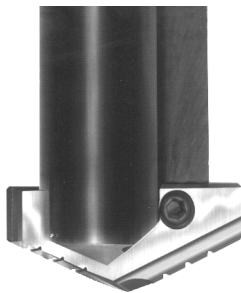


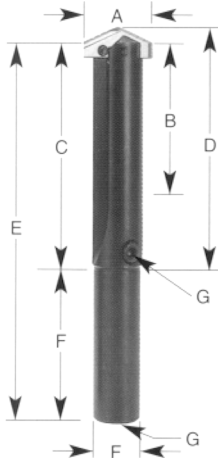
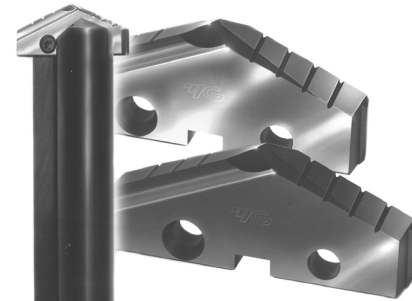
SPADE DRILL BODIES- STRAIGHT SHANK

SPADE DRILL BODIES
Straight Shank, Straight Flute

ALLIED® "TA" Series Compatible!

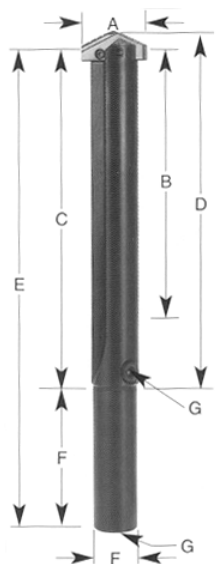


Prices Are
50%
Below Mfg's List!



Short Length - Straight Shank Holders, Straight Flute

Series	A Drill Insert Range (inches)	B Max Drill Depth	C Flute Length	D Ref Length	E OAL	F Shank Dia	F Shank Length	G Pipe Tap	Part Number	Price Each
Y	3/8 to 27/64	1 1/4	2-1/32	2 1/8	4 13/32	3/4	2 3/8	1/8	YG-P13Y01	\$159.59
Z	7/16 to 1/2	1 1/4	2-1/32	2 1/8	4 13/32	3/4	2 3/8	1/8	YG-P13Z01	\$159.59
0	33/64 to 11/16	1 3/8	2-3/16	2 19/64	4 9/16	3/4	2 3/8	1/8	YG-P13001	\$159.59
0.5	39/64 to 11/16	1 3/8	2-3/16	2 19/64	4 9/16	3/4	2 3/8	1/8	YG-P13051	\$159.59
1	45/64 to 15/16	2 5/8	3-7/8	4 1/64	6 7/8	3/4 1	3 3	1/8 1/8	YG-P13101 YG-P13102	\$165.66 \$165.66
1.5	66/64 to 15/16	2 5/8	3-7/8	4 1/64	6 7/8	3/4 1	3 3	1/8 1/8	YG-P13151 YG-P13152	\$179.07 \$179.07
2	31/32 to 1 3/8	3 3/8	4-1/2	4 41/64	8	1 1-1/4	3 1/2 3 1/2	1/8 1/8	YG-P13202 YG-P13203	\$179.07 \$179.07
2.5	1 3/16 to 1 3/8	3 3/8	4-1/2	4 41/64	8	1 1-1/4	3 1/2 3 1/2	1/8 1/8	YG-P13252 YG-P13253	\$201.00 \$201.00
3	1 13/32 to 1 7/8	4 3/4	6	6 3/16	10	1-1/4 1-1/2	4 4	1/4 1/4	YG-P13303 YG-P13304	\$203.44 \$203.44
4	1 29/32 to 2 9/16	5 1/8	6-1/2	6 11/16	10 1/2	1-1/2 1-3/4	4 4	1/4 1/4	YG-P13404 YG-P13405	\$233.87 \$247.29
5	2 1/2 to 3 1/2	6 3/4	8-1/2	8 3/4	12 1/2	2	4	1/2	YG-P13506	\$371.51
7-8	3 17/32 to 4 1/2	6 3/4	8-7/8	9 1/8	13 7/8	3	5	1/2	YG-P13708	\$505.51



Standard Length - Straight Shank Holders, Straight Flute

Series	A Drill Insert Range (inches)	B Max Drill Depth	C Flute Length	D Ref Length	E OAL	F Shank Dia	F Shank Length	G Pipe Tap	Part Number	Price Each
Y	3/8 to 27/64	2 3/8	3-5/32	3 1/4	5 17/32	3/4	2 3/8	1/8	YG-P15Y01	\$163.22
Z	7/16 to 1/2	2 3/8	3-5/32	3 1/4	5 17/32	3/4	2 3/8	1/8	YG-P15Z01	\$163.22
0	33/64 to 11/16	2 1/2	3-5/16	3 27/64	5 11/16	3/4	2 3/8	1/8	YG-P15001	\$163.22
0.5	39/64 to 11/16	2 1/2	3 5/16	3 27/64	5 11/16	3/4	2 3/8	1/8	YG-P15051	\$163.22
1	45/64 to 15/16	6 5/8	7-7/8	8 1/64	10 7/8	3/4 1	3 3	1/8 1/8	YG-P15101 YG-P15102	\$179.07 \$179.07
1.5	55/64 to 15/16	6 5/8	7-7/8	8 1/64	10 7/8	3/4 1	3 3	1/8 1/8	YG-P15151 YG-P15152	\$192.46 \$192.46
2	31/32 to 1 3/8	7 3/8	8-1/2	8 41/64	12	1 1-1/4	3 1/2 3 1/2	1/8 1/8	YG-P15202 YG-P15203	\$192.46 \$192.46
2.5	1 3/16 to 1 3/8	7 3/8	8-1/2	8 41/64	12	1 1-1/4	3 1/2 3 1/2	1/8 1/8	YG-P15252 YG-P15253	\$213.15 \$213.15
3	1 13/32 to 1 7/8	8 1/4	9-1/2	9 11/16	13 1/2	1-1/4 1-1/2	4 4	1/4 1/4	YG-P15303 YG-P15304	\$215.61 \$215.61
4	1 29/32 to 2 9/16	9 1/8	10-1/2	10 11/16	14 1/2	1-1/2 1-3/4	4 4	1/4 1/4	YG-P15404 YG-P15405	\$270.42 \$291.11
5	2 1/2 to 3 1/2	10 3/4	12-1/2	12 3/4	16 1/2	2	4	1/2	YG-P15506	\$408.07
7-8	3 17/32 to 4 1/2	10 3/4	12-7/8	13 1/8	17 7/8	3	5	1/2	YG-P15708	\$602.95

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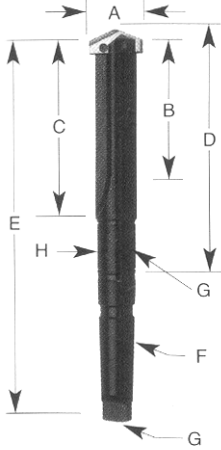
SPADE DRILL BODIES- TAPER SHANK

SPADE DRILL BODIES Morse Taper Shank, Straight Flute

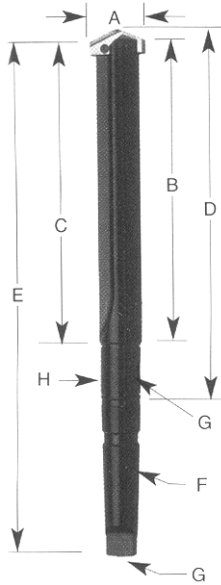
ALLIED® "TA" Series Compatible!



Short Length- Morse Taper Shank, Straight Flute



Insert Series	A	B	C	D	E	F	G	Part Number	Price Each	Coolant Inducer
Y	3/8 -27/64	1-1/4	2-1/32	3-15/32	6-5/16	#2	1/16	YG-P01Y02	\$168.95	YG-PR1030
Z	7/16 -1/2	1-1/4	2-1/32	3-15/32	6-5/16	#2	1/16	YG-P01Z02	\$168.95	
0	33/64 -11/16	1-3/8	2-3/16	3-41/64	6-15/32	#2	1/16	YG-P01002	\$168.95	YG-PR1031
0.5	39/64 -11/16	1-3/8	2-3/16	3-41/64	6-15/32	#2	1/16	YG-P01052	\$168.95	
1	45/64 -15/16	2-3/4	3-7/8	5-39/64	9-5/32	#3	1/8	YG-P01103	\$184.43	YG-PR1031
1.5	55/64 -15/16	2-3/4	3-7/8	5-39/64	9-5/32	#3	1/8	YG-P01153	\$198.61	
2	31/32 -1-3/8	3-3/8	4-1/2	6-15/64	9-25/32	#3	1/8	YG-P01203	\$205.08	YG-PR1031
2.5	1-3/16 -1-3/8	3-3/8	4-1/2	6-19/64	10-25/32	#4	1/8	YG-P01204	\$212.82	
3	1-13/32 -1-7/8	4-3/4	6	8-1/8	12-9/16	#4	1/4	YG-P01253	\$219.26	YG-PR1031
3	1-13/32 -1-7/8	4-3/4	6	8-1/8	13-13/16	#5	1/4	YG-P01254	\$228.29	
4	1-29/32 -2-9/16	5-1/8	6-1/2	8-5/8	13-1/16	#4	1/4	YG-P01304	\$228.29	YG-PR1042
4	1-29/32 -2-9/16	5-1/8	6-1/2	8-5/8	14-5/16	#5	1/4	YG-P01305	\$241.18	
5	2-1/2 -3-1/2	6-3/4	8-1/2	11-5/16	16-15/16	#5	1/2	YG-P01404	\$247.64	YG-PR1042
5	2-1/2 -3-1/2	6-3/4	8-1/2	11-5/16	16-15/16	#5	1/2	YG-P01405	\$270.84	
7	3-17/32 -4-1/2	6-3/4	8-7/8	11-11/16	17-5/16	#5	1/2	YG-P01505	\$393.38	YG-PR1054
7	3-17/32 -4-1/2	6-3/4	8-7/8	11-11/16	17-5/16	#5	1/2	YG-P01705	\$535.25	

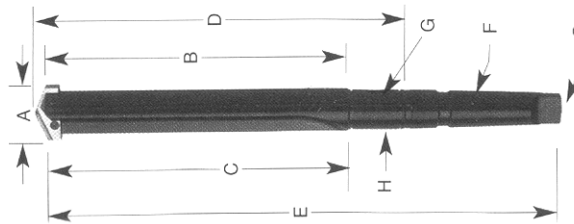


Standard Length- Morse Taper Shank, Straight Flute

Insert Series	A	B	C	D	E	F	G	Part Number	Price Each	Coolant Inducer
Y	3/8 - 27/64	2-3/8	3-5/32	4-19/32	7-7/16	#2	1/16	YG-P03Y02	\$172.82	YG-PR1030
Z	7/16 - 1/2	2-3/8	3-5/32	4-19/32	7-7/16	#2	1/16	YG-P03Z02	\$172.82	
0	33/64 - 11/16	2-1/2	3-5/16	4-49/64	7-19/32	#2	1/16	YG-P03002	\$172.82	YG-PR1031
0.5	39/64 - 11/16	2 1/2	3-5/16	4-49/64	7-19/32	#2	1/16	YG-P03052	\$172.82	
1	45/64 - 15/16	6-3/4	7-7/8	9-39/64	13-5/32	#3	1/8	YG-P03103	\$197.33	YG-PR1031
1	45/64 - 15/16	6-3/4	7-7/8	9-43/64	14-5/32	#4	1/8	YG-P03104	\$203.77	
1.5	55/64 - 15/16	6-3/4	7-7/8	9-39/64	13-5/32	#3	1/8	YG-P03153	\$211.51	YG-PR1031
1.5	55/64 - 15/16	6-3/4	7-7/8	9-43/64	14-5/32	#4	1/8	YG-P03154	\$217.97	
2	31/32 - 1-3/8	7-3/8	8-1/2	10-15/64	13-25/32	#3	1/8	YG-P03203	\$217.97	YG-PR1031
2	31/32 - 1-3/8	7-3/8	8-1/2	10-19/64	14-25/32	#4	1/8	YG-P03204	\$224.41	
2.5	1-3/16 - 1-3/8	7-3/8	8-1/2	10-15/64	13-25/32	#3	1/8	YG-P03253	\$232.15	YG-PR1031
2.5	1-3/16 - 1-3/8	7-3/8	8-1/2	10-37/64	15-1/16	#4	1/4	YG-P03254	\$241.18	
3	1-13/32 - 1-7/8	8-1/4	9-1/2	11-5/8	16-1/16	#4	1/4	YG-P03304	\$248.92	YG-PR1042
3	1-13/32 - 1-7/8	8-1/4	9-1/2	11-5/8	17-5/16	#5	1/4	YG-P03305	\$268.26	
4	1-29/32 - 2-9/16	9-1/8	10-1/2	12-5/8	17-1/16	#4	1/4	YG-P03404	\$286.33	YG-PR1042
4	1-29/32 - 2-9/16	9-1/8	10-1/2	12-5/8	18-5/16	#5	1/4	YG-P03405	\$308.25	
5	2-1/2 - 3-1/2	10-3/4	12-1/2	15-5/16	20-5/16	#5	1/2	YG-P03505	\$432.08	YG-PR1054
7	3-17/32 - 4-1/2	10-3/4	12-7/8	15-11/16	21-5/16	#5	1/2	YG-P03705	\$638.43	

Coolant Inducers Are Located On Page 273

INTERMEDIATE LENGTH HOLDERS



Intermediate Length Straight Shank Holder- Straight Flute

Series	Allied Ref. Number	A	B	C	D	E	Shank	Length	Pipe Tap	Part Number	Price Each
1	23010S - 100L	45/64" - 15/16	4-5/8	5-7/8	6-1/64	8-7/8	1	3	1/8	YG-P14102	\$189.16
1.5	23015S - 100L	55/64" - 15/16	4-5/8	5-7/8	6-1/64	8-7/8	1	3	1/8	YG-P14152	\$206.36
2	23020S - 125L	31/32" - 1-3/8	5-3/8	6-1/2	6-41/64	10	1-1/4	3-1/2	1/8	YG-P14203	\$206.36
2.5	23025S - 125L	1-3/16" - 1-3/8	5-3/8	6-1/2	6-41/64	10	1-1/4	3-1/2	1/8	YG-P14253	\$229.29
3	23030S - 150L	1-13/32" - 1-7/8	6-1/2	7-3/4	7-15/16	11-3/4	1-1/2	4	1/4	YG-P14304	\$243.62

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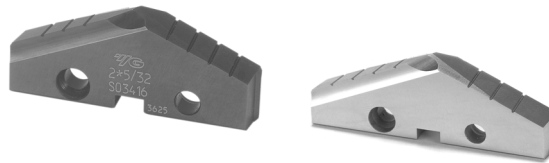
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Super Cobalt HSS M-4:

- Loose machines
- Manual machines
- If T-15 breaks
- Cross hole drilling

Super Cobalt HSS T-15:

- On CNC machines
- When M-4 life needs to be extended
- Abrasive drilling

Carbide:

- C5:** Steels
- C3:** Cast Iron
- C2:** Stainless steel, aluminum, exotic alloys, ductile iron

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			SUPER COBALT HSS		CARBIDE INSERTS			
SERIES Y INSERTS			T15 TiN	T15 TiAlN	TiN C2	TiAlN C2	TiN C5	TiAlN C5
Series Y	Dia	Dec.	\$20.72 ea	\$24.89 ea	\$35.69 ea	\$38.45 ea	\$35.69 ea	\$38.45 ea
3/32" Thickness	9.5mm	0.3740	YG-S06Y01	YG-S08Y01	YG-S21Y01	YG-S23Y01	YG-S26Y01	YG-S28Y01
	25/64	0.3750	YG-S06Y02	YG-S08Y02	YG-S21Y02	YG-S23Y02	YG-S26Y02	YG-S28Y02
0.374 to 0.4331	10.0mm	0.3906	YG-S06Y04	YG-S08Y04	YG-S21Y04	YG-S23Y04	YG-S26Y04	YG-S28Y04
	13/32	0.4063	YG-S06Y05	YG-S08Y05	YG-S21Y05	YG-S23Y05	YG-S26Y05	YG-S28Y05
to 0.4331	10.5mm	0.4134	YG-S06Y07	YG-S08Y07	YG-S21Y07	YG-S23Y07	YG-S26Y07	YG-S28Y07
	27/64	0.4219	YG-S06Y08	YG-S08Y08	YG-S21Y08	YG-S23Y08	YG-S26Y08	YG-S28Y08
to 0.4331	11.0mm	0.4331	YG-S06Y09	YG-S08Y09	YG-S21Y09	YG-S23Y09	YG-S26Y09	YG-S28Y09
	11.0mm	0.4331	YG-S06Y11	YG-S08Y11	YG-S21Y11	YG-S23Y11	YG-S26Y11	YG-S28Y11
SERIES Z INSERTS			T15 TiN	T15 TiAlN	TiN C2	TiAlN C2	TiN C5	TiAlN C5
Series Z	Dia	Dec.	\$20.72 ea	\$24.89 ea	\$35.69 ea	\$38.45 ea	\$35.69 ea	\$38.45 ea
3/32" Thickness	7/16	0.4375	YG-S06Z01	YG-S08Z01	YG-S21Z01	YG-S23Z01	YG-S26Z01	YG-S28Z01
	11.50mm	0.4528	YG-S06Z02	YG-S08Z02	YG-S21Z02	YG-S23Z02	YG-S26Z02	YG-S28Z02
0.4375 to 0.5000	29/64	0.4531	YG-S06Z03	YG-S08Z03	YG-S21Z03	YG-S23Z03	YG-S26Z03	YG-S28Z03
	15/32	0.4688	YG-S06Z04	YG-S08Z04	YG-S21Z04	YG-S23Z04	YG-S26Z04	YG-S28Z04
to 0.5000	12.0mm	0.4724	YG-S06Z05	YG-S08Z05	YG-S21Z05	YG-S23Z05	YG-S26Z05	YG-S28Z05
	31/64	0.4844	YG-S06Z06	YG-S08Z06	YG-S21Z06	YG-S23Z06	YG-S26Z06	YG-S28Z06
to 0.5000	12.5mm	0.4921	YG-S06Z07	YG-S08Z07	YG-S21Z07	YG-S23Z07	YG-S26Z07	YG-S28Z07
	1/2	0.5000	YG-S06Z08	YG-S08Z08	YG-S21Z08	YG-S23Z08	YG-S26Z08	YG-S28Z08
SERIES 0 INSERTS			T15 TiN	T15 TiAlN	TiN C2	TiAlN C2	TiN C5	TiAlN C5
Series 0	Dia	Dec.	\$22.34 ea	\$26.82 ea	\$39.56 ea	\$42.59 ea	\$39.56 ea	\$42.59 ea
13.0mm 33/64 17/32 13.5mm	13.0mm	0.5118	YG-S06001	YG-S08001	YG-S21001	YG-S23001	YG-S26001	YG-S28001
	33/64	0.5156	YG-S06002	YG-S08002	YG-S21002	YG-S23002	YG-S26002	YG-S28002
14.0mm 9/16 14.5mm	17/32	0.5313	YG-S06003	YG-S08003	YG-S21003	YG-S23003	YG-S26003	YG-S28003
	13.5mm	0.5315	YG-S06004	YG-S08004	YG-S21004	YG-S23004	YG-S26004	YG-S28004
35/64 14.0mm 9/16 14.5mm	35/64	0.5469	YG-S06060	YG-S08060	YG-S21060	YG-S23060	YG-S26060	YG-S28060
	14.0mm	0.5512	YG-S06005	YG-S08005	YG-S21005	YG-S23005	YG-S26005	YG-S28005
1/8" Thickness	9/16	0.5625	YG-S06006	YG-S08006	YG-S21006	YG-S23006	YG-S26006	YG-S28006
	14.5mm	0.5709	YG-S06007	YG-S08007	YG-S21007	YG-S23007	YG-S26007	YG-S28007
0.5118 to 0.6890	37/64	0.5781	YG-S06008	YG-S08008	YG-S21008	YG-S23008	YG-S26008	YG-S28008
	15.0mm	0.5906	YG-S06009	YG-S08009	YG-S21009	YG-S23009	YG-S26009	YG-S28009
to 0.6890	19/32	0.5938	YG-S06010	YG-S08010	YG-S21010	YG-S23010	YG-S26010	YG-S28010
	39/64	0.6094	YG-S06061	YG-S08061	YG-S21061	YG-S23061	YG-S26061	YG-S28061
15.5mm 5/8 16.0mm	15.5mm	0.6102	YG-S06011	YG-S08011	YG-S21011	YG-S23011	YG-S26011	YG-S28011
	5/8	0.6250	YG-S06012	YG-S08012	YG-S21012	YG-S23012	YG-S26012	YG-S28012
to 0.6890	16.0mm	0.6299	YG-S06013	YG-S08013	YG-S21013	YG-S23013	YG-S26013	YG-S28013
	41/64	0.6406	YG-S06062	YG-S08062	YG-S21062	YG-S23062	YG-S26062	YG-S28062
16.5mm 21/32 17.0mm	16.5mm	0.6496	YG-S06014	YG-S08014	YG-S21014	YG-S23014	YG-S26014	YG-S28014
	21/32	0.6563	YG-S06015	YG-S08015	YG-S21015	YG-S23015	YG-S26015	YG-S28015
to 0.6890	17.0mm	0.6693	YG-S06016	YG-S08016	YG-S21016	YG-S23016	YG-S26016	YG-S28016
	43/64	0.6719	YG-S06063	YG-S08063	YG-S21063	YG-S23063	YG-S26063	YG-S28063
17.5mm	11/16	0.6875	YG-S06017	YG-S08017	YG-S21017	YG-S23017	YG-S26017	YG-S28017
	17.5mm	0.6890	YG-S06018	YG-S08018	YG-S21018	YG-S23018	YG-S26018	YG-S28018

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TOOL STORAGE

SERIES 1 INSERTS			SUPER COBALT HSS				CARBIDE INSERTS				
			T15 TiN	T15 TiAlN	M4 TiN	M4 TiAlN	TiN C2	TiAlN C2	TiN C5	TiAlN C5	
Dia	Dec.		\$25.15ea	\$29.81 ea	\$22.34 ea	\$26.82 ea	\$45.09 ea	\$48.68 ea	\$45.09 ea	\$48.68 ea	
Series 1	45/64	0.7031	YG-S06101	YG-S08101	YG-S01101	YG-S03101	YG-S21101	YG-S23101	YG-S26101	YG-S28101	
	18mm	0.7087	YG-S06102	YG-S08102	YG-S01102	YG-S03102	YG-S21102	YG-S23102	YG-S26102	YG-S28102	
	23/32	0.7188	YG-S06103	YG-S08103	YG-S01103	YG-S03103	YG-S21103	YG-S23103	YG-S26103	YG-S28103	
	18.5mm	0.7283	YG-S06104	YG-S08104	YG-S01104	YG-S03104	YG-S21104	YG-S23104	YG-S26104	YG-S28104	
	47/64	0.7344	YG-S06105	YG-S08105	YG-S01105	YG-S03105	YG-S21105	YG-S23105	YG-S26105	YG-S28105	
	19.0mm	0.7480	YG-S06106	YG-S08106	YG-S01106	YG-S03106	YG-S21106	YG-S23106	YG-S26106	YG-S28106	
	3/4	0.7500	YG-S06107	YG-S08107	YG-S01107	YG-S03107	YG-S21107	YG-S23107	YG-S26107	YG-S28107	
	49/64	0.7656	YG-S06108	YG-S08108	YG-S01108	YG-S03108	YG-S21108	YG-S23108	YG-S26108	YG-S28108	
	19.5mm	0.7677	YG-S06109	YG-S08109	YG-S01109	YG-S03109	YG-S21109	YG-S23109	YG-S26109	YG-S28109	
	25/32	0.7813	YG-S06110	YG-S08110	YG-S01110	YG-S03110	YG-S21110	YG-S23110	YG-S26110	YG-S28110	
	5/32" Thickness	20.0mm	0.7874	YG-S06111	YG-S08111	YG-S01111	YG-S03111	YG-S21111	YG-S23111	YG-S26111	YG-S28111
		51/64	0.7969	YG-S06160	YG-S08160	YG-S01160	YG-S03160	YG-S21160	YG-S23160	YG-S26160	YG-S28160
		0.7031	0.8071	YG-S06112	YG-S08112	YG-S01112	YG-S03112	YG-S21112	YG-S23112	YG-S26112	YG-S28112
		13/16	0.8125	YG-S06113	YG-S08113	YG-S01113	YG-S03113	YG-S21113	YG-S23113	YG-S26113	YG-S28113
		0.9449	0.8268	YG-S06114	YG-S08114	YG-S01114	YG-S03114	YG-S21114	YG-S23114	YG-S26114	YG-S28114
		27/32	0.8438	YG-S06115	YG-S08115	YG-S01115	YG-S03115	YG-S21115	YG-S23115	YG-S26115	YG-S28115
		55/64	0.8594	YG-S06161	YG-S08161	YG-S01161	YG-S03161	YG-S21161	YG-S23161	YG-S26161	YG-S28161
		22.0mm	0.8661	YG-S06116	YG-S08116	YG-S01116	YG-S03116	YG-S21116	YG-S23116	YG-S26116	YG-S28116
		7/8	0.8750	YG-S06117	YG-S08117	YG-S01117	YG-S03117	YG-S21117	YG-S23117	YG-S26117	YG-S28117
		57/64	0.8906	YG-S06162	YG-S08162	YG-S01162	YG-S03162	YG-S21162	YG-S23162	YG-S26162	YG-S28162
23.0mm	0.9055	YG-S06118	YG-S08118	YG-S01118	YG-S03118	YG-S21118	YG-S23118	YG-S26118	YG-S28118		
29/32	0.9063	YG-S06119	YG-S08119	YG-S01119	YG-S03119	YG-S21119	YG-S23119	YG-S26119	YG-S28119		
59/64	0.9219	YG-S06120	YG-S08120	YG-S01120	YG-S03120	YG-S21120	YG-S23120	YG-S26120	YG-S28120		
15/16	0.9375	YG-S06121	YG-S08121	YG-S01121	YG-S03121	YG-S21121	YG-S23121	YG-S26121	YG-S28121		
24.0mm	0.9449	YG-S06122	YG-S08122	YG-S01122	YG-S03122	YG-S21122	YG-S23122	YG-S26122	YG-S28122		
SERIES 2 INSERTS			T15 TiN	T15 TiAlN	M4 TiN	M4 TiAlN	TiN C2	TiAlN C2	TiN C5	TiAlN C5	
Dia	Dec.		\$29.62 ea	\$35.15 ea	\$26.29 ea	\$31.50 ea	\$53.37 ea	\$57.54 ea	\$53.37 ea	\$57.54 ea	
Series 2	31/32	0.9688	YG-S06201	YG-S08201	YG-S01201	YG-S03201	YG-S21201	YG-S23201	YG-S26201	YG-S28201	
	63/64	0.9844	YG-S06202	YG-S08202	YG-S01202	YG-S03202	YG-S21202	YG-S23202	YG-S26202	YG-S28202	
	1"	1.0000	YG-S06203	YG-S08203	YG-S01203	YG-S03203	YG-S21203	YG-S23203	YG-S26203	YG-S28203	
	1-1/64	1.1667	YG-S06204	YG-S08204	YG-S01204	YG-S03204	YG-S21204	YG-S23204	YG-S26204	YG-S28204	
	26.0mm	1.0236	YG-S06205	YG-S08205	YG-S01205	YG-S03205	YG-S21205	YG-S23205	YG-S26205	YG-S28205	
	1-1/32	1.0313	YG-S06206	YG-S08206	YG-S01206	YG-S03206	YG-S21206	YG-S23206	YG-S26206	YG-S28206	
	1-3/64	1.0469	YG-S06260	YG-S08260	YG-S01260	YG-S03260	YG-S21260	YG-S23260	YG-S26260	YG-S28260	
	1-1/16	1.0625	YG-S06207	YG-S08207	YG-S01207	YG-S03207	YG-S21207	YG-S23207	YG-S26207	YG-S28207	
	27.0mm	1.0630	YG-S06208	YG-S08208	YG-S01208	YG-S03208	YG-S21208	YG-S23208	YG-S26208	YG-S28208	
	1-3/32	1.0938	YG-S06209	YG-S08209	YG-S01209	YG-S03209	YG-S21209	YG-S23209	YG-S26209	YG-S28209	
	3/16" Thickness	28.0mm	1.1024	YG-S06210	YG-S08210	YG-S01210	YG-S03210	YG-S21210	YG-S23210	YG-S26210	YG-S28210
		1-7/64	1.1094	YG-S06261	YG-S08261	YG-S01261	YG-S03261	YG-S21261	YG-S23261	YG-S26261	YG-S28261
		1-1/8	1.1250	YG-S06211	YG-S08211	YG-S01211	YG-S03211	YG-S21211	YG-S23211	YG-S26211	YG-S28211
		29.0mm	1.1417	YG-S06212	YG-S08212	YG-S01212	YG-S03212	YG-S21212	YG-S23212	YG-S26212	YG-S28212
		1-5/32	1.1563	YG-S06213	YG-S08213	YG-S01213	YG-S03213	YG-S21213	YG-S23213	YG-S26213	YG-S28213
		0.9688	1.1811	YG-S06214	YG-S08214	YG-S01214	YG-S03214	YG-S21214	YG-S23214	YG-S26214	YG-S28214
		1-3/16	1.1875	YG-S06215	YG-S08215	YG-S01215	YG-S03215	YG-S21215	YG-S23215	YG-S26215	YG-S28215
		1-7/32	1.2188	YG-S06216	YG-S08216	YG-S01216	YG-S03216	YG-S21216	YG-S23216	YG-S26216	YG-S28216
		31.0mm	1.2205	YG-S06217	YG-S08217	YG-S01217	YG-S03217	YG-S21217	YG-S23217	YG-S26217	YG-S28217
		1-1/4	1.2500	YG-S06218	YG-S08218	YG-S01218	YG-S03218	YG-S21218	YG-S23218	YG-S26218	YG-S28218
	0.9688 to 1.3780	32.0mm	1.2598	YG-S06219	YG-S08219	YG-S01219	YG-S03219	YG-S21219	YG-S23219	YG-S26219	YG-S28219
		1-9/32	1.2813	YG-S06220	YG-S08220	YG-S01220	YG-S03220	YG-S21220	YG-S23220	YG-S26220	YG-S28220
		33.0mm	1.2992	YG-S06221	YG-S08221	YG-S01221	YG-S03221	YG-S21221	YG-S23221	YG-S26221	YG-S28221
		1-5/16	1.3125	YG-S06222	YG-S08222	YG-S01222	YG-S03222	YG-S21222	YG-S23222	YG-S26222	YG-S28222
		1-1/32	1.3333	YG-S06206	YG-S08206	YG-S01206	YG-S03206	YG-S21206	YG-S23206	YG-S26206	YG-S28206
		34.0mm	1.3386	YG-S06223	YG-S08223	YG-S01223	YG-S03223	YG-S21223	YG-S23223	YG-S26223	YG-S28223
		1-11/32	1.3438	YG-S06224	YG-S08224	YG-S01224	YG-S03224	YG-S21224	YG-S23224	YG-S26224	YG-S28224
		1-3/8	1.3750	YG-S06225	YG-S08225	YG-S01225	YG-S03225	YG-S21225	YG-S23225	YG-S26225	YG-S28225
		35.0mm	1.3780	YG-S06226	YG-S08226	YG-S01225	YG-S03226	YG-S21226	YG-S23226	YG-S26226	YG-S28226

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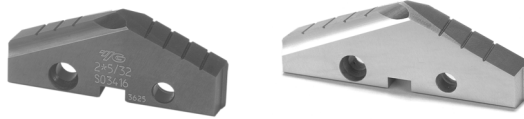
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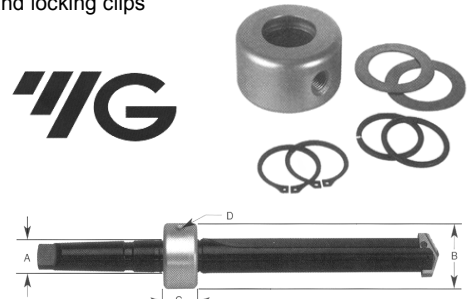
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SERIES 3 INSERTS			SUPER COBALT HSS				CARBIDE INSERTS				
Dia	Dec.	T15 TiN	T15 TiAlN	M4 TiN	M4 TiAlN	TiN C2	TiAlN C2	TiN C5	TiAlN C5		
		\$37.60 ea	\$45.09 ea	\$32.63 ea	\$39.27 ea	\$83.01 ea	\$87.42 ea	\$83.01 ea	\$87.42 ea		
1/4" Thickness	1-13/32	1.4063	YG-S06301	YG-S08301	YG-S01301	YG-S03301	YG-S21301	YG-S23301	YG-S26301	YG-S28301	
	36.0mm	1.4173	YG-S06302	YG-S08302	YG-S01302	YG-S03302	YG-S21302	YG-S23302	YG-S26302	YG-S28302	
	1-7/16	1.4375	YG-S06303	YG-S08303	YG-S01303	YG-S03303	YG-S21303	YG-S23303	YG-S26303	YG-S28303	
	37.0mm	1.4567	YG-S06304	YG-S08304	YG-S01304	YG-S03304	YG-S21304	YG-S23304	YG-S26304	YG-S28304	
	1-15/32	1.4688	YG-S06305	YG-S08305	YG-S01305	YG-S03305	YG-S21305	YG-S23305	YG-S26305	YG-S28305	
	38.0mm	1.4961	YG-S06306	YG-S08306	YG-S01306	YG-S03306	YG-S21306	YG-S23306	YG-S26306	YG-S28306	
	1-1/2	1.5000	YG-S06307	YG-S08307	YG-S01307	YG-S03307	YG-S21307	YG-S23307	YG-S26307	YG-S28307	
	1-17/32	1.5313	YG-S06308	YG-S08308	YG-S01308	YG-S03308	YG-S21308	YG-S23308	YG-S26308	YG-S28308	
	39.0mm	1.5354	YG-S06309	YG-S08309	YG-S01309	YG-S03309	YG-S21309	YG-S23309	YG-S26309	YG-S28309	
	1-9/16	1.5625	YG-S06310	YG-S08310	YG-S01310	YG-S03310	YG-S21310	YG-S23310	YG-S26310	YG-S28310	
	40.0mm	1.5748	YG-S06311	YG-S08311	YG-S01311	YG-S03311	YG-S21311	YG-S23311	YG-S26311	YG-S28311	
	1-19/32	1.5938	YG-S06312	YG-S08312	YG-S01312	YG-S03312	YG-S21312	YG-S23312	YG-S26312	YG-S28312	
1.4063 to 1.8750	41.0mm	1.6142	YG-S06313	YG-S08313	YG-S01313	YG-S03313	YG-S21313	YG-S23313	YG-S26313	YG-S28313	
	1-5/8	1.6250	YG-S06314	YG-S08314	YG-S01314	YG-S03314	YG-S21314	YG-S23314	YG-S26314	YG-S28314	
	42.0mm	1.6535	YG-S06315	YG-S08315	YG-S01315	YG-S03315	YG-S21315	YG-S23315	YG-S26315	YG-S28315	
	1-21/32	1.6563	YG-S06316	YG-S08316	YG-S01316	YG-S03316	YG-S21316	YG-S23316	YG-S26316	YG-S28316	
	1-11/16	1.6875	YG-S06317	YG-S08317	YG-S01317	YG-S03317	YG-S21317	YG-S23317	YG-S26317	YG-S28317	
	43.0mm	1.6929	YG-S06318	YG-S08318	YG-S01318	YG-S03318	YG-S21318	YG-S23318	YG-S26318	YG-S28318	
	1-23/32	1.7188	YG-S06319	YG-S08319	YG-S01319	YG-S03319	YG-S21319	YG-S23319	YG-S26319	YG-S28319	
	44.0mm	1.7323	YG-S06320	YG-S08320	YG-S01320	YG-S03320	YG-S21320	YG-S23320	YG-S26320	YG-S28320	
	1-3/4	1.7500	YG-S06321	YG-S08321	YG-S01321	YG-S03321	YG-S21321	YG-S23321	YG-S26321	YG-S28321	
	45.0mm	1.7717	YG-S06322	YG-S08322	YG-S01322	YG-S03322	YG-S21322	YG-S23322	YG-S26322	YG-S28322	
	1-25/32	1.7813	YG-S06323	YG-S08323	YG-S01323	YG-S03323	YG-S21323	YG-S23323	YG-S26323	YG-S28323	
	46.0mm	1.8110	YG-S06324	YG-S08324	YG-S01324	YG-S03324	YG-S21324	YG-S23324	YG-S26324	YG-S28324	
1-13/16	1.8125	YG-S06325	YG-S08325	YG-S01325	YG-S03325	YG-S21325	YG-S23325	YG-S26325	YG-S28325		
1-27/32	1.8438	YG-S06326	YG-S08326	YG-S01326	YG-S03326	YG-S21326	YG-S23326	YG-S26326	YG-S28326		
47.0mm	1.8504	YG-S06327	YG-S08327	YG-S01327	YG-S03327	YG-S21327	YG-S23327	YG-S26327	YG-S28327		
1-7/8	1.8750	YG-S06328	YG-S08328	YG-S01328	YG-S03328	YG-S21328	YG-S23328	YG-S26328	YG-S28328		
SERIES 4 INSERTS			T15 TiN	T15 TiAlN	M4 TiN	M4 TiAlN					
Dia	Dec.	\$47.58 ea	\$56.99 ea	\$38.74 ea	\$46.46 ea						
5/16" Thickness	1-29/32	1.9063	YG-S06402	YG-S08402	YG-S01402	YG-S03402					
	1-15/16	1.9375	YG-S06404	YG-S08404	YG-S01404	YG-S03404					
	1-31/32	1.9688	YG-S06406	YG-S08406	YG-S01406	YG-S03406					
	2"	2.000	YG-S06407	YG-S08407	YG-S01407	YG-S03407					
	2-1/32	2.0313	YG-S06409	YG-S08409	YG-S01409	YG-S03409					
	2-3/64	2.0469	YG-S06410	YG-S08410	YG-S01410	YG-S03410					
	2-1/16	2.0625	YG-S06411	YG-S08411	YG-S01411	YG-S03411					
	2-3/32	2.0938	YG-S06413	YG-S08413	YG-S01413	YG-S03413					
	2-1/8	2.1250	YG-S06414	YG-S08414	YG-S01414	YG-S03414					
	2-5/32	2.1563	YG-S06416	YG-S08416	YG-S01416	YG-S03416					
	1.9063 to 2.5625	2-3/16	2.1875	YG-S06418	YG-S08418	YG-S01418	YG-S03418				
	2-7/32	2.2188	YG-S06420	YG-S08420	YG-S01420	YG-S03420					
2-1/4	2.2500	YG-S06422	YG-S08422	YG-S01422	YG-S03422						
2-9/32	2.2813	YG-S06423	YG-S08423	YG-S01423	YG-S03423						
2-5/16	2.3125	YG-S06425	YG-S08425	YG-S01425	YG-S03425						
2-11/32	2.3438	YG-S06427	YG-S08427	YG-S01427	YG-S03427						
2-3/8	2.3750	YG-S06429	YG-S08429	YG-S01429	YG-S03429						
2-13/32	2.4063	YG-S06431	YG-S08431	YG-S01431	YG-S03431						
2-7/16	2.4375	YG-S06432	YG-S08432	YG-S01432	YG-S03432						
2-15/32	2.4688	YG-S06434	YG-S08434	YG-S01434	YG-S03434						
2-1/2	2.5000	YG-S06436	YG-S08436	YG-S01436	YG-S03436						
2-17/32	2.5313	YG-S06438	YG-S08438	YG-S01438	YG-S03438						
2-9/16	2.5625	YG-S06440	YG-S08440	YG-S01440	YG-S03440						

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A	B	C	E		
I.D.	Pipe O.D.	Len.	Pipe Tap	Part Number	Price Each
3/4	1-3/4	7/8	1/8	YG-PR1030	\$44.09
1	2-1/8	1-1/8	1/8	YG-PR1031	\$48.72
1-1/4	2-1/2	1-3/8	1/4	YG-PR1042	\$59.70
1-3/4	3	1-3/8	1/4	YG-PR1043	\$68.21
2-1/4	3-3/4	1-3/4	1/2	YG-PR1054	\$82.84

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Series Min-Max	Inch Dia	Dec. Dia	TiN Coated Part Number	Price Each	TiAlN Coated Part Number	Price Each
Y .374" to .436" 3/32" thick	3/8	.3750	YG-SF05024	\$36.69	YG-SF15024	\$41.01
	13/32	.4063	YG-SF05026	\$36.69	YG-SF15026	\$41.01
	7/16	.4375	YG-SF05028	\$36.69	YG-SF15028	\$41.01
Z .437" to .510" 3/32" thick	15/32	.4688	YG-SF05030	\$36.69	YG-SF15030	\$41.01
	1/2	.5000	YG-SF05032	\$36.69	YG-SF15032	\$41.01
0 .511" to .695" 1/8" thick	17/32	.5313	YG-SF05034	\$40.07	YG-SF15034	\$44.54
	9/16	.5625	YG-SF05036	\$40.07	YG-SF15036	\$44.54
	19/32	.5938	YG-SF05038	\$40.07	YG-SF15038	\$44.54
	5/8	.6250	YG-SF05040	\$40.07	YG-SF15040	\$44.54
	21/32	.6563	YG-SF05042	\$40.07	YG-SF15042	\$44.54
1 .690" to .960" 5/32" thick	11/16	.6875	YG-SF05044	\$40.07	YG-SF15044	\$44.54
	23/32	.7188	YG-SF05046	\$44.67	YG-SF15046	\$49.56
	3/4	.7500	YG-SF05048	\$44.67	YG-SF15048	\$49.56
	25/32	.7813	YG-SF05050	\$44.67	YG-SF15050	\$49.56
	13/16	.8125	YG-SF05052	\$44.67	YG-SF15052	\$49.56
	27/32	.8438	YG-SF05054	\$44.67	YG-SF15054	\$49.56
	7/8	.8750	YG-SF05056	\$44.67	YG-SF15056	\$49.56
2 .961" to 1.380" 3/16" Thick	29/32	.9063	YG-SF05058	\$44.67	YG-SF15058	\$49.56
	15/16	.9375	YG-SF05060	\$44.67	YG-SF15060	\$49.56
	31/32	.9688	YG-SF05062	\$51.53	YG-SF15062	\$58.08
	1	1.0000	YG-SF05100	\$51.53	YG-SF15100	\$58.08
	1-1/32	1.0313	YG-SF05102	\$51.53	YG-SF15102	\$58.08
2 .961" to 1.380" 3/16" Thick	1-1/16	1.0625	YG-SF05104	\$51.53	YG-SF15104	\$58.08
	1-3/32	1.0938	YG-SF05106	\$51.53	YG-SF15106	\$58.08
	1-1/8	1.1250	YG-SF05108	\$51.53	YG-SF15108	\$58.08
	1-5/32	1.1563	YG-SF05110	\$51.53	YG-SF15110	\$58.08
	1-3/16	1.1875	YG-SF05112	\$51.53	YG-SF15112	\$58.08
	1-7/32	1.2188	YG-SF05114	\$51.53	YG-SF15114	\$58.08
	1-1/4	1.2500	YG-SF05116	\$51.53	YG-SF15116	\$58.08
	1-9/32	1.2813	YG-SF05118	\$51.53	YG-SF15118	\$58.08
	1-5/16	1.3125	YG-SF05120	\$51.53	YG-SF15120	\$58.08
	1-11/32	1.3438	YG-SF05122	\$51.53	YG-SF15122	\$58.08
	1-3/8	1.3750	YG-SF05124	\$51.53	YG-SF15124	\$58.08

SPEED & FEEDS

CUTTING CONDITIONS FOR T-15 FLAT BOTTOM SPADE DRILL INSERTS



Material	Material Hardness (Bhn)	Speed (SFM)		Feed			
		Tin	TiAlN	3/8-1/2	33/64-11/16	45/64-15/16	31/32-1-3/8
Free Machining Steel	100-150	165	220	0.005	0.007	0.010	0.013
12L13, 12L13, 1215	150-200	150	215	0.005	0.007	0.010	0.013
12L14, 1118	200-250	135	190	0.004	0.007	0.010	0.012
Low Carbon Steel	85-125	140	195	0.005	0.007	0.009	0.012
1015, 1020, 1140	125-175	135	190	0.005	0.007	0.009	0.012
1025	175-225	125	180	0.004	0.006	0.008	0.011
	225-275	115	175	0.004	0.006	0.008	0.011
Medium Carbon	125-175	135	195	0.004	0.007	0.009	0.011
1035, 1050, 1045	175-225	125	180	0.004	0.006	0.007	0.011
1055, 1140	225-275	115	165	0.004	0.006	0.007	0.011
	275-325	105	150	0.003	0.005	0.007	0.009
Structural Steel	100-150	115	165	0.004	0.007	0.009	0.011
A36, A516	150-250	100	140	0.004	0.007	0.008	0.009
A182	250-350	80	115	0.003	0.006	0.007	0.008
Cast Iron/SG Iron	120-150	145	215	0.005	0.010	0.014	0.016
A48-76 GR30/GR45	150-200	130	190	0.005	0.008	0.011	0.016
A536-72 60-40-18	200-220	110	165	0.005	0.008	0.010	0.014
A220-76 GR40010	220-260	95	150	0.004	0.006	0.008	0.010
	260-320	80	120	0.004	0.005	0.006	0.008

Material	Material Hardness (Bhn)	Speed (SFM)		Feed			
		Tin	TiAlN	3/8-1/2	33/64-11/16	45/64-15/16	31/32-1-3/8
Alloy Steel	125-175	125	165	0.005	0.006	0.008	0.011
8620, 4130, 4137	175-225	115	150	0.004	0.006	0.008	0.011
4140, 6150	225-275	105	145	0.004	0.005	0.007	0.011
	275-325	100	140	0.003	0.005	0.007	0.009
	325-375	90	120	0.003	0.005	0.007	0.009
Tool Steel	150-200	65	90	0.003	0.005	0.006	0.008
H13, H21, A2, S1	200-250	45	75	0.003	0.005	0.006	0.008
High Temp. Alloy	140-220	20	30	0.003	0.005	0.006	0.008
Hastelloy B, Inconel	220-310	15	25	0.003	0.004	0.006	0.006
High Strength Alloys	225-300	65	90	0.004	0.006	0.007	0.008
9840, 4340	300-350	45	70	0.003	0.006	0.007	0.008
4330V etc	350-400	40	60	0.003	0.005	0.006	0.007
Aluminum	30	520	700	0.007	0.011	0.014	0.017
2014, 6061, 7075	180	255	390	0.007	0.011	0.014	0.016
Stainless Steel	135-185	60	90	0.005	0.007	0.008	0.009
310, 316, 410, 330	185-275	50	80	0.004	0.006	0.007	0.009

The recommendations for speeds, feeds and other parameters presented in this chart are nominal recommendations and should be considered only as good starting points. Speed and feed reductions (20% reduction in speed and 10% reduction in feed) are recommended.

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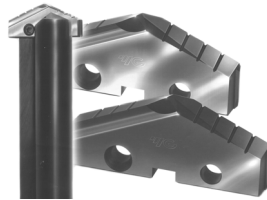
TORX SCREWS & DRIVERS

Screws sold in packages of 10



Series	Torx Screw			Torx Screw (Nylon Locking)			Premium Torx Driver			Inch/Metric Drill Range	
	Item	Part Number	Price Per Pkg	Item	Part Number	Price Per Pkg	Item	Part Number	Price Each		
Y	2XT7	YG-J7Y001	\$18.09	2XT7N	YG-J7Y006	\$20.94	T7	YG-J5Y007	\$6.97	3/8 to 27/64	9 to 11
Z	2LXT7	YG-J7Z011	\$16.05	2LXT7N	YG-J7Z016	\$20.94	T7	YG-J5Y007	\$6.97	7/16 to 1/2	11.5 to 12.5
0	2.5XT8	YG-J80021	\$14.99	2.5XT8N	YG-J80026	\$19.65	T8	YG-J50008	\$6.97	33/64 to 11/16	13.0 to 17.5
0.5	2.5LXT8	YG-J80531	\$14.99	2.5LXT8N	YG-J80536	\$20.68	T8	YG-J50008	\$6.97	39/64 to 11/16	15.5 to 17.5
1	3XT9	YG-J91041	\$15.53	3XT9N	YG-J91046	\$19.65	T9	YG-J51009	\$6.97	45/64 to 15/16	18.0 to 24.0
1.5	3LXT9	YG-J91551	\$15.53	3LXT9N	YG-J91556	\$20.68	T9	YG-J51009	\$6.97	66/64 to 15/16	22.0 to 24.0
2	4XT15	YG-JB2061	\$14.99	4XT15N	YG-JB2066	\$20.68	T15	YG-J52015	\$6.97	31/32 to 1 3/8	25.0 to 35.0
2.5	4XT15	YG-JB2061	\$14.99	4XT15N	YG-JB2066	\$20.68	T15	YG-J52015	\$6.97	1 3/16 to 1 3/8	30.0 to 35.0
3 - 4	5XT20	YG-JC3081	\$14.99	5XT20N	YG-JC3086	\$20.68	T20	YG-J53020	\$6.97	1 13/32 to 2 9/16	36.0 to 65.0
5 - 8	6XT25	YG-JD5091	\$20.17	6XT25N	YG-JD5096	\$23.45	T25	YG-J55025	\$8.48	2 1/2 to 3 1/2	64.0 to 114.0

SPEEDS/FEEDS AND COATING RECOMMENDATIONS



Material	Material Hardness (BHN)	Coating	SFM	Feed (IPR)						
				3/8" to 1/2"	33/64" to 11/16"	45/64" to 15/16"	31/32" to 1-3/8"	1-13/32" to 1-7/8"	1-29/32" to 2-9/16"	2-19/32" to 4-1/2"
Free Machining Steel 1118, 1215, 12L14, etc.	100-150	Super TiN Hardslick	280	.007	.010	.013	.016	.020	.023	.028
	150-200		260	.007	.010	.013	.016	.020	.023	.028
	200-250		240	.007	.010	.013	.016	.020	.023	.028
Low & Medium Carbon Steel 1018, 1040, 1140, etc.	125-175	Super TiALN Super TiN Hardslick	240	.006	.009	.012	.015	.019	.023	.027
	175-225		225	.005	.008	.010	.014	.018	.021	.024
	225-275		210	.005	.008	.010	.014	.018	.021	.024
Alloy Steel 4140, 5140, 8640, etc.	275-325	Super TiALN Super TiN	195	.004	.007	.009	.012	.016	.019	.022
	125-175		210	.006	.008	.010	.014	.017	.019	.022
	175-225		195	.005	.008	.010	.014	.017	.019	.022
	225-275		180	.005	.007	.010	.014	.017	.019	.022
High Strength Alloy Steel 4340, 4330V, 300M, etc.	275-325	Super TiALN	170	.004	.006	.009	.012	.015	.017	.020
	325-375		155	.003	.006	.009	.012	.015	.017	.020
	225-300		110	.005	.007	.009	.010	.014	.017	.020
Structural Steel A36, A285, A516, etc.	300-350	Super TiALN	85	.004	.007	.009	.010	.014	.017	.020
	350-400		70	.003	.006	.008	.009	.012	.015	.018
	100-150		200	.006	.010	.012	.014	.018	.021	.026
High Temp. Alloy Hastelloy B, Inconel 600, etc.	150-250	Super TiN	170	.005	.009	.010	.012	.016	.019	.024
	250-350		140	.004	.008	.009	.010	.014	.017	.020
	140-220		40	.003	.006	.007	.008	.010	.012	.015
Stainless Steel 303, 416, 420, 17-4 PH, etc.	220-310	Super TiALN Super TiN Hardslick	35	.003	.006	.007	.008	.010	.012	.015
	135-185		105	.006	.008	.009	.011	.014	.016	.020
Tool Steel H-13, H021, A04, O-2, S-3, etc.	185-275	Hardslick	90	.005	.007	.008	.010	.012	.014	.018
	150-200		110	.004	.006	.008	.010	.012	.015	.017
Aluminum	200-250	Super TiALN	90	.004	.006	.008	.010	.012	.015	.017
	30		850	.008	.013	.016	.020	.022	.025	.025
Cast Iron Gray, Ductile, Nodular	180	Hardslick	450	.008	.013	.016	.018	.022	.025	.025
	120-150		250	.007	.012	.016	.020	.024	.027	.030
	150-200		225	.006	.011	.014	.018	.022	.025	.028
	200-220		195	.006	.009	.012	.016	.018	.021	.024
	220-260		165	.005	.007	.009	.012	.014	.017	.020
260-320	135	.004	.006	.007	.009	.012	.014	.016		

Note: On many materials two or sometimes all three coatings will interchange with excellent performance.

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