



Cutting Tool Design

35 years of profile milling experience maximizing
past and present machine tool capabilities



" H o m e o f t h e M o l d M a s h e r "

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Milling Guide	3
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HIBF Series

HIBF Metric Ballnose	4
HIBF Metric Ballnose	5
HIBF Metric Ballnose Weldon Shank	6
HIBF Metric Morse Taper	7
HIBF Metric Flat Bottom Finishing Tool	8
HIBF US Standard Flat Bottom Finishing Tool	9
HIBF A Style Inserts	10
HIBF Flat Bottom Inserts, Screws	11

Mold Masher

Mold Masher 1.00 Inserts, Accessories	12
Mold Masher 1.25 Inserts, Accessories	13
Mold Masher 1.50 Inserts, Accessories	14
Mold Masher 2.00 Inserts, Accessories	15
Mold Masher Metric 25mm, Morse Taper, Inserts, Accessories	16
Mold Masher Metric 30mm, Inserts, Accessories	17
Mold Masher Metric 32mm, Morse Taper, Inserts, Accessories	18
Mold Masher Metric 40mm, Morse Taper, Inserts, Accessories	19
Mold Masher Metric 50mm, Morse Taper, Inserts, Accessories	20

Threaded

Cat 40mm/50mm	21
---------------	----

High Feed Mills

US & Metric Face Mill Positive Rake	
US & Metric Threaded Positive Rake	22
US & Metric Shank Tooling Positive Rake	
Morse Taper, Inserts, Screws	23

Milling

Button Mills 7° Positive Rake, Inserts	24
Button Mills Precision Finishing Positive and Negative Rake	
Inserts, Face Mill Extension, Cat 40 and Cat 50, Arbor	25

Cutters

Threaded Shank Cutters	26
Threaded Cutters	27
Aluminum Cutters	28
Pin Loc Style Shank Extension	29

HSK	30
HSK A 63 Threaded Style	31
HSK	32
HWZ Cutters	33
Profile Milling Cutters	34
Brazed End Mills	35
Solid End Mills	36
Solid End Mills	37
Accessories	38
Terms and Conditions	39



Milling Guide



RPM = Resolution Per Minute
IPM = Inches Per Minute
DOC = Depth Of Cut

HIBF Feed and Speed values presented as a starting point:

The direction we recommend with the HIBF Series is to begin with higher Speed and lower Feed rates to circumvent catastrophic tool failure. Then reducing the Speed rates and increasing Feed rate until optimizing the best removal rate and tool life. Feed and Speed rates should be reduced to compensate for poor set-up, longer reach, worn spindles, full step over or deeper depths of cut.

Steel: 28 - 34 HRc - P20, 1018, 4140, 4130, 4340

Cutting Dia	RPM	IPM	DOC
.375/10mm	3000-4000	45-65	.010-.032
.500/12mm/14mm	3000-4000	45-65	.020-.040
.625/16mm	3000-4000	45-65	.020-.040
.750/20mm	2600-3800	65-85	.020-.040
1.0/25mm	2600-3800	60-100	.020-.050
1.25/32mm	2400-3200	60-100	.032-.060

Tool Steel: 38-42 HRc - S7, A2, D2, GM190

Cutting Dia	RPM	IPM	DOC
.375/10mm	2600-3800	45-65	.010-.025
.500/12mm/14mm	2600-3800	65-80	.010-.025
.625/16mm	2600-3800	65-80	.010-.032
.750/20mm	2400-3000	65-100	.010-.040
1.0/25mm	2400-3000	65-150	.015-.060
1.25/32mm	2200-2800	65-200	.015-.080

Iron: 32 HRc - Grey, Nodular/Ductile

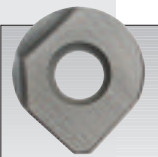
Cutting Dia	RPM	IPM	DOC
.375/10mm	2600-4000	50-80	.010-.032
.500/12mm/14mm	2600-4000	50-80	.020-.040
.625/16mm	2600-4000	80-120	.020-.050
.750/20mm	2200-4000	80-160	.020-.100
1.0/25mm	2200-4000	80-220	.020-.120
1.25/32mm	2000-3200	80-225	.020-.200

Roughing With "Mold Masher"

1.00\25MM Mold Masher			
Depth Of Cuts Step Overs	.250 - 6.5mm .125 - 3.5mm	Stainless Steel 304	Rpm 1,200-1,500 Inch/Min 10-15 Inch/Rev .011-.015
Depth Of Cuts Step Overs	.375 - 9.5mm .200 - 5 mm	Cast Steel -GM 338 Tool Steel -D2, A2 Low Alloys -P20	Rpm 1,000-2700 Inch/Min 15-38 Inch/Rev .012-.017
Depth Of Cuts Step Overs	.500 - 12mm .250 - 6.5mm	Cast Iron GM238m Nodular Iron 243m	Rpm 1,900-2600 Inch/Min 32-45 Inch/Rev .014-.022
1.25\32MM Mold Masher			
Depth Of Cuts Step Overs	.375 - 9.5mm .125 - 3.5mm	Stainless Steel 304	Rpm 1,300-1,700 Inch/Min 20-25 Inch/Rev .011-.015
Depth Of Cuts Step Overs	.500 -12mm .250 - 6.5mm	Cast Steel -GM 338 Tool Steel -D2, A2 Low Alloys -P20	Rpm 1,300-1,800 Inch/Min 15-24 Inch/Rev .011-.018
Depth Of Cuts Step Overs	.625 - 16mm .300 - 8mm	Cast Iron GM238m Nodular Iron 243m	RPM 1,800-2300 Inch/Min 32-60 Inch/Rev .012-.024
1.50\40MM Mold Masher			
Depth Of Cuts Step Overs	.375 - 9.5mm .200 - 5mm	Stainless Steel 304	RPM 1,000-1,500 Inch/Min 15-20 Inch/Rev .012-.016
Depth Of Cuts Step Overs	.500 - 12mm .300 - 8mm	Cast Steel -GM 338 Tool Steel -D2, A2 Low Alloys	RPM 1,200-1,900 Inch/Min 12-25 Inch/Rev .010-.018
Depth Of Cuts Step Overs	.625 16mm .300 - 8mm	Cast Iron GM238m Nodular Iron 243m	RPM 1,500-2500 Inch/Min 30-60 Inch/Rev .016-.026
2.00\50MM Mold Masher			
Depth Of Cuts Step Overs	.500 - 12mm .500 - 12mm	Stainless 304	RPM 700-1000 Inch/Min 9-14 Inch/Rev .010-.016
Depth Of Cuts Step Overs	.750 - 19mm 1.00 - 25mm	Cast Steel -GM 338 Tool Steel -D2, A2 Low Alloys -P20	RPM 900-1500 Inch/Min 13-36 Inch/Rev.012-.018
Depth Of Cuts Step Overs	1.00 - 25mm 1.00 - 25mm	Cast Iron GM238m Nodular Iron 243m	RPM 1,000-1500 Inch/Min 22-50 Inch/Rev .016-.028

U.S. Standard Ballnose with Weldon Shank

EDP#	Description	Mill Dia	OAL	Ext Length	Shank Dia
HM1010110	HIBF 10mm Dia x 101mm OAL x 10mm Shank	10	101	24	10
HM1011412	HIBF 10mm Dia x 114mm OAL x 12mm Shank	10	114	60	12
HM1014010	HIBF 10mm Dia x 140mm OAL x 10mm Shank	10	140	56	10
HM1014610	HIBF 10mm Dia x 146mm OAL x 10mm Shank	10	146	25	10
HM1015312	HIBF 10mm Dia x 153mm OAL x 12mm Shank	10	153	57	12
HM1210112	HIBF 12mm Dia x 101mm OAL x 12mm Shank	12	101	24	12
HM1215312	HIBF 12mm Dia x 153mm OAL x 12mm Shank	12	153	25	12
HM1215316	HIBF 12mm Dia x 153mm OAL x 16mm Shank	12	153	55	16
HM12153625	HIBF 12mm Dia x 153mm OAL x .625 Shank	12	153	55	5/8"
HM1410116	HIBF 14mm Dia x 101mm OAL x 16mm Shank	14	101	50	16
HM14101625	HIBF 14mm Dia x 101mm OAL x .625 Shank	14	101	50	5/8"
HM1414614	HIBF 14mm Dia x 146mm OAL x 14mm Shank	14	146	25	14
HM14146500	HIBF 14mm Dia x 146mm OAL x .500 Shank	14	146	25	1/2"
HM14146625	HIBF 14mm Dia x 146mm OAL x .625 Shank	14	146	50	5/8"
HM1414616	HIBF 14mm Dia x 146mm OAL x 16mm Shank	14	146	50	16
HM1614016	HIBF 16mm Dia x 140mm OAL x 16mm Shank	16	140	44	16
HM1615320	HIBF 16mm Dia x 153mm OAL x 20mm Shank	16	153	50	20
HM16153750	HIBF 16mm Dia x 153mm OAL x .750 Shank	16	153	50	3/4"
HM1620316	HIBF 16mm Dia x 203mm OAL x 16mm Shank	16	203	61	16
HM1612020	HIBF 16mm Dia x 120mm OAL x 20mm Shank	16	120	66	20
HM1620320	HIBF 16mm Dia x 203mm OAL x 20mm Shank	16	203	61	20
HM16203750	HIBF 16mm Dia x 203mm OAL x .750 Shank	16	203	61	3/4"
HM2014020	HIBF 20mm Dia x 140mm OAL x 20mm Shank	20	140	47	20
HM20140750	HIBF 20mm Dia x 140mm OAL x .750 Shank	20	140	47	3/4"
HM2020320	HIBF 20mm Dia x 203mm OAL x 20mm Shank	20	203	50	20
HM20203750	HIBF 20mm Dia x 203mm OAL x .750 Shank	20	203	50	3/4"
HM2012025	HIBF 20mm Dia x 120mm OAL x 25mm Shank	20	120	57	25
HM2015325	HIBF 20mm Dia x 153mm OAL x 25mm Shank	20	153	95	25
HM2020325	HIBF 20mm Dia x 203mm OAL x 25mm Shank	20	203	57	25



See inserts
page 10-11

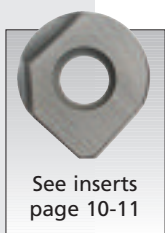
U.S. Standard Ballnose with Weldon Shank

EDP#	Description	Mill Dia	OAL	Ext Length	Shank Dia
HM20120100	HIBF 20mm Dia x 120mm OAL x 1.00 Shank	20	120	57	1"
HM20153100	HIBF 20mm Dia x 153mm OAL x 1.00 Shank	20	153	95	1"
HM20203100	HIBF 20mm Dia x 203mm OAL x 1.00 Shank	20	203	63	1"
HM2515325	HIBF 25mm Dia x 153mm OAL x 25mm Shank	25	153	59	25
HM2520325	HIBF 25mm Dia x 203mm OAL x 25mm Shank	25	203	59	25
HM2512032	HIBF 25mm Dia x 120mm OAL x 32mm Shank	25	120	57	32
HM2515332	HIBF 25mm Dia x 153mm OAL x 32mm Shank	25	153	89	32
HM2519032	HIBF 25mm Dia x 190mm OAL x 32mm Shank	25	190	105	32
HM3012032	HIBF 30mm Dia x 120mm OAL x 32mm Shank	30	120	57	32
HM3015332	HIBF 30mm Dia x 153mm OAL x 32mm Shank	30	153	89	32
HM3019032	HIBF 30mm Dia x 190mm OAL x 32mm Shank	30	190	107	32
HM3020332	HIBF 30mm Dia x 203mm OAL x 32mm Shank	30	203	153	32
HM3022932	HIBF 30mm Dia x 229mm OAL x 32mm Shank	30	229	107	32
HM3027932	HIBF 30mm Dia x 279mm OAL x 32mm Shank	30	279	137	32
HM30120125	HIBF 30mm Dia x 120mm OAL x 1.25 Shank	30	120	57	1-1/4"
HM30153125	HIBF 30mm Dia x 153mm OAL x 1.25 Shank	30	153	89	1-1/4"
HM30190125	HIBF 30mm Dia x 190mm OAL x 1.25 Shank	30	190	107	1-1/4"
HM30203125	HIBF 30mm Dia x 203mm OAL x 1.25 Shank	30	203	153	1-1/4"
HM30229125	HIBF 30mm Dia x 229mm OAL x 1.25 Shank	30	229	107	1-1/4"
HM30279125	HIBF 30mm Dia x 279mm OAL x 1.25 Shank	30	279	137	1-1/4"
HM3212032	HIBF 32mm Dia x 120mm OAL x 32mm Shank	32	120	57	32
HM3215332	HIBF 32mm Dia x 153mm OAL x 32mm Shank	32	153	89	32
HM3220332	HIBF 32mm Dia x 203mm OAL x 32mm Shank	32	203	50	32



U.S. Standard Ballnose with Weldon Shank

EDP#	Description	Mill Dia	OAL	Ext Length	Shank Dia
H375400375	HIBF .375 Dia x 4.00 OAL x .375 Shank	3/8"	4"	3/4"	3/8"
H375450500	HIBF .375 Dia x 4.50 OAL x .500 Shank	3/8"	4-1/2"	2 3/8"	1/2"
H375550500	HIBF .375 Dia x 5.50 OAL x .500 Shank	3/8"	5-1/2"	2-1/4"	1/2"
H375575375	HIBF .375 Dia x 5.75 OAL x .375 Shank	3/8"	5-3/4"	1"	3/8"
H500400500	HIBF .500 Dia x 4.00 OAL x .500 Shank	1/2"	4"	1"	1/2"
H500400750	HIBF .500 Dia x 4.00 OAL x .750 Shank	1/2"	4"	1-1/4"	3/4"
H500400625	HIBF .500 Dia x 4.00 OAL x .625 Shank	1/2"	4"	2"	5/8"
H500575500	HIBF .500 Dia x 5.75 OAL x .500 Shank	1/2"	5-3/4"	1"	1/2"
H500575625	HIBF .500 Dia x 5.75 OAL x .625 Shank	1/2"	5-3/4"	2-1/4"	5/8"
H500750625	HIBF .500 Dia x 7.50 OAL x .625 Shank	1/2"	7-1/2"	4-1/2"	5/8"
H625475750	HIBF .625 Dia x 4.75 OAL x .750 Shank	5/8"	4-3/4"	2-5/8"	3/4"
H625550625	HIBF .625 Dia x 5.50 OAL x .625 Shank	5/8"	5-1/2"	1-3/4"	5/8"
H625600750	HIBF .625 Dia x 6.00 OAL x .750 Shank	5/8"	6"	2"	3/4"
H625875750	HIBF .625 Dia x 8.75 OAL x .750 Shank	5/8"	8-3/4"	5-3/4"	3/4"
H750475100	HIBF .750 Dia x 4.75 OAL x 1.00 Shank	3/4"	4-3/4"	2-1/4"	1"
H750550750	HIBF .750 Dia x 5.50 OAL x .750 Shank	3/4"	5-1/2"	1-7/8"	3/4"
H750600100	HIBF .750 Dia x 6.00 OAL x 1.00 Shank	3/4"	6"	3-5/8"	1"
H750800100	HIBF .750 Dia x 8.00 OAL x 1.00 Shank	3/4"	8"	2-3/8"	1"
H750800750	HIBF .750 Dia x 8.00 OAL x .750 Shank	3/4"	8"	2"	3/4"
H750900100	HIBF .750 Dia x 9.00 OAL x 1.00 Shank	3/4"	9"	6"	1"
H750100750	HIBF .750 Dia x 10.00 OAL x .750 Shank	3/4"	10"	2-1/8"	3/4"
H100475125	HIBF 1.00 Dia x 4.75 OAL x 1.25 Shank	1"	4-3/4"	2-1/4"	1-1/4"
H100600100	HIBF 1.00 Dia x 6.00 OAL x 1.00 Shank	1"	6"	2-1/4"	1"
H100600125	HIBF 1.00 Dia x 6.00 OAL x 1.25 Shank	1"	6"	3-1/2"	1-1/4"
H100750125	HIBF 1.00 Dia x 7.50 OAL x 1.25 Shank	1"	7-1/2"	4-1/4"	1-1/4"
H100800100	HIBF 1.00 Dia x 8.00 OAL x 1.00 Shank	1"	8"	2"	1"
H100900100	HIBF 1.00 Dia x 9.00 OAL x 1.00 Shank	1"	9"	5"	1"
H100120100	HIBF 1.00 Dia x 12.00 OAL x 1.00 Shank	1"	12"	6"	1"
H125475125	HIBF 1.25 Dia x 4.75 OAL x 1.25 Shank	1-1/4"	4-3/4"	2-1/2"	1-1/4"
H125600125	HIBF 1.25 Dia x 6.00 OAL x 1.25 Shank	1-1/4"	6"	3"	1-1/4"
H125750125	HIBF 1.25 Dia x 7.50 OAL x 1.25 Shank	1-1/4"	7-1/2"	4-1/4"	1-1/4"
H125800125	HIBF 1.25 Dia x 8.00 OAL x 1.25 Shank	1-1/4"	8"	2"	1-1/4"



Morse Taper (MT)

EDP#	Description	Mill Dia	OAL	Ext Length	Shank Dia
HMT1416503	HIBF 14mm Dia x 165mm OAL x 3 Morse Taper	14	165	80	3MT
HMT1615203	HIBF 16mm Dia x 152mm OAL x 3 Morse Taper	16	152	68	3MT
HMT1618403	HIBF 16mm Dia x 184mm OAL x 3 Morse Taper	16	184	100	3MT
HMT2015203	HIBF 20mm Dia x 152mm OAL x 3 Morse Taper	20	152	68	3MT
HMT2018403	HIBF 20mm Dia x 184mm OAL x 3 Morse Taper	20	184	100	3MT
HMT2514703	HIBF 25mm Dia x 147mm OAL x 3 Morse Taper	25	147	63	3MT
HMT2517803	HIBF 25mm Dia x 178mm OAL x 3 Morse Taper	25	178	91	3MT
HMT3020304	HIBF 30mm Dia x 203mm OAL x 4 Morse Taper	30	203	90	4MT
HMT3022804	HIBF 30mm Dia x 228mm OAL x 4 Morse Taper	30	228	115	4MT
HMT3220304	HIBF 32mm Dia x 203mm OAL x 4 Morse Taper	32	203	90	4MT
HMT3222804	HIBF 32mm Dia x 228mm OAL x 4 Morse Taper	32	228	115	4MT



A Balanced Toolholder and Tools Provide:

- Better Surface Finish
- Tighter Tolerances
- Increased Tool Life
- Longer Spindle and Bearing Life

WE CAN BALANCE YOUR TOOLS!



See inserts
page 10-11

Flat Bottom Finishing Tool

EDP#	Description	Mill Dia	OAL	Ext Length	Shank Dia
FM1010110	Flat HIBF 10mm Dia x 101mm OAL x 10mm Shank	10	101	34	10
FM1011412	Flat HIBF 10mm Dia x 114mm OAL x 12mm Shank	10	114	60	12
FM1210112	Flat HIBF 12mm Dia x 101mm OAL x 12mm Shank	12	101	38	12
FM1215312	Flat HIBF 12mm Dia x 153mm OAL x 12mm Shank	12	153	38	12
FM1410116	Flat HIBF 14mm Dia x 101mm OAL x 16mm Shank	14	101	55	16
FM14101625	Flat HIBF 14mm Dia x 101mm OAL x .625 Shank	14	101	55	5/8"
FM1414614	Flat HIBF 14mm Dia x 146mm OAL x 14mm Shank	14	146	38	14
FM1612016	Flat HIBF 16mm Dia x 120mm OAL x 16mm Shank	16	120	70	16
FM1615316	Flat HIBF 16mm Dia x 153mm OAL x 16mm Shank	16	153	38	16
FM1615320	Flat HIBF 16mm Dia x 153mm OAL x 20mm Shank	16	153	52	20
FM1620320	Flat HIBF 16mm Dia x 203mm OAL x 20mm Shank	16	203	52	20
FM16203750	Flat HIBF 16mm Dia x 203mm OAL x .750 Shank	16	203	52	3/4"
FM2017020	Flat HIBF 20mm Dia x 170mm OAL x 20mm Shank	20	170	48	20
FM2015325	Flat HIBF 20mm Dia x 153mm OAL x 25mm Shank	20	153	97	25
FM2519032	Flat HIBF 25mm Dia x 190mm OAL x 32mm Shank	25	190	104	32
FM2520325	Flat HIBF 25mm Dia x 203mm OAL x 25mm Shank	25	203	55	25

NEW!

High Feed Cutter Inserts



U.S. Standard

EDP#	Description
HFHC3751	High Feed Insert .375 Coated
HFHC5001	High Feed Insert .500 Coated
HFHC6251	High Feed Insert .625 Coated
HFHC7501	High Feed Insert .750 Coated
HFHC1001	High Feed Insert 1.00 Coated

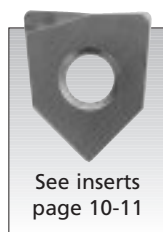
Metric

EDP#	Description
HFHC101	High Feed Insert 10mm Coated
HFHC121	High Feed Insert 12mm Coated
HFHC141	High Feed Insert 14mm Coated
HFHC161	High Feed Insert 16mm Coated
HFHC201	High Feed Insert 20mm Coated
HFHC251	High Feed Insert 25mm Coated

See inserts
page 10-11

U. S. Standard Flat Bottom Finishing Tool

EDP#	Description	Mill Dia	OAL	Ext Length	Shank Dia
F375400375	Flat HIBF .375 Dia x 4.00 OAL x .375 Shank	3/8"	4"	1-1/2"	3/8"
F375450500	Flat HIBF .375 Dia x 4.50 OAL x .500 Shank	3/8"	4-1/2"	2-1/2"	1/2"
F375575375	Flat HIBF .375 Dia x 5.75 OAL x .375 Shank	3/8"	5-3/4"	1-1/2"	3/8"
F500400500	Flat HIBF .500 Dia x 4.00 OAL x .500 Shank	1/2"	4"	2"	1/2"
F500400625	Flat HIBF .500 Dia x 4.00 OAL x .625 Shank	1/2"	4"	2"	5/8"
F500575500	Flat HIBF .500 Dia x 5.75 OAL x .500 Shank	1/2"	5-3/4"	1-1/4"	1/2"
F500575625	Flat HIBF .500 Dia x 5.75 OAL x .625 Shank	1/2"	5-3/4"	2-1/8"	5/8"
F625475625	Flat HIBF .625 Dia x 4.75 OAL x .625 Shank	5/8"	4-3/4"	2-3/4"	5/8"
F625600625	Flat HIBF .625 Dia x 6.00 OAL x .625 Shank	5/8"	6"	1-1/2"	5/8"
F750475100	Flat HIBF .750 Dia x 4.75 OAL x 1.00 Shank	3/4"	4-3/4"	2-1/2"	1"
F750550750	Flat HIBF .750 Dia x 5.50 OAL x .750 Shank	3/4"	5-1/2"	1-7/8"	3/4"
F750600100	Flat HIBF .750 Dia x 6.00 OAL x 1.00 Shank	3/4"	6"	3-3/4"	1"
F750800750	Flat HIBF .750 Dia x 8.00 OAL x .750 Shank	3/4"	8"	2-1/4"	3/4"
F750110750	Flat HIBF .750 Dia x 11.0 OAL x .750 Shank	3/4"	11"	1-7/8"	3/4"
F100475125	Flat HIBF 1.00 Dia x 4.75 OAL x 1.25 Shank	1"	4-3/4"	2-1/2"	1-1/4"
F100600100	Flat HIBF 1.00 Dia x 6.00 OAL x 1.00 Shank	1"	6"	2-1/2"	1"
F100600125	Flat HIBF 1.00 Dia x 6.00 OAL x 1.25 Shank	1"	6"	3-5/8"	1-1/4"
F100750125	Flat HIBF 1.00 Dia x 7.50 OAL x 1.25 Shank	1"	7-1/2"	4-1/4"	1-1/4"
F100800100	Flat HIBF 1.00 Dia x 8.00 OAL x 1.00 Shank	1"	8"	2-3/8"	1"
F100110100	Flat HIBF 1.00 Dia x 11.0 OAL x 1.00 Shank	1"	11"	2-3/8"	1"



Inserts HIBF Bottom - U.S. Standard

EDP#	Description	Coating TA2
IH3751375	HIBF INS .375 MicroC-2	•
IH5001500	HIBF INS .500 MicroC-2	•
IH6251625	HIBF INS .625 MicroC-2	•
IH7501750	HIBF INS .750 MicroC-2	•
IH1001100	HIBF INS 1.00 MicroC-2	•
IH1251125	HIBF INS 1.25 MicroC-2	•

**Standard Coating TA2 TiALN
others in stock or on request
TiN, TiALN, TiCN, TiALCN, CRN/CRC**



HIBF-Inserts Ball - Metric

EDP#	Description	Coating TA2
IM10110	HIBF 10mm Insert MicroC-2	•
IM12112	HIBF 12mm Insert MicroC-2	•
IM14114	HIBF 14mm Insert MicroC-2	•
IM16116	HIBF 16mm Insert MicroC-2	•
IM20120	HIBF 20mm Insert MicroC-2	•
IM25125	HIBF 25mm Insert MicroC-2	•
IM30130	HIBF 30mm Insert MicroC-2	•
IM32132	HIBF 32mm Insert MicroC-2	•

EDP#	Description
IHS3751375	S Gash Style .375 Coated
IHS5001500	S Gash Style .500 Coated
IHS7501750	S Gash Style .750 Coated
IHS1001100	S Gash Style 1.00 Coated
IHS1251125	S Gash Style 1.25 Coated

EDP#	Description
IMS10110	S Gash Style 10mm Coated
IMS16116	S Gash Style 16mm Coated
IMS20120	S Gash Style 20mm Coated
IMS25125	S Gash Style 25mm coated
IMS30130	S Gash Style 30mm Coated
IMS32132	S Gash Style 32mm Coated

**NEW!
S-GASH**



**Standard Coating
TA2 ALTiN others
in stock or on
request
TiN, TiALN, TiCN,
TiALCN, CRN/CRC**

U.S. Standard "A" Style Finisher

EDP#	Description	Coating K-Coat
IHA3751375	A Style .375 Coated	•
IHA5001500	A Style .500 Coated	•
IHA6251625	A Style .625 Coated	•
IHA7501750	A Style .750 Coated	•
IHA1001100	A Style 1.00 Coated	•



"A" Style Metric

EDP#	Description	Coating K-Coat
IMA10110	A Style 10mm Coated	•
IMA12112	A Style 12mm Coated	•
IMA16116	A Style 16mm Coated	•
IMA20120	A Style 20mm Coated	•
IMA25125	A Style 25mm Coated	•



HIBF Inserts



Inserts HIBF Flat Bottom U.S. Standard

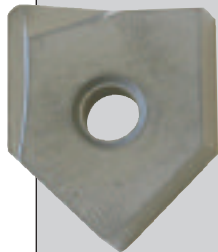
EDP#	Description	Coating	Corner RAD Standard
IF3751031	Flat .375 HIBF .031 Radius	•	.031
IF3751062	Flat .375 HIBF .062 Radius	•	.062
IF5001031	Flat .500 HIBF .031 Radius	•	.031
IF5001062	Flat .500 HIBF .062 Radius	•	.062
IF6251031	Flat .625 HIBF .031 Radius	•	.031
IF6251062	Flat .625 HIBF .062 Radius	•	.062
IF7501031	Flat .750 HIBF .031 Radius	•	.031
IF7501062	Flat .750 HIBF .062 Radius	•	.062
IF1001031	Flat 1.00 HIBF .031 Radius	•	.031
IF1001062	Flat 1.00 HIBF .062 Radius	•	.062

HIBF Inserts Flat - Metric

EDP#	Description	Coating TA2	Corner RAD Standard
IFM10105	Flat 10mm HIBF 0.5 Radius	•	0.5mm
IFM10108	Flat 10mm HIBF 0.8 Radius	•	0.8mm
IFM12105	Flat 12mm HIBF 0.5 Radius	•	0.5mm
IFM12110	Flat 12mm HIBF 1mm Radius	•	1mm
IFM12120	Flat 12mm HIBF 2mm Radius	•	2mm
IFM14110	Flat 14mm HIBF 1mm Radius	•	1mm
IFM16105	Flat 16mm HIBF 0.5 Radius	•	0.5mm
IFM16113	Flat 16mm HIBF 1.3 Radius	•	1.3mm
IFM16120	Flat 16mm HIBF 2mm Radius	•	2mm
IFM20110	Flat 20mm HIBF 1mm Radius	•	1mm
IFM20116	Flat 20mm HIBF 1.6mm Radius	•	1.6mm
IFM20120	Flat 20mm HIBF 2mm Radius	•	2mm
IFM20130	Flat 20mm HIBF 3mm Radius	•	3mm
IFM25120	Flat 25mm HIBF 2mm Radius	•	2mm

More RADs Available - In-Stock or Custom!

Standard Coating TA2 TiALN
others in stock or on request
TiN, TiALN, TiCN, TiALCN, CRN/CRC



**90°
Straight
Side**

EDP#	Description	Coating TA2	Corner RAD Standard
IFM9012105	Flat 90° Side 12mm 0.5mm Radius	•	0.5mm
IFM9012110	Flat 90° Side 12mm 1mm Radius	•	1mm
IFM9012120	Flat 90° Side 12mm 2mm Radius	•	2mm
IFM9016105	Flat 90° Side 16mm 0.5mm Radius	•	0.5mm
IFM9016113	Flat 90° Side 16mm 1.3mm Radius	•	1.3mm
IFM9016120	Flat 90° Side 16mm 2mm Radius	•	2mm
IFM9020110	Flat 90° Side 20mm 1mm Radius	•	1mm
IFM9020116	Flat 90° Side 20mm 1.6mm Radius	•	1.6mm
IFM9020120	Flat 90° Side 20mm 2mm Radius	•	2mm
IFM9020130	Flat 90° Side 20mm 3mm Radius	•	3mm

HIBF Screw

EDP#	Description
SCRH375	HIBF .375/10mm Screw
SCRH12	HIBF 12mm Screw
SCRH500	HIBF .500/14mm Screw
SCRH625	HIBF .625/16mm Screw
SCRH750	HIBF .750/20mm Screw
SCRH100	HIBF 1.00/25mm Screw
SCRH125	HIBF 1.25/30mm/32mm Screw

Screw Fit:
U.S. Standard & Metric HIBF Ball & Flat Bottom



Phone: 810-629-9885 • Fax: 810-629-2745

Mold Masher

1.00 Mold Masher



EDP#	Description	Mill Dia	OAL	Ext Length	Shank Dia	Rake
M100450100N	1.00 Dia x 4.50 OAL x 1.00 Shank	1"	4-1/2"	2-1/4"	1"	Neg
M100450100P	1.00 Dia x 4.50 OAL x 1.00 Shank	1"	4-1/2"	2-1/4"	1"	Pos
M100475125N	1.00 Dia x 4.75 OAL x 1.25 Shank	1"	4-3/4"	2-1/4"	1-1/4"	Neg
M100475125P	1.00 Dia x 4.75 OAL x 1.25 Shank	1"	4-3/4"	2-1/4"	1-1/4"	Pos
M100600100N	1.00 Dia x 6.00 OAL x 1.00 Shank	1"	6"	2-1/4"	1"	Neg
M100600100P	1.00 Dia x 6.00 OAL x 1.00 Shank	1"	6"	2-1/4"	1"	Pos
M100600125N	1.00 Dia x 6.00 OAL x 1.25 Shank	1"	6"	3-1/2"	1-1/4"	Neg
M100600125P	1.00 Dia x 6.00 OAL x 1.25 Shank	1"	6"	3-1/2"	1-1/4"	Pos
M100800100N	1.00 Dia x 8.00 OAL x 1.00 Shank	1"	8"	2-1/4"	1"	Neg
M100800100P	1.00 Dia x 8.00 OAL x 1.00 Shank	1"	8"	2-1/4"	1"	Pos
M100900125N	1.00 Dia x 9.00 OAL x 1.25 Shank	1"	9"	5-3/4"	1-1/4"	Neg
M100900125P	1.00 Dia x 9.00 OAL x 1.25 Shank	1"	9"	5-3/4"	1-1/4"	Pos
M100900150N	1.00 Dia x 9.00 OAL x 1.50 Shank	1"	9"	6-1/4"	1-1/2"	Neg
M100900150P	1.00 Dia x 9.00 OAL x 1.50 Shank	1"	9"	6-1/4"	1-1/2"	Pos
M100100100N	1.00 Dia x 10.00 OAL x 1.00 Shank	1"	10"	6"	1"	Neg
M100100100P	1.00 Dia x 10.00 OAL x 1.00 Shank	1"	10"	6"	1"	Pos
M1001100N	1.00 Dia x 11.00 OAL x 1.00 Shank	1"	11"	2-1/4"	1"	Neg
M1001100P	1.00 Dia x 11.00 OAL x 1.00 Shank	1"	11"	2-1/4"	1"	Pos
M1001100N	1.00 Dia x 11.00 OAL x 1.25 Shank	1"	11"	6"	1-1/4"	Neg
M1001100P	1.00 Dia x 11.00 OAL x 1.25 Shank	1"	11"	6"	1-1/4"	Pos
M1001300N	1.00 Dia x 13.00 OAL x 1.25 Shank	1"	13"	6"	1-1/4"	Neg
M1001300P	1.00 Dia x 13.00 OAL x 1.25 Shank	1"	13"	6"	1-1/4"	Pos

Inserts 1.00 Mold Masher



EDP#	Description
M1000N	1.00 Dia Mold Masher Insert Uncoated Neg Rake
M1000P	1.00 Dia Mold Masher Insert Uncoated Pos Rake
M1001N	1.00 Dia Mold Masher Insert Coated Neg Rake
M1001P	1.00 Dia Mold Masher Insert Coated Pos Rake
M1000NCB	1.00 Dia Mold Masher Insert Uncoated Neg Rake Chip Gullet
M1000PCB	1.00 Dia Mold Masher Insert Uncoated Pos Rake Chip Gullet
M1001NCB	1.00 Dia Mold Masher Insert Coated Neg Rake Chip Gullet
M1001PCB	1.00 Dia Mold Masher Insert Coated Pos Rake Chip Gullet

1.00 Screws And Accessories

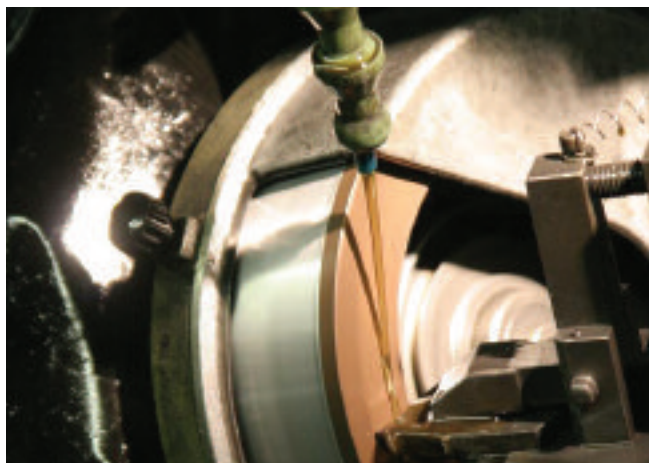
EDP#	Description
M100I	1.00 Mold Masher Insert Screw Neg/Pos
M100LN	1.00 Left Screw Neg Rake
M100LP	1.00 Left Screw Pos Rake
M100S	1.00 Seat Screw Neg/Pos Rake
M100NSC	1.00 Neg Mold Masher Seat
M100PSC	1.00 Pos Mold Masher Seat
T15	T-15 Torx Wrench
T20	T-20 Torx Wrench

Mold Masher



1.25 Mold Masher

EDP#	Description	Mill Dia	OAL	Ext Length	Shank Dia	Rake
M125475125N	1.25 Dia x 4.75 OAL x 1.25 Shank	1-1/4"	4-3/4"	2-1/4"	1-1/4"	Neg
M125475125P	1.25 Dia x 4.75 OAL x 1.25 Shank	1-1/4"	4-3/4"	2-1/4"	1-1/4"	Pos
M125600125N	1.25 Dia x 6.00 OAL x 1.25 Shank	1-1/4"	6"	3-1/2"	1-1/4"	Neg
M125600125P	1.25 Dia x 6.00 OAL x 1.25 Shank	1-1/4"	6"	3-1/2"	1-1/4"	Pos
M125600125NST	1.25 Dia x 6.00 OAL x 1.25 Shank Side Teeth	1-1/4"	6"	3-1/2"	1-1/4"	Neg
M125850150N	1.25 Dia x 8.50 OAL x 1.50 Shank	1-1/4"	8-1/2"	5-3/4"	1-1/2"	Neg
M125850150P	1.25 Dia x 8.50 OAL x 1.50 Shank	1-1/4"	8-1/2"	5-3/4"	1-1/2"	Pos
M125900200N	1.25 Dia x 9.00 OAL x 2.00 Shank	1-1/4"	9"	5-3/4"	2"	Neg
M125900200P	1.25 Dia x 9.00 OAL x 2.00 Shank	1-1/4"	9"	5-3/4"	2"	Pos
M12511125N	1.25 Dia x 11.00 OAL x 1.25 Shank	1-1/4"	11"	6"	1-1/4"	Neg
M12511125P	1.25 Dia x 11.00 OAL x 1.25 Shank	1-1/4"	11"	6"	1-1/4"	Pos



Inserts 1.25 Mold Masher



EDP#	Description
M1250P	1.25 Dia Mold Masher Uncoated Pos Rake
M1250N	1.25 Dia Mold Masher Uncoated Neg Rake
M1251P	1.25 Dia Mold Masher Coated Pos Rake
M1251N	1.25 Dia Mold Masher Coated Neg Rake
M1250PCB	1.25 Dia Mold Masher Uncoated Pos Rake w/Chip Gullet
M1250NCB	1.25 Dia Mold Masher Uncoated Neg Rake w/Chip Gullet
M1251PCB	1.25 Dia Mold Masher Coated Pos Rake w/Chip Gullet
M1251NCB	1.25 Dia Mold Masher Coated Neg Rake w/Chip Gullet

1.25 Screws and Accessories

EDP#	Description
M125I	1.25 Insert Screw Neg/Pos
M125LN	1.25 Left Screw Neg
M125LP	1.25 Left Screw Pos
M125SN	1.25 Seat Screw Neg
M125SP	1.25 Seat Screw Pos
M125ST	1.25 Side Insert Screw
M125NSC	1.25 Mold Masher Seat Neg
M125PSC	1.25 Mold Masher Seat Pos
T15	T-15 Torx Wrench
T20	T-20 Torx Wrench

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Mold Masher



1.50 Mold Masher

EDP#	Description	Mill Dia	OAL	Ext Length	Shank Dia	Rake
M150575150N	1.50 Dia x 5.75 OAL x 1.50 Shank	1-1/2"	5-3/4"	3-1/8"	1-1/2"	Neg
M150575150P	1.50 Dia x 5.75 OAL x 1.50 Shank	1-1/2"	5-3/4"	3-1/8"	1-1/2"	Pos
M150575150NST	1.50 Dia x 5.75 OAL x 1.50 Shank Side Teeth	1-1/2"	5-3/4"	3-1/8"	1-1/2"	Neg
M150575150PST	1.50 Dia x 5.75 OAL x 1.50 Shank Side Teeth	1-1/2"	5-3/4"	3-1/8"	1-1/2"	Pos
M150800150N	1.50 Dia x 8.00 OAL x 1.50 Shank	1-1/2"	8"	3-1/4"	1-1/2"	Neg
M150800150P	1.50 Dia x 8.00 OAL x 1.50 Shank	1-1/2"	8"	3-1/4"	1-1/2"	Pos
M150800200N	1.50 Dia x 8.00 OAL x 2.00 Shank	1-1/2"	8"	4-3/4"	2"	Neg
M150800200P	1.50 Dia x 8.00 OAL x 2.00 Shank	1-1/2"	8"	4-3/4"	2"	Pos
M150900200N	1.50 Dia x 9.00 OAL x 2.00 Shank	1-1/2"	9"	5-3/4"	2"	Neg
M150900200P	1.50 Dia x 9.00 OAL x 2.00 Shank	1-1/2"	9"	5-3/4"	2"	Pos
M15010150N	1.50 Dia x 10.00 OAL x 1.50 Shank	1-1/2"	10"	3-1/4"	1-1/2"	Neg
M15010150P	1.50 Dia x 10.00 OAL x 1.50 Shank	1-1/2"	10"	3-1/4"	1-1/2"	Pos
M15011200N	1.50 Dia x 11.00 OAL x 2.00 Shank	1-1/2"	11"	7-3/4"	2"	Neg
M15011200P	1.50 Dia x 11.00 OAL x 2.00 Shank	1-1/2"	11"	7-3/4"	2"	Pos
M15013200N	1.50 Dia x 13.00 OAL x 2.00 Shank	1-1/2"	13"	9-3/4"	2"	Neg
M15013200P	1.50 Dia x 13.00 OAL x 2.00 Shank	1-1/2"	13"	9-3/4"	2"	Pos

Inserts 1.50 Mold Masher

EDP#	Description
M1500N	1.50 Mold Masher Insert Uncoated Neg Rake
M1500P	1.50 Mold Masher Insert Uncoated Pos Rake
M1500NCB	1.50 Mold Masher Insert Uncoated Neg Rake w/Chip Gullet
M1500PCB	1.50 Mold Masher Insert Uncoated Pos Rake w/Chip Gullet
M1501N	1.50 Mold Masher Insert Coated Neg Rake
M1501P	1.50 Mold Masher Insert Coated Pos Rake
M1501NCB	1.50 Mold Masher Insert Coated Neg Rake w/Chip Gullet
M1501PCB	1.50 Mold Masher Insert Coated Pos Rake w/Chip Gullet



1.50 Screws and Accessories

EDP#	Description
M150I	1.50 Insert Screw Neg/Pos
M150LN	1.50 Left Screw Neg
M150LP	1.50 Left Screw Pos
M150SN	1.50 Seat Screw Neg
M150SP	1.50 Seat Screw Pos
OEST375	1.50 Side Teeth
M150ST	1.50 Side Insert Screw
M150NSC	1.50 Neg Mold Masher Seat
M150PSC	1.50 Pos Mold Masher Seat
T20	T-20 Torx Wrench
T25	T-25 Torx Wrench

Mold Masher



2.00 Mold Masher

EDP#	Description	Mill Dia	OAL	Ext Length	Shank Dia	Rake
M200600200N	2.00 Dia x 6.00 OAL x 2.00 Shank	2"	6"	2-3/4"	2"	Neg
M200600200P	2.00 Dia x 6.00 OAL x 2.00 Shank	2"	6"	2-3/4"	2"	Pos
M200700200N	2.00 Dia x 7.00 OAL x 2.00 Shank	2"	7"	3-3/4"	2"	Neg
M200700200P	2.00 Dia x 7.00 OAL x 2.00 Shank	2"	7"	3-3/4"	2"	Pos
M200700200NST	2.00 Dia x 7.00 OAL x 2.00 Shank Side Teeth	2"	7"	3-3/4"	2"	Neg
M200700200PST	2.00 Dia x 7.00 OAL x 2.00 Shank Side Teeth	2"	7"	3-3/4"	2"	Pos
M200900200N	2.00 Dia x 9.00 OAL x 2.00 Shank	2"	9"	5-3/4"	2"	Neg
M200900200P	2.00 Dia x 9.00 OAL x 2.00 Shank	2"	9"	5-3/4"	2"	Pos
M200900200NST	2.00 Dia x 9.00 OAL x 2.00 Shank Side Teeth	2"	9"	5-3/4"	2"	Neg
M200900200PST	2.00 Dia x 9.00 OAL x 2.00 Shank Side Teeth	2"	9"	5-3/4"	2"	Pos
M20010200NST	2.00 Dia x 10.00 OAL x 2.00 Shank Side Teeth	2"	10"	6-3/4"	2"	Neg
M20010200PST	2.00 Dia x 10.00 OAL x 2.00 Shank Side Teeth	2"	10"	6-3/4"	2"	Pos
M20012200N	2.00 Dia x 12.00 OAL x 2.00 Shank	2"	12"	8-3/4"	2"	Neg
M20012200P	2.00 Dia x 12.00 OAL x 2.00 Shank	2"	12"	8-3/4"	2"	Pos
M20013200NST	2.00 Dia x 13.00 OAL x 2.00 Shank Side Teeth	2"	13"	9-3/4"	2"	Neg
M20013200PST	2.00 Dia x 13.00 OAL x 2.00 Shank Side Teeth	2"	13"	9-3/4"	2"	Pos

POSI-LOCK AVAILABLE (2" SHANK ONLY)



Inserts 2.00 Mold Masher



EDP#	Description
M2000N	2.00 Mold Masher Insert Uncoated Neg Rake
M2000P	2.00 Mold Masher Insert Uncoated Pos Rake
M2000NCB	2.00 Mold Masher Insert Uncoated Neg Rake w/Chip Gullet
M2000PCB	2.00 Mold Masher Insert Uncoated Pos Rake w/Chip Gullet
M2001N	2.00 Mold Masher Insert Coated Neg Rake
M2001P	2.00 Mold Masher Insert Coated Pos Rake
M2001NCB	2.00 Mold Masher Insert Coated Neg Rake w/Chip Gullet
M2001PCB	2.00 Mold Masher Insert Coated Pos Rake w/Chip Gullet

2.00 Screws and Accessories

EDP#	Description
M200NSC	2.00 Carbide Seat Neg
M200PSC	2.00 Carbide Seat Pos
MST200NSC	2.00 Carbide Seat/Side Tooth Neg Cutter
MST200PSC	2.00 Carbide Seat/Side Tooth Pos Cutter
OEST625	2.00 Mold Masher Side Teeth
M200I	2.00 Insert Screw Neg/Pos
M200LN	2.00 Left Screw Neg
M200LP	2.00 Left Screw Pos
M200S	2.00 Seat Screw Neg/Pos
M200ST	2.00 Side Tooth Screw
T25	T-25 Torx Wrench
T30	T-30 Torx Wrench

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Mold Masher - Metric

25mm Mold Masher

EDP#	Description	Mill Dia	OAL	Ext Length	Shank Dia	Rake
MM25450100N	25mm Dia x 4.50 OAL x 1.00 Shank	25mm	4-1/2"	2-1/4"	1"	Neg
MM25450100P	25mm Dia x 4.50 OAL x 1.00 Shank	25mm	4-1/2"	2-1/4"	1"	Pos
MM2511525N	25mm Dia x 115 OAL x 25 Shank	25mm	115mm	57mm	25mm	Neg
MM2511525P	25mm Dia x 115 OAL x 25 Shank	25mm	115mm	57mm	25mm	Pos
MM25475125N	25mm Dia x 4.75 OAL x 1.25 Shank	25mm	4-3/4"	2-1/4"	1-1/4"	Neg
MM25475125P	25mm Dia x 4.75 OAL x 1.25 Shank	25mm	4-3/4"	2-1/4"	1-1/4"	Pos
MM2512032N	25mm Dia x 120 OAL x 32 Shank	25mm	120mm	57mm	32mm	Neg
MM2512032P	25mm Dia x 120 OAL x 32 Shank	25mm	120mm	57mm	32mm	Pos
MM25600100N	25mm Dia x 6.00 OAL x 1.00 Shank	25mm	6"	2-1/4"	1"	Neg
MM25600100P	25mm Dia x 6.00 OAL x 1.00 Shank	25mm	6"	2-1/4"	1"	Pos
MM2515225N	25mm Dia x 152 OAL x 25 Shank	25mm	152mm	57mm	25mm	Neg
MM2515225P	25mm Dia x 152 OAL x 25 Shank	25mm	152mm	57mm	25mm	Pos
MM25600125N	25mm Dia x 6.00 OAL x 1.25 Shank	25mm	6"	3-1/2"	1-1/4"	Neg
MM25600125P	25mm Dia x 6.00 OAL x 1.25 Shank	25mm	6"	3-1/2"	1-1/4"	Pos
MM2515232N	25mm Dia x 152 OAL x 32 Shank	25mm	152mm	76mm	32mm	Neg
MM2515232P	25mm Dia x 152 OAL x 32 Shank	25mm	152mm	76mm	32mm	Pos
MM25900125N	25mm Dia x 9.00 OAL x 1.25 Shank	25mm	9"	5-3/4"	1-1/4"	Neg
MM25900125P	25mm Dia x 9.00 OAL x 1.25 Shank	25mm	9"	5-3/4"	1-1/4"	Pos
MM25900150N	25mm Dia x 9.00 OAL x 1.50 Shank	25mm	9"	6-1/4"	1-1/2"	Neg
MM25900150P	25mm Dia x 9.00 OAL x 1.50 Shank	25mm	9"	6-1/4"	1-1/2"	Pos

25mm Mold Masher With Morse Taper

EDP#	Description	Mill Dia	OAL	Ext Length	MT	Rake
MMT251473N	25mm Dia x 147 OAL x 3MT	25mm	147mm	61mm	3MT	Neg
MMT251473P	25mm Dia x 147 OAL x 3MT	25mm	147mm	61mm	3MT	Pos
MMT251783N	25mm Dia x 178 OAL x 3MT	25mm	178mm	91mm	3MT	Neg
MMT251783P	25mm Dia x 178 OAL x 3MT	25mm	178mm	91mm	3MT	Pos

Inserts 25mm Mold Masher

EDP#	Description
M250N	25mm Dia Mold Masher Uncoated Neg Rake
M250P	25mm Dia Mold Masher Uncoated Pos Rake
M251N	25mm Dia Mold Masher Coated Neg Rake
M251P	25mm Dia Mold Masher Coated Pos Rake
M250PCB	25mm Dia Mold Masher Uncoated Pos w/Chip Gullet
M250NCB	25mm Dia Mold Masher Uncoated Neg w/Chip Gullet
M251PCB	25mm Dia Mold Masher Coated Pos w/Chip Gullet
M251NCB	25mm Dia Mold Masher Coated Neg w/Chip Gullet



25mm Screw and Accessories

EDP#	Description
M25I	25mm Mold Masher Insert Screw Neg/Pos
M25LN	25mm Left Screw Neg
M25LP	25mm Left Screw Pos
M25S	25mm Seat Screw Neg/Pos
M25NSC	25mm Carbide Seat Neg
M25PSC	25mm Carbide Seat Pos
T15	T-15 Torx Wrench
T20	T-20 Torx Wrench

Mold Masher - Metric



30mm Mold Masher

EDP#	Description	Mill Dia	OAL	Ext Length	Shank Dia	Rake
MM30475125N	30mm Dia x 4.75 OAL x 1.25 Shank	30mm	4-3/4"	2-1/4"	1-1/4"	Neg
MM30600125N	30mm Dia x 6.00 OAL x 1.25 Shank	30mm	6"	3-1/2"	1-1/4"	Neg
MM30725200N	30mm Dia x 7.25 OAL x 2.00 Shank	30mm	7-1/4"	2-1/2"	2"	Neg
MM30850125N	30mm Dia x 8.50 OAL x 1.25 Shank	30mm	8-1/2"	6"	1-1/4"	Neg
MM30110200N	30mm Dia x 11.00 OAL x 2.00 Shank	30mm	11"	7-3/4"	2"	Neg



Inserts 30mm Mold Masher



EDP#	Description
M300N	30mm Molder Masher Insert Uncoated Neg Rake
M301N	30mm Molder Masher Insert Coated Neg Rake

30mm Screws and Accessories

EDP#	Description
M30NSC	30mm Carbide Seat Neg
M30I	30mm Insert Screw Neg
M30LN	30mm Left Screw Neg
M30SN	30mm Seat Screw Neg
T-20	T-20 Torx Wrench
T-25	T-25 Torx Wrench

Mold Masher - Metric

32mm Mold Masher

EDP#	Description	Mill Dia	OAL	Ext Length	Shank Dia	Rake
MM32450125N	32mm Dia x 4.50 OAL x 1.25 Shank	32mm	4-1/2"	2-1/2"	1-1/4"	Neg
MM32450125P	32mm Dia x 4.50 OAL x 1.25 Shank	32mm	4-1/2"	2-1/2"	1-1/4"	Pos
MM32450125NST	32mm Dia x 4.50 OAL x 1.25 Shank Side Teeth	32mm	4-1/2"	2-1/2"	1-1/4"	Neg
MM3211532N	32mm Dia x 115 OAL x 32 Shank	32mm	115mm	57mm	32mm	Neg
MM3211532P	32mm Dia x 115 OAL x 32 Shank	32mm	115mm	57mm	32mm	Pos
MM3211532NST	32mm Dia x 115 OAL x 32 Side Teeth	32mm	115mm	57mm	32mm	Neg
MM32600125N	32mm Dia x 6.00 OAL x 1.25 Shank	32mm	6"	3"	1-1/4"	Neg
MM32600125P	32mm Dia x 6.00 OAL x 1.25 Shank	32mm	6"	3"	1-1/4"	Pos
MM32600125NST	32mm Dia x 6.00 OAL x 1.25 Shank Side Teeth	32mm	6"	3"	1-1/4"	Neg
MM3215332N	32mm Dia x 153 OAL x 32 Shank	32mm	153mm	76mm	32mm	Neg
MM3215332P	32mm Dia x 153 OAL x 32 Shank	32mm	153mm	76mm	32mm	Pos
MM3215332NST	32mm Dia x 153 OAL x 32 Shank Side Teeth	32mm	153mm	76mm	32mm	Neg
MM32850150N	32mm Dia x 8.50 OAL x 1.50 Shank	32mm	8-1/2"	5-1/4"	1-1/2"	Neg
MM32850150P	32mm Dia x 8.50 OAL x 1.50 Shank	32mm	8-1/2"	5-1/4"	1-1/2"	Pos
MM3221640N	32mm Dia x 216 OAL x 40 Shank	32mm	216mm	133mm	40mm	Neg
MM3221640P	32mm Dia x 216 OAL x 40 Shank	32mm	216mm	133mm	40mm	Pos
MM32900200N	32mm Dia x 9.00 OAL x 2.00 Shank	32mm	9"	5-3/4"	2"	Neg
MM3222850N	32mm Dia x 228 OAL x 50 Shank	32mm	228mm	146mm	50mm	Neg

32mm Molder Masher With Morse Taper

EDP#	Description	Mill Dia	OAL	Ext Length	MT	Rake
MMT321984N	32mm Dia x 198 OAL x 4MT	32mm	198mm	91mm	4MT	Neg
MMT321984P	32mm Dia x 198 OAL x 4MT	32mm	198mm	91mm	4MT	Pos
MMT321984NST	32mm Dia x 198 OAL x 4MT Side Teeth	32mm	198mm	91mm	4MT	Neg
MMT322284N	32mm Dia x 228 OAL x 4MT	32mm	228mm	120mm	4MT	Neg
MMT322284P	32mm Dia x 228 OAL x 4MT	32mm	228mm	120mm	4MT	Pos
MMT322284NST	32mm Dia x 228 OAL x 4MT Side Teeth	32mm	228mm	120mm	4MT	Neg

Insert 32mm Mold Masher

EDP#	Description
M320P	32mm Mold Masher Insert Uncoated Pos Rake
M320N	32mm Mold Masher Insert Uncoated Neg Rake
M321P	32mm Mold Masher Insert Coated Pos Rake
M321N	32mm Mold Masher Insert Coated Neg Rake
M320NCB	32mm Mold Masher Insert Uncoated Neg Rake w/Chip Gullet
M320PCB	32mm Mold Masher Insert Uncoated Pos Rake w/Chip Gullet
M321PCB	32mm Mold Masher Insert Coated Pos Rake w/Chip Gullet
M321NCB	32mm Mold Masher Insert Coated Neg Rake w/Chip Gullet



32mm Screws and Accessories

EDP#	Description
M32I	32mm Insert Screw Neg/Pos Rake
M32LN	32mm Left Screw Neg
M32LP	32mm Left Screw Pos
M32SN	32mm Seat Screw Neg
M32SP	32mm Seat Screw Pos
OEST375	32mm Side Insert
T-20	T-20 Torx Wrench
T-25	T-25 Torx Wrench

Mold Masher - Metric



40mm Mold Masher

EDP#	Description	Mill Dia	OAL	Ext Length	Shank Dia	Rake
MM40575150N	40mm Dia x 5.75 OAL x 1.50 Shank	40mm	5-3/4"	3-1/8"	1-1/2"	Neg
MM40575150P	40mm Dia x 5.75 OAL x 1.50 Shank	40mm	5-3/4"	3-1/8"	1-1/2"	Pos
MM4014640N	40mm Dia x 146 OAL x 40 Shank	40mm	146mm	80mm	40mm	Neg
MM4014640P	40mm Dia x 146 OAL x 40 Shank	40mm	146mm	80mm	40mm	Pos
MM4019850N	40mm Dia x 198 OAL x 50 Shank	40mm	198mm	116mm	50mm	Neg
MM4019850P	40mm Dia x 198 OAL x 50 Shank	40mm	198mm	116mm	50mm	Pos
MM4022850N	40mm Dia x 228 OAL x 50 Shank	40mm	228mm	146mm	50mm	Neg
MM4022850P	40mm Dia x 228 OAL x 50 Shank	40mm	228mm	146mm	50mm	Pos

40mm Mold Masher with Morse Taper

EDP#	Description	Mill Dia	OAL	Ext Length	MT	Rake
MMT402034N	40mm Dia x 203 OAL x 4MT	40mm	203mm	91mm	4MT	Neg
MMT402034P	40mm Dia x 203 OAL x 4MT	40mm	203mm	91mm	4MT	Pos
MMT402414N	40mm Dia x 241 OAL x 4MT	40mm	241mm	132mm	4MT	Neg
MMT402414P	40mm Dia x 241 OAL x 4MT	40mm	241mm	132mm	4MT	Pos
MMT402415N	40mm Dia x 241 OAL x 5MT	40mm	241mm	104mm	5MT	Neg
MMT402415P	40mm Dia x 241 OAL x 5MT	40mm	241mm	104mm	5MT	Pos
MMT402695N	40mm Dia x 269 OAL x 5MT	40mm	269mm	132mm	5MT	Neg
MMT402695P	40mm Dia x 269 OAL x 5MT	40mm	269mm	132mm	5MT	Pos



Insert 40mm Molder Masher



EDP#	Description
M400N	40mm Dia Mold Masher Insert Uncoated Neg Rake
M400P	40mm Dia Mold Masher Insert Uncoated Pos Rake
M401N	40mm Dia Mold Masher Insert Coated Neg Rake
M401P	40mm Dia Mold Masher Insert Coated Pos Rake
M400NCB	40mm Dia Mold Masher Insert Uncoated Neg Rake w/Chip Gullet
M400PCB	40mm Dia Mold Masher Insert Uncoated Pos Rake w/Chip Gullet
M401NCB	40mm Dia Mold Masher Coated Neg Rake w/Chip Gullet
M401PCB	40mm Dia Mold Masher Coated Pos Rake w/Chip Gullet

40mm Screws and Accessories

EDP#	Description
M40I	40mm Insert Screw Neg/Pos
M40LN	40mm Left Screw Neg
M40LP	40mm Left Screw Pos
M40SN	40mm Seat Screw Neg
M40SP	40mm Seat Screw Pos
SPRM320	Side Teeth 1.25 Mold Masher
M40ST	40mm Side Tooth Screw
M40NSC	40mm Carbide Seat Neg Rake
M40PSC	40mm Carbide Seat Pos Rake

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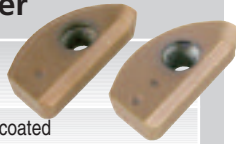
Mold Masher

50mm Mold Masher



Inserts 50mm Mold Masher

EDP#	Description
M500N	50mm Mold Masher Insert Neg Uncoated
M500P	50mm Mold Masher Insert Pos Uncoated
M501N	50mm Mold Masher Insert Neg Coated
M501P	50mm Mold Masher Insert Pos Coated
M500NCB	50mm Molder Masher Insert Neg w/Chip Breaker Uncoated
M500PCB	50mm Molder Masher Insert Pos w/Chip Breaker Uncoated
M501NCB	50mm Mold Masher Insert Neg w/Chip Breaker Coated
M501PCB	50mm Mold Masher Insert Pos w/Chip Breaker Coated



50mm Screws and Accessories

EDP#	Description
M50NSC	50mm Carbide Seat Neg
M50PSC	50mm Carbide Seat Pos
MST50NSC	50mm Carbide Seat Side Tooth Neg
MST50PSC	50mm Carbide Seat Side Tooth Pos
OEST625	50mm Mold Masher Side Teeth
M50I	50mm Insert Screw Neg/Pos
M50LN	50mm Left Screw Neg
M50LP	50mm Left Hand Screw Pos
M50SN	50mm Seat Screw Neg
M50SP	50mm Seat Screw Pos
M50ST	50mm Side Tooth Screw
T-25	T25 Torx Wrench
T-30	T30 Torx Wrench

EDP#	Description	Mill Dia	OAL	Ext Length	Shank Dia	Rake
MM50600200N	50mm Dia x 6.00 OAL x 2.00 Shank	50mm	6"	2-3/4"	2"	Neg
MM50600200P	50mm Dia x 6.00 OAL x 2.00 Shank	50mm	6"	2-3/4"	2"	Pos
MM5015250N	50mm Dia x 152 OAL x 50 Shank	50mm	152mm	70mm	50mm	Neg
MM5015250P	50mm Dia x 152 OAL x 50 Shank	50mm	152mm	70mm	50mm	Pos
MM50700200N	50mm Dia x 7.00 OAL x 2.00 Shank	50mm	7"	3-3/4"	2"	Neg
MM50700200P	50mm Dia x 7.00 OAL x 2.00 Shank	50mm	7"	3-3/4"	2"	Pos
MM50700200PST	50mm Dia x 7.00 OAL x 2.00 Shank Side Teeth	50mm	7"	3-3/4"	2"	Pos
MM5017850N	50mm Dia x 178 OAL x 50 Shank	50mm	178mm	95mm	50mm	Neg
MM5017850P	50mm Dia x 178 OAL x 50 Shank	50mm	178mm	95mm	50mm	Pos
MM5017850PST	50mm Dia x 178 OAL x 50 Shank Side Teeth	50mm	178mm	95mm	50mm	Pos
MM50900200N	50mm Dia x 9.00 OAL x 2.00 Shank	50mm	9"	5-3/4"	2"	Neg
MM50900200P	50mm Dia x 9.00 OAL x 2.00 Shank	50mm	9"	5-3/4"	2"	Pos
MM50900200NST	50mm Dia x 9.00 OAL x 2.00 Shank Side Teeth	50mm	9"	5-3/4"	2"	Neg
MM50900200PST	50mm Dia x 9.00 OAL x 2.00 Shank Side Teeth	50mm	9"	5-3/4"	2"	Pos
MM5022850N	50mm Dia x 228 OAL x 50 Shank	50mm	228mm	133mm	50mm	Neg
MM5022850P	50mm Dia x 228 OAL x 50 Shank	50mm	228mm	133mm	50mm	Pos
MM5022850NST	50mm Dia x 228 OAL x 50 Side Teeth	50mm	228mm	133mm	50mm	Neg
MM5022850PST	50mm Dia x 228 OAL x 50 Side Teeth	50mm	228mm	133mm	50mm	Pos
MM5010200NST	50mm Dia x 10.00 OAL x 2.00 Shank Side Teeth	50mm	10"	6-1/4"	2"	Neg
MM5010200PST	50mm Dia x 10.00 OAL x 2.00 Shank Side Teeth	50mm	10"	6-1/4"	2"	Pos
MM5022650NST	50mm Dia x 226 OAL x 50 Shank Side Teeth	50mm	226mm	159mm	50mm	Neg
MM5022650PST	50mm Dia x 226 OAL x 50 Shank Side Teeth	50mm	226mm	159mm	50mm	Pos
MM50120200N	50mm Dia x 12.00 OAL x 2.00 Shank	50mm	12"	8-1/2"	2"	Neg
MM50120200P	50mm Dia x 12.00 OAL x 2.00 Shank	50mm	12"	8-1/2"	2"	Pos
MM5030450N	50mm Dia x 304 OAL x 50 Shank	50mm	304mm	216mm	50mm	Neg
MM5030450P	50mm Dia x 304 OAL x 50 Shank	50mm	304mm	216mm	50mm	Pos
MM5013200PST	50mm Dia x 13.00 OAL x 2.00 Shank Side Teeth	50mm	13"	9-1/2"	2"	Pos
MM5033050NST	50mm Dia x 330 OAL x 50 Shank Side Teeth	50mm	330mm	242mm	50mm	Neg
MM5033050PST	50mm Dia x 330 OAL x 50 Shank Side Teeth	50mm	330mm	242mm	50mm	Pos

50mm Mold Masher with Morse Taper

EDP#	Description	Mill Dia	OAL	Ext Length	MT	Rake
MMT502315N	50mm Dia x 231mm OAL x 5MT	50mm	231mm	94mm	5MT	Neg
MMT502315P	50mm Dia x 231mm OAL x 5MT	50mm	231mm	94mm	5MT	Pos
MMT502695N	50mm Dia x 269mm OAL x 5MT	50mm	269mm	132mm	5MT	Neg
MMT502695P	50mm Dia x 269mm OAL x 5MT	50mm	269mm	132mm	5MT	Pos

Cat 40mm/50mm Morse Taper



Cat 40 Morse Taper Holder

EDP#	Morse Taper	Extended Length
R905-40MT250	2	50mm
R905-40MT370	3	70mm
R905-40MT495	4	95mm

Cat 50 Morse Taper Holder

EDP#	Morse Taper	Extended Length
R905-50MT365	3	65mm
R905-50MT3120	3	120mm
R905-50MT3170	3	170mm
R905-50MT3220	3	220mm
R905-50MT4100	4	100mm
R905-50MT4150	4	150mm
R905-50MT4200	4	200mm
R905-50MT5120	5	120mm
R905-50MT5170	5	170mm
R905-50MT5220	5	220mm



2 Morse Taper Threaded Holders

EDP#	Description	Thread M	Length L	End Dia D1
MT2660	2 Morse Taper x M6 Thread x 60 Ext Lgth	6	60	9.8
MT2860	2 Morse Taper x M8 Thread x 60 Ext Lgth	8	60	13
MT21040	2 Morse Taper x M10 Thread x 40 Ext Lgth	10	40	18
MT21060	2 Morse Taper x M10 Thread x 60 Ext Lgth	10	60	18

3 Morse Taper Threaded Holders

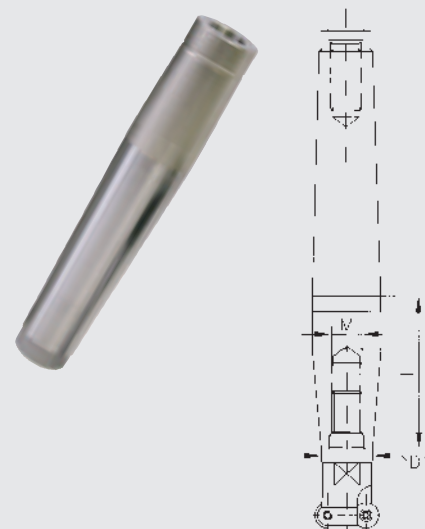
EDP#	Description	Thread M	Length L	End Dia D1
MT3880	3 Morse Taper x M8 Thread x 80 Ext Lgth	8	80	13
MT38100	3 Morse Taper x M8 Thread x 100 Ext Lgth	8	100	13
MT31080	3 Morse Taper x M10 Thread x 80 Ext Lgth	10	80	18
MT310100	3 Morse Taper x M10 Thread x 100 Ext Lgth	10	100	18
MT31260	3 Morse Taper x M12 Thread x 60 Ext Lgth	12	60	21
MT31275	3 Morse Taper x M12 Thread x 75 Ext Lgth	12	75	21
MT31285	3 Morse Taper x M12 Thread x 85 Ext Lgth	12	85	21
MT31295	3 Morse Taper x M12 Thread x 95 Ext Lgth	12	95	21

4 Morse Taper Threaded Holders

EDP#	Description	Thread M	Length L	End Dia D1
MT412120	4 Morse Taper x M12 Thread x 120 Ext Lgth	12	120	21
MT41635	4 Morse Taper x M16 Thread x 35 Ext Lgth	16	35	29
MT41665	4 Morse Taper x M16 Thread x 65 Ext Lgth	16	65	29
MT41680	4 Morse Taper x M16 Thread x 80 Ext Lgth	16	80	29
MT41695	4 Morse Taper x M16 Thread x 95 Ext Lgth	16	95	29

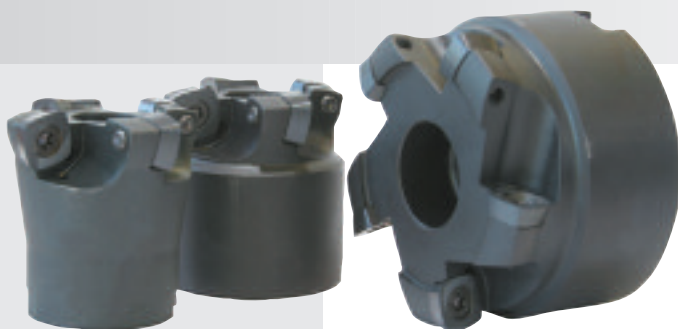
5 Morse Taper Threaded Holders

EDP#	Description	Thread M	Length L	End Dia D1
MT516100	5 Morse Taper x M16 Thread x 100 Ext Lgth	16	100	29
MT516120	5 Morse Taper x M16 Thread x 120 Ext Lgth	16	120	29
MT516150	5 Morse Taper x M16 Thread x 150 Ext Lgth	16	150	29
MT516180	5 Morse Taper x M16 Thread x 180 Ext Lgth	16	180	29



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Face Mill Positive Rake U.S. Standard

EDP#	Description
HFM20047513P	2.00 Dia. x 4 Flute x .750 Arbor Hole x 13mm Insert
HFM300512513P	3.00 Dia. x 5 Flute x 1.25 Arbor Hole x 13mm Insert
HFM400615016P	4.00 Dia. x 6 Flute x 1.50 Arbor Hole x 16mm Insert

Metric

EDP#	Description
HFM5242213P	52mm Dia. x 4 Flute x 22mm Arbor Hole x 13mm Insert
HFM 5242213PC	52mm Dia. Coolant Thru x 4 Flute x 22mm Arbor Hole x 13mm Insert
HFM6352713PC	63mm Dia. Coolant Thru x 5 Flute x 27mm Arbor Hole x 13mm Insert
HFM8062713P	80mm Dia. x 6 Flute x 27mm Arbor Hole x 13mm Insert
HFM10063216P	100mm Dia. x 6 Flute x 32mm Arbor Hole x 16mm Insert



Threaded Style Positive Rake U.S. Standard

EDP#	Description
HFMT100/12	1.00 Dia. x 2 Flute x M12 Thread x 10mm Insert
HFMT125/16	1.25 Dia. x 3 Flute x M16 Thread x 10mm Insert
HFMT125/16C	1.25 Dia. Coolant Thru x 3 Flute x M16 Thread x 10mm Insert

Metric

EDP#	Description
HFMT25/12	25mm Dia. x 2 Flute x M12 Thread x 10mm Insert
HFMT32/16	32mm Dia. x 3 Flute x M16 Thread x 10mm Insert
HFMT32/16C	32mm Dia. Coolant Thru x 3 Flute x M16 Thread x 10mm Insert



High Feed Mills



Shank Tooling Positive Rake U.S. Standard

EDP#	Description
HFM100400100P	1.00 Dia. x 2 Flute x 4.00 OAL x 1.00 Shank
HFM100500100P	1.00 Dia. x 2 Flute x 5.00 OAL x 1.00 Shank
HFM100600100P	1.00 Dia. x 2 Flute x 6.00 OAL x 1.00 Shank

Metric

EDP#	Description
HFM2510125P	25mm Dia. x 2 Flute x 101 OAL x 25mm Shank
HFM2512725P	25mm Dia. x 2 Flute x 127 OAL x 25mm Shank
HFM2515325P	25mm Dia. x 2 Flute x 153 OAL x 25mm Shank

Morse Taper Style Positive Rake

EDP#	Description
HFM2513203	25mm Dia. x 2 Flute x 132 OAL x 43 Ext Lgth x 3MT
HFM2515703	25mm Dia. x 2 Flute x 157 OAL x 68 Ext Lgth x 3MT
HFM2518203	25mm Dia. x 2 Flute x 182 OAL x 93 Ext Lgth x 3MT



Inserts



EDP#	Description	Coating TA2
SDCW10	10mm Insert for 1.00-25mm and 1.25-32mm Threaded	•
SDCW13	13mm Insert for the 2.00-3.00-52mm-63mm-80mm	•
SDCW16	16mm Insert for the 4.00-100mm	•

Screws For HFM

EDP#	Description
HFM C47	Screw For 10mm Insert
HFM C1032	Screw For 13mm, 16mm Insert

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Button Mills

U.S. Standard Milling Cutters 7° Pos Rake

EDP#	D Cutting Dia	H OAL	d1 Hole Dia	d	Flutes	Inserts	Screws
HBC20047516	2"	2"	3/4"	1-15/16"	4Z	1604	C45
HBC20057516T	2"	2"	3/4"	1-1/2"	5Z	1604	C45
HBC20057516	2"	2"	3/4"	1-1/2"	5Z	1604	C45
HBC300512516	3"	2-1/2"	1-1/4"	2-7/8"	5Z	1604	C45L
HBC30051020	3"	2"	1"	2"	5Z	2006	C45L
HBC300512520	3"	2-1/2"	1-1/4"	2-7/8"	5Z	2006	C45L
HBC400612520	4"	2"	1-1/4"	3"	6Z	2006	C45L
HBC400615020	4"	2-1/2"	1-1/2"	3-3/4"	6Z	2006	C45L

Metric Milling Cutters

C=Coolant Hole 7° Pos Rake

EDP#	D Cutting Dia	H OAL	d1 Hole Dia	d	Flutes	Inserts	Screws
HBC5242216	52mm	51mm	22mm	37.5mm	4Z	1604	C45
HBC5247516	52mm	51mm	3/4"	37.5mm	4Z	1604	C45
HBC5252212	52mm	49mm	22mm	40mm	5Z	12T3	C47
HBC5252212C	52mm	49mm	22mm	40mm	5Z	12T3	C47
HBC5252212P	52mm	49mm	22mm	40mm	5Z	12T3	C47
HBC5252212PC	52mm	49mm	22mm	40mm	5Z	12T3	C47
HBC5252216	52mm	50mm	22mm	40mm	5Z	1604	C45
HBC5252216C	52mm	50mm	22mm	40mm	5Z	1604	C45
HBC6652716	66mm	50mm	27mm	48mm	5Z	1604	C45L
HBC8062716	80mm	50mm	27mm	60mm	6Z	1604	C45L
HBC8052720	80mm	50mm	27mm	60mm	5Z	2006	C45L
HBC125715020	125mm	52mm	1-1/2"	99mm	7Z	2006	C45L
HBC152815020	152mm	51mm	1-1/2"	99mm	8Z	2006	C45L

Inserts

EDP#	Description	Coating TA2
RDLT12T3	12mm x 15 Degree x 3.97 w/Chip Gullet	•
RDHX12T3AR	12mm x 15 Degree x 3.97	•
RDHX1604HSC	16mm x 15 Degree x 4.75 - Harden Material	•
RDHX1604H	16mm x 15 Degree x 4.75	•
RDLT1604	16mm x 15 Degree x 4.75 w/Chip Gullet	•
RDHX2006HSC	20mm x 15 Degree x 6.00 - Harden Material	•
RDHX2006H	20mm x 15 Degree x 6.00	•

Button Mills



Precision Finishing With Positive and Negative Rake

EDP#	Mill Dia	Hole Dia	Flutes	Inserts	Screws
HBC2003N7512	2"	3/4"	3Z	R-1204	C47
HBC2003P7512	2"	3/4"	3Z	R-1204	C47
HBC2004N7512	2"	3/4"	4Z	R-1204	C47
HBC2004P7512	2"	2"	4Z	R-1204	C47
HBC3005N12512	3"	1-1/4"	5Z	R-1204	C47
HBC3005P12512	3"	1-1/4"	5Z	R-1204	C47

Inserts

EDP#	Description	Coating
RPCW1204	12MM x 11 Degree x 4.76	TA2,TA4, TIN,TICN
RPET1204	12MM x 11 Degree x 4.76 w/Chip Gullet	TA2,TA4, TIN,TICN



CAT 40 and CAT 50

Face Mill Extension

EDP#	PILOT	LENGTH	TAPER
CAT40-750-4L	.750	4.00	CAT40
CAT40-750-6L	.750	6.00	CAT40
CAT40-100-4L	1.00	4.00	CAT40
CAT40-100-6L	1.00	4.00	CAT40
CAT50-750-4L	.750	4.00	CAT50
CAT50-750-6L	.750	6.00	CAT50
CAT50-100-5L	1.00	5.00	CAT50
CAT50-100-7L	1.00	7.00	CAT50
CAT50-125-6L	1.25	6.00	CAT50
CAT50-125-9L	1.25	9.00	CAT50
CAT50-150-8L	1.50	8.00	CAT50
CAT50-200-6L	2.00	6.00	CAT50



Arbor

EDP#	Description
HEA 5-75	5" OAL x 1" Ext Lgth x 3/4 Pilot
HEA 7-75	7" OAL x 3" Ext Lgth x 3/4 Pilot
HEA 9-75	9" OAL x 5" Ext Lgth x 3/4 Pilot

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Standard - Threaded Shank Extensions

EDP#	Dia.	Thread	Length	Ext Length
SHK350500/6	1/2"	6mm	3-1/2"	1-3/8"
SHK600500/6	1/2"	6mm	6"	2-3/4"
SHK350625/8	5/8"	8mm	3-1/2"	1-3/8"
SHK600625/8	5/8"	8mm	6"	2-3/4"
SHK350750/10	3/4"	10mm	3-1/2"	1-3/8"
SHK600750/10	3/4"	10mm	6"	2-3/4"
SHK600100/12	1"	12mm	6"	2-3/4"
SHK550125/16	1-1/4"	16mm	5-1/2"	3"

Threaded Extensions

EDP#	Description
R976-1660	Extensions M16 to M16 x 60mm OAL
R976-1260	Extensions M12 to M12 x 60mm OAL
R976-1060	Extensions M10 to M10 x 60mm OAL

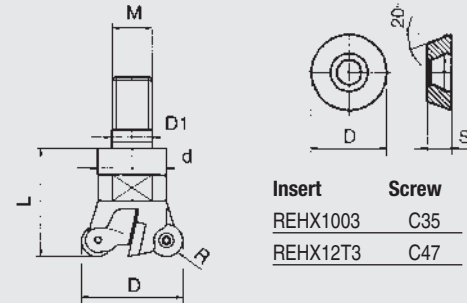
Threaded Profile Button Cutter

EDP#	Description	Dia	Flute	Thread	OAL	Insert
BT202R5/10	Threaded 20mm x 2 Flute x M10	20mm	2Z	10	28	RD10x3.18
BT252R5/12	Threaded 25mm x 2 Flute x M12	25mm	2Z	12	32	RD10x3.18
BT253R5/12	Threaded 25mm x 3 Flute x M12	25mm	3Z	12	32	RD10x3.18
BT304R5/16	Threaded 30mm x 4 Flute x M16	30mm	4Z	16	32	RD10x3.18
BT324R5/16	Threaded 32mm x 4 Flute x M16	32mm	4Z	16	32	RD10x3.18
BT355R5/16	Threaded 35mm x 5 Flute x M16	35mm	5Z	16	42	RD10x3.18
BT242R6/12	Threaded 24mm x 2 Flute x M12	24mm	2Z	12	32	RD12x3.97
BT323R6/16	Threaded 32mm x 3 Flute x M16	32mm	3Z	16	42	RD12x3.97
BT353R6/16	Threaded 35mm x 3 Flute x M16	35mm	3Z	16	42	RD12x3.97
BT354R6/16	Threaded 35mm x 4 Flute x M16	35mm	4Z	16	42	RD12x3.97
BT424R6/16	Threaded 42mm x 4 Flute x M16	42mm	4Z	16	32	RD12x3.97
BT323R8/16	Threaded 32mm x 3 Flute x M16	32mm	2Z	16	42	RD16x4.76
BR353R8/16	Threaded 35mm x 3 Flute x M16	35mm	3Z	16	42	RD16x4.76

Threaded Cutters

Threaded Profile Button Cutter Positive

EDP#	Description	Dia	Flute	Thread	OAL	Insert
12BT202R5/10	Threaded 20mm on 12 x 2 Flute x M10	20mm	2Z	10	28	REHX10x3.18
12BT253R5/12	Threaded 25mm on 12 x 2 Flute x M12	25mm	3Z	12	32	REHX10x3.18
12BT304R5/16	Threaded 30mm on 12 x 4 Flute x M16	30mm	4Z	16	32	REHX10x3.18
12BT353R6/16	Threaded 35mm on 12 x 3 Flute x M16	35mm	3Z	16	42	REHX12x3.18



HIBF Ball Nose Standards Threaded

EDP#	Description	Cutting Dia	Lgth	Thread	Insert
TBN375/6	Threaded .375 Dia x .875 x M6	3/8"	7/8"	6mm	IH375
TBN500/6	Threaded .500 Dia x .875 x M6	1/2"	7/8"	6mm	IH500
TBN625/8	Threaded .625 Dia x 1.00 x M8	5/8"	1"	8mm	IH625
TBN750/10	Threaded .750 Dia x 1.50 x M10	3/4"	1-1/2"	10mm	IH750
TBN100/12	Threaded 1.00 Dia x 1.875 x M12	1"	1-7/8"	12mm	IH100

HIBF Ball Nose Metric Threaded

EDP#	Description	Cutting Dia	Lgth	Thread	Insert
TBM12/6	Threaded 12mm Dia x 23mm x M6	12mm	23mm	6mm	HM12
TBM14/6	Threaded 14mm Dia x 23mm x M6	14mm	23mm	6mm	HM14
TBM16/8	Threaded 16mm Dia x 28mm x M8	16mm	28mm	8mm	HM16
TBM20/10	Threaded 20mm Dia x 40mm x M10	20mm	40mm	10mm	HM20
TBM25/12	Threaded 25mm Dia x 47mm x M12	25mm	47mm	12mm	HM25

HIBF Flat Bottom Standard Threaded

EDP#	Description	Cutting Dia	Lgth	Thread	Insert
TF375/6	Threaded Flat .375 Dia x .875 x M6	3/8"	7/8"	6mm	IF375
TF500/6	Threaded Flat .500 Dia x .875 x M6	1/2"	7/8"	6mm	IF500
TF625/8	Threaded Flat .625 Dia x 1.00 x M8	5/8"	1"	8mm	IF625
TF750/10	Threaded Flat .750 Dia x 1.50 x M10	3/4"	1-1/2"	10mm	IF750
TF100/12	Threaded Flat 1.00 Dia x 1.875 x M12	1"	1-7/8"	12mm	IF100

HIBF Flat Bottom Metric Threaded

EDP#	Description	Cutting Dia	Lgth	Thread	Insert
TFM12/6	Threaded Flat 12mm Dia x 23 x M6	12mm	23mm	6mm	IFM12
TFM14/6	Threaded Flat 14mm Dia x 23 x M6	14mm	23mm	6mm	IFM14
TFM16/8	Threaded Flat 16mm Dia x 28 x M8	16mm	28mm	8mm	IFM16
TFM20/10	Threaded Flat 20mm Dia x 40 x M10	20mm	40mm	10mm	IFM20
TFM25/12	Threaded Flat 25mm Dia x 47 x M12	25mm	47mm	12mm	IFM25



Aluminum Cutters

Threaded Aluminum Cutters

EDP#	Description	Dia	Thread	Flutes	OAL	Insert
VCT625	Threaded .625 Dia x 2.00 OAL x 2 Flute x M8	5/8"	8mm	2	2"	VCGT11
VCT750	Threaded .750 Dia x 2.00 OAL x 2 Flute x M10	3/4"	10mm	2	2"	VCGT11
VCT100	Threaded 1.00 Dia x 2.00 OAL x 2 Flute x M12	1"	12mm	2	2"	VCGT16
VCT125	Threaded 1.25 Dia x 2.00 OAL x 2 Flute x M16	1-1/4"	16mm	2	2"	VCGT22

Threaded Metric Aluminum Cutters

EDP#	Description	Dia	Thread	Flutes	OAL	Insert
VCT15	Threaded 15mm Dia x 50mm OAL x 2 Flute x 8mm	15mm	8mm	2	50mm	VCGT11
VCT20	Threaded 20mm Dia x 50mm OAL x 2 Flute x 10mm	20mm	10mm	2	50mm	VCGT11
VCT25	Threaded 25mm Dia x 50mm OAL x 2 Flute x 12mm	25mm	12mm	2	50mm	VCGT16
VCT32	Threaded 32mm Dia x 50mm OAL x 2 Flute x 16mm	32mm	16mm	2	50mm	VCGT22
VCT42	Threaded 42mm Dia x 50mm OAL x 3 Flute x 16mm	42mm	16mm	3	50mm	VCGT22

U.S. Standard Diameters Aluminum Cutters

EDP#	Description	Dia	Hole	Flutes	OAL	Insert
VC200750	2.00 Dia x 2.00 OAL x 3 Flute x 7.50 Hole	2"	3/4"	3	2"	VCGT22
VC300100	3.00 Dia x 2.00 OAL x 5 Flute x 1.00 Hole	3"	1"	5	2	VCGT22
VC300125	3.00 Dia x 2.00 OAL x 5 Flute x 1.25 Hole	3"	1-1/4"	5	2"	VCGT22
VC400150	4.00 Dia x 2.00 OAL x 6 Flute x 1.50 Hole	4"	1-1/2"	6	2"	VCGT22

Metric Diameter Aluminum Cutters

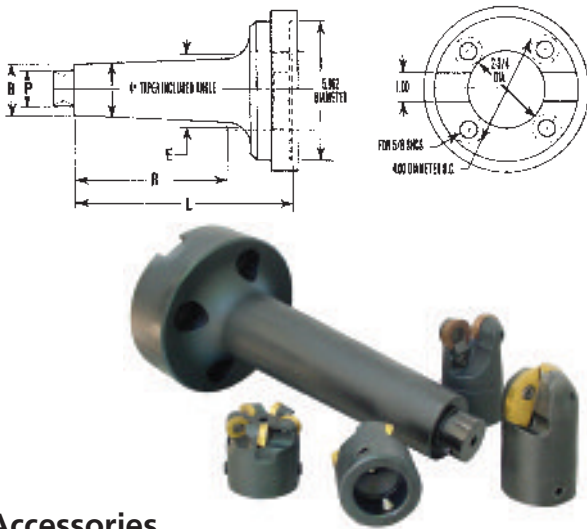
EDP#	Description	Dia	Hole	Flutes	OAL	Insert
VC4216	42mm Dia x 55mm OAL x 3 Flute x 16mm Hole	42mm	16mm	3	55mm	VCGT22
VC5222	52mm Dia x 55mm OAL x 3 Flute x 22mm Hole	52mm	22mm	3	55mm	VCGT22
VC6627	66mm Dia x 55mm OAL x 4 Flute x 27mm Hole	66mm	27mm	4	55mm	VCGT22
VC8027	80mm Dia x 55mm OAL x 5 Flute x 27mm Hole	80mm	27mm	5	55mm	VCGT22
VC12540	125mm Dia x 55mm OAL x 6 Flute x 40mm Hole	125mm	40mm	6	55mm	VCGT22

Aluminum Cutter Inserts

EDP#	Description
VCGT22AR	VCGT22 EURO STYLE INSERT
VCGT22CZ	VCGT22 STYLE INSERT
VCGT16AR	VCGT16AR STYLE INSERT
VDGT11	VDGT11 STYLE INSERT
C25	VDGT 11 SCREW
C45	VCGT22 SCREW
C47	VCGT 16 Screw

Pin Loc Style Shank Extensions

EDP#	P	L	R	B	E
HHX 675	1.25	6.75	3.87	1.88	2.16
HHX 875	1.25	8.75	5.97	1.88	2.30
HHX 1075	1.25	10.75	7.90	1.88	2.44
HHX 1275	1.25	12.75	9.87	1.88	2.58
HHX 1475	1.25	14.75	11.87	1.88	2.72
HHX 1675	1.25	16.75	13.87	1.88	2.86
HHX 1875	1.25	18.75	15.87	1.88	3.00
HHX 2075	1.25	20.75	17.87	1.88	3.13



Accessories

EDP#	Description
CHS 38	Set Screw
M200IN	Insert for PL20050N
RDHX1604	Insert for PL200316 - PL200416 - PL200516
HFM13	Insert for PLHFM20013
RPCW84	Insert for PL200284
VCGT22	Insert for PLVC200322
C45	Screw

2.00" Shank Extensions

EDP#	Description
CHS 200-2	5-1/2" OAL x 2" Ext Lgth x 1-1/4" Pilot x 2" Shank
CHS 200-4	7-1/2" OAL x 4" Ext Lgth x 1-1/4" Pilot x 2" Shank
CHS 200-6	9-1/2" OAL x 6" Ext Lgth x 1-1/4" Pilot x 2" Shank
CHS 200-8	11-1/2" OAL x 8" Ext Lgth x 1-1/4" Pilot x 2" Shank
CHS 200-10.5	13-1/2" OAL x 10-1/2" Ext Lgth x 1-1/4" Pilot x 2" Shank

Cutter Heads

PL20050N



PL200316



PL200416



PL200516



PL200284



PLVC200322



PLHFM20013

PLEX725/M16



Pos. Loc Available

HSK-A63 Threaded Style Holders Rineck

EDP#	HSK	Thread	Upper Shank Dia	Lower Shank Dia	Gage Length	Ext Length	Balanced
R920-A630625	A63	M6	10mm	22mm	51mm	25mm	G2.5/15,000
R920-A63650	A63	M6	10mm	22mm	76mm	50mm	G2.5/15,000
R920-A630675	A63	M6	10mm	26mm	101mm	75mm	G2.5/15,000
R920-A630825	A63	M8	13.8mm	18mm	51mm	25mm	G2.5/15,000
R920-A630825ZY	A63	M8	13.8mm	13.8mm	51mm	25mm	G2.5/15,000
R920-A630850	A63	M8	13.8mm	23mm	76mm	50mm	G2.5/15,000
R920-A630850ZY	A63	M8	13.8mm	13.8mm	76mm	50mm	G2.5/15,000
R920-A630875	A63	M8	13.8mm	25mm	101mm	75mm	G2.5/15,000
R920-A6308100	A63	M8	13.8mm	30mm	126mm	100mm	G2.5/15,000
R920-A6308125	A63	M8	13.8mm	32mm	151mm	125mm	G2.5/15,000
R920-A631025	A63	M10	18mm	23mm	51mm	25mm	G2.5/15,000
R920-A631025ZY	A63	M10	18mm	18mm	51mm	25mm	G2.5/15,000
R920-A631050	A63	M10	18mm	25mm	76mm	50mm	G2.5/15,000
R920-A631050ZY	A63	M10	18mm	25mm	76mm	50mm	G2.5/15,000
R920-A631075	A63	M10	18mm	30mm	101mm	75mm	G2.5/15,000
R920-A631075ZY	A63	M10	18mm	18mm	101mm	75mm	G2.5/15,000
R920-A6310100	A63	M10	18mm	35mm	126mm	100mm	G2.5/15,000
R920-A6310100ZY	A63	M10	18mm	18mm	126mm	100mm	G2.5/15,000
R920-A6310125	A63	M10	18mm	40mm	151mm	125mm	G2.5/15,000
R920-A6310125ZY	A63	M10	18mm	18mm	151mm	125mm	G2.5/15,000
R920-A631225	A63	M12	21mm	24mm	51mm	25mm	G2.5/15,000
R920-A631250	A63	M12	21mm	30mm	76mm	50mm	G2.5/15,000
R920-A631250ZY	A63	M12	23mm	23mm	76mm	50mm	G2.5/15,000
R920-A631275	A63	M12	21mm	35mm	101mm	75mm	G2.5/15,000
R920-A631275ZY	A63	M12	23mm	23mm	101mm	75mm	G2.5/15,000
R920-A6312100	A63	M12	21mm	38mm	126mm	100mm	G2.5/15,000
R920-A6312100ZY	A63	M12	23mm	23mm	126mm	100mm	G2.5/15,000
R920-A6312125	A63	M12	21mm	43mm	151mm	125mm	G2.5/15,000
R920-A6312150	A63	M12	21mm	45mm	176mm	150mm	G2.5/15,000
R920-A6312175	A63	M12	21mm	46mm	201mm	175mm	G2.5/15,000
R920-A6312200	A63	M12	21mm	46mm	226mm	200mm	G2.5/15,000

**Other threaded styles available
Call for additional information**

**HSK-A32
HSK-A40
HSK-A50
HSK-A80
HSK-A100**

HSK A63 Threaded Style

EDP#	HSK	Thread	Upper Shank Dia	Lower Shank Dia	Gage Length	Ext Length	Balanced
R920-A631625	A63	M16	29mm	29mm	51mm	25mm	G2.5/15,000
R920-A631650	A63	M16	29mm	34mm	76mm	50mm	G2.5/15,000
R920-A631650ZY	A63	M16	29mm	29mm	76mm	50mm	G2.5/15,000
R920-A631675	A63	M16	29mm	35mm	101mm	75mm	G2.5/15,000
R920-A631675ZY	A63	M16	29mm	29mm	101mm	75mm	G2.5/15,000
R920-A6316100	A63	M16	29mm	40mm	126mm	100mm	G2.5/15,000
R920-A6316100ZY	A63	M16	29mm	29mm	126mm	100mm	G2.5/15,000
R920-A6316125	A63	M16	29mm	44mm	151mm	125mm	G2.5/15,000
R920-A6316150	A63	M16	29mm	47mm	176mm	150mm	G2.5/15,000
R920-A6316150ZY	A63	M16	29mm	29mm	176mm	150mm	G2.5/15,000
R920-A6316175	A63	M16	29mm	52mm	201mm	175mm	G2.5/15,000
R920-A6316200	A63	M16	29mm	52mm	226mm	200mm	G2.5/15,000
R920-A6316200ZY	A63	M16	29mm	29mm	226mm	200mm	G2.5/15,000



HSK Style A63 A80 A100

EDP#	HSK	Taper	Upper Shank Dia	Lower Shank Dia	Gage Length	Ext Length	Balanced
R905-A63MK170	A63	MT1	18mm	26mm	104mm	78mm	G6.3/8,000
R905-A63MK280	A63	MT2	28mm	34mm	114mm	88mm	G6.3/8,000
R905-A63MK2135	A63	MT2	28mm	40mm	169mm	143mm	G6.3/8,000
R905-A63MK3100	A63	MT3	36mm	41mm	134mm	108mm	G6.3/8,000
R905-A63MK3145	A63	MT3	36mm	47mm	179mm	153mm	G6.3/8,000
R905-A63MK4130	A63	MT4	44mm	52mm	164mm	138mm	G6.3/8,000
R905-A63MK4175	A63	MT4	44mm	52mm	209mm	183mm	G6.3/8,000
R905-A80MK280	A80	MT2	28mm	34mm	114mm	88mm	G6.3/8,000
R905-A80MK2135	A80	MT2	28mm	40mm	169mm	143mm	G6.3/8,000
R905-A80MK3100	A80	MT3	36mm	41mm	134mm	108mm	G6.3/8,000
R905-A80MK3145	A80	MT3	36mm	47mm	179mm	153mm	G6.3/8,000
R905-A80MK4135	A80	MT4	44mm	53mm	169mm	143mm	G6.3/8,000
R905-A80MK4175	A80	MT4	44mm	58mm	209mm	183mm	G6.3/8,000
R905-A80MK5165	A80	MT5	56mm	62mm	199mm	173mm	G6.3/8,000
R905-A80MK5200	A80	MT5	56mm	62mm	234mm	208mm	G6.3/8,000
R905-A100MK280	A100	MT2	34mm	34mm	117mm	88mm	G6.3/8,000
R905-A100MK2135	A100	MT2	40mm	40mm	172mm	143mm	G6.3/8,000
R905-A100MK3100	A100	MT3	41mm	41mm	137mm	108mm	G6.3/8,000
R905-A100MK3145	A100	MT3	47mm	47mm	182mm	153mm	G6.3/8,000
R905-A100MK4135	A100	MT4	55mm	55mm	172mm	143mm	G6.3/8,000
R905-A100MK4175	A100	MT4	60mm	60mm	212mm	183mm	G6.3/8,000
R905-A100MK5165	A100	MT5	70mm	70mm	202mm	173mm	G6.3/8,000
R905-A100MK5215	A100	MT5	76mm	76mm	249mm	220mm	G6.3/8,000



HSK - Shrink Fit

HSK Shrink Fit Style Holder - Rineck 4.5 Degree Draft



EDP#	HSK	Hole	Upper Shank Dia	Lower Shank Dia	Gage Length	Ext Length	Balanced
R985-A6303A80	A63	3mm	11mm	15mm	80mm	54mm	G2.5/15,000
R985-A6304A80	A63	4mm	14mm	22mm	80mm	54mm	G2.5/15,000
R985-A6305A80	A63	5mm	16mm	22mm	80mm	54mm	G2.5/15,000
R985-A6306A80	A63	6mm	21mm	27mm	80mm	54mm	G2.5/15,000
R985-A6308A80	A63	8mm	21mm	27mm	80mm	54mm	G2.5/15,000
R985-A6310A85	A63	10mm	24mm	32mm	85mm	59mm	G2.5/15,000
R985-A6312A90	A63	12mm	24mm	32mm	90mm	64mm	G2.5/15,000
R985-A6314A90	A63	14mm	27mm	34mm	90mm	64mm	G2.5/15,000
R985-A6316A95	A63	16mm	27mm	34mm	95mm	69mm	G2.5/15,000
R985-A6318A95	A63	18mm	33mm	42mm	95mm	69mm	G2.5/15,000
R985-A6320A100	A63	20mm	33mm	42mm	100mm	74mm	G2.5/15,000
R985-A6325A115	A63	25mm	44mm	53mm	115mm	89mm	G2.5/15,000
R985-A6332A120	A63	32mm	44mm	53mm	120mm	94mm	G2.5/15,000
R985-A6306A120	A63	6mm	21mm	27mm	120mm	94mm	G2.5/15,000
R985-A6308A120	A63	8mm	21mm	27mm	120mm	94mm	G2.5/15,000
R985-A6310A120	A63	10mm	24mm	32mm	120mm	94mm	G2.5/15,000
R985-A6312A120	A63	12mm	24mm	32mm	120mm	94mm	G2.5/15,000
R985-A6314A120	A63	14mm	27mm	34mm	120mm	94mm	G2.5/15,000
R985-A6316A120	A63	16mm	27mm	34mm	120mm	94mm	G2.5/15,000
R985-A6318A120	A63	18mm	33mm	42mm	120mm	94mm	G2.5/15,000
R985-A6320A120	A63	20mm	33mm	42mm	120mm	94mm	G2.5/15,000
R985-A6306A160	A63	6mm	21mm	27mm	160mm	134mm	G2.5/15,000
R985-A6308A160	A63	8mm	21mm	27mm	160mm	134mm	G2.5/15,000
R985-A6310A160	A63	10mm	24mm	32mm	160mm	134mm	G2.5/15,000
R985-A6312A160	A63	12mm	24mm	32mm	160mm	134mm	G2.5/15,000
R985-A6314A160	A63	14mm	27mm	34mm	160mm	134mm	G2.5/15,000
R985-A6316A160	A63	16mm	27mm	34mm	160mm	134mm	G2.5/15,000
R985-A6318A160	A63	18mm	33mm	42mm	160mm	134mm	G2.5/15,000
R985-A6320A160	A63	20mm	33mm	42mm	160mm	134mm	G2.5/15,000
R985-A6325A160	A63	25mm	44mm	53mm	160mm	134mm	G2.5/15,000
R985-A6332A160	A63	32mm	44mm	53mm	160mm	134mm	G2.5/15,000

HSK shrink fit holders also come with 3 degree draft. We also have HSK-A40, HSK-A50 and HSK-A100. Call for additional information.

HWZ Cutters



EDP#	Description	Dia	OAL	Ext Length	Shank Dia
HWZ625850100	.625 Dia x 6.50 OAL x 1.00 Shank	5/8"	6-1/2"	4"	1"
HWZ750550100	.750 Dia x 5.50 OAL x 1.00 Shank	3/4"	5-1/2"	3-1/2"	1"
HWZ750650100	.750 Dia x 6.50 OAL x 1.00 Shank	3/4"	6-1/2"	4"	1"
HWZ750750100	.750 Dia x 7.50 OAL x 1.00 Shank	3/4"	7-1/2"	5"	1"
HWZ750900100	.750 Dia x 9.00 OAL x 1.00 Shank	3/4"	9"	6-1/2"	1"
HWZ100450125	1.00 Dia x 4.50 OAL x 1.25 Shank	1"	4-1/2"	2"	1-1/4"
HWZ100650100	1.00 Dia x 6.50 OAL x 1.00 Shank	1"	6-1/2"	4-1/2"	1"
HWZ100650125	1.00 Dia x 6.50 OAL x 1.25 Shank	1"	6-1/2"	4"	1-1/4"
HWZ100750125	1.00 Dia x 7.50 OAL x 1.25 Shank	1"	7-1/2"	5"	1-1/4"
HWZ100900125	1.00 Dia x 9.00 OAL x 1.25 Shank	1"	9"	6-1/2"	1-1/4"
HWZ100110125	1.00 Dia x 11.00 OAL x 1.25 Shank	1"	11"	7-1/2"	1-1/4"
HWZ125450125	1.25 Dia x 4.50 OAL x 1.25 Shank	1-1/4"	4-1/2"	2-1/4"	1-1/4"
HWZ125600125	1.25 Dia x 6.00 OAL x 1.25 Shank	1-1/4"	6"	3/12"	1-1/4"
HWZ125800125	1.25 Dia x 8.00 OAL x 1.25 Shank	1-1/4"	8"	5-1/2"	1-1/4"
HWZ125800150	1.25 Dia x 8.00 OAL x 1.50 Shank	1-1/4"	8"	5-1/2"	1-1/2"
HWZ150100125	1.50 Dia x 10.00 OAL x 1.25 Shank	1-1/2"	10"	8"	1-1/4"
HWZ150800150	1.50 Dia x 8.00 OAL x 1.50 Shank	1-1/2"	8"	5-1/2"	1-1/2"
HWZ150900150	1.50 Dia x 9.00 OAL x 1.50 Shank	1-1/2"	9"	6-1/2"	1-1/2"
HWZ150110150	1.50 Dia x 11.00 OAL x 1.50 Shank	1-1/2"	11"	8-1/2"	1-1/2"
HWZ200800200	2.00 Dia x 8.00 OAL x 2.00 Shank	2"	8"	5"	2"



Accessories

For HWZ Shoulder Mill

EDP#	Radius	Part
ADKT1505-16	.062	Insert
ADKT1505-16 TiN	.062	Insert
ADKT1505-16 TiALN	.062	Insert
C47 Torx		Screw
T15		Torx®



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Profile Milling Cutters



EDP#	Description	Dia	OAL	Ext Length	Shank Dia
HLR750350750	.750 Dia x 3.50 OAL x .750 Shank	3/4"	3-1/2"	2-1/2"	3/4"
HLR750500750	.750 Dia x 5.00 OAL x .750 Shank	3/4"	5"	4"	3/4"
HLR100400100N	1.00 Dia x 4.00 OAL x 1.00 Shank Neg	1"	4"	2"	1"
HLR100400100P	1.00 Dia x 4.00 OAL x 1.00 Shank Pos	1"	4"	2"	1"
HLR100500100P	1.00 Dia x 5.00 OAL x 1.00 Shank Pos	1"	5"	2"	1"
HLR100600100N	1.00 Dia x 6.00 OAL x 1.00 Shank Neg	1"	6"	3-3/4"	1"
HLR100600100P	1.00 Dia x 6.00 OAL x 1.00 Shank Pos	1"	6"	3-3/4"	1"
HLR100600125N	1.00 Dia x 6.00 OAL x 1.25 Shank Neg	1"	6"	3-3/4"	1-1/4"
HLR100600125P	1.00 Dia x 6.00 OAL x 1.25 Shank Pos	1"	6"	3-3/4"	1-1/4"
HLR100800125N	1.00 Dia x 8.00 OAL x 1.25 Shank Neg	1"	8"	5-3/4"	1-1/4"
HLR125400125N	1.25 Dia x 4.00 OAL x 1.25 Shank Neg	1-1/4"	4"	1-3/4"	1-1/4"
HLR125400125P	1.25 Dia x 4.00 OAL x 1.25 Shank Pos	1-1/4"	4"	1-3/4"	1-1/4"
HLR125600125N	1.25 Dia x 6.00 OAL x 1.25 Shank Pos	1-1/4"	6"	3-1/4"	1-1/4"
HLR125600125P	1.25 Dia x 6.00 OAL x 1.25 Shank Pos	1-1/4"	6"	3-1/4"	1-1/4"
HLR125750125N	1.25 Dia x .750 OAL x 1.25 Shank Neg	1-1/4"	7-1/2"	5-1/4"	1-1/4"
HLR125110125N	1.25 Dia x 11.00 OAL x 1.25 Shank Neg	1-1/4"	11"	6-1/2"	1-1/4"
HLR125800125N	1.25 Dia x 8.00 OAL x 1.25 Shank Neg	1-1/4"	8"	6-1/4"	1-1/4"
HLR150400150N	1.50 Dia x 4.00 OAL x 1.50 Shank Neg	1-1/2"	4"	1-3/4"	1-1/2"
HLR150400150P	1.50 Dia x 4.00 OAL x 1.50 Shank Pos	1-1/2"	4"	1-3/4"	1-1/2"
HLR150450750N	1.50 Dia x 4.50 OAL x .750 Shank Neg	1-1/2"	4-1/2"	3"	3/4"
HLR150450750P	1.50 Dia x 4.50 OAL x .750 Shank Pos	1-1/2"	4 1/2"	3"	3/4"
HLR150600125N	1.50 Dia x 6.00 OAL x 1.25 Shank Neg	1-1/2"	6"	4"	1-1/4"
HLR150600125P	1.50 Dia x 6.00 OAL x 1.25 Shank Pos	1-1/2"	6"	4"	1-1/4"
HLR150750150N	1.50 Dia x .750 OAL x 1.50 Shank Neg	1-1/2"	7-1/2"	5-1/4"	1-1/2"
HLR150800125N	1.50 Dia x 8.00 OAL x 1.25 Shank Neg	1-1/2"	8"	5-1/4"	1-1/4"
HLR150900150N	1.50 Dia x 9.00 OAL x 1.50 Shank Neg	1-1/2"	9"	6-3/4"	1-1/2"
HLR150110150N	1.50 Dia x 11.00 OAL x 1.50 Shank Neg	1-1/2"	11"	8-1/2"	1-1/2"
HLR200400125N	2.00 Dia x 4.00 OAL x 1.25 Shank Neg	2"	4"	1-1/2"	1-1/4"
HLR200400125P	2.00 Dia x 4.00 OAL x 1.25 Shank Pos	2"	4"	1-1/2"	1-1/4"
HLR200500125N	2.00 Dia x 5.00 OAL x 1.25 Shank Neg	2"	5"	2-1/2"	1-1/4"
HLR200500125P	2.00 Dia x 5.00 OAL x 1.25 Shank Pos	2"	5"	2-1/2"	1-1/4"
HLR200700125N	2.00 Dia x 5.00 OAL x 1.25 Shank Neg	2"	7"	4-1/2"	1-1/4"

Accessories, Inserts and Screw



EDP#	Part	Coating
RPCW-1204	Insert	TA2
RPCT-1204	Chip Gullet	TA2
C47	TORX Screw	
T15	TORX® Screwdriver	

Brazed End Mills



EDP#	Description	Mill Dia	Shank Dia	OAL
BF375300375	Flat .375 Dia x 3.00 OAL x .375 Shank Brazed	3/8"	3/8"	3"
BF375450500	Flat .375 Dia x 4.50 OAL x .500 Shank Brazed	3/8"	1/2"	4-1/2"
BF375550500	Flat .375 Dia x 5.50 OAL x .500 Shank Brazed	3/8"	1/2"	5-1/2"
BF500300625	Flat .500 Dia x 3.00 OAL x .625 Shank Brazed	1/2"	5/8"	3"
BF500400625	Flat .500 Dia x 4.00 OAL x .625 Shank Brazed	1/2"	5/8"	4"
BF500475625	Flat .500 Dia x 4.75 OAL x .625 Shank Brazed	1/2"	5/8"	4-3/4"
BF500575625	Flat .500 Dia x 5.75 OAL x .625 Shank Brazed	1/2"	5/8"	5-3/4"
BF500700625	Flat .500 Dia x 7.00 OAL x .625 Shank Brazed	1/2"	5/8"	7"
BF625400625	Flat .625 Dia x 4.00 OAL x .625 Shank Brazed	5/8"	5/8"	4"
BF625475750	Flat .625 Dia x 4.75 OAL x .750 Shank Brazed	5/8"	3/4"	4-3/4"
BF625625750	Flat .625 Dia x 6.25 OAL x .750 Shank Brazed	5/8"	3/4"	6-1/4"
BF625800750	Flat .625 Dia x 8.00 OAL x .750 Shank Brazed	5/8"	3/4"	8"

B375300375	.375 Dia x 3.00 OAL x .375 Shank	3/8"	3/8"	3"
B375450500	.375 Dia x 4.50 OAL x .500 Shank	3/8"	1/2"	4-1/2"
B375550500	.375 Dia x 5.50 OAL x .500 Shank	3/8"	1/2"	5-1/2"
B500300625	.500 Dia x 3.00 OAL x .625 Shank	1/2"	5/8"	3"
B500400625	.500 Dia x 4.00 OAL x .625 Shank	1/2"	5/8"	4"
B500475625	.500 Dia x 4.75 OAL x .625 Shank	1/2"	5/8"	4-3/4"
B500575625	.500 Dia x 5.75 OAL x .625 Shank	1/2"	5/8"	5-3/4"
B500700625	.500 Dia x 7.00 OAL x .625 Shank	1/2"	5/8"	7"
B625400750	.625 Dia x 4.00 OAL x .750 Shank	5/8"	3/4"	4"
B625475750	.625 Dia x 4.75 OAL x .750 Shank	5/8"	3/4"	4-3/4"
B625625750	.625 Dia x 6.25 OAL x .750 Shank	5/8"	3/4"	6-1/4"
B625800750	.625 Dia x 8.00 OAL x .750 Shank	5/8"	3/4"	8"
B750450750	.750 Dia x 4.50 OAL x .750 Shank	3/4"	3/4"	4-1/2"
B750475100H	.750 Dia x 4.75 OAL x 1.00 Shank Brazed Helix	3/4"	1"	5-1/2"
B750550750	.750 Dia x 5.50 OAL x .750 Shank	3/4"	3/4"	5-1/2"
B750600100H	.750 Dia x 6.00 OAL x 1.00 Shank Brazed Helix	3/4"	1"	6"
B750800125	.750 Dia x 8.00 OAL x 1.25 Shank	3/4"	1-1/4"	8"
B750800750	.750 Dia x 8.00 OAL x .750 Shank	3/4"	3/4"	8"
B750800750H	.750 Dia x 8.00 OAL x .750 Shank Brazed Helix	3/4"	3/4"	8"
B750900125	.750 Dia x 9.00 OAL x 1.25 Shank	3/4"	1-1/4"	9"
B75010750	.750 Dia x 10.00 OAL x .750 Shank	3/4"	3/4"	10"
B75010750H	.750 Dia x 10.00 OAL x .750 Shank Brazed Helix	3/4"	3/4"	10"
B100550125H	1.00 Dia x 5.50 OAL x 1.25 Shank Brazed Helix	1"	1-1/4"	5-1/2"

A heavy duty carbide end mill for both profile, rise and fall duplicating.

Hardened steel shanks for rigidity, together with length, make these end mills a must in every die, mold and pattern shop.

Resharpening and retipping service is available to help minimize your inventory of tools.



REGULAR GRIND
5° HELIX GRIND
2 CUTTING EDGES TO CENTER

A perfect replacement for solid carbide end mills of the same size at a more affordable price.

**All end mills listed as flat bottoms are available with corner radii to your specifications.*



FLAT BOTTOM BRAZED CARBIDE END MILLS



Solid Carbide End Mills

U.S. Standard English

EDP#	Description	Cutting Dia	OAL	Shank Dia	Flute
BN1252502502z	1/8" Dia x 2.50 OAL x 1/4" Shank x 2 Flute	1/8"	2-1/2"	1/4"	2
BN1252502504z	1/8" Dia x 2.50 OAL x 1/4" Shank x 4 Flute	1/8"	2-1/2"	1/4"	4
BN1253002502z	1/8" Dia x 3.00 OAL x 1/4" Shank x 2 Flute	1/8"	3"	1/4"	2
BN1254002504z	1/8" Dia x 4.00 OAL x 1/4" Shank x 4 Flute	1/8"	4"	1/4"	4
BN12540018752z	1/8" Dia x 4.00 OAL x 3/16" Shank x 2 Flute	1/8"	4"	3/16"	2
BN12540018754z	1/8" Dia x 4.00 OAL x 3/16" Shank x 4 Flute	1/8"	4"	3/16"	4
FB12540018754z	1/8" Dia x 4.00 OAL x 3/16" Shank x 4 Flute	1/8"	4"	3/16"	4
BN18753002502z	3/16" Dia x 3.00 OAL x 1/4" Shank x 2 Flute	3/16"	3"	1/4"	2
BN18753002504z	3/16" Dia x 3.00 OAL x 1/4" Shank x 4 Flute	3/16"	3"	1/4"	4
BN18754002502z	3/16" Dia x 4.00 OAL x 1/4" Shank x 2 Flute	3/16"	4"	1/4"	2
BN18754002504z	3/16" Dia x 4.00 OAL x 1/4" Shank x 4 Flute	3/16"	4"	1/4"	4
BN2502753754z	1/4" Dia x 2.75 OAL x 3/8" Shank x 4 Flute	1/4"	2-3/4"	3/8"	4
BN2504003752z	1/4" Dia x 4.00 OAL x 3/8" Shank x 2 Flute	1/4"	4"	3/8"	2
BN2504003754z	1/4" Dia x 4.00 OAL x 3/8" Shank x 4 Flute	1/4"	4"	3/8"	4
BN31254003752z	5/16" Dia x 4.00 OAL x 3/8" Shank x 2 Flute	5/16"	4"	3/8"	2



Solid Carbide End Mills



U.S. Standard

EDP#	Description	Cutting Dia	OAL	Shank Dia	Flute
BN3754003752z	3/8" Dia x 4.00 OAL x 3/8" Shank x 2 Flute	3/8"	4"	3/8"	2
BN3754003754z	3/8" Dia x 4.00 OALx 3/8" Shank x 4 Flute	3/8"	4"	3/8"	4
BN3755005004z	3/8" Dia x 5.00 OAL x 1/2" Shank x 4 Flute	3/8"	5"	1/2"	4
BN5005006254z	1/2" Dia x 5.00 OAL x 5/8" Shank x 4 Flute	1/2"	5"	5/8"	4

Metric

EDP#	Description	Cutting Dia	OAL	Shank Dia	Flute
FBM310064z	3mm Dia x 100 OAL x 6 Shank x 4 Flute	3mm	100mm	6mm	4
FBM47564z	4mm Dia x 75 OAL x 6 Shank x 4 Flute	4mm	75mm	6mm	4
FBM57564z	5mm Dia x 75 OAL x 6 Shank x 4 Flute	5mm	75mm	6mm	4
BNM67562z	6mm Dia x 75 OAL x 6 Shank x 2 Flute	6mm	75mm	6mm	2
BNM610082z	6mm Dia x 100 OAL x 8 Shank x 2 Flute	6mm	100mm	8mm	2
FBM610083z	6mm Dia x 100 OAL x 8 Shank x 3 Flute	6mm	100mm	8mm	3
BNM810084z	8mm Dia x 100 OAL x 8 Shank x 4 Flute	8mm	100mm	8mm	4
FBM810084z	8mm Dia x 100 OAL x 8 Shank x 4 Flute	8mm	100mm	8mm	4

Solid Carbide Profile End Mills

U.S. Standard

EDP# 2 Flute	EDP# 4 Flute	Cutting Dia	OAL	Shank Dia
PF02892	PF19822	1/8"	2-1/2"	3/16"
PF01250	PF19125	1/8"	4"	3/16"
PF02893	PF19823	3/16"	3"	1/4"
PF01875	PF19875	3/16"	4"	1/4"
PF02894	PF19824	1/4"	4"	3/8"
PF02895	PF19825	5/16"	4"	3/8"
PF02896	PF19826	3/8"	4"	3/8"

Metric

EDP# 2 Flute	EDP# 4 Flute	Cutting Dia	OAL	Shank Dia
PF02903	PF20923	4mm	76mm	6mm
PF02904	PF20924	6mm	101mm	10mm
PF02905	PF20925	8mm	101mm	10mm
PF02906	PF20926	10mm	101mm	10mm
PF02907	PF20927	12mm	101mm	12mm



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Accessories

NEW-LUBE®

FEATURES:

- Increases tool life.
- Eliminates the need for flood coolants on many applications.
- Avoids mist in air.
- No moving parts.
- 1/3 to 1/4 the cost of competitors mist systems.
- Single and double nozzle systems available.



EDP#	Description
MSN1	Single Nozzle Mist
NDN2	Double Nozzle Mist



Height Presetter HP- 6 and HP-150

The Height Presetter is a tool for precisely setting tool tip offsets from Z 0. It's done quickly and conveniently from the machine operators control pendant while he views the presetter visually.

It is also very useful in measuring tool tip or nose wear of the cutting tool. This is especially important for consistent stock removal over the entire surface of the job in finishing operations. A great time saver, while adding more precision to your machining operations.

EDP#	
HP-6	U.S. Standard
HP-150	Metric



Harroun Enterprise can balance your tools and holders

A balanced toolholder & tools provides:

- Better surface
- Tighter tolerances
- Increased tool life
- Longer spindle and bearing life

Despite the relatively small mass of this assembly compared to the spindle . Devastating result at any speed will effect the performance however, at high speeds (typically above 10,000 RPM), unbalanced tools and toolholders centrifugal forces can cause significant damage to spindle and / or spindle bearings and create other undesirable effects such as chatter, poor surface finish, high insert or tool wear.

Call for information

Terms and Conditions



PRICES

Prices are effective January 30, 2006. Prices are subject to change without notice. ADDED to listed prices, buyer shall pay the seller an amount equal to any tax or duty which seller may pay in respect to the sales.

DELIVERY

F.O.B. Fenton, Michigan. Product will be shipped the best way, usually UPS, unless specified otherwise.

TERMS

Net 30 days. If payment is not received within these terms, an additional charge of 1-1/2% per month will be applied to the unpaid balance.

RETURNS

All returned goods must have a return goods authorization (RGA) number, which can be obtained by calling our sales department at 810-629-9885.

RGA number must be clearly labeled on the outside of the returned package.

EXPRESS WARRANTY

Harroun Enterprises warrants its products for 6 (six) months from date of purchase against defects due to faulty material or workmanship and will repair or replace, at its discretion, without charge any items returned, provided the user notifies Harroun of said defect within 180 days of date of purchase. This warranty is void if an item has been damaged by accident or unreasonable use, neglect, improper service, or other causes not arising out of defects in material or workmanship. No other expressed warranty is given or authorized.

LIMITATION OF IMPLIED WARRANTY

Harroun Enterprises disclaims any implied warranty of merchantability or fitness for any period beyond that of the express warranty.

EXCLUSION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES

HARROUN ENTERPRISES SHALL NOT BE LIABLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES. This warranty gives you specific legal rights and you may have other rights which vary from state to state. THIS WARRANTY IS IN LIEU OF ANY OTHER WARRANTY, EXPRESS OR IMPLIED, INCLUDING ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. Stated limitations may not apply in states where prohibited.

WARRANTY SERVICE

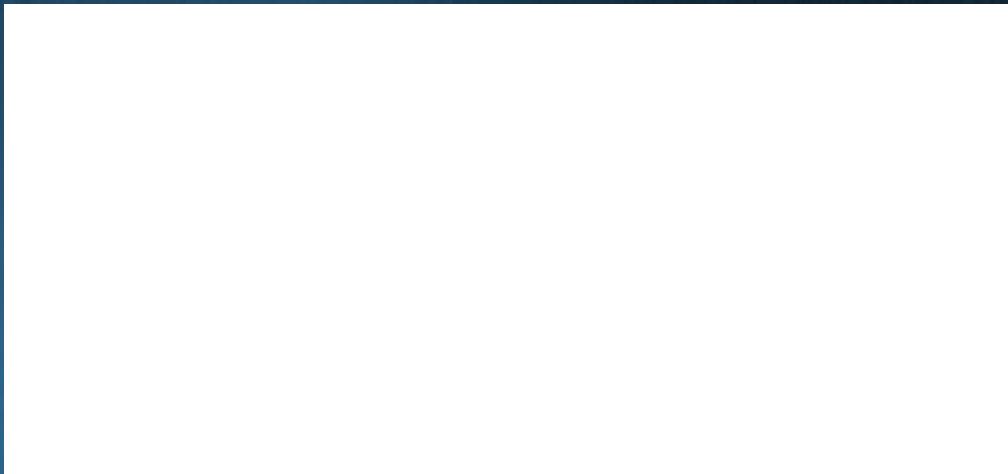
To obtain warranty service you must do the following: 1. Call Harroun at 1-810-629-9885 to obtain a return authorization number. 2. Return item(s), transportation prepaid, to:

Harroun Enterprises

1111 Fenway Circle, Fenton, MI 48430

ATTN: Return Authorization #:_____.

" H o m e o f t h e M o l d M a s h e r "



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