51	TD60-.2501-2151-W.375
60	0.500	1-1/8	0.500	2.5	1.000	.524	1	TDGW-321	TD60-.5001-32-W.500
60	0.750	1-3/8	0.750	3.5	1.250	.524	3	TDGW-321	TD60-.7503-32-W.750
82	0.250	51/64	0.375	2.25	1.000	.291	1	TDGW-21.51	TD82-.2501-2151-W.375
82	0.500	1-11/32	0.500	2.5	1.000	.453	1	TDGW-321	TD82-.5001-32-W.500
82	0.750	1-9/16	0.750	3.5	1.250	.453	3	TDGW-321	TD82-.7503-32-W.750
90	0.250	53/64	0.375	2.25	1.000	.272	1	TDGW-21.51	TD90-.2501-2151-W.375
90	0.500	1-25/64	0.500	2.5	1.000	.425	1	TDGW-321	TD90-.5001-32-W.500
90	0.750	1-41/64	0.750	3.5	1.250	.425	3	TDGW-321	TD90-.7503-32-W.750

SF-15 CUTTERS

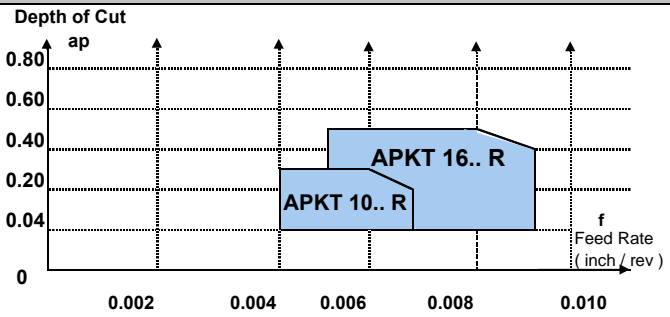
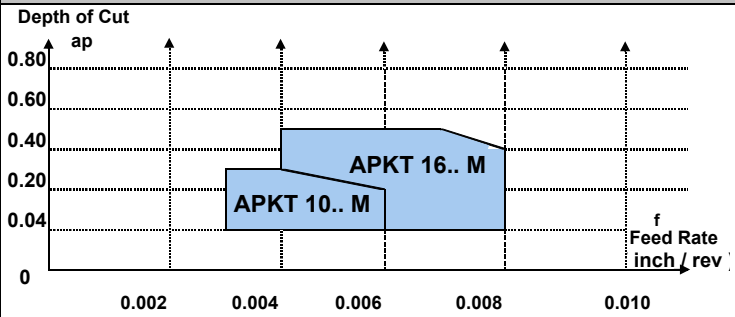
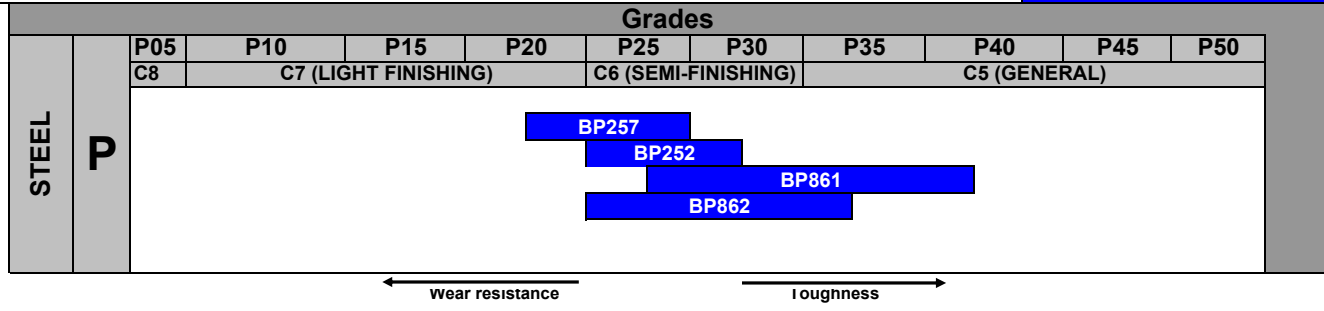
HI-SHEAR AXIAL RAKE
HI-SHEAR RADIAL RAKE
15° LEAD ANGLE
SQUARE INSERTS

MILLING CUTTER NUMBER	CUTTER DIAMETER	NO. OF INSERTS	MOUNTING DETAIL	WEDGE NUMBER	INSERT NUMBER
1/2" x 1/2" x 3/16" INSERTS					
SF15L-2.004 RH or LH	2"	4	3/4" BORE	R.H. 666D-11R OR L.H. 666D-11L	R.H. SBC-43-J7 OR L.H. SBC-43-Q7
SF15L-3.006 RH or LH	3"	6	1" BORE		
SF15L-4.006 RH or LH	4"	6	1 1/2" BORE		
SF15L-5.007 RH or LH	5"	7	1 1/2" BORE		
SF15L-6.008 RH or LH	6"	8	2" BORE		
5/8" x 5/8" x 3/16" INSERTS					
SF15M-2.004 RH or LH	2"	4	3/4" BORE	R.H. 688D-11R OR L.H. 688D-11L	R.H. SBC-53-J8 OR L.H. SBC-53-Q8
SF15M-3.006 RH or LH	3"	6	1" BORE		
SF15M-4.006 RH or LH	4"	6	1 1/2" BORE		
SF15M-5.007 RH or LH	5"	7	1 1/2" BORE		
SF15M-6.008 RH or LH	6"	8	2" BORE		
SF15M-8.012 RH or LH	8"	12	FLAT BACK 2 1/2" BORE		
2" DIAMETER INTEGRAL SHANK CUTTERS UPON REQUEST. SPECIFY SHANK STYLE WHEN ORDERING.					
LEFT HAND CUTTERS AVAILABLE UPON REQUEST. SPECIAL DIAMETERS AVAILABLE UPON REQUEST.					

SF-45 CUTTERS

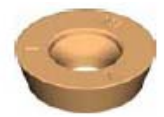
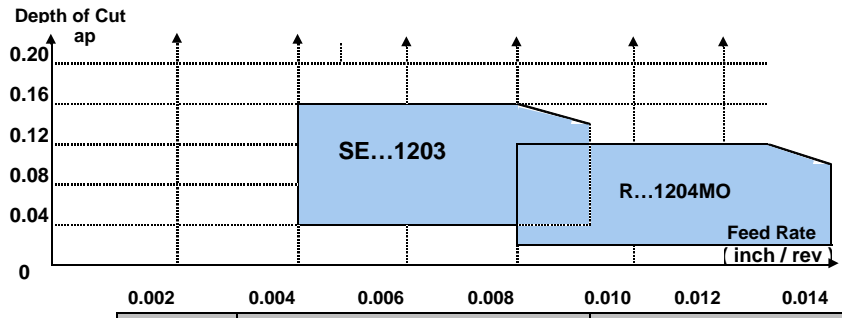
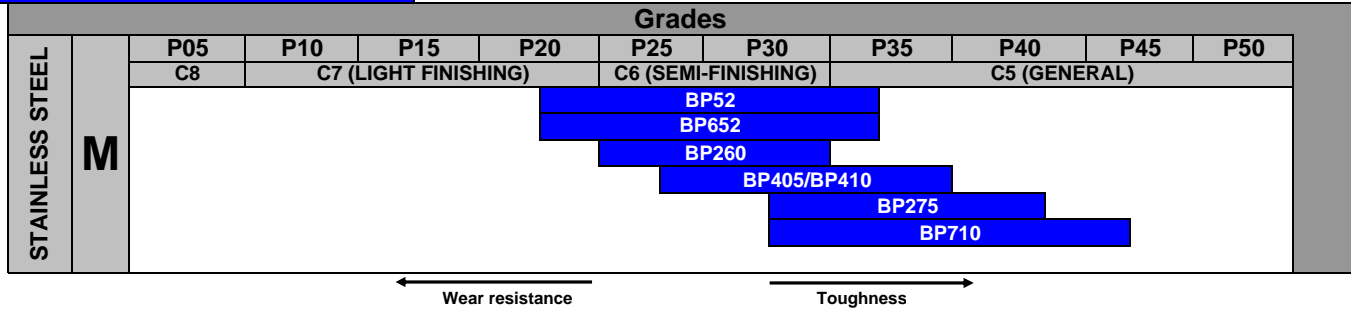
HI-SHEAR AXIAL RAKE
HI-SHEAR RADIAL RAKE
45° LEAD ANGLE
SQUARE INSERTS

MILLING CUTTER NUMBER	CUTTER DIAMETER	NO. OF INSERTS	MOUNTING DETAIL	WEDGE NUMBER	INSERT NUMBER
1/2" x 1/2" x 1/8" INSERTS					
SF45L-2.004 RH or LH	2"	4	3/4" BORE	R.H. SLW5-10 OR L.H. SLW5-10	BSEAN-42AN
SF45L-3.006 RH or LH	3"	6	1" BORE		BSEAN-42AFN
SF45L-4.006 RH or LH	4"	6	1 1/2" BORE		BSEAN-42AFTN
SF45L-6.008 RH or LH	6"	8	2" BORE		BSEAN-AFTNKT
1/2" x 1/2" x 3/16" INSERTS					
SF45LM-2.004 RH or LH	2"	4	3/4" BORE	R.H. 688D-11R OR L.H. 688D-11L	R.H. SBC-53-J8 OR L.H. SBC-53-Q8
SF45LM-3.006 RH or LH	3"	6	1" BORE		
SF45LM-4.006 RH or LH	4"	6	1 1/2" BORE		
SF45M-6.008 RH or LH	6"	8	2" BORE		
5/8" x 5/8" x 3/16" INSERTS					
SF15M-6.008 RH or LH	4"	6	1 1/2" BORE	R.H. 688D-11R OR L.H. 688D-11L	R.H. SBC-53-J8 OR L.H. SBC-53-Q8
SF15M-8.012 RH or LH	6"	8	2" BORE		
SF15M-8.012 RH or LH	8"	12	FLAT BACK 2 1/2" BORE		
<p>2" DIAMETER INTEGRAL SHANK CUTTERS UPON REQUEST. SPECIFY SHANK STYLE WHEN ORDERING.</p> <p>LEFT HAND CUTTERS AVAILABLE UPON REQUEST. SPECIAL DIAMETERS AVAILABLE UPON REQUEST.</p>					



INSERT	$r\epsilon$ (inch)	CVD		PVD		
		BP257	BP252	BP861	BP862	
ADKT 1505PDR M	0.031	10.80	10.80			
APKT 1000PDR M	0.015	9.90	9.90			
APKT 1604 PDR M	0.031	10.28	10.28			
ADKT 1505PDR S	0.008		10.28	12.46	12.46	
APKT 1000PDR S	0.008		8.25	9.52	9.52	
APKT 1604PDR S	0.031		10.28	12.46	12.46	
ADKT 150516 R	0.063	11.73	12.38	14.21		
ADKT 150524 R	0.094	11.73	12.38	14.21		
ADKT 150532 R	0.125	11.73	12.38	14.21		
APKT 100316 R	0.063	9.90	9.90	11.38		
APKT 160416 R	0.061					
APKT 160424 R	0.094	11.73	12.38	14.21		
APKT 160432 R	0.125	11.73	12.38	14.21		
SDMT 1205PDR S	0.031			10.65		

**MILLING INSERTS
STEEL
DIN**



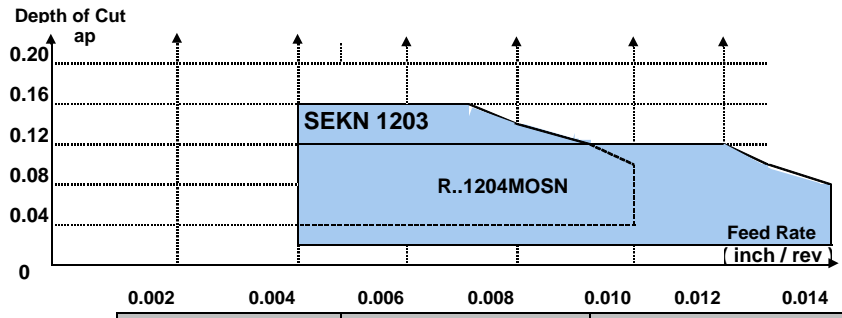
INSERT	UNCOATED		CVD		PVD		
	BP52	BP710	BP405	BP410	BP265	BP652	BP275
RDLW 1003MOSM			5.49	5.49			
RDLW 12T3MOSM					7.44		7.44
RDLW 1604MOS							
RPMT 1204MOSN			5.89	5.89	6.94		6.94
RPMW 1204MOSN				5.66	7.44		7.44
SBC-43-J7	11.69	12.93				12.93	
SBC-43-Q8	11.69	12.93				12.93	
SBC-53-J7	12.98	14.72				14.72	
SBC-53-Q8	12.98	14.72				14.72	
SEAN 42AFTN	9.92	11.16				11.16	
SEAN 42AFTNKT	9.44	10.58				10.58	
SEAN 43AFTN	11.74	13.01				13.01	
SEAN 43AFTNKT	11.45	12.28				12.28	
SEAN 53AFTN	13.05	14.85				14.85	
SEAN 53AFTNKT	12.33	13.98				13.98	
SEKN 1203AFSNM			6.44	6.44	7.49		7.49
SEKN 1504AFSN			10.05	10.05			
SPKN 1203EDSR			6.89	6.89	7.99		7.99
SEKR 1203AFEN			3.67	6.44	7.49		7.49
SEKR 1504AFEN			9.75	9.75			
SPKR 1203EDSR			6.89				7.99
TPKN 1603PDR			6.24	6.24	7.32		7.32
TPKN 2204PDR			9.02	9.02	10.65		10.65
TPKR 1603PDSR			6.24	6.24	7.32		7.32
TPKR 2204PDSR			9.02	9.02	1.07		10.65

**MILLING INSERTS
CAST IRON
DIN**

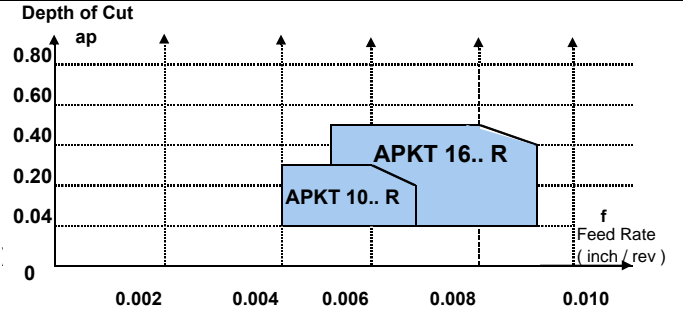
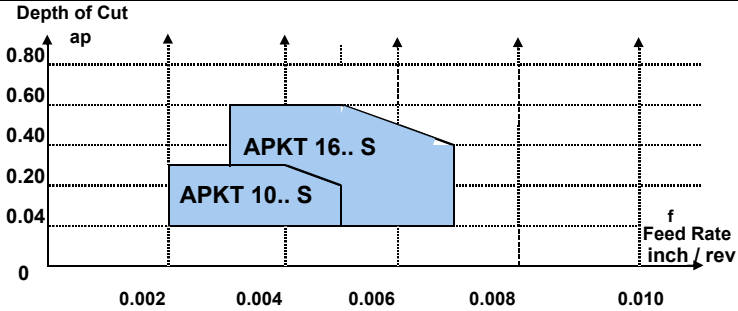
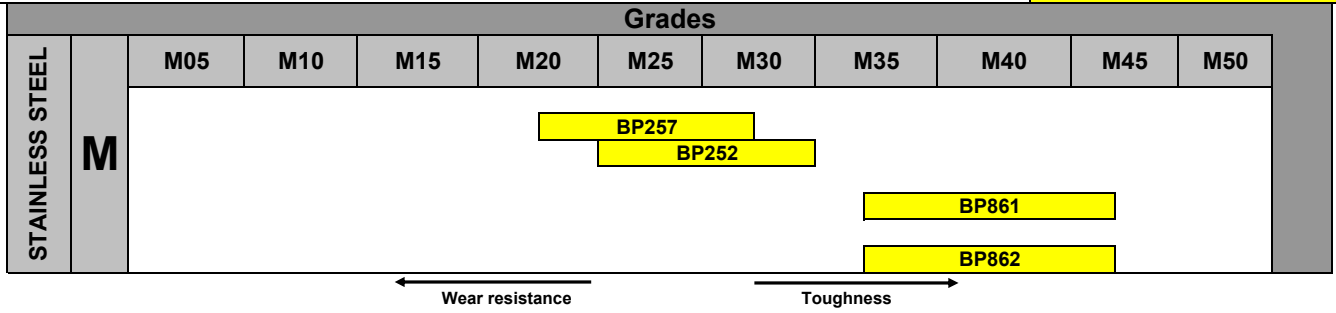


BELCAR PRODUCTS

		Grades									
STAINLESS STEEL	M	P05	P10	P15	P20	P25	P30	P35	P40	P45	P50
		C4	C3 (SEMI-FINISHING)	C2 (GENERAL)			C1 (ROUGHING)				
		BP410									
		← Wear resistance					→ Toughness				



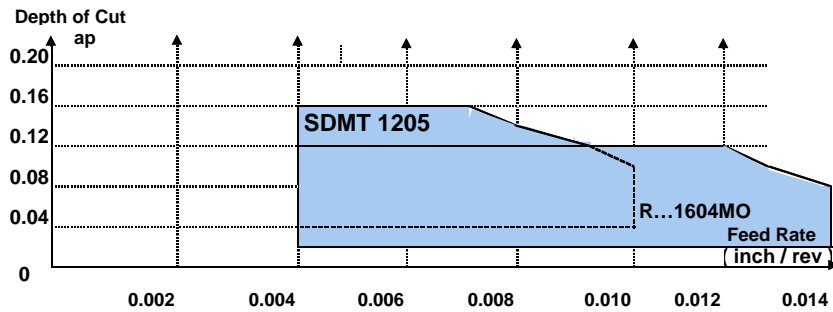
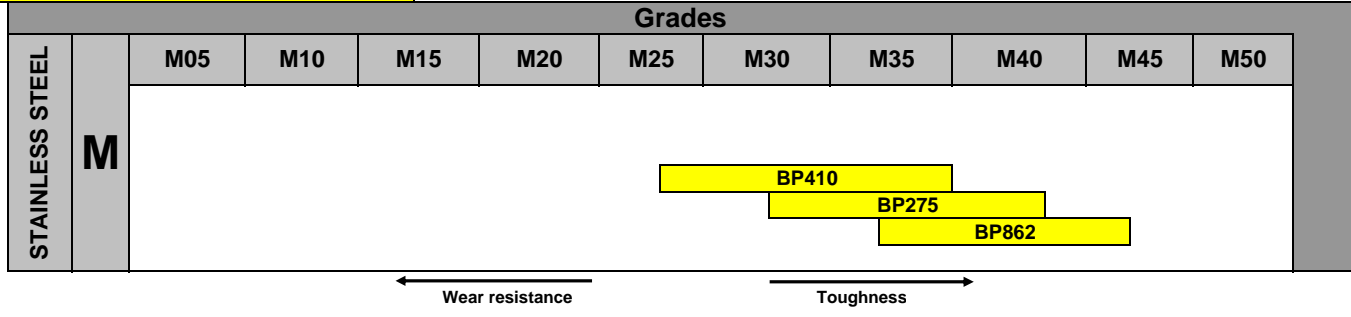
INSERT	UNCOATED		CVD		PVD	
			BP410			
RDLW 1003MOSM			5.49			
RDLW 12T3MOSM						
RDLW 1604MOS						
RPMW 1204MOSN			5.89			
SEKN 1203AFSNM			6.44			
SEKN 1504AFSN			10.05			
SPKN 1203EDSRM			6.89			
SEKR 1203AFEN-11			3.67	6.44		
SEKR 1504AFEN-11			9.75	9.75		
SPKR 1203EDSR-11			6.89			
TPKN 1603PDR-11			6.24	6.24		
TPKN 2204PDR-11			9.02	9.02		
TPKR 1603PDSR-11			6.24	6.24		
TPKR 2204PDSR-11			9.02	9.02		



INSERT	r_e (inch)	CVD		PVD		
		BP257	BP252	BP861	BP862	
ADKT 1505PDR M	0.031	10.80	10.80			
APKT 1003PDR M	0.015	9.90	9.90			
APKT 1604 PDR M	0.031	10.28	10.28			
ADKT 1505PDR S	0.031		10.28	12.46	12.46	
APKT 1003PDR S	0.015		8.25	9.52	9.52	
APKT 1604PDR S	0.031		10.28	12.46	12.46	
ADKT 150516 R	0.063	11.73	12.38	14.21		
ADKT 150524 R	0.094	11.73	12.38	14.21		
ADKT 150532 R	0.125	11.73	12.38	14.21		
APKT 100316 R	0.063	9.90	9.90	11.38		
APKT 160424 R	0.094	11.73	12.38	14.21		
APKT 160432 R	0.125	11.73	12.38	14.21		
SDMT 1205PDR S	0.031			10.65		



**MILLING INSERTS
STAINLESS STEEL**



INSERT	CVD			PVD		
			BP410		BP275	BP862
RDLW 1003MOS-11			5.49			
RDLW 12T3MOS-11					7.44	
RDLW 1604MOS-11						
RPMT 1204MOSN			5.89		6.94	
RPMW 1204MOSN			5.66		7.44	
SEKN 1203AFSN-11			6.44		7.49	
SEKN 1504AFSN-11			10.05			
SPKN 1203EDSR-11			6.89		7.99	
SEKR 1203AFEN-11			6.44		7.49	
SEKR 1504AFEN-11			9.75			
SPKR 1203EDSR-11						
TPKN 1603PDR-11			6.24		7.32	
TPKN 2204PDR-11			9.02		10.65	
TPKR 1603PDSR-11			6.24		7.32	
TPKR 2204PDSR-11			9.02		10.65	



