



Profile Milling Program Tool Contents

VRBS, MBT, VBD,/BDS	Graphite Machining Program	8-9	
SFCY	Cylindrical Steel Shank Holder – Ball	10	
SFTA	Taper Steel Shank Holder – Ball	10	
CYF	Cylindrical Steel Shank Holder – Flat	11	
TAF	Taper Steel Shank Holder – Flat	11	
TAV, CY, TA	Spike-Line Cylindrical Steel Shank	12	
CB SFCY	Cylindrical Carbide Shank Holder – Ball	12	
CB CYF	Cylindrical Carbide Shank Holder – Flat	13	
CB TAV	Spike-Line Taper Carbide Shank Holder – Ball & Flat	13	
CB TA	Taper Carbide Uni-Shank Holder – Ball & Flat	13	
SF CY/CYF	Screw-on Head – Ball & Flat	15	
Solid Carbide Adaptor		15	
Inserts		16-21	
Cutting Parameters		20-21	
Verify Surface Roughness		22	
Feed & Speed Calculator		23	

Profile Milling Program Tools

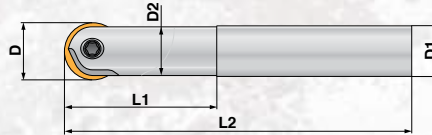
Millstar Profile Milling Tools represent the latest in profile and contour milling technology, providing the competitive edge of shorter machining and lead times, and the advantages of higher machining accuracy and true contouring results.

The Millstar Advantage

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

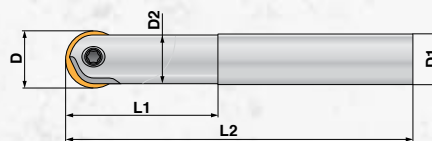


Graphite Machining Program - True Diamond Coated Inserts



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

Tool Ordering Number	Dimensions					Recommended Shank Part Number
	Size ØD	Shank ØD1	Neck ØD2	Neck Length L1	Total Length L2	
VRBS-0250-DMD	0.250	0.250	NA	NA	6.000	CBCYV-0250-6.0-0250
VRBS-0312-DMD	0.312	0.312	NA	NA	6.000	CBCYV-0312-6.0-0312
RB-0375-N-DMD	0.375	0.375	0.337	1.145	6.000	CBCY-0375-6.0-0375
RB-0500-N-DMD	0.500	0.500	0.440	1.145	6.000	CBSFCY-0500-6.0-0500
RB-0500-N-DMD	0.500	12mm	0.440	1.145	6.000	CBSFCY-0500-6.0-12
RB-0625-N-DMD	0.625	0.625	0.550	1.325	6.000	CBSFCY-0625-6.0-0625
RB-0750-N-DMD	0.750	0.750	0.675	1.500	8.000	CBSFCY-0750-8.0-0750
RB-0750-N-DMD	0.750	18mm	0.675	1.500	8.000	CBSFCY-0750-8.0-18
RB-1000-N-DMD	1.000	1.000	0.882	1.866	8.000	CBSFCY-1000-8.0-1000
RB-1000-N-DMD	1.000	25mm	0.882	1.866	8.000	CBSFCY-1000-8.0-25

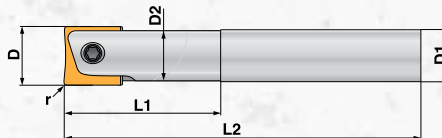
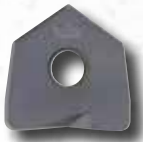


MBT - Ball Nose Graphite Finishing Line, Inch

Tool Ordering Number	Dimensions					Recommended Shank Part Number
	Size ØD	Shank ØD1	Neck ØD2	Neck Length L1	Total Length L2	
MBT-0375-DMD	0.375	0.375	0.337	1.145	6.000	CBCY-0375-6.0-0375
MBT-0500-DMD	0.500	0.500	0.440	1.145	6.000	CBSFCY-0500-6.0-0500
MBT-0500-DMD	0.500	12mm	0.440	1.145	6.000	CBSFCY-0500-6.0-12
MBT-0625-DMD	0.625	0.625	0.550	1.325	6.000	CBSFCY-0625-6.0-0625
MBT-0750-DMD	0.750	0.750	0.675	1.500	8.000	CBSFCY-0750-8.0-0750
MBT-0750-DMD	0.750	18mm	0.675	1.500	8.000	CBSFCY-0750-8.0-18
MBT-1000-DMD	1.000	1.000	0.882	1.866	8.000	CBSFCY-1000-8.0-1000
MBT-1000-DMD	1.000	25mm	0.882	1.866	8.000	CBSFCY-1000-8.0-25

* For other holder options, see page 10 (Inch).

Graphite Machining Program - True Diamond Coating or PCD Tipped



VBD/BDS - Flat Bottom Graphite Machining Line, Inch

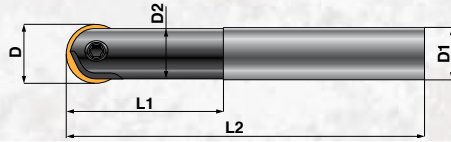
Tool Ordering Number	Dimensions						Recommended Shank Part Number
	Size ØD	Radius	Shank ØD1	Neck ØD2	Neck Length L1	Total Length L2	
VBD-0250-R01-	0.250	0.015	0.250	NA	NA	6.000	CBCYV-0250-6.0-0250
VBD-0312-R01-	0.312	0.015	0.312	NA	NA	6.000	CBCYV-0312-6.0-0312
BDS-0375-N02-	0.375	0.031	0.375	0.337	1.145	6.000	CBCY-0375-6.0-0375
BDS-0375-N04-	0.375	0.062	0.375	0.337	1.145	6.000	CBCY-0375-6.0-0375
BDS-0500-N01-	0.500	0.015	0.500	0.440	1.145	6.000	CBCYF-0500-6.0-0500
BDS-0500-N02-	0.500	0.031	0.500	0.440	1.145	6.000	CBCYF-0500-6.0-0500
BDS-0500-N04-	0.500	0.062	0.500	0.440	1.145	6.000	CBCYF-0500-6.0-0500
BDS-0500-N01-	0.500	0.015	12mm	0.440	1.145	6.000	CBCYF-0500-6.0-12
BDS-0500-N02-	0.500	0.031	12mm	0.440	1.145	6.000	CBCYF-0500-6.0-12
BDS-0500-N04-	0.500	0.062	12mm	0.440	1.145	6.000	CBCYF-0500-6.0-12
BDS-0625-N02-	0.625	0.031	0.625	0.550	1.325	6.000	CBCYF-0625-6.0-0625
BDS-0625-N04-	0.625	0.062	0.625	0.550	1.325	6.000	CBCYF-0625-6.0-0625
BDS-0750-N02-	0.750	0.031	0.750	0.675	1.500	8.000	CBCYF-0750-8.0-0750
BDS-0750-N04-	0.750	0.062	0.750	0.675	1.500	8.000	CBCYF-0750-8.0-0750
BDS-0750-N08-	0.750	0.125	0.750	0.675	1.500	8.000	CBCYF-0750-8.0-0750
BDS-0750-N02-	0.750	0.031	18mm	0.675	1.512	8.000	CBCYF-0750-8.0-18
BDS-0750-N04-	0.750	0.062	18mm	0.675	1.512	8.000	CBCYF-0750-8.0-18
BDS-0750-N08-	0.750	0.125	18mm	0.675	1.512	8.000	CBCYF-0750-8.0-18
BDS-1000-N02-	1.000	0.031	1.000	0.820	1.866	8.000	CBCYF-1000-8.0-1000
BDS-1000-N04-	1.000	0.062	1.000	0.820	1.866	8.000	CBCYF-1000-8.0-1000
BDS-1000-N08-	1.000	0.125	1.000	0.820	1.866	8.000	CBCYF-1000-8.0-1000
BDS-1000-N02-	1.000	0.031	25mm	0.820	1.866	8.000	CBCYF-1000-8.0-25
BDS-1000-N04-	1.000	0.062	25mm	0.820	1.866	8.000	CBCYF-1000-8.0-25
BDS-1000-N08-	1.000	0.125	25mm	0.820	1.866	8.000	CBCYF-1000-8.0-25

All products on these pages come in both PCD Tipped and Diamond Coated (DMD).


Examples: VBD-0250-R01-DMD
BDS-0375-N02-PCD

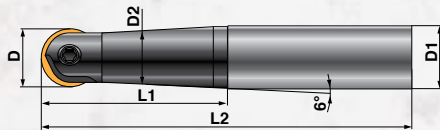
* For other holder options, see page 10 (Inch).

Profile Milling Holders



SFCY - Cylindrical Steel Shank Holder, Ball

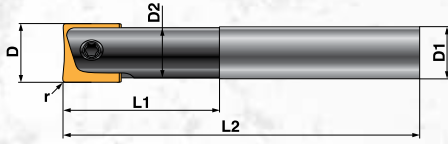
Tool Ordering Number	Dimensions					Screw	Key	Use with Inserts	
	Size ØD	Shank ØD1	Neck ØD2	Neck Length L1	Total Length L2			Type	Code
SFCY-0500-4.0-0500	0.500	0.500	0.440	1.250	4.000	MS12	T20		MB, MBT, RB-N, BS-N, RBT
SFCY-0500-5.0-0500	0.500	0.500	0.440	1.500	5.000	MS12	T20		
SFCY-0500-6.0-0500	0.500	0.500	0.440	1.750	6.000	MS12	T20		
SFCY-0500-6.0-12	0.500	12mm	0.440	1.750	6.000	MS12	T20		
SFCY-0625-5.0-0625	0.625	0.625	0.550	1.375	5.000	MS16	T20		
SFCY-0625-6.25-0625	0.625	0.625	0.550	2.000	6.250	MS16	T20		
SFCY-0750-4.5-0750	0.750	0.750	0.675	1.750	4.500	MS20	T20		
SFCY-0750-6.0-0750	0.750	0.750	0.675	2.000	6.000	MS20	T20		
SFCY-0750-7.5-0750	0.750	0.750	0.675	2.375	7.500	MS20	T20		
SFCY-0750-9.0-0750	0.750	0.750	0.675	2.375	9.000	MS20	T20		
SFCY-1000-6.0-1000	1.000	1.000	0.882	1.750	6.000	MS25	T20		
SFCY-1000-6.0-25	1.000	25mm	0.882	1.750	6.000	MS25	T20		
SFCY-1000-8.0-1000	1.000	1.000	0.882	2.500	8.000	MS25	T20		
SFCY-1000-10.0-1000	1.000	1.000	0.882	2.750	10.000	MS25	T20		
SFCY-1000-10.0-25	1.000	25mm	0.882	2.750	10.000	MS25	T20		
SFCY-1250-7.5-1250	1.250	1.250	1.125	2.250	7.500	MS32	T30		
SFCY-1250-10.0-1250	1.250	1.250	1.125	3.000	10.000	MS32	T30		



SFTA - Taper Steel Shank Holder, Ball

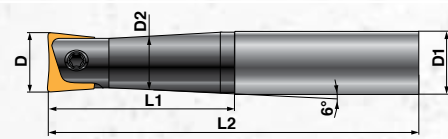
Tool Ordering Number	Dimensions					Screw	Key	Use with Inserts	
	Size ØD	Shank ØD1	Neck ØD2	Neck Length L1	Total Length L2			Type	Code
SFTA-0500-7.5-0625	0.500	0.625	0.440	2.000	7.500	MS 12	T20		MB, MBT, RB-N, BS-N, RBT
SFTA-0625-7.5-0750	0.625	0.750	0.550	2.250	7.500	MS 16	T20		
SFTA-0750-8.0-1000	0.750	1.000	0.675	3.500	8.000	MS 20	T20		
SFTA-0750-10.0-1000	0.750	1.000	0.675	3.500	10.000	MS 20	T20		
SFTA-1000-10.0-1250	1.000	1.250	0.882	4.000	10.000	MS 25	T20		
SFTA-1000-12.5-1250	1.000	1.250	0.882	4.000	12.500	MS 25	T20		
SFTA-1000-15.0-1250	1.000	1.250	0.882	4.000	15.000	MS 25	T20		
SFTA-1250-9.0-1500	1.250	1.500	1.125	4.000	9.000	MS 32	T30		
SFTA-1250-12.0-1500	1.250	1.500	1.125	4.000	12.000	MS 32	T30		

Profile Milling Holders




CYF - Cylindrical Steel Shank Holder, Flat

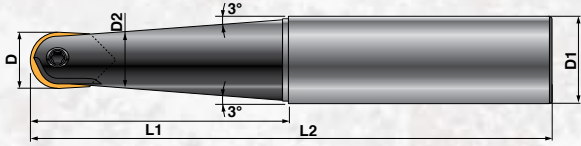
Tool Ordering Number	Dimensions					Screw	Key	Use with Inserts	
	Size ØD	Shank ØD1	Neck ØD2	Neck Length L1	Total Length L2			Type	Code
CYF-0375-4.0-0375	0.375	0.375	0.337	0.750	4.000	MS 10	T15		BD-N, BD-R, BDS, FB-R, TO, TOBD-NF, HF
CYF-0500-4.0-0500	0.500	0.500	0.440	1.250	4.000	MS 12	T20		
CYF-0500-6.0-0500	0.500	0.500	0.440	1.750	6.000	MS 12	T20		
CYF-0500-6.0-12	0.500	12mm	0.440	1.750	6.000	MS 12	T20		
CYF-0625-6.25-0625	0.625	0.625	0.550	2.000	6.250	MS 16	T20		
CYF-0750-6.0-0750	0.750	0.750	0.675	2.000	6.000	MS 20	T20		
CYF-0750-9.0-0750	0.750	0.750	0.675	2.375	9.000	MS 20	T20		
CYF-0750-9.0-18	0.750	18mm	0.675	2.375	9.000	MS 20	T20		
CYF-1000-6.0-1000	1.000	1.000	0.882	1.750	6.000	MS 25	T20		
CYF-1000-6.0-25	1.000	25mm	0.882	1.750	6.000	MS 25	T20		
CYF-1000-8.0-1000	1.000	1.000	0.882	2.500	8.000	MS 25	T20		
CYF-1000-10.0-1000	1.000	1.000	0.882	2.750	10.000	MS 25	T20		
CYF-1000-10.0-25	1.000	25mm	0.882	2.750	10.000	MS 25	T20		
CYF-1250-7.5-1250	1.250	1.250	1.125	2.250	7.500	MS 32	T30		
CYF-1250-10.0-1250	1.250	1.250	1.125	3.000	10.000	MS 32	T30		



TAF - Taper Steel Shank Holder, Flat

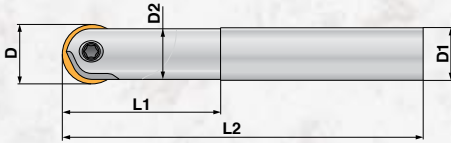
Tool Ordering Number	Dimensions					Screw	Key	Use with Inserts	
	Size ØD	Shank ØD1	Neck ØD2	Neck Length L1	Total Length L2			Type	Code
TAF-0375-6.0-0500	0.375	0.500	0.337	1.750	6.000	MS 10	T15		BD-N, BD-R, BDS, FB-R, TO, TOBD-NF, HF
TAF-0500-7.5-0625	0.500	0.625	0.440	2.000	7.500	MS 12	T20		
TAF-0625-7.5-0750	0.625	0.750	0.550	2.250	7.500	MS 16	T20		
TAF-0750-10.0-1000	0.750	1.000	0.675	3.500	10.000	MS 20	T20		
TAF-1000-10.0-1250	1.000	1.250	0.882	4.000	10.000	MS 25	T20		
TAF-1000-12.5-1250	1.000	1.250	0.882	4.000	12.500	MS 25	T20		
TAF-1000-15.0-1250	1.000	1.250	0.882	4.000	15.000	MS 25	T20		
TAF-1250-9.0-1500	1.250	1.500	1.125	4.000	9.000	MS 32	T30		
TAF-1250-12.0-1500	1.250	1.500	1.125	4.000	12.000	MS 32	T30		

Profile Milling Holders



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

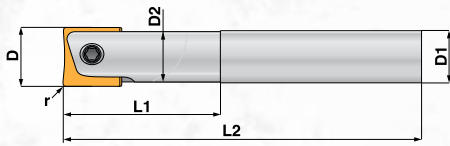
Tool Ordering Number	Dimensions					Screw	Key	Use with Inserts	
	Size ØD	Shank ØD1	Neck ØD2	Neck Length L1	Total Length L2			Type	Code
TAV-0250-3.75-0500	0.250	0.500	0.225	1.250	3.750	MS06N	T7		VRBS, VBD
TAV-0312-3.75-0500	0.3125	0.500	0.281	1.250	3.750	MS08N	T7		VRBS, VBD
CY-0375-4.0-0375	0.375	0.375	0.337	0.750	4.000	MS10	T15		MB, MBT, RB-N, BS-N, BD, BDS, FB, TO, HF, RBT
CY-0375-4.0-0500	0.375	0.500	0.337	1.000	4.000	MS10	T15		MB, MBT, RB-N, BS-N, BD, BDS, FB, TO, HF, RBT
TA-0375-6.0-0500	0.375	0.500	0.337	1.750	6.000	MS10	T15		MB, MBT, RB-N, BS-N, BD, BDS, FB, TO, HF, RBT



CB SFCY - Cylindrical Carbide Shank Holder, Ball

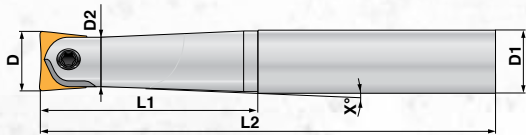
Tool Ordering Number	Dimensions					Screw	Key	Use with Inserts	
	Size ØD	Shank ØD1	Neck ØD2	Neck Length L1	Total Length L2			Type	Code
CBCYV-0250-6.0-0250	0.250	0.250	0.220	1.100	6.000	MS06N	T7		VRBS, VBD
CBCYV-0312-6.0-0312	0.312	0.312	0.280	1.100	6.000	MS08N	T7		VRBS, VBD
CBCY-0375-4.0-0375	0.375	0.375	0.337	1.145	4.000	MS10	T15		MB, MBT, RB-N, BS-N, RBT
CBCY-0375-6.0-0375	0.375	0.375	0.337	1.145	6.000	MS10	T15		
CBSFCY-0500-6.0-0500	0.500	0.500	0.440	1.145	6.625	MS12	T20		
CBSFCY-0500-6.0-12	0.500	12mm	0.440	1.145	6.625	MS12	T20		
CBSFCY-0625-6.0-0625	0.625	0.625	0.550	1.325	6.750	MS16	T20		
CBSFCY-0750-8.0-18	0.750	18mm	0.675	1.500	8.875	MS20	T20		
CBSFCY-0750-8.0-0750	0.750	0.750	0.675	1.512	8.875	MS20	T20		
CBSFCY-1000-8.0-1000	1.000	1.000	0.882	1.866	9.125	MS25	T20		
CBSFCY-1000-8.0-25	1.000	25mm	0.882	1.866	9.125	MS25	T20		

Profile Milling Holders



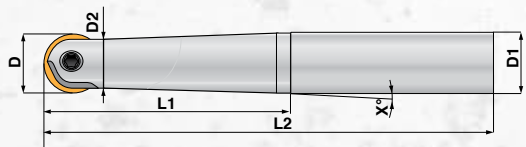
CB CYF - Cylindrical Carbide Shank Holder, Flat

Tool Ordering Number	Dimensions					Screw	Key	Use with Inserts	
	Size ØD	Shank ØD1	Neck ØD2	Neck Length L1	Total Length L2			Type	Code
CBCY-0375-4.0-0375	0.375	0.375	0.337	1.145	4.000	MS10	T15		BD-N, BD-R, BDS, FB-R, TO, TOBD-NF, HF
CBCY-0375-6.0-0375	0.375	0.375	0.337	1.145	6.000	MS10	T15		
CBCYF-0500-6.0-0500	0.500	0.500	0.440	1.145	6.625	MS12	T20		
CBCYF-0500-6.0-12	0.500	12mm	0.440	1.145	6.625	MS12	T20		
CBCYF-0625-6.0-0625	0.625	0.625	0.550	1.325	6.750	MS16	T20		
CBCYF-0750-8.0-18	0.750	18mm	0.675	1.500	8.875	MS20	T20		
CBCYF-0750-8.0-0750	0.750	0.750	0.675	1.512	8.875	MS20	T20		
CBCYF-1000-8.0-1000	1.000	1.000	0.820	1.866	9.125	MS25	T20		
CBCYF-1000-8.0-25	1.000	25mm	0.882	1.866	9.125	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-0250-6.0-0500	0.250	0.500	0.224	1.181 taper	6.125	6° (3°/side)	MS06N	T7		VRBS, VBD
CBTAV-0250-6.0-0500 LT	0.250	0.500	0.224	2.750 taper	6.125	6° (3°/side)	MS06N	T7		
CBTAV-0312-6.0-0500	0.312	0.500	0.285	1.181 taper	6.125	6° (3°/side)	MS08N	T7		



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-0375-6.0-0500	0.375	0.500	0.337	1.181 taper	6.125	6° (3°/side)	MS10	T15		MB, MBT, RB-N, BS-N, BD, BDS, FB, TO, HF, RBT



Profile Milling Program Tool Contents

VRBS, MBT, VBD, BDS	Graphite Machining Program	61	
SFCY	Cylindrical Steel Shank Holder – Ball	62	
SFTA	Taper Steel Shank Holder – Ball	62	
CYF	Cylindrical Steel Shank Holder – Flat	63	
TAF	Taper Steel Shank Holder – Flat	63	
TAV, CY, TA	Spike-Line Cylindrical Steel Shank	64	
CB SFCY	Cylindrical Carbide Shank Holder – Ball	64	
CB CYF	Cylindrical Carbide Shank Holder – Flat	65	
CB TAV	Spike-Line Taper Carbide Shank Holder – Ball & Flat	65	
CB TA	Taper Carbide Uni-Shank Holder – Ball & Flat	66	
CB CYV	Spike Line Taper Carbide Shank – Ball & Flat	66	
CB CY	Cylindrical Carbide Uni-Shank Holder – Ball & Flat	67	
CYFMK	Morse Steel Shank Holder – Flat	67	
CYMK	Morse Steel Shank Holder – Ball	68	
SF CY/CYF	Screw-on Head – Ball & Flat	68-69	
Solid Carbide Adaptor		69	
Inserts		70-73	
Cutting Parameters		74-75	
Verify Surface Roughness		76	
Feed & Speed Calculator		77	

Profile Milling Program Tools

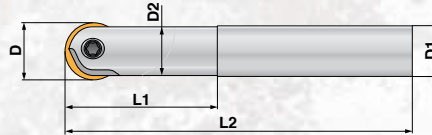
Millstar Profile Milling Tools represent the latest in profile and contour milling technology, providing the competitive edge of shorter machining and lead times, and the advantages of higher machining accuracy and true contouring results.

The Millstar Advantage

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

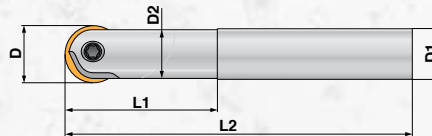


Graphite Machining Program - True Diamond Coated Inserts



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

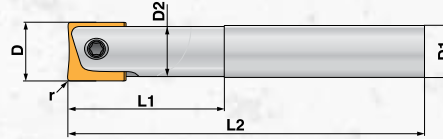
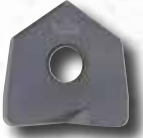
Tool Ordering Number	Dimensions					Recommended Shank Part Number
	Size ØD	Shank ØD1	Neck ØD2	Neck Length L1	Total Length L2	
VRBS-6-DMD	6	6	5,7	30	115	CBCYV-06-115-06
VRBS-8-DMD	8	8	7,5	30	115	CBCYV-08-130-08
RB-10-N-DMD	10	10	9,0	32	150	CBCY-10-150-10
RB-12-N-DMD	12	12	10,8	52	165	CBSFCY-12-150-12
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

Graphite Machining Program - True Diamond Coating or PCD Tipped

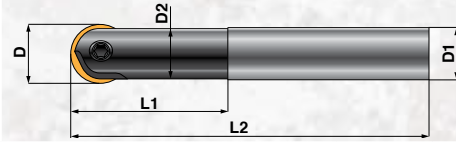


VBD/BDS - Flat Bottom Graphite Machining Line, Metric


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

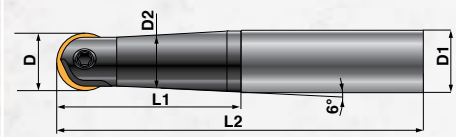
* For other holder options, see page 62 (Metric).

Profile Milling Holders




SFCY - Cylindrical Steel Shank Holder, Ball

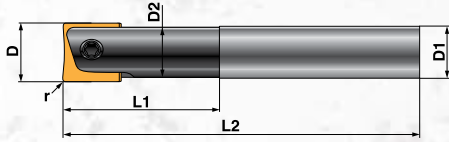
Tool Ordering Number	Dimensions					Screw	Key	Use with Inserts	
	Size ØD	Shank ØD1	Neck ØD2	Neck Length L1	Total Length L2			Type	Code
SFCY-12-125-12	12	12	10,8	36	125	MS12	T20		MB, MBT, RB-N, BS-N, RBT
SFCY-12-150-12	12	12	10,8	46	150	MS12	T20		
SFCY-0500-6.0-12	0.5"	12	11,2	44	152	MS12	T20		
SFCY-14-125-16	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

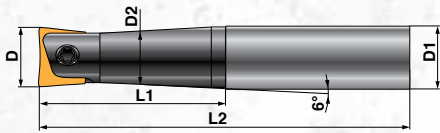
Tool Ordering Number	Dimensions					Screw	Key	Use with Inserts	
	Size ØD	Shank ØD1	Neck ØD2	Neck Length L1	Total Length L2			Type	Code
SFTA-12-190-16	12	16	10,8	60	190	MS12	T20		MB, MBT, RB-N, BS-N, RBT
SFTA-16-190-20	16	20	14,4	57	190	MS16	T20		
SFTA-20-200-25	20	25	18,0	80	200	MS20	T20		
SFTA-25-250-32	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

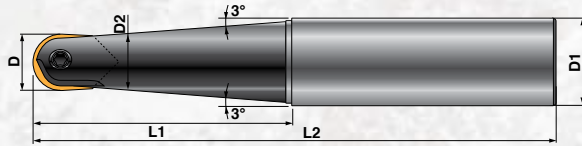
Tool Ordering Number	Dimensions					Screw	Key	Use with Inserts	
	Size ØD	Shank ØD1	Neck ØD2	Neck Length L1	Total Length L2			Type	Code
CYF-10-100-10	10	10	9,0	19	100	MS10	T15		BD-N, BD-R, BDS, FB-R, TO, TOBD-NF, HF
CYF-12-125-12	12	12	10,8	36	125	MS12	T20		
CYF-12-150-12	12	12	10,8	46	150	MS12	T20		
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

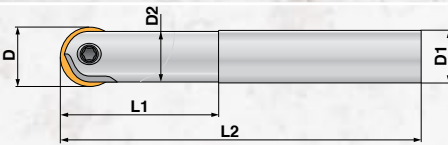
Tool Ordering Number	Dimensions					Screw	Key	Use with Inserts	
	Size ØD	Shank ØD1	Neck ØD2	Neck Length L1	Total Length L2			Type	Code
TAF-10-150-12	10	12	9,0	35	150	MS10	T15		BD-N, BD-R, BDS, FB-R, TO, TOBD-NF, HF
TAF-12-190-16	12	16	10,8	60	190	MS12	T20		
TAF-16-190-20	16	20	14,4	57	190	MS16	T20		
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

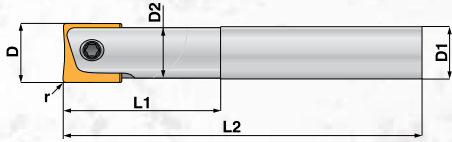
Tool Ordering Number	Dimensions					Screw	Key	Use with Inserts	
	Size ØD	Shank ØD1	Neck ØD2	Neck Length L1	Total Length L2			Type	Code
TAV-06-095-12	6	12	5,7	30	95	MS06N	T7		VRBS, VBD
TAV-08-095-12	8	12	7,5	32	95	MS08N	T7		VRBS, VBD
CY-10-100-10	10	10	9,0	19	100	MS10	T15		VRBS, VBD, MB, MBT, RB-N, BS-N,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

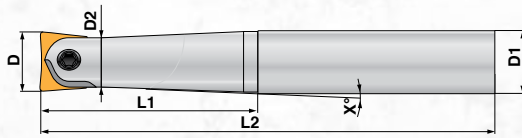
Tool Ordering Number	Dimensions					Screw	Key	Use with Inserts	
	Size ØD	Shank ØD1	Neck ØD2	Neck Length L1	Total Length L2			Type	Code
CBSFCY-12-150-12	12	12	10,8	52	165	MS12	T20		MB, MBT, RB-N, BS-N, RBT
CBSFCY-16-150-16	16	16	14,4	52	170	MS16	T20		
CBSFCY-20-200-20	20	20	18,0	77	225	MS20	T20		
CBSFCY-25-200-25	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

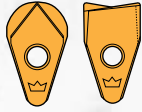


CB CYF - Cylindrical Carbide Shank Holder, Flat

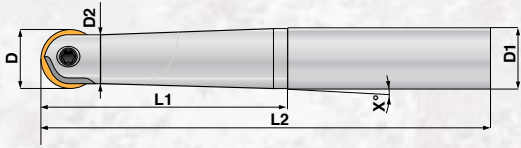
Tool Ordering Number	Dimensions					Screw	Key	Use with Inserts	
	Size ØD	Shank ØD1	Neck ØD2	Neck Length L1	Total Length L2			Type	Code
CBCYF-12-150-12	12	12	10,8	52	165	MS12	T20		BD-N, BD-R, BDS, FB-R, TO, TOBD-NF, HF
CBCYF-16-150-16	16	16	14,4	52	170	MS16	T20		
CBCYF-20-200-20	20	20	18,0	77	225	MS20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



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

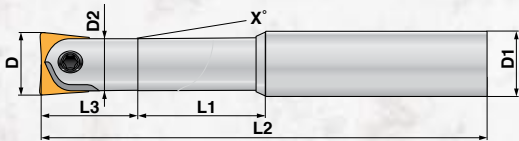
Tool Ordering Number	Dimensions					X°	Screw	Key	Use with Inserts	
	Size ØD	Shank ØD1	Neck ØD2	Neck Length L1	Total Length L2				Type	Code
CBTAV-06-075-12	6	12	5,7	35	75	6° (3°/side)	MS06N	T7		VRBS, VBD
CBTAV-06-150-12	6	12	5,7	30	155	6° (3°/side)	MS06N	T7		
CBTAV-06-150-12 LT	6	12	5,7	70	155	6° (3°/side)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

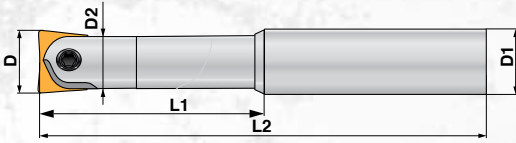
Tool Ordering Number	Dimensions					X°	Screw	Key	Use with Inserts	
	Size ØD	Shank ØD1	Neck ØD2	Neck L1	Total L2				Type	Code
CBTA-10-150-12	10	12	9,0	30	165	6° (3° side)	MS10	T15		MB, MBT, RB-N, BS-N, BD, BDS, FB, TO, HF, RBT



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

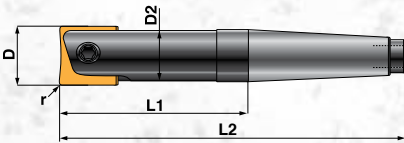
Tool Ordering Number	Dimensions						X°	Screw	Key	Use with Inserts	
	Size ØD	Shank ØD1	Neck ØD2	Neck L3	Neck L1	Total L2				Type	Code
CBCYV-06-115-12	6	12	5,7	30	45	115	1°	MS06N	T7		VRBS, VBD
CBCYV-08-100-12	8	12	7,5	30	30	100	1°	MS08N	T7		VRBS, VBD

Profile Milling Program Tools



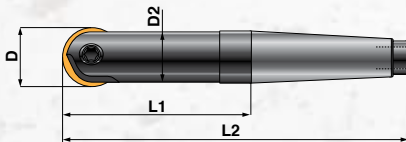
CB CY - Cylindrical Carbide Uni-Shank Holder, Ball & Flat

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		
CBCY-10-150-10	10	10	9,0	32	150	MS10	T15		MB, MBT, RB-N, BS-N, BD, BDS, FB, TO, HF, RBT



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		