



Profile Milling Program Tool Contents

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Profile Milling Program Tools

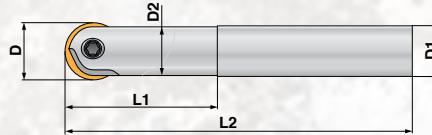
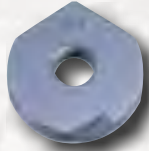
Millstar Profile Milling Tools represent the latest in profile and contour milling technology, providing the competitive edge of shorter machining and lead times, and the advantages of higher machining accuracy and true contouring results.

The Millstar Advantage

<i>Better surface finishes</i>	=	<i>Reduced finishing work</i>
<i>Faster run & feed speed</i>	=	<i>Reduced machining time</i>
<i>Increased tool life</i>	=	<i>Reduced tool changes & cost</i>
<i>Accurate and constant milling</i>	=	<i>Reduced manual rework</i>
<i>Balanced milling action, two flute efficiency</i>	=	<i>Greatly increased metal removal productivity</i>

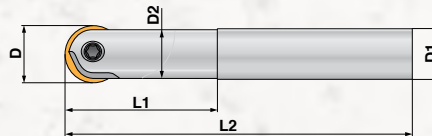
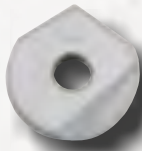


Graphite Machining Program



VRBS/RB - General Ball Nose Graphite Machining Line, Metric

Tool Ordering Number	Dimensions					Recommended Shank Part Number
	Size ØD	Shank ØD1	Neck ØD2	Neck Length L1	Total Length L2	
VRBS-6-DMD	6	6	5,7	30	115	CBCYV-06-115-06
VRBS-8-DMD	8	8	7,5	30	115	CBCYV-08-130-08
RB-10-N-DMD	10	10	9,0	32	150	CBCY-10-150-10
RB-12-N-DMD	12	12	10,8	52	165	CBSFCY-12-150-12
RB-16-N-DMD	16	16	14,4	52	170	CBSFCY-16-150-16
RB-20-N-DMD	20	20	18,0	77	225	CBSFCY-20-200-20
RB-25-N-DMD	25	25	22,5	93	230	CBSFCY-25-200-25
RB-30-N-DMD	30	30	27,2	57	230	CBSFCY-30/32-190-32
RB-32-N-DMD	32	32	27,2	57	230	CBSFCY-30/32-190-32

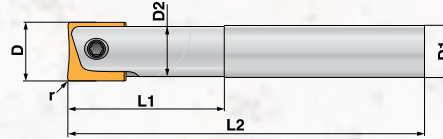
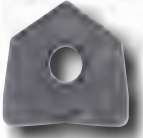


MBT - Ball Nose Graphite Finishing Line, Metric

Tool Ordering Number	Dimensions					Recommended Shank Part Number
	Size ØD	Shank ØD1	Neck ØD2	Neck Length L1	Total Length L2	
MBT-10-DMD	10	10	9,0	32	150	CBCY-10-150-10
MBT-12-DMD	12	12	10,8	52	165	CBSFCY-12-150-12
MBT-16-DMD	16	16	14,4	52	170	CBSFCY-16-150-16
MBT-20-DMD	20	20	18,0	77	225	CBSFCY-20-200-20
MBT-25-DMD	25	25	22,5	93	230	CBSFCY-25-200-25
MBT-30-DMD	30	30	27,2	57	230	CBSFCY-30/32-190-32
MBT-32-DMD	32	32	27,2	57	230	CBSFCY-30/32-190-32

* For other holder options, see page 62 (Metric).

Graphite Machining Program

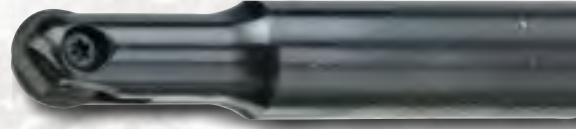
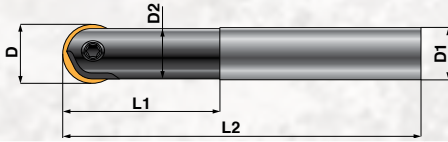


VBD/BDS - Flat Bottom Graphite Machining Line, Metric


Tool Ordering Number	Dimensions						Recommended Shank Part Number
	Size ØD	Radius	Shank ØD1	Neck ØD2	Neck Length L1	Total Length L2	
VBD-06-R0,1	6	0,1	6	5,7	30	115	CBCYV-06-115-06
VBD-06-R0,4	6	0,4	6	5,7	30	115	CBCYV-06-115-06
VBD-08-R0,1	8	0,1	8	7,5	30	115	CBCYV-08-130-08
VBD-08-R0,4	8	0,4	8	7,5	30	115	CBCYV-08-130-08
BDS-10-N-0.1	10	0,1	10	9,0	32	150	CBCY-10-150-10
BDS-10-N-0.8	10	0,8	10	9,0	32	150	CBCY-10-150-10
BDS-10-N-1.0	10	1,0	10	9,0	32	150	CBCY-10-150-10
BDS-12-N-0.1	12	0,1	12	10,8	52	165	CBCYF-12-150-12
BDS-12-N-1.0	12	1,0	12	10,8	52	165	CBCYF-12-150-12
BDS-16-N-0.1	16	0,1	16	14,4	52	170	CBCYF-16-150-16
BDS-16-N-1.0	16	1,0	16	14,4	52	170	CBCYF-16-150-16
BDS-16-N-1.3	16	1,3	16	14,4	52	170	CBCYF-16-150-16
BDS-20-N-0.1	20	0,1	20	18,0	77	225	CBCYF-20-200-20
BDS-20-N-1.0	20	1,0	20	18,0	77	225	CBCYF-20-200-20
BDS-20-N-1.6	20	1,6	20	18,0	77	225	CBCYF-20-200-20
BDS-25-N-1.0	25	1,0	25	22,5	93	230	CBCYF-25-200-25
BDS-25-N-2.0	25	2,0	25	22,5	93	230	CBCYF-25-200-25

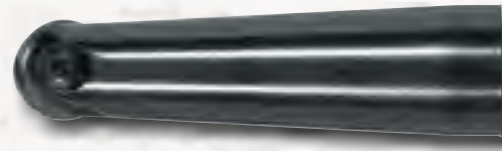
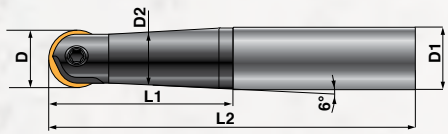
* For other holder options, see page 62 (Metric).

Profile Milling Holders




SFCY - Cylindrical Steel Shank Holder, Ball

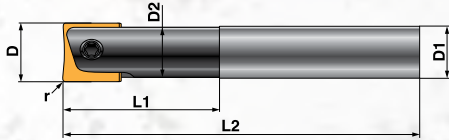
Tool Ordering Number	Dimensions					Screw	Key	Use with Inserts	
	Size ØD	Shank ØD1	Neck ØD2	Neck Length L1	Total Length L2			Type	Code
SFCY-12-125-12	12	12	10,8	36	125	MS12	T20		MB, MBT, RB-N, BS-N, RBT
SFCY-12-150-12	12	12	10,8	46	150	MS12	T20		
SFCY-0500-6.0-12	0.5"	12	11,2	44	152	MS12	T20		
SFCY-14-125-16	14	16	12,6	36	125	MS16	T20		
SFCY-16-160-16	16	16	14,4	50	160	MS16	T20		
SFCY-20-150-20	20	20	18,0	50	150	MS20	T20		
SFCY-20-190-20	20	20	18,0	61	190	MS20	T20		
SFCY-22-200-25	22	25	19,8	50	200	MS25	T20		
SFCY-25-150-25	25	25	22,5	50	150	MS25	T20		
SFCY-25-200-25	25	25	22,5	64	200	MS25	T20		
SFCY-25-250-25	25	25	22,5	64	250	MS25	T20		
SFCY-1000-6.0-25	1.0"	25	22,5	44	152	MS25	T20		
SFCY-1000-10.0-25	1.0"	25	22,5	70	254	MS25	T20		
SFCY-30/32-190-32	30/32	32	27,2	57	190	MS32	T30		
SFCY-30/32-250-32	30/32	32	27,2	76	250	MS32	T30		
SFCY-30/32-300-32	30/32	32	27,2	57	300	MS32	T30		




SFTA - Taper Steel Shank Holder, Ball

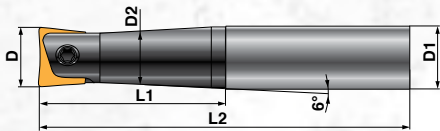
Tool Ordering Number	Dimensions					Screw	Key	Use with Inserts	
	Size ØD	Shank ØD1	Neck ØD2	Neck Length L1	Total Length L2			Type	Code
SFTA-12-190-16	12	16	10,8	60	190	MS12	T20		MB, MBT, RB-N, BS-N, RBT
SFTA-16-190-20	16	20	14,4	57	190	MS16	T20		
SFTA-20-200-25	20	25	18,0	80	200	MS20	T20		
SFTA-25-250-32	25	32	22,5	100	250	MS25	T20		
SFTA-25-315-32	25	32	22,5	100	315	MS25	T20		
SFTA-30/32-250-40	30/32	40	27,2	120	250	MS32	T30		
SFTA-30/32-250-42	30/32	42	27,2	120	250	MS32	T30		

Profile Milling Holders




CYF - Cylindrical Steel Shank Holder, Flat

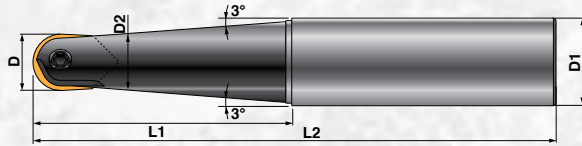
Tool Ordering Number	Dimensions					Screw	Key	Use with Inserts	
	Size ØD	Shank ØD1	Neck ØD2	Neck Length L1	Total Length L2			Type	Code
CYF-10-100-10	10	10	9,0	19	100	MS10	T15		BD-N, BD-R, BDS, FB-R, TO, TOBD-NF, HF
CYF-12-125-12	12	12	10,8	36	125	MS12	T20		
CYF-12-150-12	12	12	10,8	46	150	MS12	T20		
CYF-16-160-16	16	16	14,4	50	160	MS16	T20		
CYF-20-150-20	20	20	18,0	50	150	MS20	T20		
CYF-20-200-20	20	20	18,0	61	200	MS20	T20		
CYF-25-150-25	25	25	22,5	50	150	MS25	T20		
CYF-25-200-25	25	25	22,5	64	200	MS25	T20		
CYF-30/32-190-32	30/32	32	28,6	57	190	MS32	T30		
CYF-30/32-250-32	30/32	32	28,6	76	250	MS32	T30		



TAF - Taper Steel Shank Holder, Flat

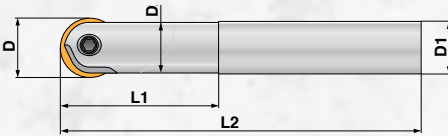
Tool Ordering Number	Dimensions					Screw	Key	Use with Inserts	
	Size ØD	Shank ØD1	Neck ØD2	Neck Length L1	Total Length L2			Type	Code
TAF-10-150-12	10	12	9,0	35	150	MS10	T15		BD-N, BD-R, BDS, FB-R, TO, TOBD-NF, HF
TAF-12-190-16	12	16	10,8	60	190	MS12	T20		
TAF-16-190-20	16	20	14,4	57	190	MS16	T20		
TAF-20-200-25	20	25	18,0	80	200	MS20	T20		
TAF-25-250-32	25	32	22,5	100	250	MS25	T20		
TAF-25-315-32	25	32	22,5	100	315	MS25	T20		
TAF-30/32-250-40	30/32	40	28,6	120	250	MS32	T30		

Profile Milling Program Tools



TAV, CY, TA - Spike-Line Cylindrical Steel Shank

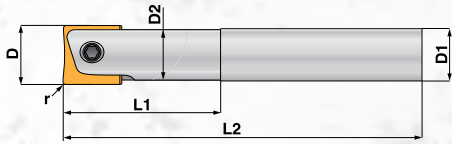
Tool Ordering Number	Dimensions					Screw	Key	Use with Inserts	
	Size ØD	Shank ØD1	Neck ØD2	Neck Length L1	Total Length L2			Type	Code
TAV-06-095-12	6	12	5,7	30	95	MS06N	T7		VRBS, VBD
TAV-08-095-12	8	12	7,5	32	95	MS08N	T7		VRBS, VBD
CY-10-100-10	10	10	9,0	19	100	MS10	T15		VRBS, VBD, MB, MBT, RB-N, BS-N, BD, BDS, FB, TO, HF, RBT
CY-10-100-12	10	12	9,0	25	100	MS10	T15		
TA-10-125-12	10	12	9,0	35	125	MS10	T15		
TA-10-150-12	10	12	9,0	35	150	MS10	T15		




CB SFCY - Cylindrical Carbide Shank Holder, Ball

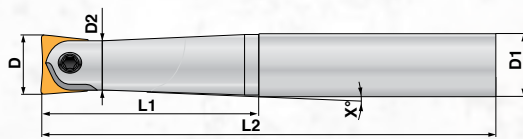
Tool Ordering Number	Dimensions					Screw	Key	Use with Inserts	
	Size ØD	Shank ØD1	Neck ØD2	Neck Length L1	Total Length L2			Type	Code
CBSFCY-12-150-12	12	12	10,8	52	165	MS12	T20		MB, MBT, RB-N, BS-N, RBT
CBSFCY-16-150-16	16	16	14,4	52	170	MS16	T20		
CBSFCY-20-200-20	20	20	18,0	77	225	MS20	T20		
CBSFCY-25-200-25	25	25	22,5	93	230	MS25	T20		
CBSFCY-30/32-190-32	30/32	32	27,2	57	230	MS32	T30		

Profile Milling Program Tools




CB CYF - Cylindrical Carbide Shank Holder, Flat

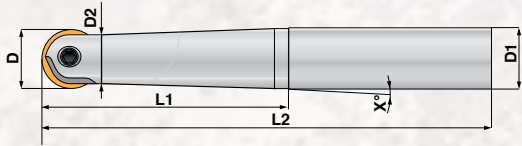
Tool Ordering Number	Dimensions					Screw	Key	Use with Inserts	
	Size ØD	Shank ØD1	Neck ØD2	Neck Length L1	Total Length L2			Type	Code
CBCYF-12-150-12	12	12	10,8	52	165	MS12	T20		BD-N, BD-R, BDS, FB-R, TO, TOBD-NF, HF
CBCYF-16-150-16	16	16	14,4	52	170	MS16	T20		
CBCYF-20-200-20	20	20	18,0	77	225	MS20	T20		
CBCYF-25-200-25	25	25	22,5	93	230	MS25	T20		



CB TAV - Spike-Line Taper Carbide Shank, Ball & Flat

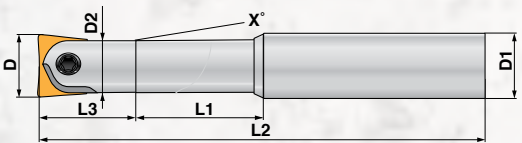
Tool Ordering Number	Dimensions					X°	Screw	Key	Use with Inserts	
	Size ØD	Shank ØD1	Neck ØD2	Neck Length L1	Total Length L2				Type	Code
CBTAV-06-075-12	6	12	5,7	35	75	6° (3°/side)	MS06N	T7		VRBS, VBD
CBTAV-06-150-12	6	12	5,7	30	155	6° (3°/side)	MS06N	T7		
CBTAV-06-150-12 LT	6	12	5,7	70	155	6° (3°/side)	MS06N	T7		
CBTAV-08-080-12	8	12	7,5	40	80	6° (3°/side)	MS08N	T7		
CBTAV-08-150-12	8	12	7,5	30	155	6° (3°/side)	MS08N	T7		

Profile Milling Program Tools



CB TA - Taper Carbide Uni-Shank Holder, Ball & Flat

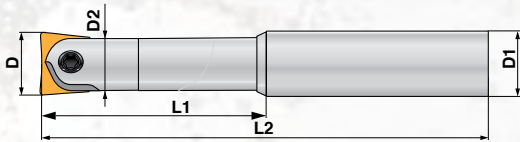
Tool Ordering Number	Dimensions					X°	Screw	Key	Use with Inserts	
	Size ØD	Shank ØD1	Neck ØD2	Neck L1	Total L2				Type	Code
CBTA-10-150-12	10	12	9,0	30	165	6° (3° side)	MS10	T15		MB, MBT, RB-N, BS-N, BD, BDS, FB, TO, HF, RBT






CB CYV - Spike Line Taper Carbide Shank, Ball & Flat

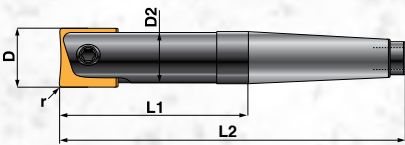
Tool Ordering Number	Dimensions						X°	Screw	Key	Use with Inserts	
	Size ØD	Shank ØD1	Neck ØD2	Neck L3	Neck L1	Total L2				Type	Code
CBCYV-06-115-12	6	12	5,7	30	45	115	1°	MS06N	T7		VRBS, VBD
CBCYV-08-100-12	8	12	7,5	30	30	100	1°	MS08N	T7		

Profile Milling Program Tools




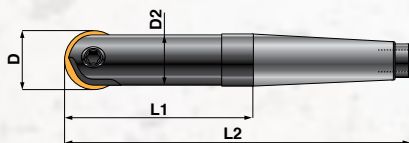
CB CY - Cylindrical Carbide Uni-Shank Holder, Ball & Flat

Tool Ordering Number	Dimensions					Screw	Key	Use with Inserts	
	Size ØD	Shank ØD1	Neck ØD2	Neck L1	Total L2			Type	Code
CBCYV-06-115-06	6	6	5,7	30	115	MS06N	T7		VRBS, VBD
CBCYV-08-130-08	8	8	7,5	30	130	MS08N	T7		MB, MBT, RB-N, BS-N, BD, BDS, FB, TO, HF, RBT
CBCY-10-150-10	10	10	9,0	32	150	MS10	T15		




CYFMK - Morse Steel Shank Holder, Flat

Tool Ordering Number	Dimensions					Screw	Key	Use with Inserts	
	Size ØD	Shank ØD1	Neck L1	Total L2	MORSE			Type	Code
CYFMK-2-130-12	12	10,8	40	130	MK2	MS12	T20		BD-N, BD-R, BDS, FB-R, TO, TOBD-NF, HF
CYFMK-2-140-16	16	14,4	45	140	MK2	MS16	T20		
CYFMK-2-150-20	20	18,0	55	150	MK2	MS20	T20		
CYFMK-3-180-25	25	22,5	70	180	MK3	MS25	T20		
CYFMK-4-210-32	32	27,2	75	210	MK4	MS32	T30		



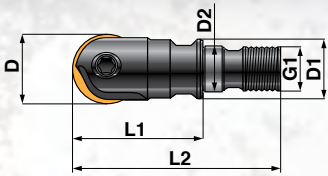
CYMK - Morse Steel Shank Holder, Ball

Tool Ordering Number	Dimensions					Screw	Key	Use with Inserts	
	Size ØD	Shank ØD1	Neck L1	Total L2	MORSE			Type	Code
CYMK-2-130-12	12	10,8	40	130	MK2	MS12	T20		MB, MBT, RB-N, BS-N, RBT
CYMK-2-140-16	16	14,4	45	140	MK2	MS16	T20		
CYMK-2-150-20	20	18,0	55	150	MK2	MS20	T20		
CYMK-3-180-25	25	22,5	70	180	MK3	MS25	T20		
CYMK-4-210-32	32	27,2	75	210	MK4	MS32	T30		




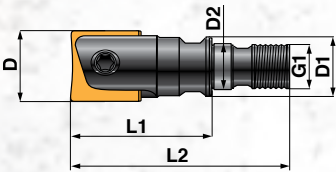
Screw-On Heads

Modular Screw-On System




SF CY - Screw-on Head, Ball

Tool Ordering Number	Size ØD	Diameter D1	Diameter D2	Thread G1	Length L1	Length L2	Screw	Key	Use with Inserts	
									Type	Code
SFCY-10-SC-M6	10	9,8	6,5	M6	24	40	MS10	T15		MB, MBT, RB-N, BS-N, RBT
SFCY-12-SC-M6	12	10,8	6,5	M6	26	42	MS12	T20		
SFCY-16-SC-M8	16	15,0	8,5	M8	30	48	MS16	T20		
SFCY-20-SC-M10	20	18,0	10,5	M10	36	56	MS20	T20		
SFCY-25-SC-M12	25	22,5	12,5	M12	44	65	MS25	T20		
SFCY-32-SC-M16	32	28,6	16,5	M16	50	74	MS32	T30		



CYF - Screw-on Head, Flat

Tool Ordering Number	Size ØD	Diameter D1	Diameter D2	Thread G1	Length L1	Length L2	Screw	Key	Use with Inserts	
									Type	Code
CYF-10-SC-M6	10	9,8	6,5	M6	24	40	MS10	T15		BD-N, BD-R, BDS, FB-R, TO, TOBD-NF, HF
CYF-12-SC-M6	12	10,8	6,5	M6	26	42	MS12	T20		
CYF-16-SC-M8	16	15,0	8,5	M8	30	48	MS16	T20		
CYF-20-SC-M10	20	18,0	10,5	M10	36	56	MS20	T20		
CYF-25-SC-M12	25	22,5	12,5	M12	44	65	MS25	T20		
CYF-32-SC-M16	32	28,6	16,5	M16	50	74	MS32	T30		

Solid Carbide Adaptor

Tool Ordering Number	Size ØD1	Neck ØD2	Neck L1	Total L	Thread G1
CY-10-150-SC-M6	10	9,8	30	150	M6
CY-12-80-12-SC-M6	12	10,8	27	80	M6
CY-12-150-SC-M6	12	10,8	27	150	M6
CY-16-200-SC-M8	16	15,0	31	200	M8
CY-18-130-SC-M10-CH	18	-	-	130	M10
CY-18-190-SC-M10-CH	18	-	-	190	M10
CY-20-200-SC-M10	20	18,0	36	200	M10
CY-25-170-SC-106-M12	25	24	106	170	M12
CY-25-220-SC-156-M12	25	24	156	220	M12
CY-25-250-SC-M12	25	22,5	44	250	M12
CY-32-170-SC-106-M16	32	29	106	170	M16
CY-32-220-SC-156-M16	32	29	156	220	M16
CY-32-300-SC-M16	32	28,6	52	300	M16

