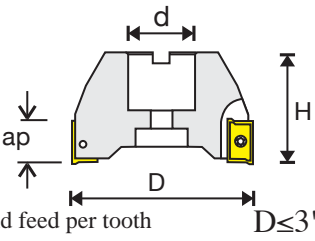


SHARS 90° Square Shoulder Indexable Face Mills & End Mills

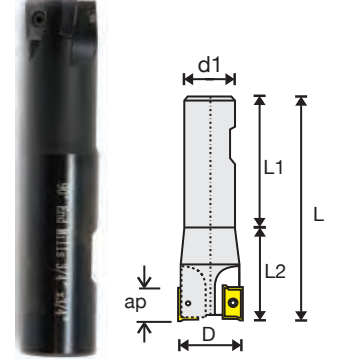
90° Cutting Angle • Screw Down Insert

FEATURES:

- Setting angle 90°
- Axial rake angle +7°
- All types of square shoulder face milling, side milling and full slot milling (shaft end mills) of steels, alloyed steels, stainless and heat resistant steels, cast irons and aluminum alloys.
- Fitted with 10° positive rectangular inserts allow high depth of cut and feed per tooth
- Uses APKT/APHT/APHW inserts (sold separately)
- Radial rake angle -10°



Cutting Diameter D	Shank d1	Arbor Holed	L,H	ap	No. of Insert	Screw	Insert#	Order #	USA Brand	SHARS (D)
FACE MILLS										
2"		3/4"	1.750"	0.551"	5	M4×8.4	APKT 33	404-1867	\$223.00	\$75.99
2-1/2"		3/4"	2.000"	0.551"	6	M4×8.4	APKT 33	404-1868	270.00	85.99
3"		1"	2.000"	0.551"	7	M4×8.4	APKT 33	404-1869	324.00	91.79
4"		1-1/2"	2.000"	0.551"	8	M4×8.4	APKT 33	404-1870	410.00	107.99
5"		1-1/2"	2.000"	0.551"	8	M4×8.4	APKT 33	404-1871	524.00	129.00
6"		2"	2-31/64"	0.551"	10	M4×8.4	APKT 33	404-2352	246.00	155.55
8"		2-1/2"	2-31/64"	0.551"	12	M4×8.4	APKT 33	404-2353	345.20	224.70
END MILLS										
1/2"	5/8"		3-1/4"	0.410"	1	M2.5×6.5	APKT 22	404-1860	124.00	23.95
5/8"	5/8"		3-1/4"	0.410"	2	M2.5×6.5	APKT 22	404-1861	138.00	28.75
3/4"	3/4"		3-1/2"	0.410"	3	M2.5×6.5	APKT 22	404-1862	162.00	31.15
1"	1"		3-1/2"	0.410"	4	M2.5×6.5	APKT 22	404-1863	190.00	50.35
1-1/4"	1-1/4"		3-3/4"	0.551"	3	M4×8.4	APKT 33	404-1864	128.00	48.00
1-1/2"	1-1/2"		4"	0.551"	4	M4×8.4	APKT 33	404-1865	155.00	81.55



Replacement Screw	Order #	Price (B)
M2.5×6.5	404-1998	\$2.50
M4×8.4	404-1999	2.50

*See Page 58 for Grade Information.

Insert	ISO	Coating	Length	Thickness	YBG202	Price(B)
APMT 22 PDER DM	APMT 100320 PDER	TIALN	0.413"	0.138"	424-3033	\$7.07
APKT 33 PDER PM	APKT 160408 PDER	TIALN	.551	.187	424-3012	8.37
APET 1604 PDER MP3	For Aluminum micrograin c2/c3 uncoated				424-0824	7.95



SHARS 90° Square Shoulder Indexable Face Mills

Clamp Style • Triangular 11° Positive Inserts

- All types of square shoulder face milling of steels, alloyed steels, stainless and heat resistant steels, cast irons and aluminum alloys.
- Fitted with 11° positive rectangular inserts allow high depth of cut and feed per tooth
- Uses TPKN/TPUN inserts (sold separately)

FEATURES:

- Setting angle 90°
- Radial rake angle +1°
- Axial rake +7°

Screw

Cutting Dia.	Order #	Price(D)
1-1/2 ~ 3"	404-6918s	\$2.50
4 ~ 6"	404-6927	2.50

Insert

Grade YBC151	Radius R	Order #	Price(D)
TPG 321	1/64"	424-1801	\$4.05
TPG 322	1/32"	424-1802	4.05
TPG 432	1/32"	424-1806	6.29
TPG 433	3/64"	424-1807	6.29

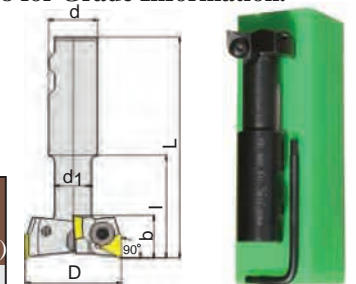
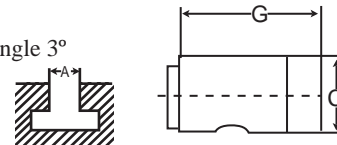
*See Page 58 for Grade Information.

SHARS Indexable T-Slot Cutter

Weldon Shank • TPG Style Insert • Setting Rake: 90° • Axial rake angle 3°

APPLICATION:

- Insert grade allows use on cast steel, carbon steel, alloys, hardened steels and stainless steel.



A	Cutting Diameter D	Shank Diameter d	d1	OAL L	b	G	# of Inserts	Insert Style	Order #	USA Brand	SHARS (D)
3/4"	1-15/32"	1"	25/32"	4-7/16"	5/8"	2-9/32"	2	TPG-222	404-6601	\$75.50	\$39.95
1"	1-27/32"	1-1/4"	1-1/32"	4-13/16"	53/64"	2-9/32"	4	TPG-322	404-6602	96.50	40.95
1-1/4"	2-7/32"	1-1/4"	1-9/32"	5-3/8"	1-3/32"	2-9/32"	4	TPG-322	404-6603	165.60	69.95
1-1/2"	2-21/32"	1-1/4"	1-17/32"	5-29/32"	1-11/32"	2-9/32"	4	TPG-433	404-6604	192.45	89.95

Description	Order #	Price(D)
Lock Screw M5×0.8	404-6601S	\$2.00
Wrench	404-6601W	\$2.00