



ALLIED MACHINE & ENGINEERING

Holemaking Solutions for Today's Manufacturing



A TOTAL SOLUTION PROVIDER OF
AMEC TOOLING



suttontools
world class cutting tools

A COMPLETE OFFERING

Wouldn't it be nice if things were just simple?

suttontools

We recognise the relentless challenge facing metal working industries to produce faster and more efficiently than ever before. We never lose sight of our customers needs, striving to provide a simple solution in a complex manufacturing environment. Delivering quality cutting tools in today's industry is no longer enough. Customers want one supplier that can cover all tooling requirements - a company that they can depend on to deliver.

Sutton Tools is industry recognised for its superior service in delivering world-class, reproducible and guaranteed performance product. But how do we make it easier – How do we make it simple?

Sutton tools have answered this challenge by extending their offering of cutting tools to include a comprehensive replaceable drilling system. As a total solution provider the simple choice is Sutton Tools.

A Total Solution:

- General Purpose Tools
- High Performance Tools
- Carbide Drills, Taps & Endmills
- Replaceable-tip drilling systems
- Carbide Inserts
- Tool Holders
- Specials
- Heat Treatment
- Regrinding Service
- Recoating Service
- Tool Dispensing

Sutton Tools distribute Allied branded replaceable-tip drilling systems in Australia



By increasing the cutting tool portfolio with the inclusion of replaceable-tip drilling systems, Sutton Tools aims to become a high-level total solution provider in the Australian market.

Sutton Tools and Allied Machine & Engineering Corp (AMEC) are excited to join forces and are looking forward to offering premium solutions, which will increase productivity and efficiency to the Australian customer base.

Sutton Tools will be able to cover all applications for customers and offer for the first time a complete range of cutting tools and services.

Why AMEC

Allied is regarded as a world leader in Metal Cutting. Serving all facets of manufacturing, which include the aerospace, defence, agriculture, automotive, heavy equipment, general machining, machine tool, mining, petrochemical, energy, renewable energy, structural steel, tool & die and water treatment industries.

Allied provides precision hole-making technologies with the highest level of drill performance for end users worldwide. Its precision engineering and expert application support make us the first and best choice for answers to complex metal-cutting challenges.

Allied devotes its advanced engineering and manufacturing capabilities to creating the widest selection of value-added tooling available to metal-cutting industries around the world. Allied tooling solutions deliver the lowest cost-per-hole in many varieties of drilling, reaming and threading applications.

About AMEC

Allied Machine & Engineering Corporation is a leading manufacturer of replaceable-tip drilling systems in Dover, Ohio.

General Purpose Tools



Carbide Inserts



Carbide Drills, Taps & Endmills



Replaceable-tip drilling systems

PM HSS High Performance Drills, Taps & Endmills

Regrinding / Recoating Service / Specials

GEN3SYS® XT and XT Pro

High Penetration Replaceable Insert Drilling System | GEN3SYS XT | GEN3SYS XT Pro

Diameter Range: 0.4331" - 1.3780" (11.00mm - 35.00mm)

The Next Generation of Drilling

The GEN3SYS XT and XT Pro replaceable insert high penetration drilling system has been designed to provide high speed production machining beyond the capabilities of the T-A® drilling system. The product offering consists of various grades, geometries, and coatings available to suit the most demanding applications.

Conceived from the outset as the ultimate high performance drilling solution, the GEN3SYS XT drill range is incredibly versatile. Incorporating both straight and helical fluted tool holder options across the range, as well as through coolant for maximum material removal, GEN3SYS XT not only gives outstanding performance from day one, but it can also be reground for extended life and economy.

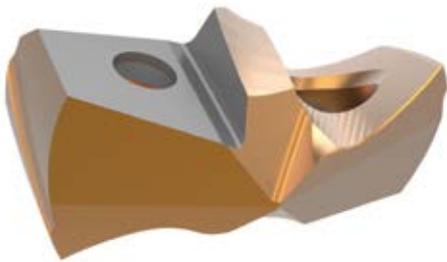


Excellent chip control

Improves hole quality and surface finish

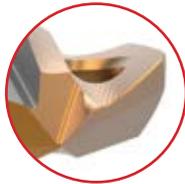
Provides maximum durability and stability

GEN3SYS XT Drill Inserts



Standard Geometry

- Designed with corner and cutting edge enhancements to deliver more reliability, durability, and productivity
- Increases penetration rates and tool life



LR - Low Rake Geometry

- The toughest XT geometry available
- Designed for harder steels and less than ideal machining applications
- Available in C1 or C2 carbide



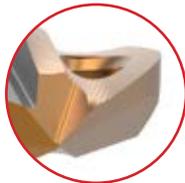
AS - Stainless Steel Geometry

- Designed with a specific geometry to provide unmatched chip control and tool life in austenitic and PH stainless steels, as well as high temperature alloys such as Inconel, Hastelloy, and Titanium alloys
- Available in C2 carbide



CI - Cast Iron Geometry

- Increases durability and tool life in ductile, nodular, and grey cast irons
- Available in C2 carbide



XT Inserts Connect with:



XT Pro holders

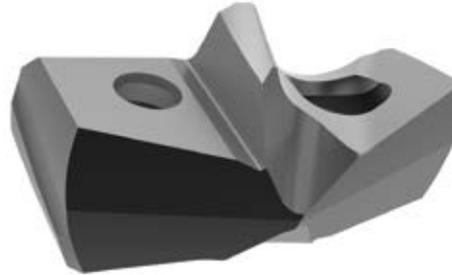


XT standard holders

3xD, 5xD, 7xD, 10xD

Available in 3xD, 5xD, 7xD, and 10xD

GEN3SYS XT Pro Drill Inserts



P - Steels

- Designed to provide increased penetration rates and tool life in steel applications
- Superior geometry and edge provides excellent chip control
- Allied's multi-layer AM420 coating increases heat resistance and improves tool life



K - Cast Irons

- Uniquely designed for cast/nodular iron applications
- Geometry includes a corner radius for improved hole finish and heat dispersion
- Allied's multi-layer AM440 coating provides increased abrasion resistance and tool life



N - Non-ferrous Materials

- Designed for applications in aluminum, brass, and copper
- The geometry yields excellent chip control in these softer materials
- TiN coating gives the versatility to run in a variety of materials while reducing build up



XT Pro Inserts Connect with:



XT Pro holders



XT standard holders

3xD, 5xD, 7xD, 10xD

Available in 3xD, 5xD, 7xD, and 10xD

High Performance Drills

General Purpose Drill Inserts

General Purpose Drills

Structural Steel Inserts & Drills

Porting Tools

Threading Tools

Special Tooling

GEN3SYS® XT

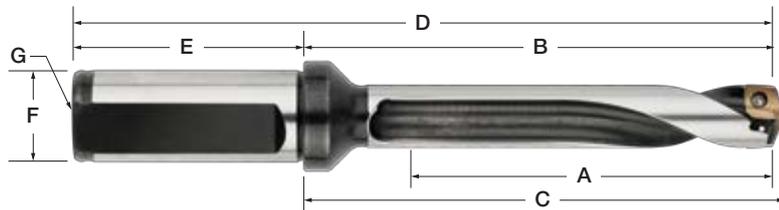
The unique design of the **GEN3SYS®** High Penetration Drilling System increases hole quality, surface finish, and true position when compared to other competitive products. **GEN3SYS®** Drill Inserts and Holders penetrate up to 35% faster than competitive drilling products.

Product Advantages

- Highly precise locating pad for absolute repeatability and reductions in TIR
- AM300® coating increases tool life up to 50% above competitors premium coatings
- The helical margin design enables maximum durability and stability when cutting forces are applied
- Four cutting geometries



Series	Diameter		Item #	Series	Diameter		Item #	Series	Diameter		Item #
	mm	inch			mm	inch			mm	inch	
14	14.00		AL7C114P14	18	18.26	23/32	AL7C118P0024	24	24.00		AL7C124P1.015
	14.29	9/16	AL7C114P0018		18.50		AL7C118P.758		24.61	31/32	AL7C126P26
	14.50		AL7C114P14.5		18.65	47/64	AL7C118P.765		25.00	63/64	AL7C126P0101
	14.68	37/64	AL7C114P.578		19.00		AL7C118P19.5		25.40	1	AL7C126P1.046
	14.80		AL7C114P14.8		19.05	3/4	AL7C118P0025		25.60		AL7C126P0102
15	15.00		AL7C115P15		19.25		AL7C120P20		25.78	1-1/64	AL7C126P27
	15.08	19/32	AL7C115P0019		19.45	49/64	AL7C120P.796		26.00		AL7C126P0103
	15.25		AL7C115P.609		19.50		AL7C120P20.5		26.20	1-1/32	AL7C126P28
	15.48	39/64	AL7C115P15.5		19.80		AL7C120P0026		26.59	1-3/64	AL7C126P1.109
	15.50		AL7C115P.618		19.85	25/32	AL7C120P21		26.99	1-1/16	AL7C126P0104
	15.70		AL7C115P0020	20.00		AL7C120P0027	27.00		AL7C129P29		
	15.88	5/8	AL7C116P16	20.24	51/64	AL7C120P21.5	27.78	1-3/32	AL7C129P0105		
	16.00		AL7C116P.640	20.50		AL7C120P.859	28.00		AL7C129P30		
16	16.08		AL7C116P16.5	20.64	13/16	AL7C122P22	28.17	1-7/64	AL7C129P0106		
	16.27	41/64	AL7C116P0021	21.00		AL7C122P0028	28.58	1-1/8	AL7C129P30.5		
	16.50		AL7C117P17	21.43	27/32	AL7C122P.890	29.00		AL7C129P0107		
	16.67	21/32	AL7C117P.671	21.50		AL7C122P23	29.37	1-5/32	AL7C129P31		
	17.00		AL7C117P0022	21.83	55/64	AL7C122P0029	30.00		AL7C129P0108		
	17.07	43/64	AL7C117P17.5	22.00		AL7C122P.921	30.16	1-3/16	AL5C129H0106		
17	17.10		AL7C117P.703	22.23	7/8	AL7C122P0030	30.50		AL5C129H30.5		
	17.20		AL7C118P18	22.61	57/64	AL7C124P24	30.96	1-7/32	AL5C129H0107		
	17.46	11/16	AL7C118P0023	23.00		AL7C124P0031	31.00		AL5C129H31		
	17.50		AL7C118P18.5	23.02	29/32	AL7C124P25	31.75	1-1/4	AL5C129H0108		
	17.86	45/64	AL7C118P.734	23.42	59/64	AL7C124P0100					
	18.00		AL7C118P19	23.81	15/16	AL7C124P1.008					



Series	Length	A	B	C	Flat	D	E	F	G	Item #	TORX Plus	TORX Plus
		Max. Drill Depth	Body Length	Ref. Length		Overall Length	Shank Length	Shank Dia.	Pipe Tap		Hand Driver	Screws (10 Piece)
14	5xD	75.0	102.4	104.9	No	152.4	50	20	1/8	AL60514H20CM	AL8IP7	AL7247IP710
15	5xD	80.0	107.0	109.6	No	157.0	50	20	1/8	AL60515H20CM	AL8IP7	AL7247IP710
16	5xD	84.9	115.3	118.2	No	165.3	50	20	1/8	AL60516H20CM	AL8IP8	AL72556IP810
17	5xD	89.9	120.0	122.9	No	170.1	50	20	1/8	AL60517H20CM	AL8IP8	AL72567IP810
18	5xD	99.9	134.0	136.8	No	190.0	56	25	1/8	AL60518H25CM	AL8IP9	AL739IP910
20	5xD	110.0	144.1	146.9	No	200.1	56	25	1/8	AL60520H25CM	AL8IP9	AL739IP910
22	5xD	119.9	153.3	156.2	No	209.3	56	25	1/8	AL60522H25CM	AL8IP9	AL739IP910
24	5xD	129.9	165.8	168.7	No	221.8	56	25	1/8	AL60524H25CM	AL8IP9	AL739IP910
26	5xD	145.0	186.1	188.8	No	246.1	60	32	1/8	AL60526H32CM	AL8IP15	AL7495IP1510
29	5xD	159.9	200.1	203.1	No	260.1	60	32	1/4	AL60529H32CM	AL8IP15	AL7495IP1510

High Performance
Inserts & Drills

General Purpose
Drill Inserts

General Purpose
Drills

Structural Steel
Inserts & Drills

Porting Tools

Threading Tools

Special Tooling

T-A® Drilling System

Replaceable Insert Drilling System | GEN2 T-A® | Original T-A®

Diameter Range: 0.374" - 4.507" (9.50mm - 114.48mm)

This is Not Yesterday's Spade Drill

The T-A drilling system is an innovation inspired by Universal replacement spade insert drilling system. However, with the development of the GEN2 T-A insert, along with the countless geometry options for the Original T-A, this drilling system provides benefits and performance that spade blade inserts of the past never could.

With constant innovations in holder designs, insert geometries and coatings, and coolant dispersion, the T-A drilling system continues to evolve and become much more productive and powerful than ever before.

Excellent hole size and finish

Optimizes chip evacuation

Wide range of geometry options available



High Performance Drills

General Purpose Drill Inserts

General Purpose Drills

Structural Steel Inserts & Drills

Porting Tools

Threading Tools

Special Tooling

Drill Insert Grades

<p>HSS (Original / GEN2) First choice for general purpose use. Suited for difficult machining applications with low rigidity, as well as deep hole drilling. Recommended for drilling most steels, cast irons, and aluminum alloys up to 275 BHN 96kg.</p>	<p>HSS Super Cobalt (Original / GEN2) Suited for good-to-rigid machining applications, used for drilling exotic and high alloy materials, or general use when surface speed needs to be increased. For use in material hardness up to 350 BHN 121kg.</p>	<p>HSS Premium Cobalt (Original / GEN2) Suited for rigid machining applications, used for drilling exotic and high alloy materials, or general use when surface speed needs to be increased. For material hardness up to 400 BHN 139kg.</p>	<p>Carbide C5 (P40) (Original only) Excellent for drilling free machining steel, low/medium carbon steels, alloy steels, high strength steels, tool steels, and hardened steels.</p>
<p>Carbide C3 (K10) (Original only) Designed for drilling grey/white cast irons. The special geometry offers substantial increase in penetration rates and provides exceptional edge strength and tool life.</p>	<p>Carbide C2 (K20) (Original / GEN2) Excellent for drilling high temperature alloys, titanium alloys, cast aluminum, SG/Nodular cast iron, grey/white iron, aluminum bronze, brass, copper, and certain stainless steels.</p>	<p>Carbide C1 (K35) (GEN2 only) Excellent for drilling free machining steel, low/medium carbon steels, alloy steels, high strength steels, tool steels, and hardened steels.</p>	<p>Carbide N2 (Original only) Allied's N2 carbide is used with CVD diamond coating. This improves the insert's hardness, durability, and performance, which extends tool life between 30 - 50x over uncoated carbide.</p>

Drill Insert Coatings

 <p>AM300®</p> <ul style="list-style-type: none"> Increased heat resistance over AM200® coating Up to 20% increased tool life over AM200 coating Provides superior tool life at high penetration rates Color: copper/bronze 	 <p>AM200®</p> <ul style="list-style-type: none"> First choice for increased heat resistance over TiN, TiCN, and TiAlN with improved wear capabilities Allows for improved tool life and higher penetration rates Over 20% increase in tool life compared to TiAlN coating Color: copper/bronze 	 <p>TiN</p> <ul style="list-style-type: none"> General purpose coating Improved tool life over non-coated inserts Excellent choice for aluminum Color: gold/yellow 	 <p>TiAlN</p> <ul style="list-style-type: none"> Excellent choice for wear resistance over high surface speeds Excellent oxidation resistance Maximum working temperature 800°C Color: violet/gray 	 <p>TiCN</p> <ul style="list-style-type: none"> Excellent choice for wear resistance over low surface speeds High hardness/wear resistance Maximum working temperature 400°C Color: blue/gray
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ER Collet Shank
Series: Y, Z, 0



Straight Shank
Series: ALL



Morse Taper Shank
Series: ALL



Flanged Shank
Series: ALL

Original T-A®



Original T-A® is an excellent choice for general purpose use. The design provides fast penetration rates that produce good hole size and finish without pecking or pre-drilling. Recommended for use in most steels, cast irons, high temperature alloys and aluminium alloys.

Product Advantages

- 12 Holders cover a range of 9.5 – 114mm, and up to 30xD
- Through coolant optimise chip evacuation and improved tool performance
- Corner clip allows for effective heat dispersion and increased tool life
- Self-centring point eliminates centre drilling
- Web Thin reduces thrust and increases point strength allowing greater reliability
- Morse taper and straight shanks available

GEN2 T-A®



GEN2 T-A® drill inserts provide lower drilling forces, increased drill stability, smoother breakout on through-hole and allows for improved chip formation. These inserts feature Allied's exclusive AM200® coating for increased tool life.

Product Advantages

- Notch Point® Geometry improves stability, hole straightness and reduces thrust
- Web Thin reduces thrust and increases point strength allowing greater reliability
- Helical Margin increases drill stability
- Helical Flute improves tool life
- AM200® coating for superior tool life
- Corner clip for effective heat dispersion helping to increase tool life



Material Coating				Original T-A	Gen 2 T-A
Material Coating				HSS TiN	Super Cobalt AM200
Diameter		Thickness (B)	Series	Item #	Item #
mm	inch	(B)			
17.86	45/64	5/32	1	AL131T.703	AL451H.703
18.00		5/32	1	AL131T18	AL451H18
18.26	23/32	5/32	1	AL131T0023	AL451H0023
18.50		5/32	1	AL131T18.5	AL451H18.5
18.65	47/64	5/32	1	AL131T.734	AL451H.734
19.00		5/32	1	AL131T19	AL451H19
19.05	3/4	5/32	1	AL131T0024	AL451H0024
19.45	49/64	5/32	1	AL131T.765	AL451H.765
19.50		5/32	1	AL131T19.5	AL451H19.5
19.84	25/32	5/32	1	AL131T0025	AL451H0025
20.00		5/32	1	AL131T20	AL451H20
20.24	51/64	5/32	1	AL131T.796	AL451H.796
20.50		5/32	1	AL131T20.5	AL451H.801
20.64	13/16	5/32	1	AL131T20.5	AL451H20.5
21.00		5/32	1	AL131T0026	AL451H0026
21.50		5/32	1	AL131T21	AL451H21
21.43	27/32	5/32	1	AL131T0027	AL451H0027
21.50		5/32	1	AL131T21	AL451H21.5
21.83	55/64	5/32	1	AL131T.859	AL451H.859
22.00		5/32	1	AL131T22	AL451H22
22.23	7/8	5/32	1	AL131T0028	AL451H0028
22.50		5/32	1	AL131T22	AL451H22.5
22.62	57/64	5/32	1	AL131T.890	AL451H.890
23.00		5/32	1	AL131T23	AL451H23
23.02	29/32	5/32	1	AL131T0029	AL451H0029
23.42	59/64	5/32	1	AL131T.921	AL451H.921
23.50		5/32	1	AL131T23	AL451H23.5
23.81	15/16	5/32	1	AL131T0030	AL451H0030
24.00		5/32	1	AL131T24	AL451H24
24.50		3/16	2	AL132T0031	AL452H24.5
24.61	31/32	3/16	2	AL132T0031	AL452H0031
24.79	63/64	3/16	2	AL132T0031	AL452H.976
25.00		3/16	2	AL132T25	AL452H25
25.40	1	3/16	2	AL132T0100	AL452H0100
25.50		3/16	2	AL132T25	AL452H25.5
25.80	1-1/64	3/16	2	AL132T1.015	AL452H1.015
26.00		3/16	2	AL132T26	AL452H26
26.19	1-1/32	3/16	2	AL132T0101	AL452H0101
26.50		3/16	2	AL132T26	AL452H26.5
26.59	1-3/64	3/16	2	AL132T1.046	AL452H1.046
26.99	1-1/16	3/16	2	AL132T0102	AL452H0102
27.00		3/16	2	AL132T27	AL452H27
27.50		3/16	2	AL132T27	AL452H27.5
27.78	1-3/32	3/16	2	AL132T0103	AL452H0103
28.00		3/16	2	AL132T28	AL452H28
28.18	1-7/64	3/16	2	AL132T1.109	AL452H1.109
28.50		3/16	2	AL132T28	AL452H28.5
28.58	1-1/8	3/16	2	AL132T0104	AL452H0104
29.00		3/16	2	AL132T29	AL452H29
29.37	1-5/32	3/16	2	AL132T0105	AL452H0105
29.50		3/16	2	AL132T29	AL452H29.5
30.00		3/16	2	AL132T30	AL452H30

Material Coating				Original T-A	Gen 2 T-A
Material Coating				HSS TiN	Super Cobalt AM200
Diameter		Thickness (B)	Series	Item #	Item #
mm	inch	(B)			
30.16	1-3/16	3/16	2	AL132T0106	AL452H0106
30.50		3/16	2	AL132T0106	AL452H30.5
30.96	1-7/32	3/16	2	AL132T0107	AL452H0107
31.00		3/16	2	AL132T31	AL452H31
31.14		3/16	2	AL132T0107	AL452H1.226
31.26		3/16	2	AL132T31	AL452H1.231
31.34		3/16	2	AL132T0108	AL452H1.234
31.50		3/16	2	AL132T32	AL452H31.5
31.75	1-1/4	3/16	2	AL132T0108	AL452H0108
32.00		3/16	2	AL132T32	AL452H32
32.50		3/16	2	AL132T32	AL452H32.5
32.54	1-9/32	3/16	2	AL132T0109	AL452H0109
33.00		3/16	2	AL132T33	AL452H33
33.34	1-5/16	3/16	2	AL132T0110	AL452H0110
33.50		3/16	2	AL132T33	AL452H33.5
34.00		3/16	2	AL132T34	AL452H34
34.13	1-11/32	3/16	2	AL132T0111	AL452H0111
34.50		3/16	2	AL132T34	AL452H34.5
34.93	1-3/8	3/16	2	AL132T0112	AL452H0112
35.00		3/16	2	AL132T35	AL452H35
35.72	1-13/32	1/4	3	AL433T0113	AL453H0113
36.00		1/4	3	AL433T36	AL453H36
36.51	1-7/16	1/4	3	AL433T0114	AL453H0114
37.00		1/4	3	AL433T37	AL453H37
37.31	1-15/32	1/4	3	AL433T0115	AL453H0115
38.00		1/4	3	AL433T38	AL453H38
38.10	1-1/2	1/4	3	AL433T0116	AL453H0116
38.89	1-17/32	1/4	3	AL433T0117	AL453H0117
39.00		1/4	3	AL433T39	AL453H39
39.29		1/4	3	AL433T0118	AL453H1.547
39.69	1-9/16	1/4	3	AL433T0118	AL453H0118
40.00		1/4	3	AL433T40	AL453H40
40.48	1-19/32	1/4	3	AL433T0119	AL453H0119
41.00		1/4	3	AL433T41	AL453H41
41.28	1-5/8	1/4	3	AL433T0120	AL453H0120
42.00		1/4	3	AL433T42	AL453H42
42.07	1-21/32	1/4	3	AL433T0121	AL453H0121
42.86	1-11/16	1/4	3	AL433T0122	AL453H0122
43.00		1/4	3	AL433T43	AL453H43
43.66	1-23/32	1/4	3	AL433T0123	AL453H0123
44.00		1/4	3	AL433T44	AL453H44
44.45	1-3/4	1/4	3	AL433T0124	AL453H0124
45.00		1/4	3	AL433T45	AL453H45
45.24		1/4	3	AL433T0125	AL453H0125
45.50		1/4	3	AL433T46	AL453H45.5
45.64		1/4	3	AL433T46	AL453H1.797
46.00		1/4	3	AL433T46	AL453H46
46.04	1-13/16	1/4	3	AL433T0126	AL453H0126
46.83	1-27/32	1/4	3	AL433T0127	AL453H0127
47.00		1/4	3	AL433T47	AL453H47
47.63	1-7/8	1/4	3	AL433T0128	AL453H0128

Holder Length Options (for use with both GEN2 and Original T-A inserts)



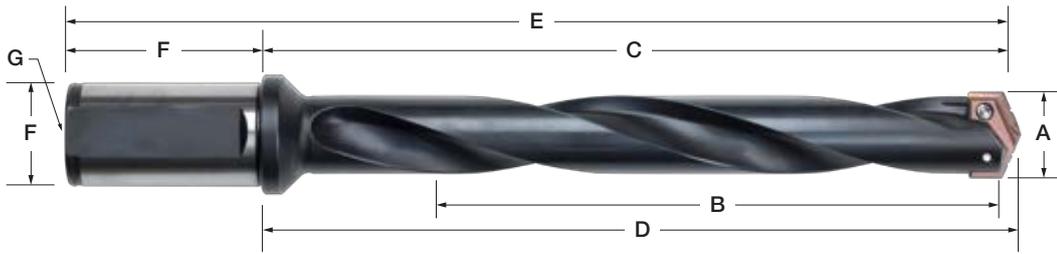
Stub Length | Series: Y - 3 (straight flute flanged shank only)



3XL Length | Series: ALL

Flanged Shank Helical Flute Holders

For Original T-A and GEN2 T-A Inserts

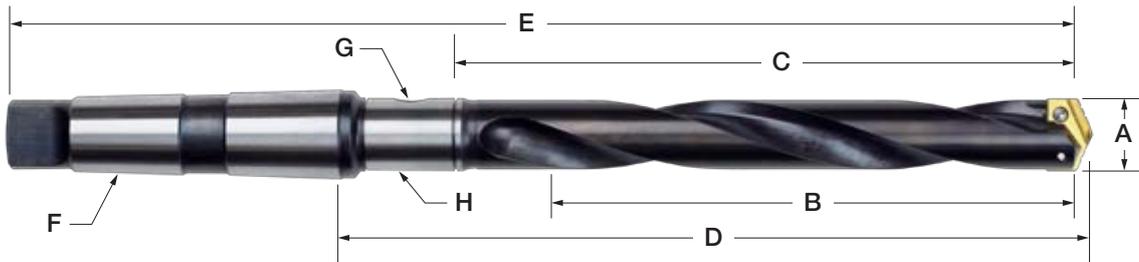


Series	Length	A	B	C	D	E	F	F	G	Item #	TORX Plus	TORX Plus
		Insert Range	Max. Drill Depth	Body Length	Ref. Length	Overall Length	Shank Dia.	Shank Length	Pipe Tap		Hand Driver	Screws (10 Piece)
1	Intermediate	18.0 - 24.0	117.5	154.8	158.4	210.8	25	56	1/8	AL23010H25FM	AL8IP9	AL7375IP910
2	Intermediate	25.0 - 35.0	136.5	179.4	183	239.4	32	60	1/4	AL23020H32FM	AL8IP15	AL7495IP1510
3	Intermediate	36.0 - 47.0	165.1	217.5	222.3	287.5	40	70	1/4	AL23030H40FM	AL8IP20	AL7514IP2010
1	Standard	18.0 - 24.0	168.3	205.6	209.2	261.6	25	56	1/8	AL24010H25FM	AL8IP9	AL7375IP910
2	Standard	25.0 - 35.0	187.3	230.2	233.8	290.2	32	60	1/4	AL24020H32FM	AL8IP15	AL7495IP1510
3	Standard	36.0 - 47.0	209.6	261.9	266.7	331.9	40	70	1/4	AL24030H40FM	AL8IP20	AL7514IP2010
1	Extended	18.0 - 24.0	269.9	307.2	310.8	363.2	25	56	1/8	AL25010H25FM	AL8IP9	AL7375IP910
2	Extended	25.0 - 35.0	288.9	331.8	335.4	391.8	32	60	1/4	AL25020H32FM	AL8IP15	AL7495IP1510

Accessories

Tapered Shank Helical Flute Holders

For Original T-A and GEN2 T-A Inserts



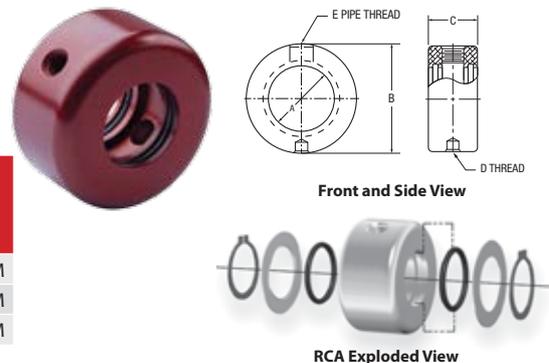
Series	Length	A	B	C	D	E	F	G	H	Item #	TORX Plus	TORX Plus
		Insert Range	Max. Drill Depth	Body Length	Ref. Length	Overall Length	MT #	Pipe Tap	RCA		Hand Driver	Screws (10 Piece)
1	Intermediate	18.0 - 24.0	120.7	149.2	193.3	283.3	3	1/8	2T-3SRM	AL23010H003M	AL8IP9	AL7375IP910
2	Intermediate	25.0 - 35.0	136.5	165.1	211.2	324.6	4	1/8	2T-3SRM	AL23020H004M	AL8IP15	AL7495IP1510
3	Intermediate	36.0 - 47.0	165.1	196.9	250.9	363.6	4	1/4	2T-4SRM	AL23030H004M	AL8IP20	AL7514IP2010
1	Standard	18.0 - 24.0	171.5	200	244.1	334.2	3	1/8	2T-3SRM	AL24010H003M	AL8IP9	AL7375IP910
2	Standard	25.0 - 35.0	187.3	215.9	262	375.4	4	1/8	2T-3SRM	AL24020H004M	AL8IP15	AL7495IP1510
3	Standard	36.0 - 47.0	209.5	241.3	295.3	408	4	1/4	2T-4SRM	AL24030H004M	AL8IP20	AL7514IP2010
1	Extended	18.0 - 24.0	273.1	301.6	345.7	435.8	3	1/8	2T-3SRM	AL25010H003M	AL8IP9	AL7375IP910
2	Extended	25.0 - 35.0	289	317.5	363.6	477	4	1/8	2T-3SRM	AL25020H004M	AL8IP15	AL7495IP1510

Accessories

Accessories

Rotary Coolant Adapter (RCA)

Series	A	B	C	D	E	Item #
	I.D	O.D	Length	Thread for Drive Rod	Pipe Tap	
1	25.4	53.97	28.57	M8-1.25	1/8	AL2T3SRM
2	25.4	53.97	28.57	M8-1.25	1/8	AL2T3SRM
3	31.75	63.5	34.92	M10 X 1.50	1/4	AL2T4SRM



Front and Side View

RCA Exploded View

Coatings:

AM200[®] is a proprietary coating developed to meet the demands of a high penetration rate drilling application. This coating has excellent wear characteristics and a high heat threshold.

Structural Steel Inserts

T-A® Structural Steel Drilling System

Designed for use on structural steels, this system delivers outstanding performance and durability.

- AM200® coating increases tool life up to 50% above competitors premium coatings
- Made from Super Cobalt for excellent wear resistance while maintaining toughness

T-A® Thin Wall Geometry Insert

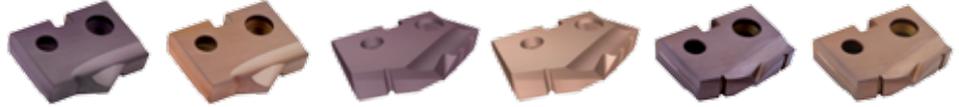
- For material up to 10mm thick
- Patented blade design for thin wall I-Beam and steel plate applications provides:
 - better hole tolerance
 - increased productivity
 - Superior hole quality

T-A® Notch Point® Geometry Insert

- For material greater than 10mm thick
- Patented design provides:
 - Excellent centring ability and reduced tool lead off
 - Significant reduction in bell mouching
 - Reduction in thrust
 - Better chip control

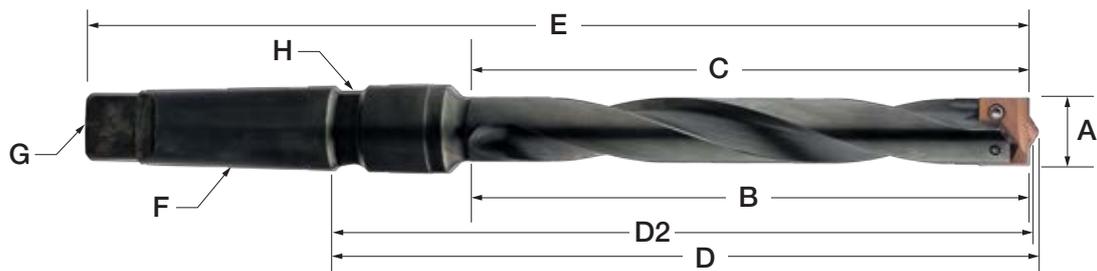
150° Geometry Insert

Offers the same features as the Notch Point® in addition to producing a reduced exit burr.



Diameter		Thickness (B)	Series	Thin Wall		Notch Point		150° Structural Steel	
				Super Cobalt		Super Cobalt		Super Cobalt	
Coating		Series	Item #	Item #	Item #	Item #	Item #	Item #	Item #
mm	inch								
18.00		5/32	1	AL151A18TW	AL151H18TW	AL151A18NP	AL151H18NP	AL151A18SS	AL151H18SS
20.64	13/16"	5/32	1	AL151A0026TW	AL151H0026TW	AL151A0026NP	AL151H0026NP	AL151A0026SS	AL151H0026SS
22.00		5/32	1	AL151A22TW	AL151H22TW	AL151A22NP	AL151H22NP	AL151A22SS	AL151H22SS
22.23	7/8"	5/32	1	AL151A0028TW	AL151H0028TW	AL151A0028NP	AL151H0028NP	AL151A0028SS	AL151H0028SS
23.81	15/16"	5/32	1	AL151A0030TW	AL151H0030TW	AL151A0030NP	AL151H0030NP	AL151A0030SS	AL151H0030SS
24.00		5/32	1	AL151A24TW	AL151H24TW	AL151A24NP	AL151H24NP	AL151A24SS	AL151H24SS
25.40	1"	3/16	2	AL152A0100TW	AL152H0100TW	AL152A0100NP	AL152H0100NP	AL152A0100SS	AL152H0100SS
26.00		3/16	2	AL152A26TW	AL152H26TW	AL152A26NP	AL152H26NP	AL152A26SS	AL152H26SS
26.99	1-1/16"	3/16	2	AL152A0102TW	AL152H0102TW	AL152A0102NP	AL152H0102NP	AL152A0102SS	AL152H0102SS
27.00		3/16	2	AL152A27TW	AL152H27TW	AL152A27NP	AL152H27NP	AL152A27SS	AL152H27SS
28.58	1-1/8"	3/16	2	AL152A0104TW	AL152H0104TW	AL152A0104NP	AL152H0104NP	AL152A0104SS	AL152H0104SS
30.16	1-3/16"	3/16	2	AL152A0106TW	AL152H0106TW	AL152A0106NP	AL152H0106NP	AL152A0106SS	AL152H0106SS
31.00		3/16	2	AL152A31TW	AL152H31TW	AL152A31NP	AL152H31NP	AL152A31SS	AL152H31SS
31.75	1-1/4"	3/16	2	AL152A0108TW	AL152H0108TW	AL152A0108NP	AL152H0108NP	AL152A0108SS	AL152H0108SS
33.00		3/16	2	AL152A33TW	AL152H33TW	AL152A33NP	AL152H33NP	AL152A33SS	AL152H33SS
33.34	1-5/16"	3/16	2	AL152A0110TW	AL152H0110TW	AL152A0110NP	AL152H0110NP	AL152A0110SS	AL152H0110SS
34.93	1-3/8"	3/16	2	AL152A0112TW	AL152H0112TW	AL152A0112NP	AL152H0112NP	AL152A0112SS	AL152H0112SS

Structural Steel Drills



Accessories

Series	Length	A	B	C	D	D2*	E	F	G	H	Item #	TORX Plus	TORX Plus
		Min. Drill Insert	Max. Drill Depth	Body Length	Ref. Length	Ref. Length	Overall Length	MT#	Coolant Inlet Style	Hand Driver		Screws (10 Piece)	
1	Standard	18	121	149	159.2	157.6	248	3	TTC	TSC	AL24010H003IS045	AL8IP9	AL7375IP910
1	Standard	21	121	149	159.2	157.6	248	3	TTC	TSC	AL24010H003IS052	AL8IP9	AL7375IP910
1.5	Standard	22	121	149	159.2	157.6	248	3	TTC	TSC	AL24015H003IS056	AL8IP9	AL7375IP910
1.5	Standard	24	121	149	159.2	157.6	248	3	TTC	TSC	AL24015H003IS060	AL8IP9	AL7375IP910
2	Standard	26	137	165	177.4	175	289	4	TTC	TSC	AL24020H004IS100	AL8IP15	AL7495IP1510
2.5	Standard	31	137	165	177.4	175	289	4	TTC	TSC	AL24025H004IS112	AL8IP15	AL7495IP1510
Straight Flute Option													
1	Short	18	70	98	108.4	106.8	197	3	TTC	TSC	AL22010S003IS045	AL8IP9	AL7375IP910
1	Short	21	70	98	108.4	106.8	197	3	TTC	TSC	AL22010S003IS052	AL8IP9	AL7375IP910
1.5	Short	22	70	98	108.4	106.8	197	3	TTC	TSC	AL22015S003IS056	AL8IP9	AL7375IP910
1.5	Short	24	70	98	108.4	106.8	197	3	TTC	TSC	AL22015S003IS060	AL8IP9	AL7375IP910
2	Short	26	86	114	126.6	124.2	238	4	TTC	TSC	AL22020S004IS100	AL8IP15	AL7495IP1510
2.5	Short	31	86	114	126.6	124.2	238	4	TTC	TSC	AL22025S004IS112	AL8IP15	AL7495IP1510

*D2 Ref Length applies if using structural steel holder with Notch Point, Gen 2 T-A, or 150° Structural Steel T-A drill insert geometry

AccuPort 432®

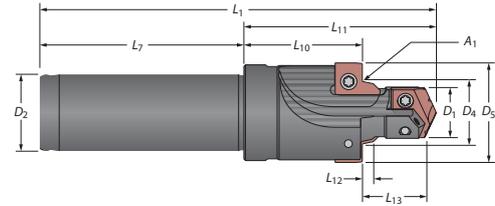
Replaceable Insert Port Contour Cutters | J1926 |

Single operation hydraulic port cutting system	No pre-drilling required	Replaceable inserts eliminate regrinding and resetting
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High Performance Multi-Step Action

Durable and precise, the AccuPort 432 holders provide a strong and rigid platform for the drilling of hydraulic ports. The precision ground insert location on each holder ensures total repeatability and simple, uncomplicated changing of the replaceable inserts.

With the AccuPort technology, you can drill and finish port forms in **ONE** operation. Save time and money with AccuPort.



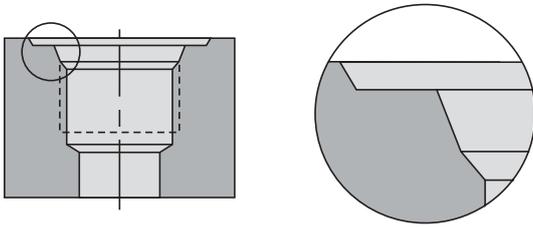
AccuPort 432® System also includes ISO 11926-1, MS16142, ISO 6149-1:2006, SAE J2244/1, JDS-G173.1, SAE AS5202.

Tube Dash No.	Cutting			Seal Angle			Holder			Shank		Port Thread Size	Item #
	D1	L13	D5	D1	L13	D5	D1	L13	D5	L1	D2		
-4	9.80	14.00	21.30	12°	12.50	2.70	38.80	22.80	80.70	41.90	16.00	7/16-20 UNF-2B	J1926-04Y-16FM
-5	11.50	14.00	23.50	12°	14.10	2.70	38.80	22.50	92.80	41.90	16.00	1/2-20 UNF-2B	J1926-05Z-16FM
-6	13.00	15.50	25.10	12°	15.70	2.70	47.20	29.00	89.10	41.90	20.00	9/16-18 UNF-2B	J1926-060-20FM
-8	17.50	17.50	30.60	15°	20.70	2.70	50.30	29.20	92.30	41.90	20.00	3/4-16 UNF-2B	J1926-080-20FM
-10	20.50	20.00	34.10	15°	24.00	2.70	54.40	30.10	107.40	53.10	25.00	7/8-14 UNF-2B	J1926-101-25FM
-12	25.00	23.00	42.00	15°	29.20	3.50	67.10	38.90	125.00	57.90	32.00	1 1/16-12 UN-2B	J1926-122-32FM
-14	28.00	23.00	45.20	15°	32.40	3.50	67.10	38.20	125.00	57.90	32.00	1 3/16-12 UN-2B	J1926-142-32FM
-16	31.20	23.00	49.10	15°	35.60	3.50	67.10	37.50	125.00	57.90	32.00	1 5/16-12 UN-2B	J1926-162-32FM
-20	39.00	23.00	58.50	15°	43.60	3.50	77.80	46.60	143.30	65.50	32.00	1 5/8-12 UN-2B	J1926-203-32FM*
-24	45.50	23.00	65.10	15°	49.90	3.50	77.80	45.20	143.30	65.50	32.00	1 7/8-12 UN-2B	J1926-243-32FM*
-32	61.50	23.00	88.10	15°	65.80	3.50	96.80	60.80	162.30	65.50	32.00	2 1/2-12 UN-2B	J1926-324-32FM*

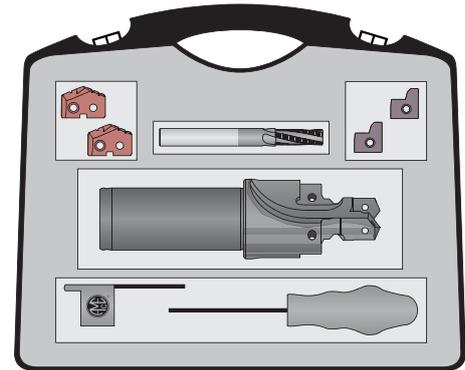
***NOTICE:** Due to the cutting forces generated by this tool, a mechanical chuck is required. Please contact Application Engineering with any questions.

AccuPort 432®

Port and Thread Finishing Kits | J1926 | Ferrous Materials



SAE J-1926-1 / ISO 11926-1



Port and Thread Finishing Kits

Tube Dash No.	AccuPort 432			GEN2 T-A® Insert		Port Form Insert		AccuThread™ Thread Mill		Kit Part No.
	Part No.	Port Thread Size	Qty	Super Cobalt (AM200®)	Qty	C5 Carbide (TiAlN)	Qty	Part No. (AM210®)	Qty	
-4	J1926-04Y-16FM	7/16-20 UNF-2B	1	45YH-386	2	J1926-02-C5A	2	TMAK0438-20M	1	ATKK04-1926M
-5	J1926-05Z-16FM	1/2-20 UNF-2B	1	45ZH-11.5	2	J1926-03-C5A	2	TMAK0438-20M	1	ATKK05-1926M
-6	J1926-060-20FM	9/16-18 UNF-2B	1	450H-13	2	J1926-03-C5A	2	TMAK0563-18M	1	ATKK06-1926M
-8	J1926-080-20FM	3/4-16 UNF-2B	1	450H-0022	2	J1926-07-C5A	2	TMAK0750-16M	1	ATKK08-1926M
-10	J1926-101-25FM	7/8-14 UNF-2B	1	451H-20.5	2	J1926-04-C5A	2	TMAK0875-14M	1	ATKK10-1926M
-12	J1926-122-32FM	1-1/16-12 UN-2B	1	452H-25	2	J1926-08-C5A	2	TMAK1063-12M	1	ATKK12-1926M
-14	J1926-142-32FM	1-3/16-12 UN-2B	1	452H-28	2	J1926-08-C5A	2	TMAK1063-12M	1	ATKK14-1926M
-16	J1926-162-32FM	1-5/16-12 UN-2B	1	452H-1.231	2	J1926-09-C5A	2	TMAK1063-12M	1	ATKK16-1926M
-20	J1926-203-32FM	1-5/8-12 UN-2B	1	453H-39	1	J1926-10-C5A	2	TMAK1063-12M	1	ATKK20-1926M
-24	J1926-243-32FM	1-7/8-12 UN-2B	1	453H-45.5	1	J1926-11-C5A	2	TMAK1063-12M	1	ATKK24-1926M
-32	J1926-324-32FM	2-1/2-12 UN-2B	1	454H-61.5	1	J1926-12-C5A	2	TMAK1063-12M	1	ATKK32-1926M

AccuPort 432® Kits are available in Metric or Imperial Shanks as well as for Ferrous and Non Ferrous materials

High Performance Drills
General Purpose Drill Inserts
General Purpose Drills
Structural Steel Inserts & Drills
Porting Tools
Threading Tools
Special Tooling

Threading Solutions

Solid Carbide and Indexable Thread Mills | AccuThread™ 856 | ThreadMills USA

High Performance Drills

General Purpose Drill Inserts

General Purpose Drills

Any Thread, Any Time

Allied Machine's thread milling product line has developed into a comprehensive range of high precision tooling that offers outstanding productivity with exceptional levels of tool life and thread accuracy.

The thread mill range covers both solid carbide and indexable replaceable insert tools with an extensive range of thread forms.



Online programmer available 24/7

Solid carbide and indexable insert styles

Large range of thread form options

Structural Steel Inserts & Drills

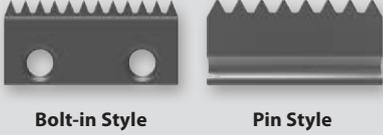
Porting Tools

Threading Tools

Special Tooling

Solid Carbide Thread Mills	Notes
<p>AccuThread™ 856</p> 	<ul style="list-style-type: none"> Allied Machine's proprietary AM210® coating yields a 25-50% increase in tool life over competitor products Standard cutting lengths allow for multiple applications without the need for special thread mills Helical flute offers increased strength and rigidity when cutting forces are applied
<p>ThreadMills USA</p> 	<ul style="list-style-type: none"> Helical flute offers increased strength and rigidity when cutting forces are applied High quality for consistent, predictable production Coolant through options available TiAlN coating improves tool life versus uncoated tools 
<p>AccuThread™ T3</p> 	<ul style="list-style-type: none"> Allied Machine's proprietary AM210® coating yields a 25-50% increase in tool life over competitor products Standard cutting lengths allow for multiple applications without the need for special thread mills Helical flute offers increased strength and rigidity when cutting forces are applied

Straight BSW	Helical BSPP, NPS, NPSF, UN, ISO	Taper Helical BSPT, NPT, NPTF	Helical (3-Tooth Style) UN, ISO
 <p>AccuThread™ 856</p>	 <p>AccuThread™ 856</p>	 <p>AccuThread™ 856</p>	 <p>AccuThread™ T3</p>
  <p>ThreadMills USA™ (coolant and non-coolant)</p>	  <p>ThreadMills USA™ (coolant and non-coolant)</p>	  <p>ThreadMills USA™ (coolant and non-coolant)</p>	

Indexable Insert Thread Mills		Notes
AccuThread™ 856 Bolt-in Style 		<ul style="list-style-type: none"> • Thread mill holders are manufactured from stainless steel that is engineered to dampen vibration during operation • Extensive range of thread forms with two thread lengths • Can produce left or right handed threads
AccuThread™ 856 Pin Style 		<ul style="list-style-type: none"> • Patented pin style locking system ensures unsurpassed repeatability • Thread mill holders are manufactured from stainless steel that is engineered to dampen vibration during operation • Extensive range of thread forms with two thread lengths
AccuThread™ 856 Indexable Inserts 		<ul style="list-style-type: none"> • Full profiles present on all inserts allow 100% thread form against 65-75% for tapping • Allied Machine's premium carbide allows for extended tool life while providing high quality thread forms • Allied Machine's proprietary AM210® coating yields a 25-50% increase in tool life over competitor products

High Performance Drills

General Purpose Drill Inserts

Special Tooling Solutions



General Purpose Drills

Structural Steel Inserts & Drills

Product Advantages

- Imagine utilising complex forms that were previously only available as brazed or solid carbide tools
- Allow for complex design with a replaceable cutting edge
- Reduce setup times
- Eliminates regrinds
- Short leads times
- Utilise standard, Insta-Quote™, and/or Special Insert Design

Porting Tools

COMPLEX SOLUTIONS



Threading Tools

INNOVATIVE SOLUTIONS



LONG SOLUTIONS



EVERY PROBLEM
HAS A
SOLUTION

Special Tooling

suttontools

A TOTAL SOLUTION



For all technical enquiries contact your local Sutton Tools representative

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