



ALLIED MACHINE & ENGINEERING

Holemaking Solutions for Today's Manufacturing



Boring



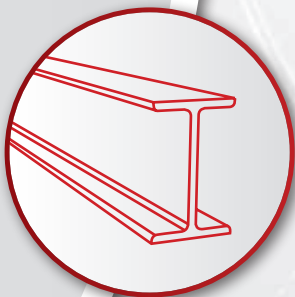
Reaming



Burnishing



Threading



Specials



Structural Steel Solutions

► *DRILLING*

Replaceable Insert Drills

SECTION

A91

Structural Steel Solutions

Structural Steel Drilling Solutions

Replaceable Insert Drilling System | GEN3SYS® XT Pro | T-A® and GEN2 T-A®

- ▶ GEN3SYS XT Pro Diameter Range: 0.4724" - 1.3780" (12.00 mm - 35.00 mm)
- ▶ T-A Diameter Range: 0.511" - 1.882" (12.98 mm - 47.80 mm)



Take on Tough Drilling

Allied Machine's Structural Steel Drilling System is designed for maximum performance in structural steel materials and applications. These solutions utilize the GEN3SYS XT Pro, T-A, and GEN2 T-A designs and capabilities.

With multiple geometries and coatings, you're sure to find the solution that is right for you. Tough drilling is tough no more.

Excellent chip control	Improves hole quality and surface finish	Provides maximum durability and stability
------------------------	--	---

Your safety and the safety of others is very important. This catalog contains important safety messages. Always read and follow all safety precautions.



This triangle is a safety hazard symbol. It alerts you to potential safety hazards that can cause tool failure and serious injury.

When you see this symbol in the catalog, look for a related safety message that may be near this triangle or referred to in the nearby text.

There are safety signal words also used in the catalog. Safety messages follow these words.

WARNING

WARNING (shown above) means that failure to follow the precautions in this message could result in tool failure and serious injury.

NOTICE means that failure to follow the precautions in this message could result in damage to the tool or machine but not result in personal injury.

NOTE and **IMPORTANT** are also used. These are important that you read and follow but are not safety-related.

Visit www.alliedmachine.com for the most up-to-date information and procedures.

Applicable Industries

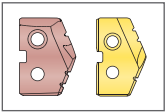


Structural Steel

Structural Steel Drilling Solutions Contents

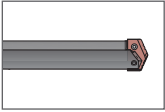
Reference Icons

The following icons will appear throughout the catalog to help you navigate between products.



Corresponding T-A Inserts

Refers to the corresponding T-A insert items that connect with each specific holder series



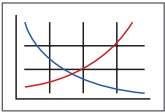
Corresponding T-A Holders

Refers to the corresponding T-A holder items that connect with each specific insert series



Setup / Assembly Information

Detailed instructions and information regarding the corresponding part(s)



Recommended Cutting Data

Speed and feed recommendations for optimum and safe drilling



Coolant-Through Option

Indicates that the product is coolant through

Series	GEN3SYS XT Pro Diameter Range	
	Imperial (inch)	Metric (mm)
12	0.4724 - 0.5117	12.00 - 12.99
13	0.5118 - 0.5511	13.00 - 13.99
14	0.5512 - 0.5905	14.00 - 14.99
15	0.5906 - 0.6298	15.00 - 15.99
16	0.6299 - 0.6692	16.00 - 16.99
17	0.6693 - 0.7086	17.00 - 17.99
18	0.7087 - 0.7873	18.00 - 19.99
20	0.7874 - 0.8660	20.00 - 21.99
22	0.8661 - 0.9448	22.00 - 23.99
24	0.9449 - 1.0235	24.00 - 25.99
26	1.0236 - 1.1416	26.00 - 28.99
29	1.1417 - 1.2597	29.00 - 31.99
32	1.2598 - 1.3780	32.00 - 35.00

Series	T-A Diameter Range	
	Imperial (inch)	Metric (mm)
0	0.511 - 0.695	12.98 - 17.65
1	0.690 - 0.960	17.53 - 24.38
2	0.961 - 1.380	24.41 - 35.05
3	1.353 - 1.882	34.36 - 47.80

Introduction Information

Structural Steel Drilling Overview	2
Case Study Example	3

GEN3SYS® XT Pro System

GEN3SYS XT Pro System Overview	4
Product Nomenclature	5
12 - 13 Series	6 - 7
14 - 15 Series	8 - 9
16 - 17 Series	10 - 11
18 - 20 Series	12 - 13
22 - 24 Series	14 - 15
26 - 29 Series	16 - 17
32 Series	18

T-A® Drilling System

T-A System Overview	20
Product Nomenclature	21
0 Series	22 - 25
1 Series	26 - 29
2 Series	30 - 33
3 Series	34 - 36
Deep Hole Drilling Guidelines	37

Recommended Cutting Data

GEN3SYS XT Pro System	38 - 39
T-A System	40 - 41






Structural Steel Drilling

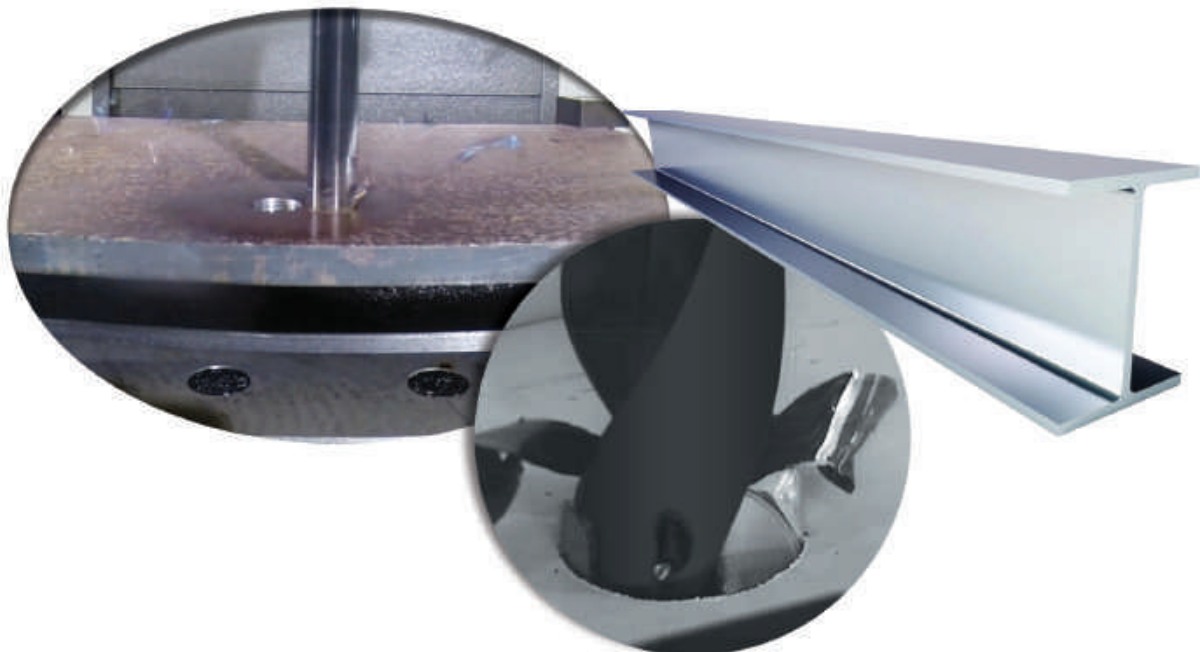
Achieving Optimal Results in Structural Steel

Drilling in structural steel materials can be a difficult process, and achieving optimal results becomes a major issue. Allied Machine's structural steel drilling solutions have been specifically designed to produce the best results in the toughest materials. With solutions in both the T-A® and GEN3SYS® XT Pro product lines, you have multiple options to solve your application problems.



Insert Style Comparison

	 GEN3SYS® XT Pro Structural Steel	 T-A® Thin Wall	 T-A® Notch Point®	 T-A® 150° Structural Steel	 GEN2 T-A® High Efficiency
High penetration	<input checked="" type="checkbox"/>				
Material less than 7/16" thick		<input checked="" type="checkbox"/>			
Material over 7/16" thick	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Reduced exit burr			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Includes Notch Point® geometry			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Available from carbide	<input checked="" type="checkbox"/>				<input checked="" type="checkbox"/>
Stocked in common sizes for the Structural Steel industry	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>



A
DRILLING
B
BORING
C
REAMING
D
BURNISHING
E
THREADING
X
SPECIALS

Case Study Example

CASE STUDY

Project Profile: Structural Steel I-Beam Construction
Tooling Solution: T-A® Structural Steel Drilling System

The Problem:
 Previously, the customer was using a competitor spade drill running at the following parameters:

- 650 RPM
- 0.010 IPR (0.25 mm/rev)
- 6.5 IPM (165.1 mm/min)

The tool drilled a 0.875" (22.23 mm) diameter hole to a 0.4375" (11.11 mm) depth. The drill had a tool life of **only 20 holes**.

The poor tool performance was brought to the attention of the technician, who was familiar with Allied Machine products. The following day, Allied Machine tooling was brought in for testing. The customer needed improvement in the tool life of the inserts.

The Solution:
 Allied Machine recommended the T-A Structural Steel Drilling System.

- **Insert** = 151A-0028-TW (#1 series T-A insert with TiAlN coating and Thin Wall geometry)
- **Holder** = 25010H-004IS052 (#1 series T-A holder with #4 Morse Taper shank and helical flute)

The tool ran at the following parameters:

- 440 RPM
- 0.010 IPR (0.25 mm/rev)
- 4.4 IPM (111.7 mm/min)

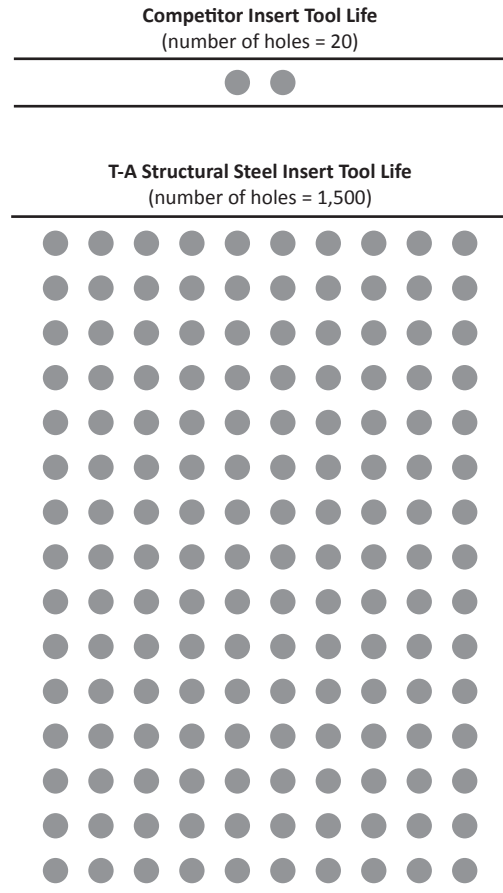
The tool achieved the desired diameter and depth. But most of all, the tool produced **1,500 holes**.

Summary:
 The customer was able to take advantage of Allied Machine’s vast experience in the structural steel drilling niche. Allied’s wide variety of stocked solutions for specific customer problems allows for a remarkable increase in tool life.

The T-A Structural Steel Drilling System defeated the competition, decreasing the total cost per hole from \$2.02 to just \$0.22. This reduction resulted in a **savings of 89%** for the customer.



The PROOF is in the NUMBERS



Overall **SAVINGS** of **89%**



PREMIUM SOLUTION



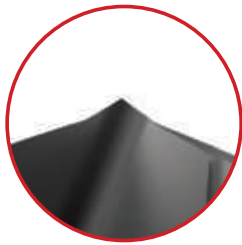
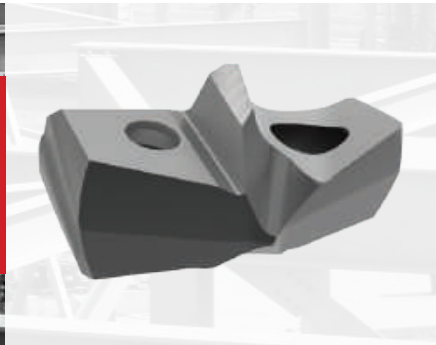
A
DRILLING
B
BORING
C
REAMING
D
BURNISHING
E
THREADING
X
SPECIALS

GEN3SYS® XT Pro Structural Steel Drilling System

A
DRILLING
B
BORING
C
REAMING
D
BURNISHING
E
THREADING
X
SPECIALS

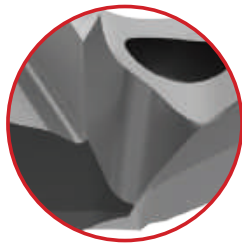


GEN3SYS® XT Pro **ST**
STRUCTURAL STEEL ENHANCEMENTS



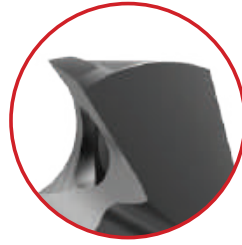
New Point Design

Increases stability without hindering penetration



Redesigned Insert

Provides consistent performance and adds durability



Improved Geometry

Extends tool life and increases insert strength without increasing horsepower consumption



AM420

AM420 Coating

Increases heat threshold and extends tool life

Get the Consistency You Need

The challenge of drilling structural steel materials is about to get easier. Developed through a rigorous and thorough testing process, the modified and improved XTST insert is a product of innovation.

Achieve the **consistent performance** you need while matching or even exceeding your current parameters.

Tough Drilling is Tough No More

Structural steel applications can prove to be difficult to machine, so you need a drill that's been put through the fire to ensure it can conquer those challenging applications.

Rigorous testing and countless hours of design and programming make the XT Pro structural steel insert the optimal drill for structural steel applications.

- Diameter range: 0.4724" - 1.3780" (12.00 mm - 35.00 mm)
- Holders available in 1.5xD, 3xD, 5xD, and 7xD lengths
- Flanged shank with flat



1.5xD

3xD

5xD

7xD

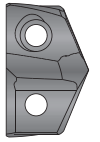


NOTICE: Structural Steel GEN3SYS holders are specifically designed to be used only with XTST geometry inserts. Using other GEN3SYS XT or XT Pro insert geometries in these holders could lead to chip packing and tool failure. Contact Application Engineering for questions regarding proper use of tools.

GEN3SYS® XT Pro Drill Nomenclature

GEN3SYS XT Pro Drill Inserts

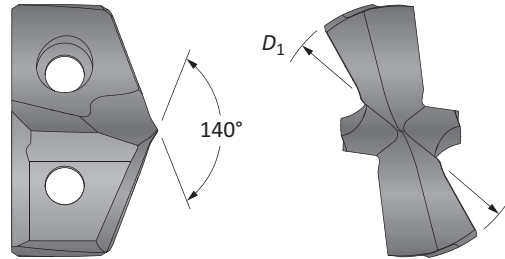
XT	ST	20	–	20.00
1	2	3		4



1. XT Pro Drill Insert	2. Geometry	3. Series	4. Diameter (mm)															
XT = XT Pro insert	ST = Structural Steel	<table border="0"> <tr> <td>12 = 12 series</td> <td>17 = 17 series</td> <td>26 = 26 series</td> </tr> <tr> <td>13 = 13 series</td> <td>18 = 18 series</td> <td>29 = 29 series</td> </tr> <tr> <td>14 = 14 series</td> <td>20 = 20 series</td> <td>32 = 32 series</td> </tr> <tr> <td>15 = 15 series</td> <td>22 = 22 series</td> <td></td> </tr> <tr> <td>16 = 16 series</td> <td>24 = 24 series</td> <td></td> </tr> </table>	12 = 12 series	17 = 17 series	26 = 26 series	13 = 13 series	18 = 18 series	29 = 29 series	14 = 14 series	20 = 20 series	32 = 32 series	15 = 15 series	22 = 22 series		16 = 16 series	24 = 24 series		For complete list of diameter ranges by series, see contents page.
12 = 12 series	17 = 17 series	26 = 26 series																
13 = 13 series	18 = 18 series	29 = 29 series																
14 = 14 series	20 = 20 series	32 = 32 series																
15 = 15 series	22 = 22 series																	
16 = 16 series	24 = 24 series																	

Reference Key

Symbol	Attribute
D_1	Insert diameter

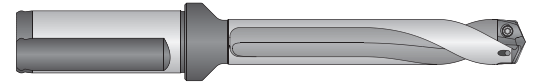


Sizes not shown are available upon request.
When ordering, please follow the example below:

Imperial:	0.7913", 20 series = use Part No. XTST20-20.10
Metric:	20.10 mm, 20 series = use Part No. XTST20-20.10

GEN3SYS Structural Steel Drill Holders

ST	03	12	0	–	20	FM
1	2	3	4		5	6

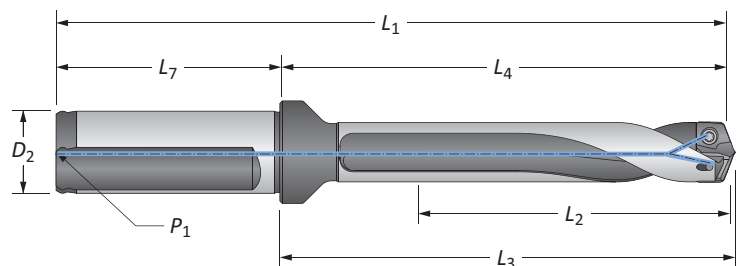


1. Holder	2. Length	3. Series	4. Body Diameter																					
ST = Structural steel holder	<table border="0"> <tr> <td>01 = 1.5x Diameter</td> </tr> <tr> <td>03 = 3x Diameter</td> </tr> <tr> <td>05 = 5x Diameter</td> </tr> <tr> <td>07 = 7x Diameter</td> </tr> </table>	01 = 1.5x Diameter	03 = 3x Diameter	05 = 5x Diameter	07 = 7x Diameter	<table border="0"> <tr> <td>12 = 12 series</td> <td>17 = 17 series</td> <td>26 = 26 series</td> </tr> <tr> <td>13 = 13 series</td> <td>18 = 18 series</td> <td>29 = 29 series</td> </tr> <tr> <td>14 = 14 series</td> <td>20 = 20 series</td> <td>32 = 32 series</td> </tr> <tr> <td>15 = 15 series</td> <td>22 = 22 series</td> <td></td> </tr> <tr> <td>16 = 16 series</td> <td>24 = 24 series</td> <td></td> </tr> </table>	12 = 12 series	17 = 17 series	26 = 26 series	13 = 13 series	18 = 18 series	29 = 29 series	14 = 14 series	20 = 20 series	32 = 32 series	15 = 15 series	22 = 22 series		16 = 16 series	24 = 24 series		<table border="0"> <tr> <td>0 = Standard</td> </tr> <tr> <td>5 = Oversized</td> </tr> </table>	0 = Standard	5 = Oversized
01 = 1.5x Diameter																								
03 = 3x Diameter																								
05 = 5x Diameter																								
07 = 7x Diameter																								
12 = 12 series	17 = 17 series	26 = 26 series																						
13 = 13 series	18 = 18 series	29 = 29 series																						
14 = 14 series	20 = 20 series	32 = 32 series																						
15 = 15 series	22 = 22 series																							
16 = 16 series	24 = 24 series																							
0 = Standard																								
5 = Oversized																								

5. Shank Diameter	6. Shank Style												
<table border="0"> <thead> <tr> <th>Imperial (in)</th> <th>Metric (mm)</th> </tr> </thead> <tbody> <tr> <td>063 = 5/8" 125 = 1-1/4"</td> <td>16 = 16 mm 32 = 32 mm</td> </tr> <tr> <td>075 = 3/4" 150 = 1-1/2"</td> <td>20 = 20 mm 40 = 40 mm</td> </tr> <tr> <td>100 = 1"</td> <td>25 = 25 mm</td> </tr> </tbody> </table>	Imperial (in)	Metric (mm)	063 = 5/8" 125 = 1-1/4"	16 = 16 mm 32 = 32 mm	075 = 3/4" 150 = 1-1/2"	20 = 20 mm 40 = 40 mm	100 = 1"	25 = 25 mm	<table border="0"> <tr> <td>F = Flanged with flat</td> </tr> <tr> <td>FM = Flanged metric with flat</td> </tr> <tr> <td>C = Cylindrical (no flat)</td> </tr> <tr> <td>CM = Cylindrical metric (no flat)</td> </tr> </table>	F = Flanged with flat	FM = Flanged metric with flat	C = Cylindrical (no flat)	CM = Cylindrical metric (no flat)
Imperial (in)	Metric (mm)												
063 = 5/8" 125 = 1-1/4"	16 = 16 mm 32 = 32 mm												
075 = 3/4" 150 = 1-1/2"	20 = 20 mm 40 = 40 mm												
100 = 1"	25 = 25 mm												
F = Flanged with flat													
FM = Flanged metric with flat													
C = Cylindrical (no flat)													
CM = Cylindrical metric (no flat)													

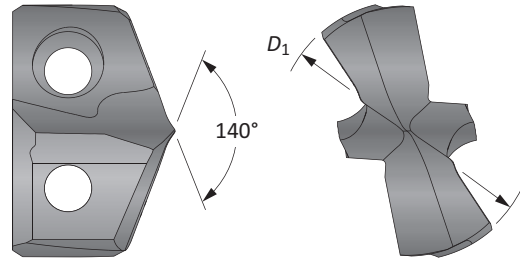
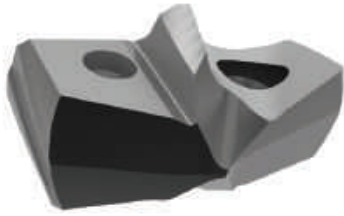
Reference Key

Symbol	Attribute
D_2	Shank diameter
L_1	Overall length
L_2	Drill depth
L_3	Holder reference length
L_4	Holder body length
L_7	Shank length
P_1	Rear pipe tap




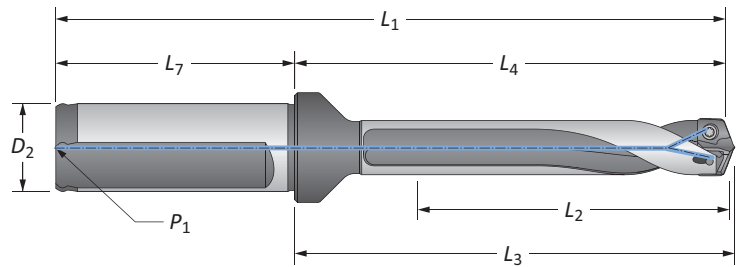
GEN3SYS® XT Pro Structural Steel Drilling System

12 Series | Diameter Range: 0.4724" - 0.5117" (12.00 mm - 12.99 mm)



Inserts






Fractional Equivalent	Insert D_1 inch	D_1 mm	 XTST Part No.
–	0.4724	12.00	XTST12-12.00



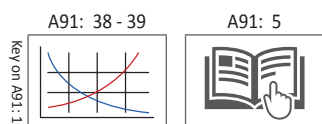
HOLDERS

Length	Body				Shank				Flat	Part No.
	L_2	L_4	L_3	L_1	L_7	D_2	P_1			
i 1.5xD	49/64	1-55/64	1-15/16	3-57/64	2-1/32	3/4	1/8 NPT	YES	ST01120-075F	
i 3xD	1-17/32	2-5/8	2-45/64	4-21/32	2-1/32	3/4	1/8 NPT	YES	ST03120-075F	
i 5xD	2-9/16	3-41/64	3-47/64	5-43/64	2-1/32	3/4	1/8 NPT	YES	ST05120-075F	
i 7xD	3-37/64	4-43/64	4-3/4	6-45/64	2-1/32	3/4	1/8 NPT	YES	ST07120-075F	
m 1.5xD	19.5	47.1	49.3	97.1	50	20	1/8 BSPT	YES	ST01120-20FM	
m 3xD	39.0	68.8	68.8	118.8	50	20	1/8 BSPT	YES	ST03120-20FM	
m 5xD	65.0	94.8	94.8	144.8	50	20	1/8 BSPT	YES	ST05120-20FM	
m 7xD	90.9	120.8	120.8	170.8	50	20	1/8 BSPT	YES	ST07120-20FM	

Connection Accessories

 Insert Screws	 Nylon Locking Screws	 Insert Driver	 Preset Torque Hand Driver	 Replacement Tips	Admissible Tightening Torque*
7247-IP7-1	7247N-IP7-1	8IP-7	8IP-7TL	8IP-7B	7.4 in-lbs (84 N-cm)

*Tightening torques are calculated with a friction coefficient of $\mu = 0.14$ and develop 90% of ultimate yield strength



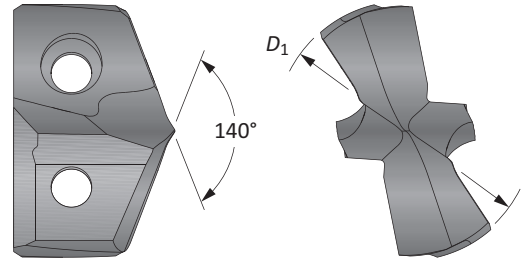
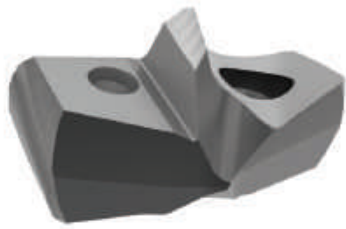
i = Imperial (in)
m = Metric (mm)

Inserts sold in multiples of 1 | Screws sold in multiples of 10


NOTICE: Structural Steel GEN3SYS holders are specifically designed to be used only with XTST geometry inserts. Using other GEN3SYS XT or XT Pro insert geometries in these holders could lead to chip packing and tool failure. Contact Application Engineering for questions regarding proper use of tools. ext: 7611 | email: appeng@alliedmachine.com

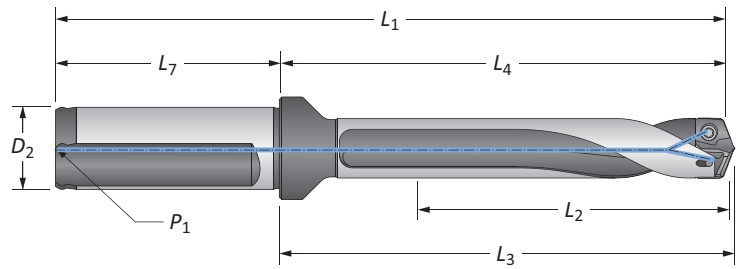
GEN3SYS® XT Pro Structural Steel Drilling System

13 Series | Diameter Range: 0.5118" - 0.5511" (13.00 mm - 13.99 mm)



Inserts





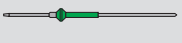
Fractional Equivalent	Insert D_1 inch	D_1 mm	 XTST Part No.
-	0.5118	13.00	XTST13-13.00



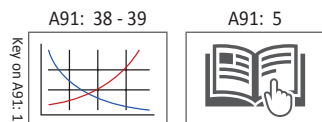
Holders

	Length	Body				Shank				Part No.
		L_2	L_4	L_3	L_1	L_7	D_2	P_1	Flat	
i	1.5xD	53/64	1-57/64	1-63/64	3-59/64	2-1/32	3/4	1/8 NPT	YES	ST01130-075F
	3xD	1-21/32	2-23/32	2-13/16	4-3/4	2-1/32	3/4	1/8 NPT	YES	ST03130-075F
	5xD	2-3/4	3-53/64	3-29/32	5-55/64	2-1/32	3/4	1/8 NPT	YES	ST05130-075F
	7xD	3-55/64	4-15/16	5-1/32	6-31/32	2-1/32	3/4	1/8 NPT	YES	ST07130-075F
m	1.5xD	21.1	48.1	50.3	99.7	50	20	1/8 BSPT	YES	ST01130-20FM
	3xD	42.1	69.1	71.3	120.7	50	20	1/8 BSPT	YES	ST03130-20FM
	5xD	69.9	97.2	99.4	148.8	50	20	1/8 BSPT	YES	ST05130-20FM
	7xD	97.9	125.4	127.6	177.0	50	20	1/8 BSPT	YES	ST07130-20FM

Connection Accessories

 Insert Screws	 Nylon Locking Screws	 Insert Driver	 Preset Torque Hand Driver	 Replacement Tips	Admissible Tightening Torque*
7247-IP7-1	7247N-IP7-1	8IP-7	8IP-7TL	8IP-7B	7.4 in-lbs (84 N-cm)

*Tightening torques are calculated with a friction coefficient of $\mu = 0.14$ and develop 90% of ultimate yield strength



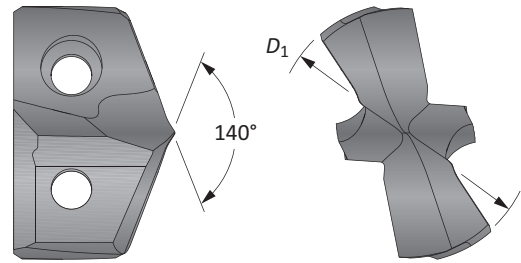
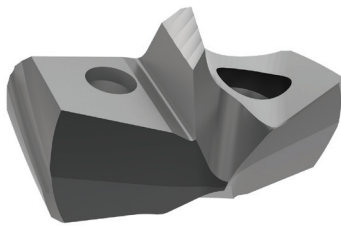
i = Imperial (in)
m = Metric (mm)

Inserts sold in multiples of 1 | Screws sold in multiples of 10


NOTICE: Structural Steel GEN3SYS holders are specifically designed to be used only with XTST geometry inserts. Using other GEN3SYS XT or XT Pro insert geometries in these holders could lead to chip packing and tool failure. Contact Application Engineering for questions regarding proper use of tools. ext: 7611 | email: appeng@alliedmachine.com

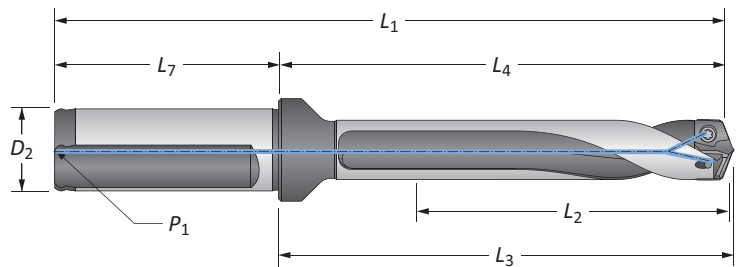
GEN3SYS® XT Pro Structural Steel Drilling System

14 Series | Diameter Range: 0.5512" - 0.5905" (14.00 mm - 14.99 mm)



Inserts





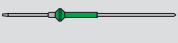
Fractional Equivalent	Insert D_1 inch	D_1 mm	 XTST Part No.
–	0.5512	14.00	XTST14-14.00
9/16	0.5626	14.29	XTST14-14.29



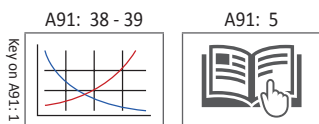
Holders

Length	Body				Shank				Flat	Part No.
	L_2	L_4	L_3	L_1	L_7	D_2	P_1			
1.5xD	29/32	1-61/64	2-1/16	3-63/64	2-1/32	3/4	1/8 NPT	YES	ST01140-075F	
3xD	1-25/32	2-27/32	2-61/64	4-7/8	2-1/32	3/4	1/8 NPT	YES	ST03140-075F	
5xD	2-61/64	4-1/32	4-1/8	6-1/16	2-1/32	3/4	1/8 NPT	YES	ST05140-075F	
7xD	4-9/64	5-13/64	5-5/16	7-15/64	2-1/32	3/4	1/8 NPT	YES	ST07140-075F	
1.5xD	22.5	49.9	52.5	99.9	50	20	1/8 BSPT	YES	ST01140-20FM	
3xD	45.0	72.4	75.0	122.4	50	20	1/8 BSPT	YES	ST03140-20FM	
5xD	75.0	102.4	104.9	152.4	50	20	1/8 BSPT	YES	ST05140-20FM	
7xD	104.9	132.3	134.9	182.3	50	20	1/8 BSPT	YES	ST07140-20FM	

Connection Accessories

 Insert Screws	 Nylon Locking Screws	 Insert Driver	 Preset Torque Hand Driver	 Replacement Tips	Admissible Tightening Torque*
7247-IP7-1	7247N-IP7-1	8IP-7	8IP-7TL	8IP-7B	7.4 in-lbs (84 N-cm)

*Tightening torques are calculated with a friction coefficient of $\mu = 0.14$ and develop 90% of ultimate yield strength



i = Imperial (in)
m = Metric (mm)

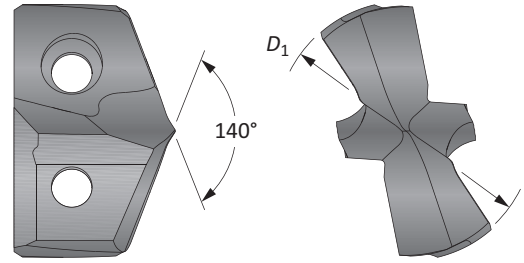
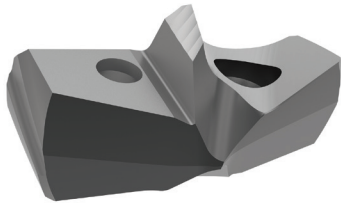
Inserts sold in multiples of 1 | Screws sold in multiples of 10

NOTICE: Structural Steel GEN3SYS holders are specifically designed to be used only with XTST geometry inserts. Using other GEN3SYS XT or XT Pro insert geometries in these holders could lead to chip packing and tool failure. Contact Application Engineering for questions regarding proper use of tools. ext: 7611 | email: appeng@alliedmachine.com




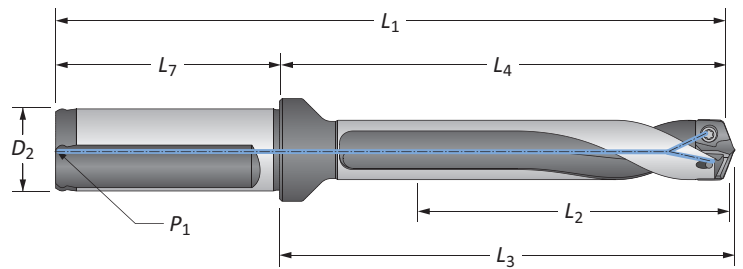
GEN3SYS® XT Pro Structural Steel Drilling System

15 Series | Diameter Range: 0.5906" - 0.6298" (15.00 mm - 15.99 mm)



Inserts






Fractional Equivalent	Insert D_1 inch	D_1 mm	 XTST Part No.
	0.5906	15.00	XTST15-15.00
5/8	0.6252	15.88	XTST15-15.88



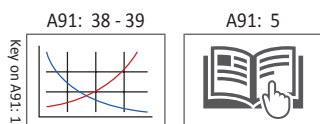
Holders

	Length	Body				Shank				Part No.
		L_2	L_4	L_3	L_1	L_7	D_2	P_1	Flat	
i	1.5xD	61/64	2-1/64	2-7/64	4-3/64	2-1/32	3/4	1/8 NPT	YES	ST01150-075F
	3xD	1-57/64	2-61/64	3-3/64	4-63/64	2-1/32	3/4	1/8 NPT	YES	ST03150-075F
	5xD	3-5/32	4-7/32	4-5/16	6-1/4	2-1/32	3/4	1/8 NPT	YES	ST05150-075F
	7xD	4-27/64	5-15/32	5-37/64	7-1/2	2-1/32	3/4	1/8 NPT	YES	ST07150-075F
m	1.5xD	24.0	51.1	53.6	101.1	50	20	1/8 BSPT	YES	ST01150-20FM
	3xD	48.0	75.1	77.6	125.1	50	20	1/8 BSPT	YES	ST03150-20FM
	5xD	80.0	107.0	109.6	157.0	50	20	1/8 BSPT	YES	ST05150-20FM
	7xD	111.9	139.0	141.6	189.0	50	20	1/8 BSPT	YES	ST07150-20FM

Connection Accessories

 Insert Screws	 Nylon Locking Screws	 Insert Driver	 Preset Torque Hand Driver	 Replacement Tips	Admissible Tightening Torque*
7247-IP7-1	7247N-IP7-1	8IP-7	8IP-7TL	8IP-7B	7.4 in-lbs (84 N-cm)

*Tightening torques are calculated with a friction coefficient of $\mu = 0.14$ and develop 90% of ultimate yield strength



i = Imperial (in)
m = Metric (mm)

Inserts sold in multiples of 1 | Screws sold in multiples of 10

NOTICE: Structural Steel GEN3SYS holders are specifically designed to be used only with XTST geometry inserts. Using other GEN3SYS XT or XT Pro insert geometries in these holders could lead to chip packing and tool failure. Contact Application Engineering for questions regarding proper use of tools. ext: 7611 | email: appeng@alliedmachine.com

GEN3SYS® XT Pro Structural Steel Drilling System

16 Series | Diameter Range: 0.6299" - 0.6692" (16.00 mm - 16.99 mm)

A
DRILLING

B

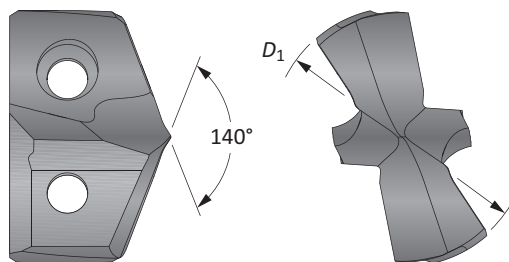
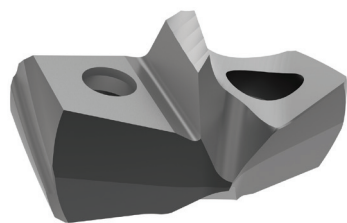
BORING

C
REAMING


D
URNISHING

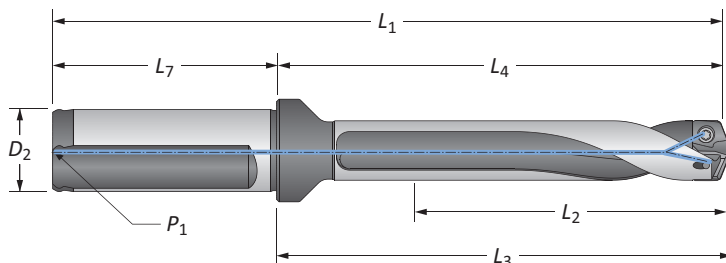
E
HREADING

X
PECIALS



Inserts






Fractional Equivalent	Insert D ₁ inch	D ₁ mm	 XTST Part No.
–	0.6299	16.00	XTST16-16.00



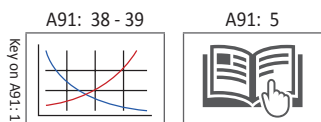
Holders

Length	Body				Shank				Flat	Part No.
	L ₂	L ₄	L ₃	L ₁	L ₇	D ₂	P ₁			
i	1.5xD	1-1/64	2-13/64	2-5/16	4-15/64	2-1/32	3/4	1/8 NPT	YES	ST01160-075F
	3xD	2-1/64	3-13/64	3-5/16	5-15/64	2-1/32	3/4	1/8 NPT	YES	ST03160-075F
	5xD	3-23/64	4-17/32	4-21/32	6-9/16	2-1/32	3/4	1/8 NPT	YES	ST05160-075F
	7xD	4-11/16	5-7/8	5-63/64	7-29/32	2-1/32	3/4	1/8 NPT	YES	ST07160-075F
m	1.5xD	25.5	55.8	58.7	105.8	50	20	1/8 BSPT	YES	ST01160-20FM
	3xD	51.0	81.3	84.2	131.3	50	20	1/8 BSPT	YES	ST03160-20FM
	5xD	84.9	115.3	118.2	165.3	50	20	1/8 BSPT	YES	ST05160-20FM
	7xD	118.9	149.3	152.2	199.3	50	20	1/8 BSPT	YES	ST07160-20FM

Connection Accessories

 Insert Screws	 Nylon Locking Screws	 Insert Driver	 Preset Torque Hand Driver	 Replacement Tips	Admissible Tightening Torque*
72556-IP8-1	72556N-IP8-1	8IP-8	8IP-8TL	8IP-8B	15.5 in-lbs (175 N-cm)

*Tightening torques are calculated with a friction coefficient of $\mu = 0.14$ and develop 90% of ultimate yield strength



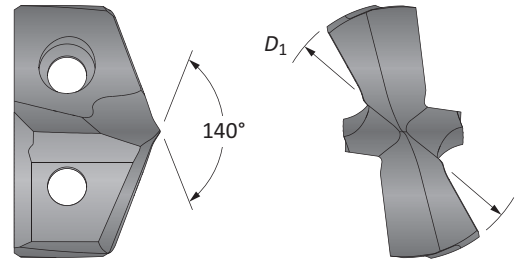
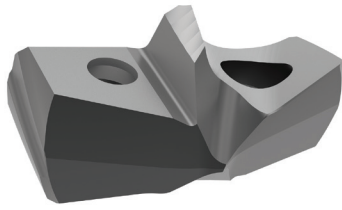
i = Imperial (in)
m = Metric (mm)

Inserts sold in multiples of 1 | Screws sold in multiples of 10


NOTICE: Structural Steel GEN3SYS holders are specifically designed to be used only with XTST geometry inserts. Using other GEN3SYS XT or XT Pro insert geometries in these holders could lead to chip packing and tool failure. Contact Application Engineering for questions regarding proper use of tools. ext: 7611 | email: appeng@alliedmachine.com

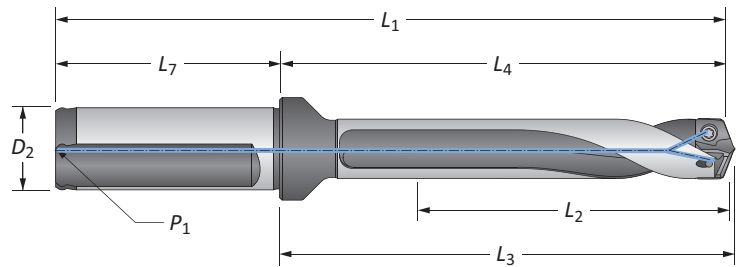
GEN3SYS® XT Pro Structural Steel Drilling System

17 Series | Diameter Range: 0.6693" - 0.7086" (17.00 mm - 17.99 mm)



Inserts




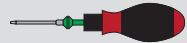

Fractional Equivalent	Insert D_1 inch	D_1 mm	 XTST Part No.
–	0.6693	17.00	XTST17-17.00
11/16	0.6876	17.46	XTST17-17.46



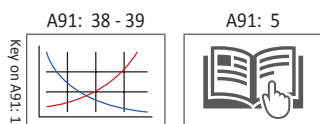
Holders

	Length	Body				Shank				Part No.
		L_2	L_4	L_3	L_1	L_7	D_2	P_1	Flat	
i	1.5xD	1-1/16	2-1/4	2-23/64	4-9/32	2-1/32	3/4	1/8 NPT	YES	ST01170-075F
	3xD	2-1/8	3-5/16	3-27/64	5-11/32	2-1/32	3/4	1/8 NPT	YES	ST03170-075F
	5xD	3-35/64	4-23/32	4-27/32	6-3/4	2-1/32	3/4	1/8 NPT	YES	ST05170-075F
	7xD	4-31/32	6-9/64	6-1/4	8-11/64	2-1/32	3/4	1/8 NPT	YES	ST07170-075F
m	1.5xD	27.0	57.1	60	107.1	50	20	1/8 BSPT	YES	ST01170-20FM
	3xD	54.0	84.1	87.0	134.1	50	20	1/8 BSPT	YES	ST03170-20FM
	5xD	89.9	120.0	122.9	170.0	50	20	1/8 BSPT	YES	ST05170-20FM
	7xD	125.9	156.0	158.9	206.0	50	20	1/8 BSPT	YES	ST07170-20FM

Connection Accessories

 Insert Screws	 Nylon Locking Screws	 Insert Driver	 Preset Torque Hand Driver	 Replacement Tips	Admissible Tightening Torque*
72567-IP8-1	72567N-IP8-1	8IP-8	8IP-8TL	8IP-8B	15.5 in-lbs (175 N-cm)

*Tightening torques are calculated with a friction coefficient of $\mu = 0.14$ and develop 90% of ultimate yield strength



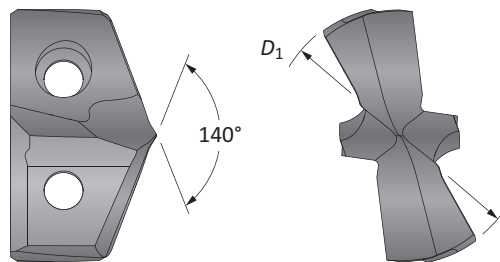
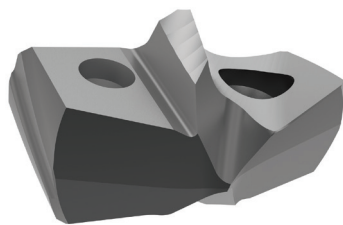
i = Imperial (in)
m = Metric (mm)

Inserts sold in multiples of 1 | Screws sold in multiples of 10


NOTICE: Structural Steel GEN3SYS holders are specifically designed to be used only with XTST geometry inserts. Using other GEN3SYS XT or XT Pro insert geometries in these holders could lead to chip packing and tool failure. Contact Application Engineering for questions regarding proper use of tools. ext: 7611 | email: appeng@alliedmachine.com

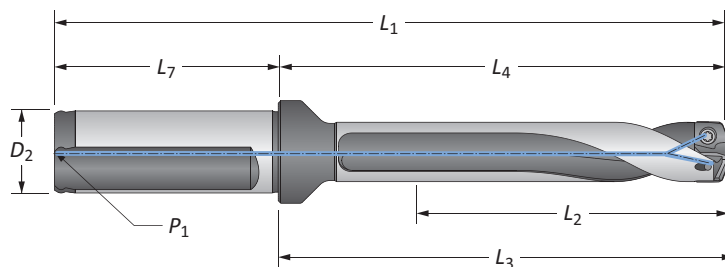
GEN3SYS® XT Pro Structural Steel Drilling System

18 Series | Diameter Range: 0.7087" - 0.7873" (18.00 mm - 19.99 mm)



Inserts






Fractional Equivalent	Insert D_1 inch	D_1 mm	 XTST Part No.
-	0.7087	18.00	XTST18-18.00
-	0.7480	19.00	XTST18-19.00



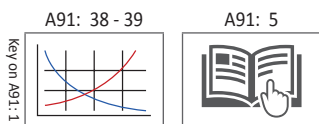
Holders

Length	Body				Shank				Flat	Part No.
	L_2	L_4	L_3	L_1	L_7	D_2	P_1			
1.5xD	1-3/16	2-17/32	2-41/64	4-51/64	2-9/32	1	1/8 NPT	YES	ST01180-100F	
3xD	2-3/8	3-45/64	3-53/64	5-63/64	2-9/32	1	1/8 NPT	YES	ST03180-100F	
5xD	3-15/16	5-9/32	5-25/64	7-9/16	2-9/32	1	1/8 NPT	YES	ST05180-100F	
7xD	5-33/64	6-27/32	6-31/32	9-1/8	2-9/32	1	1/8 NPT	YES	ST07180-100F	
1.5xD	30.0	64	67.1	114	50	20	1/8 BSPT	YES	ST01180-20FM	
3xD	60.0	94.0	97.1	144.0	50	20	1/8 BSPT	YES	ST03180-20FM	
5xD	99.9	134.0	137.1	184.0	50	20	1/8 BSPT	YES	ST05180-20FM	
7xD	139.9	174.0	177.1	224.0	50	20	1/8 BSPT	YES	ST07180-20FM	

Connection Accessories

 Insert Screws	 Nylon Locking Screws	 Insert Driver	 Preset Torque Hand Driver	 Replacement Tips	Admissible Tightening Torque*
7375-IP9-1	7375N-IP9-1	8IP-9	8IP-9TL	8IP-9B	27.0 in-lbs (305 N-cm)

*Tightening torques are calculated with a friction coefficient of $\mu = 0.14$ and develop 90% of ultimate yield strength



i = Imperial (in)
m = Metric (mm)

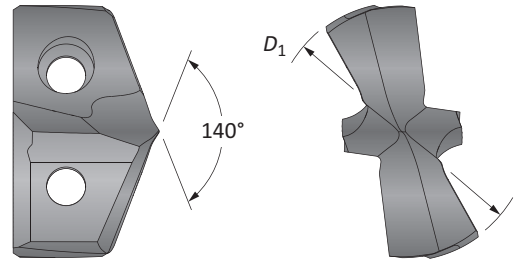
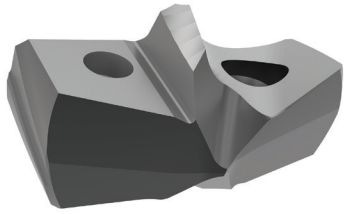
Inserts sold in multiples of 1 | Screws sold in multiples of 10

NOTICE: Structural Steel GEN3SYS holders are specifically designed to be used only with XTST geometry inserts. Using other GEN3SYS XT or XT Pro insert geometries in these holders could lead to chip packing and tool failure. Contact Application Engineering for questions regarding proper use of tools. ext: 7611 | email: appeng@alliedmachine.com




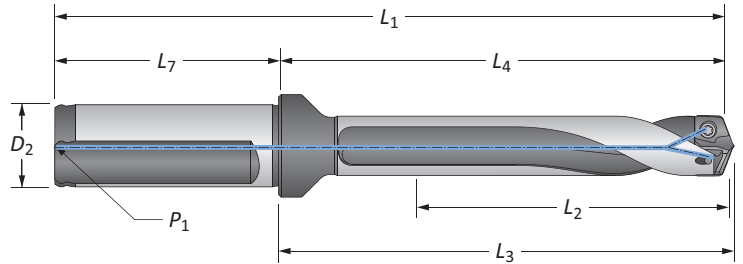
GEN3SYS® XT Pro Structural Steel Drilling System

20 Series | Diameter Range: 0.7874" - 0.8660" (20.00 mm - 21.99 mm)



Inserts






Fractional Equivalent	Insert		 XTST Part No.
	D ₁ inch	D ₁ mm	
–	0.7874	20.00	XTST20-20.00
13/16	0.8126	20.64	XTST20-20.64
–	0.8268	21.00	XTST20-21.00
–	0.8591	21.82	XTST20-21.82




Holders

	Length	Body				Shank				Part No.
		L ₂	L ₄	L ₃	L ₁	L ₇	D ₂	P ₁	Flat	
i	1.5xD	1-15/64	2-41/64	2-49/64	4-59/64	2-9/32	1	1/8 NPT	YES	ST01200-100F
	3xD	2-17/32	3-15/16	4-1/16	6-7/32	2-9/32	1	1/8 NPT	YES	ST03200-100F
	5xD	4-11/32	5-43/64	5-51/64	7-61/64	2-9/32	1	1/8 NPT	YES	ST05200-100F
	7xD	6-1/16	7-13/32	7-17/32	9-11/16	2-9/32	1	1/8 NPT	YES	ST07200-100F
m	1.5xD	33.0	67.1	70.3	123.1	56	25	1/8 BSPT	YES	ST01200-25FM
	3xD	66.0	100.1	103.3	156.1	56	25	1/8 BSPT	YES	ST03200-25FM
	5xD	110.0	144.1	147.2	200.1	56	25	1/8 BSPT	YES	ST05200-25FM
	7xD	153.9	188.1	191.2	244.1	56	25	1/8 BSPT	YES	ST07200-25FM

Connection Accessories

 Insert Screws	 Nylon Locking Screws	 Insert Driver	 Preset Torque Hand Driver	 Replacement Tips	Admissible Tightening Torque*
7375-IP9-1	7375N-IP9-1	8IP-9	8IP-9TL	8IP-9B	27.0 in-lbs (305 N-cm)

*Tightening torques are calculated with a friction coefficient of $\mu = 0.14$ and develop 90% of ultimate yield strength

A91: 38 - 39  A91: 5 

Key on A91: 1

i = Imperial (in)
m = Metric (mm)

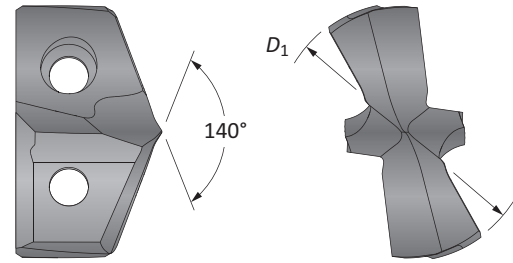
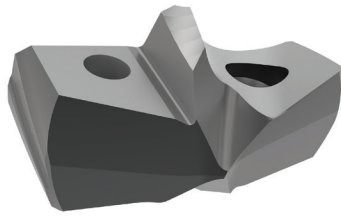
Inserts sold in multiples of 1 | Screws sold in multiples of 10

NOTICE: Structural Steel GEN3SYS holders are specifically designed to be used only with XTST geometry inserts. Using other GEN3SYS XT or XT Pro insert geometries in these holders could lead to chip packing and tool failure. Contact Application Engineering for questions regarding proper use of tools. ext: 7611 | email: appeng@alliedmachine.com

A
DRILLING
B
BORING
C
REAMING
D
BURNISHING
E
THREADING
X
SPECIALS

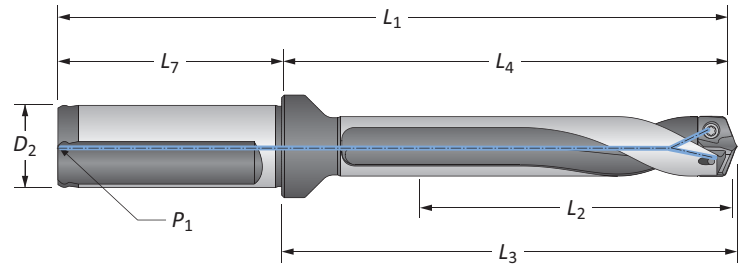
GEN3SYS® XT Pro Structural Steel Drilling System

22 Series | Diameter Range: 0.8661" - 0.9448" (22.00 mm - 23.99 mm)



Inserts

Fractional Equivalent	Insert D_1 inch	D_1 mm	XTST Part No.
-	0.8661	22.00	XTST22-22.00
7/8	0.8752	22.23	XTST22-22.23
-	0.9055	23.00	XTST22-23.00
15/16	0.9374	23.81	XTST22-23.81



Holders

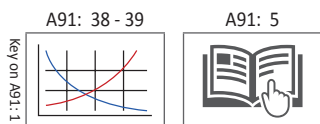
Length	Body				Shank				Part No.
	L_2	L_4	L_3	L_1	L_7	D_2	P_1	Flat	
1.5xD	1-13/32	2-23/32	2-55/64	5	2-9/32	1	1/8 NPT	YES	ST01220-100F
1.5xD	1-13/32	2-23/32	2-55/64	5	2-9/32	1	1/8 NPT	YES	ST01225-100F
3xD	2-53/64	4-9/64	4-9/32	6-27/64	2-9/32	1	1/8 NPT	YES	ST03220-100F
3xD	2-53/64	4-9/64	4-9/32	6-27/64	2-9/32	1	1/8 NPT	YES	ST03225-100F*
5xD	4-23/32	6-1/32	6-11/64	8-5/16	2-9/32	1	1/8 NPT	YES	ST05220-100F
5xD	4-23/32	6-1/32	6-11/64	8-5/16	2-9/32	1	1/8 NPT	YES	ST05225-100F*
7xD	6-39/64	7-59/64	8-1/16	10-13/64	2-9/32	1	1/8 NPT	YES	ST07220-100F
7xD	6-39/64	7-59/64	8-1/16	10-13/64	2-9/32	1	1/8 NPT	YES	ST07225-100F*
1.5xD	36.0	69.3	72.7	125.3	56	25	1/8 BSPT	YES	ST01220-25FM
1.5xD	36.0	69.3	72.7	125.3	56	25	1/8 BSPT	YES	ST01225-25FM
3xD	72.0	105.3	108.7	161.3	56	25	1/8 BSPT	YES	ST03220-25FM
3xD	72.0	105.3	108.7	161.3	56	25	1/8 BSPT	YES	ST03225-25FM*
5xD	119.9	153.3	156.7	209.3	56	25	1/8 BSPT	YES	ST05220-25FM
5xD	119.9	153.3	156.7	209.3	56	25	1/8 BSPT	YES	ST05225-25FM*
7xD	167.9	201.3	204.7	257.3	56	25	1/8 BSPT	YES	ST07220-25FM
7xD	167.9	201.3	204.7	257.3	56	25	1/8 BSPT	YES	ST07225-25FM*

*Oversized body holder (minimum drill diameter = 23mm)

Connection Accessories

Insert Screws	Nylon Locking Screws	Insert Driver	Preset Torque Hand Driver	Replacement Tips	Admissible Tightening Torque*
739-IP9-1	739N-IP9-1	8IP-9	8IP-9TL	8IP-9B	27.0 in-lbs (305 N-cm)

*Tightening torques are calculated with a friction coefficient of $\mu = 0.14$ and develop 90% of ultimate yield strength



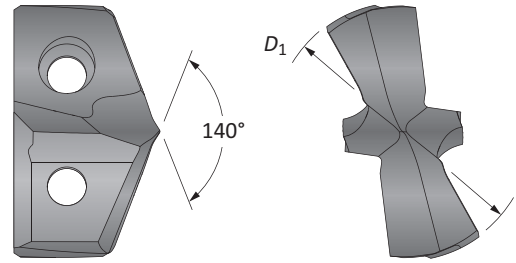
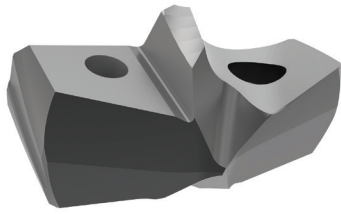
i = Imperial (in)
m = Metric (mm)

Inserts sold in multiples of 1 | Screws sold in multiples of 10


NOTICE: Structural Steel GEN3SYS holders are specifically designed to be used only with XTST geometry inserts. Using other GEN3SYS XT or XT Pro insert geometries in these holders could lead to chip packing and tool failure. Contact Application Engineering for questions regarding proper use of tools. ext: 7611 | email: appeng@alliedmachine.com

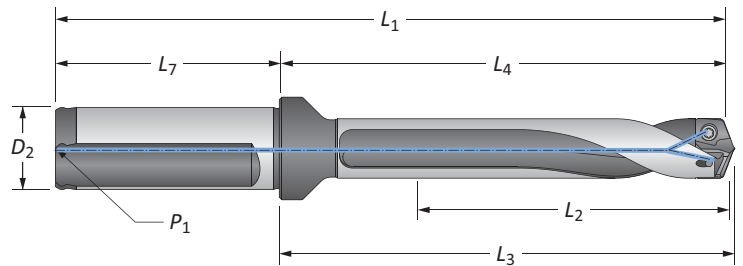
GEN3SYS® XT Pro Structural Steel Drilling System

24 Series | Diameter Range: 0.9449" - 1.0235" (24.00 mm - 25.99 mm)



Inserts



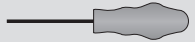


Fractional Equivalent	Insert			XTST Part No.
	D_1 inch	D_1 mm		
–	0.9449	24.00		XTST24-24.00
–	0.9685	24.60		XTST24-24.60
1	1.0000	25.40		XTST24-25.40
–	1.0150	25.78		XTST24-25.78



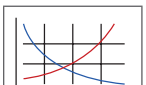

Holders

	Length	Body				Shank				Part No.
		L_2	L_4	L_3	L_1	L_7	D_2	P_1	Flat	
i	1.5xD	1-35/64	2-61/64	3-3/32	5-15/64	2-9/32	1	1/8 NPT	YES	ST01240-100F
	3xD	3-5/64	4-31/64	4-5/8	6-49/64	2-9/32	1	1/8 NPT	YES	ST03240-100F
	5xD	5-1/8	6-17/32	6-21/32	8-13/16	2-9/32	1	1/8 NPT	YES	ST05240-100F
	7xD	7-11/64	8-37/64	8-45/64	10-55/64	2-9/32	1	1/8 NPT	YES	ST07240-100F
m	1.5xD	39.0	74.8	78.3	130.8	56	25	1/8 BSPT	YES	ST01240-25FM
	3xD	78.0	113.8	117.3	169.8	56	25	1/8 BSPT	YES	ST03240-25FM
	5xD	129.9	165.8	169.2	221.8	56	25	1/8 BSPT	YES	ST05240-25FM
	7xD	181.9	217.8	221.2	273.8	56	25	1/8 BSPT	YES	ST07240-25FM

Connection Accessories

					Admissible Tightening Torque*
Insert Screws 739-IP9-1	Nylon Locking Screws 739N-IP9-1	Insert Driver 8IP-9	Preset Torque Hand Driver 8IP-9TL	Replacement Tips 8IP-9B	27.0 in-lbs (305 N-cm)

*Tightening torques are calculated with a friction coefficient of $\mu = 0.14$ and develop 90% of ultimate yield strength

A91: 38 - 39  A91: 5 

Key on A91: 1

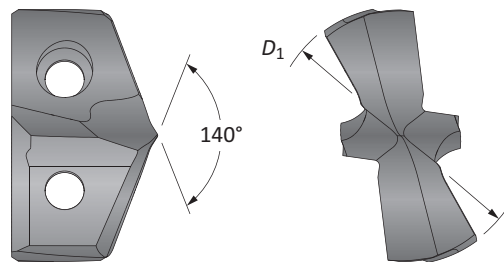
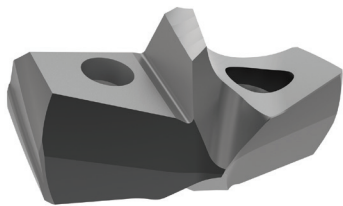
i = Imperial (in)
m = Metric (mm)

Inserts sold in multiples of 1 | Screws sold in multiples of 10

NOTICE: Structural Steel GEN3SYS holders are specifically designed to be used only with XTST geometry inserts. Using other GEN3SYS XT or XT Pro insert geometries in these holders could lead to chip packing and tool failure. Contact Application Engineering for questions regarding proper use of tools. ext: 7611 | email: appeng@alliedmachine.com

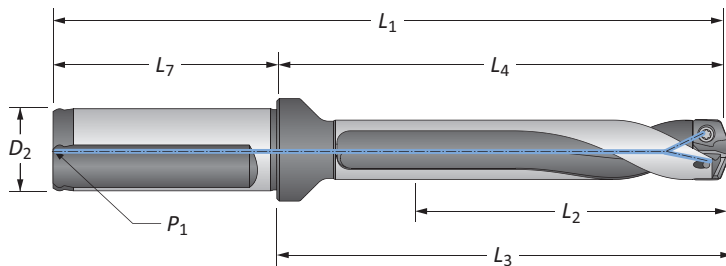
GEN3SYS® XT Pro Structural Steel Drilling System

26 Series | Diameter Range: 1.0236" - 1.1416" (26.00 mm - 28.99 mm)



Inserts

Fractional Equivalent	Insert D_1 inch	D_1 mm	XTST Part No.
-	1.0236	26.00	XTST26-26.00
1-1/16	1.0626	26.99	XTST26-26.99
-	1.0630	27.00	XTST26-27.00
-	1.1024	28.00	XTST26-28.00
1-1/8	1.1252	28.58	XTST26-28.58



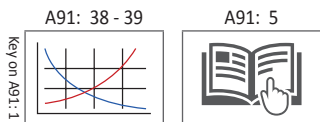
Holders

Length	Body				Shank				Part No.
	L_2	L_4	L_3	L_1	L_7	D_2	P_1	Flat	
1.5xD	1-45/64	3-11/32	3-15/32	5-5/8	2-9/32	1-1/4	1/4 NPT	YES	ST01260-125F
3xD	3-27/64	5-1/16	5-3/16	7-11/32	2-9/32	1-1/4	1/4 NPT	YES	ST03260-125F
5xD	5-23/32	7-11/32	7-31/64	9-5/8	2-9/32	1-1/4	1/4 NPT	YES	ST05260-125F
7xD	7-63/64	9-5/8	9-49/64	11-29/32	2-9/32	1-1/4	1/4 NPT	YES	ST07260-125F
1.5xD	43.5	84.6	87.9	144.6	60	32	1/4 BSPT	YES	ST01260-32FM
3xD	87.0	128.1	131.4	188.1	60	32	1/4 BSPT	YES	ST03260-32FM
5xD	145.0	186.1	189.4	246.1	60	32	1/4 BSPT	YES	ST05260-32FM
7xD	202.9	244.0	247.4	304.0	60	32	1/4 BSPT	YES	ST07260-32FM

Connection Accessories

Insert Screws	Nylon Locking Screws	Insert Driver	Preset Torque Hand Driver	Replacement Tips	Admissible Tightening Torque*
7495-IP15-1	7495N-IP15-1	8IP-15	8IP-15TL	8IP-15B	61.0 in-lbs (690 N-cm)

*Tightening torques are calculated with a friction coefficient of $\mu = 0.14$ and develop 90% of ultimate yield strength



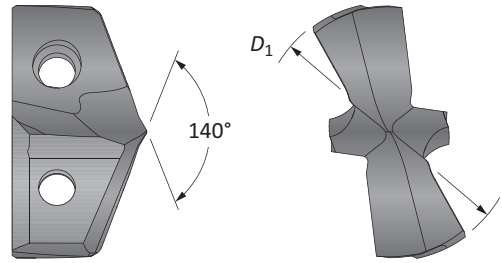
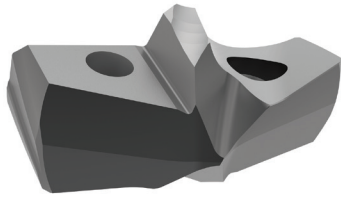
i = Imperial (in)
m = Metric (mm)

Inserts sold in multiples of 1 | Screws sold in multiples of 10


NOTICE: Structural Steel GEN3SYS holders are specifically designed to be used only with XTST geometry inserts. Using other GEN3SYS XT or XT Pro insert geometries in these holders could lead to chip packing and tool failure. Contact Application Engineering for questions regarding proper use of tools. ext: 7611 | email: appeng@alliedmachine.com

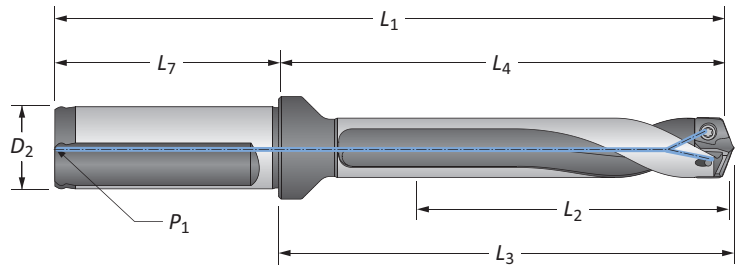
GEN3SYS® XT Pro Structural Steel Drilling System

29 Series | Diameter Range: 1.1417" - 1.2597" (29.00 mm - 31.99 mm)



Inserts






Fractional Equivalent	Insert D_1 inch	D_1 mm	 XTST Part No.
-	1.1417	29.00	XTST29-29.00
-	1.1811	30.00	XTST29-30.00
1-3/16	1.1874	30.16	XTST29-30.16
-	1.2205	31.00	XTST29-31.00
1-1/4	1.2500	31.75	XTST29-31.75



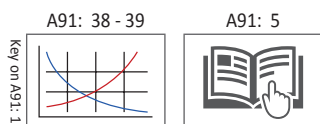
Holders

Length	Body				Shank				Part No.
	L_2	L_4	L_3	L_1	L_7	D_2	P_1	Flat	
i 1.5xD	1-57/64	3-21/64	3-5/8	5-49/64	2-9/32	1-1/4	1/4 NPT	YES	ST01290-125F
i 3xD	3-25/32	5-3/8	5-33/64	7-21/32	2-9/32	1-1/4	1/4 NPT	YES	ST03290-125F
i 5xD	6-19/64	7-29/32	8-3/64	10-3/16	2-9/32	1-1/4	1/4 NPT	YES	ST05290-125F
i 7xD	8-13/16	10-27/64	10-9/16	12-45/64	2-9/32	1-1/4	1/4 NPT	YES	ST07290-125F
m 1.5xD	48	88.2	91.7	148.2	60	32	1/4 BSPT	YES	ST01290-32FM
m 3xD	96.0	136.2	139.7	196.2	60	32	1/4 BSPT	YES	ST03290-32FM
m 5xD	159.9	200.1	203.7	260.1	60	32	1/4 BSPT	YES	ST05290-32FM
m 7xD	223.9	264.1	267.7	324.1	60	32	1/4 BSPT	YES	ST07290-32FM

Connection Accessories

 Insert Screws	 Nylon Locking Screws	 Insert Driver	 Preset Torque Hand Driver	 Replacement Tips	Admissible Tightening Torque*
7495-IP15-1	7495N-IP15-1	8IP-15	8IP-15TL	8IP-15B	61.0 in-lbs (690 N-cm)

*Tightening torques are calculated with a friction coefficient of $\mu = 0.14$ and develop 90% of ultimate yield strength



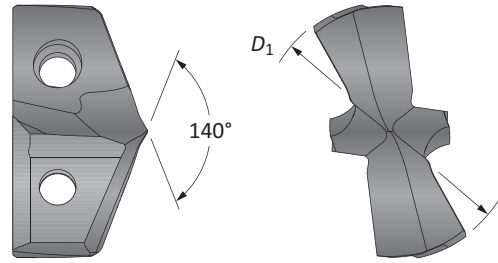
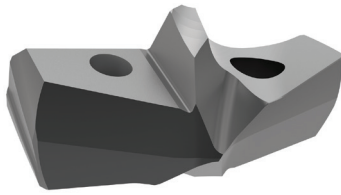
i = Imperial (in)
m = Metric (mm)

Inserts sold in multiples of 1 | Screws sold in multiples of 10

NOTICE: Structural Steel GEN3SYS holders are specifically designed to be used only with XTST geometry inserts. Using other GEN3SYS XT or XT Pro insert geometries in these holders could lead to chip packing and tool failure. Contact Application Engineering for questions regarding proper use of tools. ext: 7611 | email: appeng@alliedmachine.com

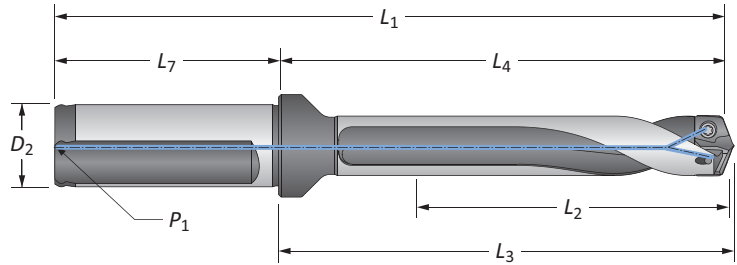
GEN3SYS® XT Pro Structural Steel Drilling System

32 Series | Diameter Range: 1.2598" - 1.3780" (32.00 mm - 35.00 mm)



Inserts

Fractional Equivalent	Insert D_1 inch	D_1 mm	XTST Part No.
-	1.2598	32.00	XTST32-32.00
-	1.2992	33.00	XTST32-33.00
1-5/16	1.3126	33.34	XTST32-33.34
-	1.3386	34.00	XTST32-34.00
1-3/8	1.3752	34.93	XTST32-34.93



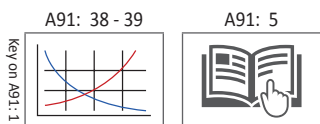
Holders

Length	Body				Shank				Flat	Part No.
	L_2	L_4	L_3	L_1	L_7	D_2	P_1			
i	1.5xD	2-5/64	4-5/32	4-5/16	6-53/64	2-11/16	1-1/2	1/4 NPT	YES	ST01320-150F
	3xD	4-9/64	6-7/32	6-3/8	8-29/32	2-11/16	1-1/2	1/4 NPT	YES	ST03320-150F
	5xD	6-59/64	8-31/32	9-1/8	11-21/32	2-11/16	1-1/2	1/4 NPT	YES	ST05320-150F
	7xD	9-41/64	11-23/32	11-57/64	14-13/32	2-11/16	1-1/2	1/4 NPT	YES	ST07320-150F
m	1.5xD	52.5	105.2	109.5	165.2	60	32	1/4 BSPT	YES	ST01320-32FM
	1.5xD	52.5	105.2	109.5	173.5	70	40	1/4 BSPT	YES	ST01320-40FM
	3xD	105.0	157.7	162.0	217.7	60	32	1/4 BSPT	YES	ST03320-32FM
	3xD	105.0	157.7	162.0	227.7	70	40	1/4 BSPT	YES	ST03320-40FM
	5xD	175.0	227.7	232.0	287.7	60	32	1/4 BSPT	YES	ST05320-32FM
	5xD	175.0	227.7	232.0	297.7	70	40	1/4 BSPT	YES	ST05320-40FM
	7xD	244.9	297.7	302.2	357.7	60	32	1/4 BSPT	YES	ST07320-32FM
	7xD	244.9	297.7	302.2	367.7	70	40	1/4 BSPT	YES	ST07320-40FM

Connection Accessories

Insert Screws	Nylon Locking Screws	Insert Driver	Preset Torque Hand Driver	Replacement Tips	Admissible Tightening Torque*
7495-IP15-1	7495N-IP15-1	8IP-15	8IP-15TL	8IP-15B	61.0 in-lbs (690 N-cm)

*Tightening torques are calculated with a friction coefficient of $\mu = 0.14$ and develop 90% of ultimate yield strength



i = Imperial (in)
m = Metric (mm)

Inserts sold in multiples of 1 | Screws sold in multiples of 10

NOTICE: Structural Steel GEN3SYS holders are specifically designed to be used only with XTST geometry inserts. Using other GEN3SYS XT or XT Pro insert geometries in these holders could lead to chip packing and tool failure. Contact Application Engineering for questions regarding proper use of tools. ext: 7611 | email: appeng@alliedmachine.com

T-A® Structural Steel Drilling System

STRUCTURAL STEEL ENHANCEMENTS T-A & T-A GEN2

GEN2 T-A Insert

Available in AM300® Coating



High Efficiency (-HE)

- Improves performance
- Improves tool life
- Improves chip formation in structural steel materials

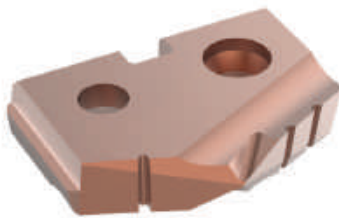
T-A Inserts

Available in AM200® and TiAlN Coatings



Thin Wall (-TW)

- Designed for drilling 7/16" thick or less I-Beam or structural materials
- Increases hole diameter tolerance
- Improves hole roundness
- Decreases material deflection



Notch Point® (-NP)

- Provides excellent self-centering characteristics
- Reduces bellmouth and tool lead-off
- Reduces axial thrust requirements



Structural Steel (-SS)

- Designed for drilling 7/16" thick or thicker I-Beam or structural materials
- Reduces exit burrs
- Increases stability
- Lowers drilling forces
- Includes Notch Point® web geometry



Holder Anatomy

1. Morse Taper Shank
2. Coolant Inlet
3. Flute (straight or helical)
4. Built-up Body Diameter
5. Coolant Outlets



Straight Flute

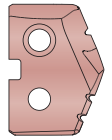


Helical Flute

T-A® Drill Nomenclature

T-A Drill Inserts

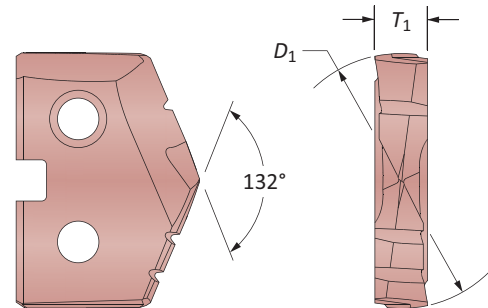
4	5	3	H	-	0115	-	HE
1	2	3	4		5		6



1. Insert	2. Material	3. Series	4. Coating	5. Diameter	6. Geometry
1 = T-A 4 = GEN2 T-A	5 = Super cobalt C1 = C1 (K35) carbide	0 = 0 series 1 = 1 series 2 = 2 series 3 = 3 series	H = AM200® A = TiAlN	0017 = Inch .515 = Decimal 13 = Metric	TW = Thin Wall NP = Notch Point® SS = Structural Steel HE = High Efficiency

Reference Key

Symbol	Attribute
D_1	Insert diameter
T_1	Insert thickness



T-A Drill Holders

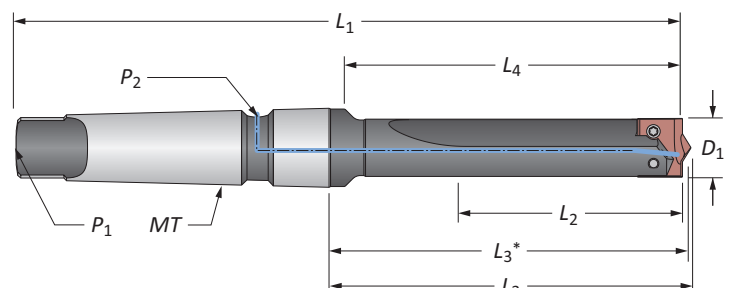
2	40	20	S	-	004	IS	060
1	2	3	4		5	6	7



1. Holder	2. Length	3. Series	4. Flute
2 = T-A holder	20 = Short 40 = Standard 50 = Extended 60 = Long	00 = 0 series 05 = 0.5 series 10 = 1 series 15 = 1.5 series 20 = 2 series 25 = 2.5 series 30 = 3 series	S = Straight H = Helical
5. Shank Designator	6. Shank Code	7. Minimum Insert Diameter	
003 = 3MT 004 = 4MT	IS = Imperial Morse taper structural steel	In increments of 1/64 of an inch	

Reference Key

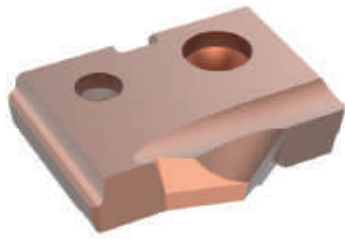
Symbol	Attribute	Symbol	Attribute
D_1	Drill insert range	L_4	Flute length
L_1	Overall length	P_1	Rear pipe tap
L_2	Drill depth	P_2	Side pipe tap
L_3	Holder reference length	MT	Morse taper size
L_3^*	Holder reference length		



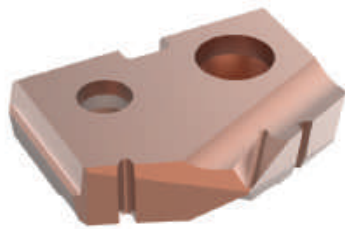
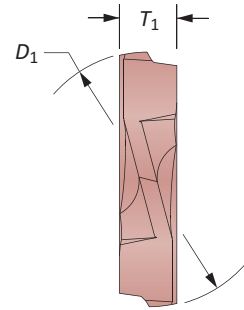
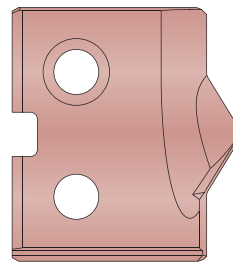
*If using Structural Steel holder with Notch Point®, T-A GEN2, or 150° Structural Steel T-A drill insert geometry

T-A® Structural Steel Drill Inserts

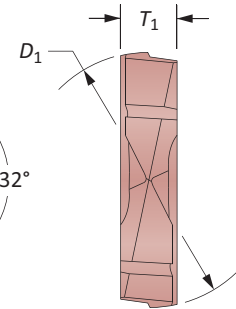
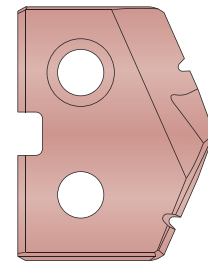
0 Series | Diameter Range: 0.5512" - 0.6875" (14.00 mm - 17.46 mm)



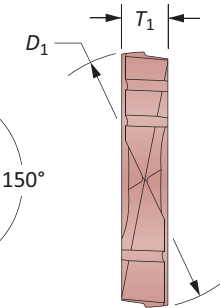
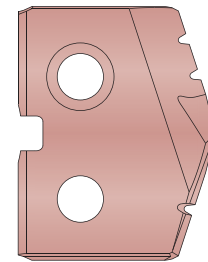
Thin Wall
For material up to 7/16" thick



Notch Point®
For material over 7/16" thick

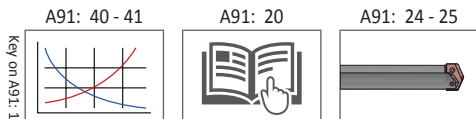


150° Structural Steel
For material over 7/16" thick
and for reduced exit burr



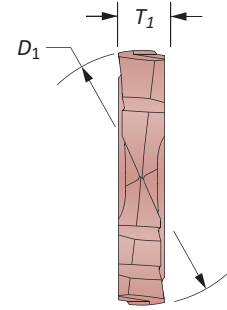
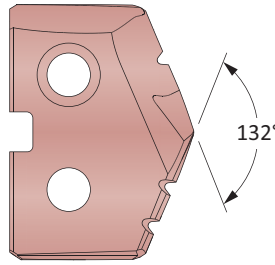
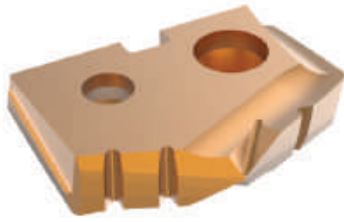
HSS Inserts – Super Cobalt

Series	Insert					Thin Wall		Notch Point		150° Structural Steel	
	Fractional Equivalent	D_1 inch	D_1 mm	T_1							
					AM200® Part No.	TiAlN Part No.	AM200® Part No.	TiAlN Part No.	AM200® Part No.	TiAlN Part No.	
0	–	0.5512	14.00	1/8							
	9/16	0.5625	14.29	1/8							
	5/8	0.6250	15.88	1/8							
0.5	–	0.6299	16.00	1/8							
	11/16	0.6875	17.46	1/8							





GEN2 T-A® Structural Steel Drill Inserts

0 Series | Diameter Range: 0.5512" - 0.6875" (14.00 mm - 17.46 mm)

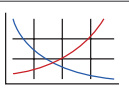


HSS Inserts – Super Cobalt | Carbide Inserts – C1 (K35)


Series	Fractional Equivalent	Insert			Part No.	
		D ₁ inch	D ₁ mm	T ₁	 Super Cobalt	 C1 (K35)
0	–	0.5512	14.00	1/8	450H-14-HE	4C10P-14-HE
	9/16	0.5625	14.29	1/8	450H-0018-HE	4C10P-0018-HE
0.5	5/8	0.6250	15.88	1/8	450H-0020-HE	4C10P-0020-HE
	–	0.6299	16.00	1/8	450H-16-HE	4C10P-16-HE
	11/16	0.6875	17.46	1/8	450H-0022-HE	4C10P-0022-HE

Key on A91-1


A91: 40 - 41



A91: 20



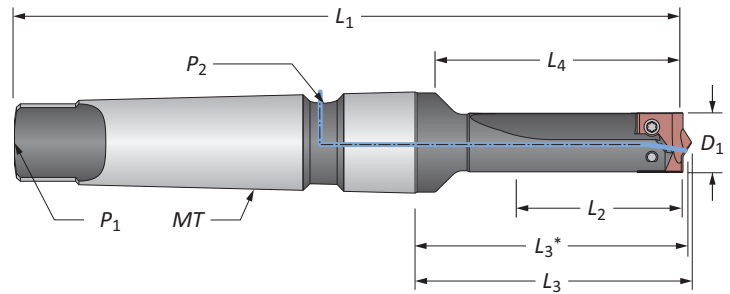
A91: 24 - 25



Inserts sold in multiples of 2

T-A® Structural Steel Drill Insert Holders

0 Series | Taper Shank



Straight Flute #3 Morse Taper

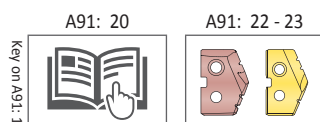
Series	Length	D_1	Body					Shank			Part No.	
			L_2	L_4	L_3	L_3^*	L_1	MT	P_1	P_2		
i	0	Short	9/16	1-3/8	2-3/16	2-35/64	2-31/64	6-1/16	#3	TTC	TSC	22000S-003IS036
	0.5	Short	5/8	1-3/8	2-3/16	2-35/64	2-31/64	6-1/16	#3	TTC	TSC	22005S-003IS040
		Short	11/16	1-3/8	2-3/16	2-35/64	2-31/64	6-1/16	#3	TTC	TSC	22005S-003IS044
m	0	Short	14	35	56	64.7	63.1	154	#3	TTC	TSC	22000S-003IS036
	0.5	Short	16	35	56	64.7	63.1	154	#3	TTC	TSC	22005S-003IS040
		Short	17.5	35	56	64.7	63.1	154	#3	TTC	TSC	22005S-003IS044

*If using Structural Steel holder with Notch Point®, GEN2 T-A, or 150° Structural Steel T-A drill insert geometry

Connection Accessories

Series	Insert Screws	Nylon Locking Screws	Insert Driver	Preset Torque Hand Driver	Replacement Tips	Admissible Tightening Torque*
0	72556-IP8-1	72556N-IP8-1	8IP-8	8IP-8TL	8IP-8B	15.5 in-lbs (175 N-cm)
0.5	72567-IP8-1	72567N-IP8-1	8IP-8	8IP-8TL	8IP-8B	15.5 in-lbs (175 N-cm)

*Tightening torques are calculated with a friction coefficient of $\mu = 0.14$ and develop 90% of ultimate yield strength



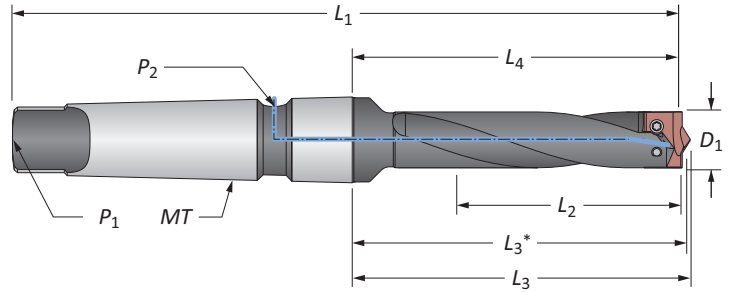
i = Imperial (in)
m = Metric (mm)

Screws sold in multiples of 10



T-A® Structural Steel Drill Insert Holders

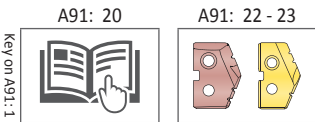
0 Series | Taper Shank



Helical Flute #3 Morse Taper

Series	Length	D ₁	Body					Shank			Part No.	
			L ₂	L ₄	L ₃	L ₃ *	L ₁	MT	P ₁	P ₂		
i	0	Standard	9/16	2-1/2	3-5/16	3-43/64	3-39/64	7-3/16	#3	TTC	TSC	24000H-003IS036
		Extended	9/16	6-1/2	9-7/16	9-51/64	9-19/32	13-5/64	#3	TTC	TSC	⚠ 25000H-003IS036
	0.5	Standard	5/8	2-1/2	3-5/16	3-43/64	3-39/64	7-3/16	#3	TTC	TSC	24005H-003IS040
		Extended	11/16	6-1/2	9-7/16	9-51/64	9-19/32	13-5/64	#3	TTC	TSC	⚠ 25005H-003IS044
m	0	Standard	14	64	84	93.3	91.7	183	#3	TTC	TSC	24000H-003IS036
		Extended	14	165	240	248.8	243.7	338	#3	TTC	TSC	⚠ 25000H-003IS036
	0.5	Standard	16	64	84	93.3	91.7	183	#3	TTC	TSC	24005H-003IS040
		Extended	17.5	64	84	93.3	91.7	183	#3	TTC	TSC	24005H-003IS044
			17.5	165	240	248.8	243.7	338	#3	TTC	TSC	⚠ 25005H-003IS044

*If using Structural Steel holder with Notch Point®, GEN2 T-A, or 150° Structural Steel T-A drill insert geometry



i = Imperial (in)
m = Metric (mm)

Screws sold in multiples of 10

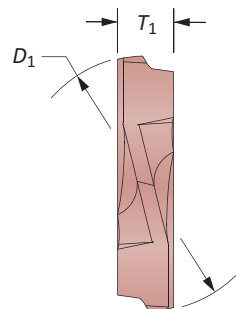
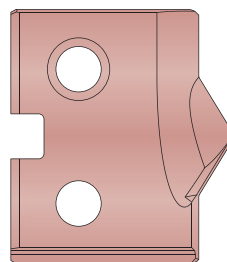
⚠ WARNING Refer to Speed and Feed charts for recommended adjustments to speeds and feeds. Refer to page A91: 35 for deep hole drilling guidelines in this section of the catalog. Visit www.alliedmachine.com/DeepHoleGuidelines for the most up-to-date information and procedures. Factory technical assistance is available for your specific applications through our Application Engineering Team. ext: 7611 | email: appeng@alliedmachine.com

T-A® Structural Steel Drill Inserts

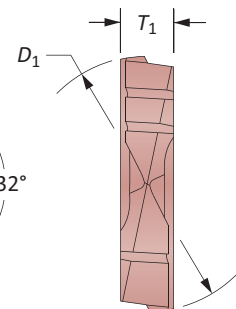
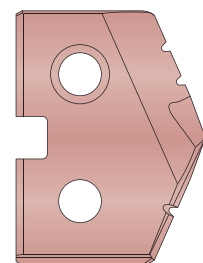
1 Series | Diameter Range: 0.7087" - 0.9449" (18.00 mm - 24.00 mm)



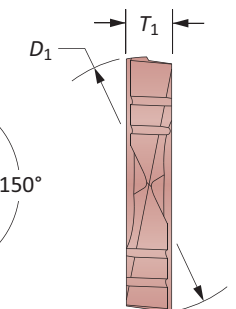
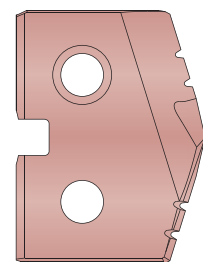
Thin Wall
For material up to 7/16" thick



Notch Point®
For material over 7/16" thick

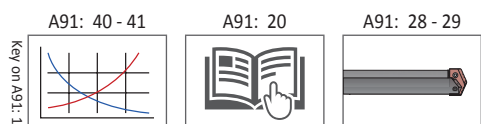


150° Structural Steel
For material over 7/16" thick
and for reduced exit burr



HSS Inserts – Super Cobalt

Series	Insert				Thin Wall		Notch Point		150° Structural Steel	
	Fractional Equivalent	D ₁ inch	D ₁ mm	T ₁	AM200® Part No.	TiAlN Part No.	AM200® Part No.	TiAlN Part No.	AM200® Part No.	TiAlN Part No.
1	–	0.7087	18.00	5/32	151H-18-TW	151A-18-TW	151H-18-NP	151A-18-NP	151H-18-SS	151A-18-SS
	13/16	0.8125	20.64	5/32	151H-0026-TW	151A-0026-TW	151H-0026-NP	151A-0026-NP	151H-0026-SS	151A-0026-SS
	–	0.8268	21.00	5/32	151H-21-TW	151A-21-TW	151H-21-NP	151A-21-NP	151H-21-SS	151A-21-SS
	–	0.8661	22.00	5/32	151H-22-TW	151A-22-TW	151H-22-NP	151A-22-NP	151H-22-SS	151A-22-SS
1.5	7/8	0.8750	22.23	5/32	151H-0028-TW	151A-0028-TW	151H-0028-NP	151A-0028-NP	151H-0028-SS	151A-0028-SS
	15/16	0.9375	23.81	5/32	151H-0030-TW	151A-0030-TW	151H-0030-NP	151A-0030-NP	151H-0030-SS	151A-0030-SS
	–	0.9449	24.00	5/32	151H-24-TW	151A-24-TW	151H-24-NP	151A-24-NP	151H-24-SS	151A-24-SS

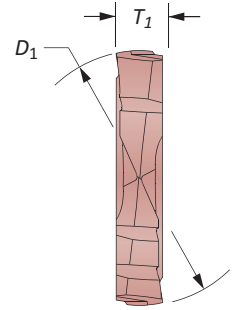
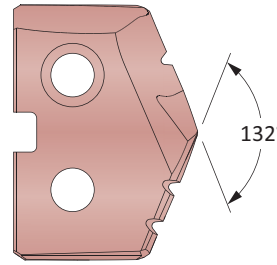


Inserts sold in multiples of 2





GEN2 T-A® Structural Steel Drill Inserts

1 Series | Diameter Range: 0.7087" - 0.9449" (18.00 mm - 24.00 mm)



HSS Inserts – Super Cobalt | Carbide Inserts – C1 (K35)

Series	Fractional Equivalent	Insert			Part No.	
		D ₁ inch	D ₁ mm	T ₁	 Super Cobalt	 C1 (K35)
1	–	0.7087	18.00	5/32	451H-18-HE	4C11P-18-HE
	13/16	0.8125	20.64	5/32	451H-0026-HE	4C11P-0026-HE
	–	0.8268	21.00	5/32	451H-21-HE	4C11P-21-HE
	–	0.8661	22.00	5/32	451H-22-HE	4C11P-22-HE
1.5	7/8	0.8750	22.23	5/32	451H-0028-HE	4C11P-0028-HE
	15/16	0.9375	23.81	5/32	451H-0030-HE	4C11P-0030-HE
	–	0.9449	24.00	5/32	451H-24-HE	4C11P-24-HE

Key on A91-1

A91: 40 - 41

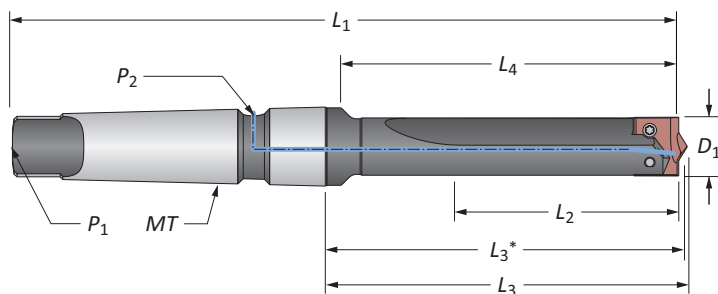
A91: 20

A91: 28 - 29

Inserts sold in multiples of 2

T-A® Structural Steel Drill Insert Holders

1 Series | Taper Shank



Straight Flute #3 Morse Taper

Series	Length	D_1	Body					L_1	MT	P_1	P_2	Part No.
			L_2	L_4	L_3	L_3^*						
i	1	Short	18mm	2-3/4	3-7/8	4-17/64	4-13/64	7-3/4	#3	TTC	TSC	22010S-003IS045
		Short	13/16	2-3/4	3-7/8	4-17/64	4-13/64	7-3/4	#3	TTC	TSC	22010S-003IS052
	1.5	Short	7/8	2-3/4	3-7/8	4-17/64	4-13/64	7-3/4	#3	TTC	TSC	22015S-003IS056
		Short	15/16	2-3/4	3-7/8	4-17/64	4-13/64	7-3/4	#3	TTC	TSC	22015S-003IS060
m	1	Short	18	70	98	108.4	106.8	197	#3	TTC	TSC	22010S-003IS045
		Short	21	70	98	108.4	106.8	197	#3	TTC	TSC	22010S-003IS052
	1.5	Short	22	70	98	108.4	106.8	197	#3	TTC	TSC	22015S-003IS056
		Short	24	70	98	108.4	106.8	197	#3	TTC	TSC	22015S-003IS060






*If using Structural Steel holder with Notch Point®, T-A GEN2, or 150° Structural Steel T-A drill insert geometry

Straight Flute #4 Morse Taper

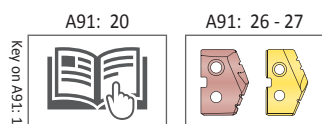
Series	Length	D_1	Body					L_1	MT	P_1	P_2	Part No.
			L_2	L_4	L_3	L_3^*						
i	1	Short	18mm	2-3/4	3-7/8	4-21/64	4-17/64	8-3/4	#4	TTC	TSC	22010S-004IS045
		Short	13/16	2-3/4	3-7/8	4-21/64	4-17/64	8-3/4	#4	TTC	TSC	22010S-004IS052
	1.5	Short	7/8	2-3/4	3-7/8	4-21/64	4-17/64	8-3/4	#4	TTC	TSC	22015S-004IS056
		Short	15/16	2-3/4	3-7/8	4-21/64	4-17/64	8-3/4	#4	TTC	TSC	22015S-004IS060
m	1	Short	18	70	98	109.9	108.3	222	#4	TTC	TSC	22010S-004IS045
		Short	21	70	98	109.9	108.3	222	#4	TTC	TSC	22010S-004IS052
	1.5	Short	22	70	98	109.9	108.3	222	#4	TTC	TSC	22015S-004IS056
		Short	24	70	98	109.9	108.3	222	#4	TTC	TSC	22015S-004IS060

*If using Structural Steel holder with Notch Point®, T-A GEN2, or 150° Structural Steel T-A drill insert geometry

Connection Accessories

Series	 Insert Screws	 Nylon Locking Screws	 Insert Driver	 Preset Torque Hand Driver	 Replacement Tips	Admissible Tightening Torque*
1	7375-IP9-1	7375N-IP9-1	8IP-9	8IP-9TL	8IP-9B	27.0 in-lbs (305 N-cm)
1.5	739-IP9-1	739N-IP9-1	8IP-9	8IP-9TL	8IP-9B	27.0 in-lbs (305 N-cm)

*Tightening torques are calculated with a friction coefficient of $\mu = 0.14$ and develop 90% of ultimate yield strength



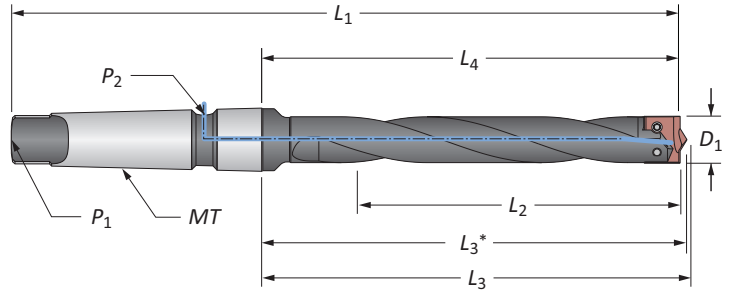
i = Imperial (in)
m = Metric (mm)

Screws sold in multiples of 10



T-A® Structural Steel Drill Insert Holders

1 Series | Taper Shank



Helical Flute #3 Morse Taper

Series	Length	D ₁	Body					Shank			Part No.	
			L ₂	L ₄	L ₃	L ₃ *	L ₁	MT	P ₁	P ₂		
i	1	Standard	18mm	4-3/4	5-7/8	6-17/64	6-13/64	9-3/4	#3	TTC	TSC	24010H-003IS045
		Standard	13/16	4-3/4	5-7/8	6-17/64	6-13/64	9-3/4	#3	TTC	TSC	24010H-003IS052
		Extended	18mm	6-1/2	9-11/32	9-47/64	9-1/2	13-7/32	#3	TTC	TSC	⚠ 25010H-003IS045
	1.5	Standard	7/8	4-3/4	5-7/8	6-17/64	6-13/64	9-3/4	#3	TTC	TSC	24015H-003IS056
		Standard	15/16	4-3/4	5-7/8	6-17/64	6-13/64	9-3/4	#3	TTC	TSC	24015H-003IS060
		Extended	15/16	6-1/2	9-11/32	9-47/64	9-15/32	13-7/32	#3	TTC	TSC	⚠ 25015H-003IS060
m	1	Standard	18	121	149	159.2	157.6	248	#3	TTC	TSC	24010H-003IS045
		Standard	21	121	149	159.2	157.6	248	#3	TTC	TSC	24010H-003IS052
		Extended	18	165	237	247.3	241.3	336	#3	TTC	TSC	⚠ 25010H-003IS045
		Extended	22	165	237	247.3	241.3	336	#3	TTC	TSC	⚠ 25010H-003IS052
	1.5	Standard	22	121	149	159.2	157.6	248	#3	TTC	TSC	24015H-003IS056
		Standard	24	121	149	159.2	157.6	248	#3	TTC	TSC	24015H-003IS060
	Extended	24	165	237	247.3	234.5	336	#3	TTC	TSC	⚠ 25015H-003IS060	

*If using Structural Steel holder with Notch Point®, T-A GEN2, or 150° Structural Steel T-A drill insert geometry

Helical Flute #4 Morse Taper

Series	Length	D ₁	Body					Shank			Part No.	
			L ₂	L ₄	L ₃	L ₃ *	L ₁	MT	P ₁	P ₂		
i	1	Standard	18mm	4-3/4	5-7/8	6-21/64	6-17/64	10-3/4	#4	TTC	TSC	24010H-004IS045
		Standard	13/16	4-3/4	5-7/8	6-21/64	6-17/64	10-3/4	#4	TTC	TSC	24010H-004IS052
		Extended	13/16	6-1/2	9-9/32	9-47/64	9-43/64	14-5/32	#4	TTC	TSC	⚠ 25010H-004IS052
		Long	13/16	6-1/2	15-25/32	16-15/64	16-11/64	20-21/32	#4	TTC	TSC	⚠ 26010H-004IS052
	1.5	Standard	7/8	4-3/4	5-7/8	6-21/64	6-17/64	10-3/4	#4	TTC	TSC	24015H-004IS056
		Standard	15/16	4-3/4	5-7/8	6-21/64	6-17/64	10-3/4	#4	TTC	TSC	24015H-004IS060
	Extended	15/16	6-1/2	9-9/32	9-47/64	9-43/64	14-5/32	#4	TTC	TSC	⚠ 25015H-004IS060	
m	1	Standard	18	121	149	159.2	157.6	248	#4	TTC	TSC	24010H-004IS045
		Standard	21	121	149	159.2	157.6	248	#4	TTC	TSC	24010H-004IS052
		Extended	22	165	237	247.3	241.3	336	#4	TTC	TSC	⚠ 25010H-004IS052
		Long	22	165	237	247.3	241.3	336	#4	TTC	TSC	⚠ 26010H-004IS052
	1.5	Standard	22	121	149	159.2	157.6	248	#4	TTC	TSC	24015H-004IS056
		Standard	24	121	149	159.2	157.6	248	#4	TTC	TSC	24015H-004IS060
	Extended	24	165	237	247.3	234.5	336	#4	TTC	TSC	⚠ 25015H-004IS060	
	Long	24	165	237	247.3	234.5	336	#4	TTC	TSC	⚠ 26015H-004IS060	

*If using Structural Steel holder with Notch Point®, T-A GEN2, or 150° Structural Steel T-A drill insert geometry

i = Imperial (in)
m = Metric (mm)

Screws sold in multiples of 10

⚠ WARNING Refer to Speed and Feed charts for recommended adjustments to speeds and feeds. Refer to page A91: 35 for deep hole drilling guidelines in this section of the catalog. Visit www.alliedmachine.com/DeepHoleGuidelines for the most up-to-date information and procedures. Factory technical assistance is available for your specific applications through our Application Engineering Team. ext: 7611 | email: appeng@alliedmachine.com

A DRILLING
B BORING
C REAMING
D BURNISHING
E THREADING
X SPECIALS

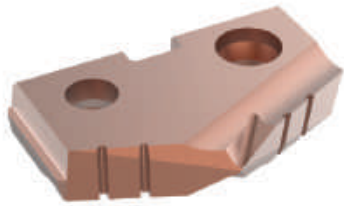
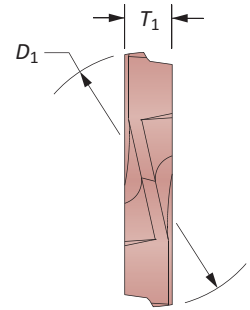
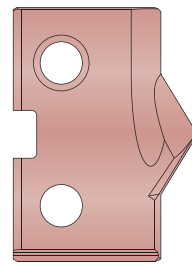


T-A® Structural Steel Drill Inserts

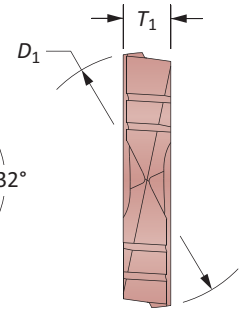
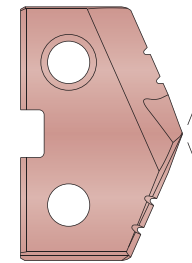
2 Series | Diameter Range: 1.0000" - 1.3750" (25.40 mm - 34.93 mm)



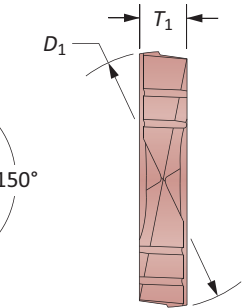
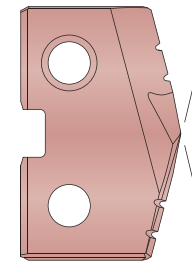
Thin Wall
For material up to 7/16" thick









Notch Point®
For material over 7/16" thick

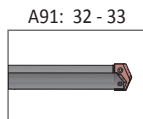
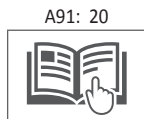
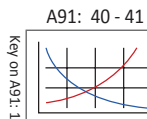


150° Structural Steel
For material over 7/16" thick
and for reduced exit burr



HSS Inserts – Super Cobalt

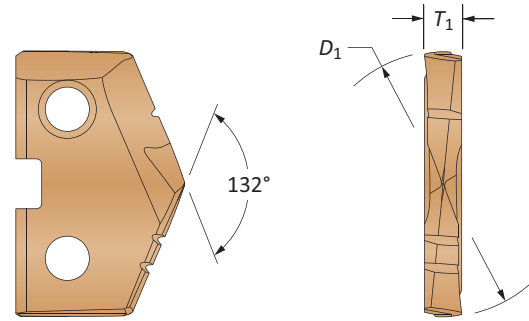
Series	Insert				Thin Wall		Notch Point		150° Structural Steel	
	Fractional Equivalent	D_1 inch	D_1 mm	T_1	 AM200® Part No.	 TiAlN Part No.	 AM200® Part No.	 TiAlN Part No.	 AM200® Part No.	 TiAlN Part No.
2	1	1.0000	25.40	3/16	152H-0100-TW	152A-0100-TW	152H-0100-NP	152A-0100-NP	152H-0100-SS	152A-0100-SS
	–	1.0236	26.00	3/16	152H-26-TW	152A-26-TW	152H-26-NP	152A-26-NP	152H-26-SS	152A-26-SS
	1-1/16	1.0625	26.99	3/16	152H-0102-TW	152A-0102-TW	152H-0102-NP	152A-0102-NP	152H-0102-SS	152A-0102-SS
	–	1.0630	27.00	3/16	152H-27-TW	152A-27-TW	152H-27-NP	152A-27-NP	152H-27-SS	152A-27-SS
	1-1/8	1.1250	28.58	3/16	152H-0104-TW	152A-0104-TW	152H-0104-NP	152A-0104-NP	152H-0104-SS	152A-0104-SS
2.5	1-3/16	1.1875	30.16	3/16	152H-0106-TW	152A-0106-TW	152H-0106-NP	152A-0106-NP	152H-0106-SS	152A-0106-SS
	–	1.2205	31.00	3/16	152H-31-TW	152A-31-TW	152H-31-NP	152A-31-NP	152H-31-SS	152A-31-SS
	1-1/4	1.2500	31.75	3/16	152H-0108-TW	152A-0108-TW	152H-0108-NP	152A-0108-NP	152H-0108-SS	152A-0108-SS
	–	1.2992	33.00	3/16	152H-33-TW	152A-33-TW	152H-33-NP	152A-33-NP	152H-33-SS	152A-33-SS
	1-5/16	1.3125	33.34	3/16	152H-0110-TW	152A-0110-TW	152H-0110-NP	152A-0110-NP	152H-0110-SS	152A-0110-SS
	1-3/8	1.3750	34.93	3/16	152H-0112-TW	152A-0112-TW	152H-0112-NP	152A-0112-NP	152H-0112-SS	152A-0112-SS







GEN2 T-A® Structural Steel Drill Inserts

2 Series | Diameter Range: 1.0000" - 1.3750" (25.40 mm - 34.93 mm)



HSS Inserts – Super Cobalt | Carbide Inserts – C1 (K35)

Series	Fractional Equivalent	Insert			Part No.	
		D ₁ inch	D ₁ mm	T ₁	 Super Cobalt	 C1 (K35)
2	1	1.0000	25.40	3/16	452H-0100-HE	4C12P-0100-HE
	–	1.0236	26.00	3/16	452H-26-HE	4C12P-26-HE
	1-1/16	1.0625	26.99	3/16	452H-0102-HE	4C12P-0102-HE
	–	1.0630	27.00	3/16	452H-27-HE	4C12P-27-HE
	1-1/8	1.1250	28.58	3/16	452H-0104-HE	4C12P-0104-HE
2.5	1-3/16	1.1875	30.16	3/16	452H-0106-HE	4C12P-0106-HE
	–	1.2205	31.00	3/16	452H-31-HE	4C12P-31-HE
	1-1/4	1.2500	31.75	3/16	452H-0108-HE	4C12P-0108-HE
	–	1.2992	33.00	3/16	452H-33-HE	4C12P-33-HE
	1-5/16	1.3125	33.34	3/16	452H-0110-HE	4C12P-0110-HE
	1-3/8	1.3750	34.93	3/16	452H-0112-HE	4C12P-0112-HE

Key on A91-1

A91: 40 - 41

A91: 20

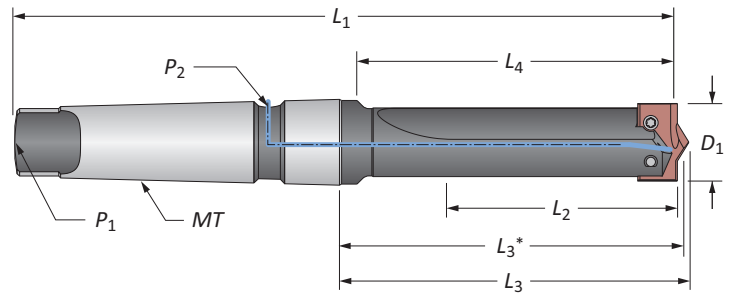
A91: 32 - 33

Inserts sold in multiples of 2

A DRILLING
B BORING
C REAMING
D BURNISHING
E THREADING
X SPECIALS

T-A® Structural Steel Drill Insert Holders

2 Series | Taper Shank



Straight Flute #4 Morse Taper

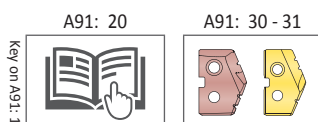
Series	Length	D ₁	Body					Shank			Part No.	
			L ₂	L ₄	L ₃	L ₃ *	L ₁	MT	P ₁	P ₂		
i	2	Short	1 - 1-3/8	3-3/8	4-1/2	4-63/64	4-57/64	9-3/8	#4	TTC	TSC	22020S-004IS100
	2.5	Short	1-3/16 - 1-3/8	3-3/8	4-1/2	4-63/64	4-57/64	9-3/8	#4	TTC	TSC	22025S-004IS112
m	2	Short	26	86	114	126.6	124.2	238	#4	TTC	TSC	22020S-004IS100
	2.5	Short	31	86	114	126.6	124.2	238	#4	TTC	TSC	22025S-004IS112

*If using Structural Steel holder with Notch Point®, T-A GEN2, or 150° Structural Steel T-A drill insert geometry

Connection Accessories

Series	Insert Screws	Nylon Locking Screws	Insert Driver	Preset Torque Hand Driver	Replacement Tips	Admissible Tightening Torque*
2	7495-IP15-1	7495N-IP15-1	8IP-15	8IP-15TL	8IP-15B	61.0 in-lbs (690 N-cm)
2.5	7495-IP15-1	7495N-IP15-1	8IP-15	8IP-15TL	8IP-15B	61.0 in-lbs (690 N-cm)

*Tightening torques are calculated with a friction coefficient of $\mu = 0.14$ and develop 90% of ultimate yield strength



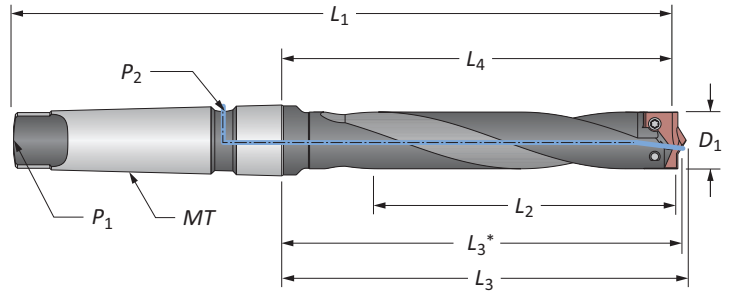
i = Imperial (in)
m = Metric (mm)

Screws sold in multiples of 10



T-A® Structural Steel Drill Insert Holders

2 Series | Taper Shank



Helical Flute #3 Morse Taper

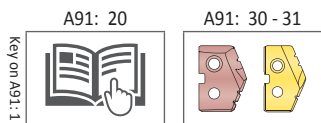
Series	Length	D ₁	Body					Shank			Part No.
			L ₂	L ₄	L ₃	L ₃ *	L ₁	MT	P ₁	P ₂	
i 2	Extended	1 - 1-3/8	6-1/2	9-11/32	9-3/4	9-29/64	13-7/32	#3	TTC	TSC	⚠ 25020H-003IS100
m 2	Extended	26	165	237	247.7	240.1	336	#3	TTC	TSC	⚠ 25020H-003IS100

*If using Structural Steel holder with Notch Point®, T-A GEN2, or 150° Structural Steel T-A drill insert geometry

Helical Flute #4 Morse Taper

Series	Length	D ₁	Body					Shank			Part No.
			L ₂	L ₄	L ₃	L ₃ *	L ₁	MT	P ₁	P ₂	
i 2	Standard	1 - 1-3/8	5-3/8	6-1/2	6-63/64	6-57/64	11-3/8	#4	TTC	TSC	24020H-004IS100
	Extended	1 - 1-3/8	6-1/2	9-7/32	9-3/4	9-43/64	14-5/32	#4	TTC	TSC	⚠ 25020H-004IS100
	Long	1 - 1-3/8	6-1/2	16	16-15/32	16-25/64	20-7/8	#4	TTC	TSC	⚠ 26020H-004IS100
2.5	Standard	1-3/16 - 1-3/8	5-3/8	6-1/2	6-63/64	6-57/64	11-3/8	#4	TTC	TSC	24025H-004IS112
m 2	Standard	26	137	165	177.4	175.0	289	#4	TTC	TSC	24020H-004IS100
	Extended	26	165	237	247.7	240.1	360	#4	TTC	TSC	⚠ 25020H-004IS100
	Long	26	165	406	418.3	416.3	530	#4	TTC	TSC	⚠ 26020H-004IS100
	2.5	Standard	31	137	165	177.4	175.0	289	#4	TTC	TSC

*If using Structural Steel holder with Notch Point®, T-A GEN2, or 150° Structural Steel T-A drill insert geometry



Key on A91:1

i = Imperial (in)
m = Metric (mm)

Screws sold in multiples of 10

⚠ WARNING Refer to Speed and Feed charts for recommended adjustments to speeds and feeds. Refer to page A91: 35 for deep hole drilling guidelines in this section of the catalog. Visit www.alliedmachine.com/DeepHoleGuidelines for the most up-to-date information and procedures. Factory technical assistance is available for your specific applications through our Application Engineering Team. ext: 7611 | email: appeng@alliedmachine.com

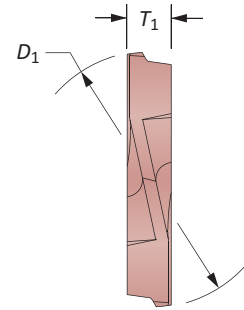
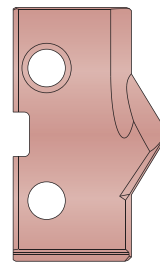
A DRILLING
B BORING
C REAMING
D BURNISHING
E THREADING
X SPECIALS

T-A® Structural Steel Drill Inserts

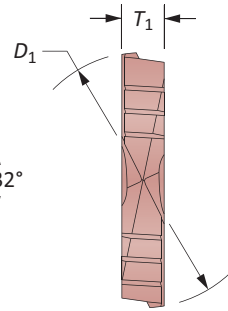
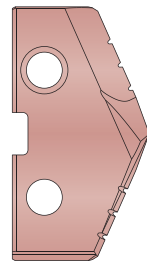
3 Series | Diameter Range: 1.4375" - 1.5625" (36.51 mm - 39.69 mm)



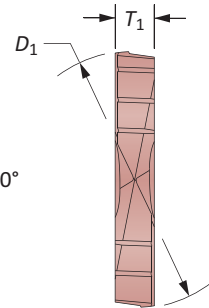
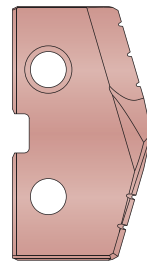
Thin Wall
For material up to 7/16" thick









Notch Point®
For material over 7/16" thick



150° Structural Steel
For material over 7/16" thick
and for reduced exit burr



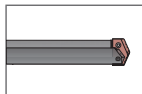
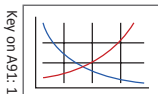
HSS Inserts – Super Cobalt

Insert				Thin Wall		Notch Point		150° Structural Steel	
Fractional Equivalent	D_1 inch	D_1 mm	T_1						
				AM200® Part No.	TiAlN Part No.	AM200® Part No.	TiAlN Part No.	AM200® Part No.	TiAlN Part No.
1-7/16	1.4375	36.51	1/4	153H-0114-TW	153A-0114-TW	153H-0114-NP	153A-0114-NP	153H-0114-SS	153A-0114-SS
1-1/2	1.5000	38.10	1/4	153H-0116-TW	153A-0116-TW	153H-0116-NP	153A-0116-NP	153H-0116-SS	153A-0116-SS
-	1.5354	39.00	1/4	153H-39-TW	153A-39-TW	153H-39-NP	153A-39-NP	153H-39-SS	153A-39-SS
1-9/16	1.5625	39.69	1/4	153H-0118-TW	153A-0118-TW	153H-0118-NP	153A-0118-NP	153H-0118-SS	153A-0118-SS

A91: 40 - 41

A91: 20

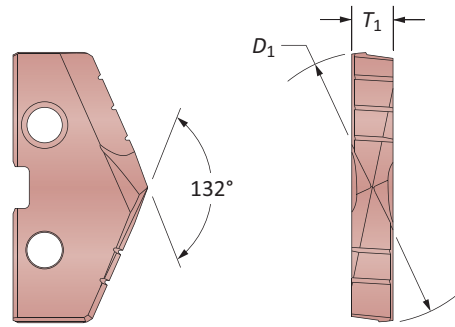
A91: 36



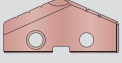
Inserts sold in multiples of 1

GEN2 T-A® Structural Steel Drill Inserts

3 Series | Diameter Range: 1.4375" - 1.5625" (36.51 mm - 39.69 mm)

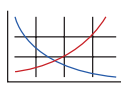


HSS Inserts – Super Cobalt


Fractional Equivalent	Insert			Part No.
	D_1 inch	D_1 mm	T_1	 Super Cobalt
1-7/16	1.4375	36.51	1/4	453H-0114-HE
1-1/2	1.5000	38.10	1/4	453H-0116-HE
-	1.5354	39.00	1/4	453H-39-HE
1-9/16	1.5625	39.69	1/4	453H-0118-HE

Key on A91-1


A91: 40 - 41



A91: 20



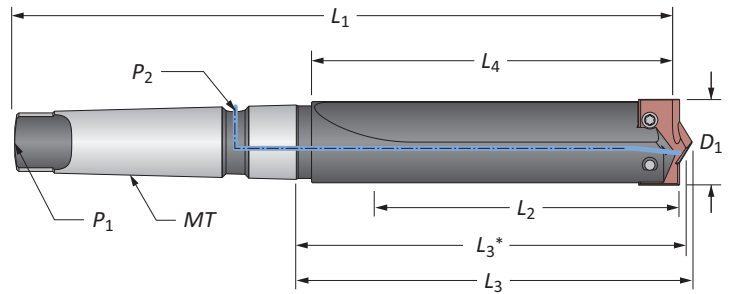
A91: 36



Inserts sold in multiples of 1

T-A® Structural Steel Drill Insert Holders

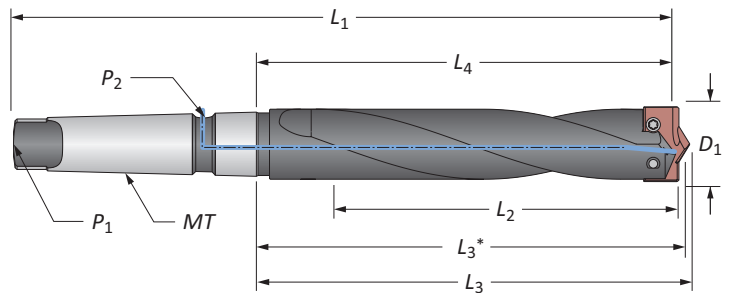
3 Series | Taper Shank



Straight Flute #4 Morse Taper

Length	D_1	Body					Shank			Part No.
		L_2	L_4	L_3	L_3^*	L_1	MT	P_1	P_2	
① Short	1-13/32 - 1-7/8	4-3/4	6	6-1/2	6-7/16	10-7/8	#4	TTC	TSC	22030S-004IS126

*If using Structural Steel holder with Notch Point®, T-A GEN2, or 150° Structural Steel T-A drill insert geometry



Helical Flute #4 Morse Taper

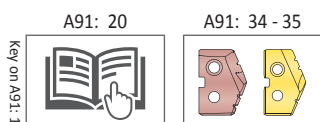
Length	D_1	Body					Shank			Part No.
		L_2	L_4	L_3	L_3^*	L_1	MT	P_1	P_2	
① Standard	1-13/32 - 1-7/8	6-1/2	7-3/4	8-1/4	8-3/16	12-5/8	#4	TTC	TSC	24030H-004IS126

*If using Structural Steel holder with Notch Point®, T-A GEN2, or 150° Structural Steel T-A drill insert geometry

Connection Accessories

Insert Screws	Nylon Locking Screws	Insert Driver	Preset Torque Hand Driver	Replacement Tips	Admissible Tightening Torque*
7514-IP20-1	7514N-IP20-1	8IP-20	-	-	121.3 in-lbs (1370 N-cm)

*Tightening torques are calculated with a friction coefficient of $\mu = 0.14$ and develop 90% of ultimate yield strength

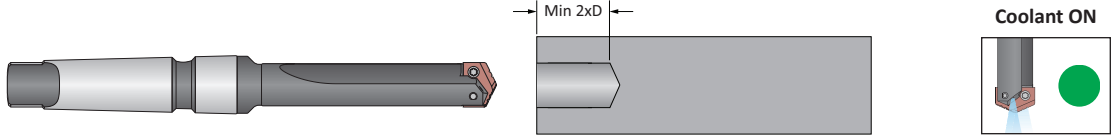

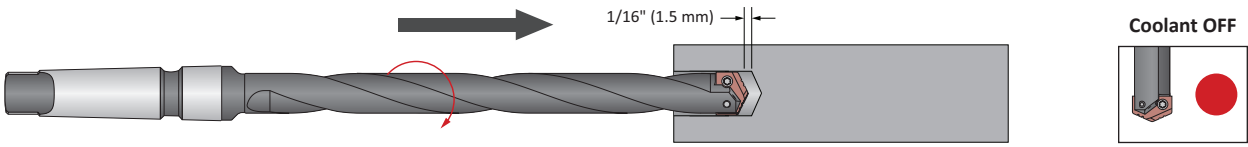
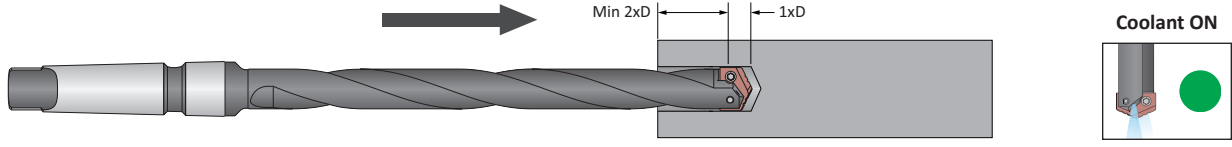
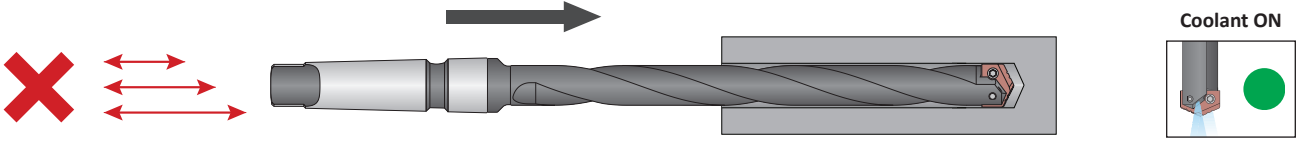
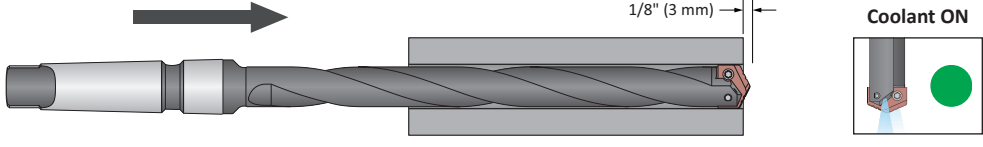

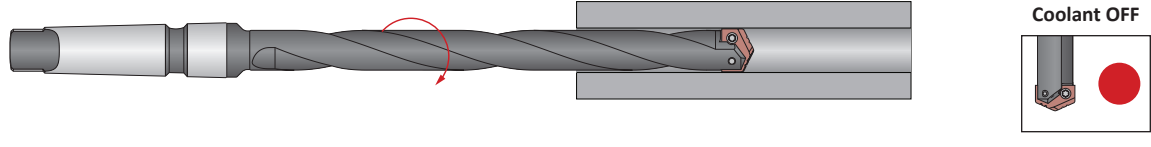


① = Imperial (in)
 Ⓜ = Metric (mm)

Screws sold in multiples of 10

Deep Hole Drilling Guidelines

For Use with Drills Greater than 9xD (Extended, Long, XL, 3XL, and Special Length)

<p>1. Pilot Hole 100 % RPM 100% IPR (mm/rev)</p>	<p>Establish the pilot hole using the same diameter short drill to a depth of 2xD minimum. Utilize a pilot drill with the same or larger included point angle.</p>	 <p>Coolant ON</p>
<p> 2. Feed-in 50 RPM max 12 IPM (300 mm/min)</p>	<p>Feed the longer drill within 1/16" (1.5 mm) short of the established pilot hole bottom at a maximum of 50 RPM and 12 IPM (300 mm/min) feed rate.</p>	 <p>Coolant OFF</p>
<p>3. Deep Hole Transition Drilling 50 % RPM 75% IPR (mm/rev)</p>	<p>Drill additional 1xD past the bottom of the pilot hole at 50% reduction of recommended speed and 25% reduction of recommended feed. Minimum of 1 second dwell is required to meet full speed before feeding.</p>	 <p>Coolant ON</p>
<p>4. Deep Hole Drilling - Blind 100% RPM 100% IPR (mm/rev)</p>	<p>Drill to full depth at recommended speed and feed for longer drill according to Allied speed and feed charts. No peck cycle recommended.</p>	 <p>Coolant ON</p>
<p>5. Deep Hole Drilling - at Breakout 50% RPM 75% IPR (mm/rev)</p>	<p>For through holes only: Reduce speed by 50% and feed by 25% prior to breakout. Do not break out more than 1/8" (3 mm) past the full diameter of the drill.</p>	 <p>Coolant ON</p>
<p> 6. Drill Retract 50 RPM max</p>	<p>Reduce speed to a maximum of 50 RPM before retracting from the hole.</p>	 <p>Coolant OFF</p>

⚠ WARNING Tool failure can cause serious injury. To prevent:

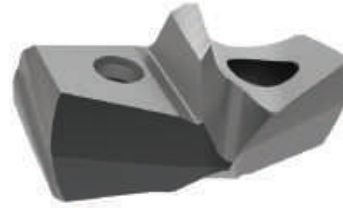
- When using holders without support bushing, use a short T-A® holder to establish an initial hole that is a minimum of 2 diameters deep.
- Do not rotate tool holders more than 50 RPM unless it is engaged with the workpiece or fixture.

Visit www.alliedmachine.com/DeepHoleGuidelines for the most up-to-date information and procedures. Factory technical assistance is available for your specific applications through our Application Engineering Team. ext: 7611 | email: appeng@alliedmachine.com

A
DRILLING
B
BORING
C
REAMING
D
BURNISHING
E
THREADING
X
SPECIALS

Recommended Cutting Data

GEN3SYS® XT Pro (XTST)



Imperial (inch)

ISO	Material	Speed (SFM) - Mist Coolant		Feed Rate (IPR) by Diameter			
		Hardness (BHN)	AM420 Speed	12 series 0.4724" - 0.5117"	13 series 0.5118" - 0.5511"	14 series 0.5512" - 0.5905"	15 series 0.5906" - 0.6298"
P	Structural Steel A36, A285, A516, A572, etc.	100 - 150	350	0.008	0.009	0.010	0.010
		150 - 250	300	0.007	0.008	0.009	0.009
		250 - 350	260	0.006	0.007	0.008	0.008

Metric (mm)

ISO	Material	Speed (M/min) - Mist Coolant		Feed Rate (mm/rev) by Diameter			
		Hardness (BHN)	AM420 Speed	12 series 12.00 mm - 12.99 mm	13 series 13.00 mm - 13.99 mm	14 series 14.00 mm - 14.99 mm	15 series 15.00 mm - 15.99 mm
P	Structural Steel A36, A285, A516, A572, etc.	100 - 150	107	0.20	0.22	0.25	0.25
		150 - 250	91	0.18	0.20	0.23	0.23
		250 - 350	79	0.15	0.17	0.20	0.20

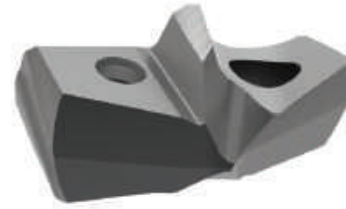
Speed and Feed Multiplier

	Depth of Cut	
	<= 1.5xD	> 1.5xD
Speed	See above chart	0.75
Feed	See above chart	0.90

NOTE: The speeds and feeds listed above are based on a rigid setup using air mist through tool coolant. Speed may be increased up to 50% if using high pressure flood or through coolant.

NOTE: If drilling dry without coolant, speed must be reduced significantly based on setup, drill depth, and material hardness. Up to 50% speed and feed reduction may be necessary in these types of applications. Contact the Application Engineering department for assistance. ext: 7611 | email: appeng@alliedmachine.com

NOTE: If drilling material thickness of 0.500" (12.7mm) or less, a minimum of 10% reduction in feed is required to minimize material deflection.



Feed Rate (IPR) by Diameter

16 series 0.6299" - 0.6692"	17 series 0.6693" - 0.7086"	18 series 0.7087" - 0.7873"	20 series 0.7874" - 0.8660"	22 series 0.8661" - 0.9448"	24 series 0.9449" - 1.0235"	26 series 1.0236" - 1.1416"	29 series 1.1417" - 1.2597"	32 series 1.2598" - 1.3780"
0.012	0.012	0.014	0.015	0.016	0.017	0.018	0.019	0.019
0.010	0.010	0.012	0.014	0.015	0.016	0.017	0.018	0.018
0.009	0.009	0.011	0.012	0.013	0.014	0.015	0.016	0.016

Feed Rate (mm/rev) by Diameter



16 series 16.00 mm - 16.99 mm	17 series 17.00 mm - 17.99 mm	18 series 18.00 mm - 19.99 mm	20 series 20.00 mm - 21.99 mm	22 series 22.00 mm - 23.99 mm	24 series 24.00 mm - 25.99 mm	26 series 26.00 mm - 28.99 mm	29 series 29.00 mm - 31.99 mm	32 series 32.00 mm - 35.00 mm
0.30	0.30	0.36	0.38	0.41	0.43	0.46	0.48	0.48
0.25	0.25	0.30	0.36	0.38	0.41	0.43	0.46	0.46
0.23	0.23	0.28	0.30	0.33	0.36	0.38	0.41	0.41

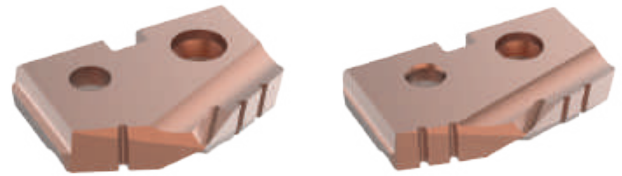
Recommended Cutting Data | Imperial (inch)

T-A® | GEN2 T-A®





Thin Wall Inserts
Super Cobalt

ISO	Material	Speed (SFM) - Mist Coolant			Feed Rate (IPR) by Diameter			
		Hardness (BHN)	 AM200® Speed	 TiAlN Speed	0 series 9/16" - 11/16"	1 series 13/16" - 15/16"	2 series 1" - 1-3/8"	3 series 1-13/32" - 1-7/8"
P	Structural Steel A36, A285, A516, etc.	100 - 150	125	110	0.012	0.018	0.019	0.020
		150 - 250	115	100	0.011	0.016	0.017	0.019
		250 - 350	105	90	0.010	0.014	0.016	0.018




Notch Point® and 150° Structural Steel Inserts
Super Cobalt


ISO	Material	Speed (SFM) - Mist Coolant			Feed Rate (IPR) by Diameter			
		Hardness (BHN)	 AM200® Speed	 TiAlN Speed	0 series 9/16" - 11/16"	1 series 13/16" - 15/16"	2 series 1" - 1-3/8"	3 series 1-13/32" - 1-7/8"
P	Structural Steel A36, A285, A516, etc.	100 - 150	125	110	0.010	0.012	0.014	0.018
		150 - 250	115	100	0.009	0.011	0.012	0.016
		250 - 350	105	90	0.008	0.010	0.011	0.014



GEN2 T-A Inserts
Super Cobalt

ISO	Material	Speed (SFM) - Mist Coolant			Feed Rate (IPR) by Diameter			
		Hardness (BHN)	 AM200® Speed	0 series 9/16" - 11/16"	1 series 13/16" - 15/16"	2 series 1" - 1-3/8"	3 series 1-13/32" - 1-7/8"	
P	Structural Steel A36, A285, A516, etc.	100 - 150	125	0.010	0.012	0.014	0.018	
		150 - 250	115	0.009	0.011	0.012	0.016	
		250 - 350	105	0.008	0.010	0.011	0.014	

GEN2 T-A Inserts
Carbide C1 (K35)

ISO	Material	Speed (SFM) - Mist Coolant			Feed Rate (IPR) by Diameter			
		Hardness (BHN)	 AM300® Speed	0 series 9/16" - 11/16"	1 series 13/16" - 15/16"	2 series 1" - 1-3/8"	3 series 1-13/32" - 1-7/8"	
P	Structural Steel A36, A285, A516, etc.	100 - 150	165	0.008	0.011	0.015	0.017	
		150 - 250	155	0.006	0.010	0.013	0.015	
		250 - 350	140	0.005	0.009	0.012	0.013	



NOTE: The speeds and feeds listed above are based on a rigid setup using air mist through tool coolant. Speed may be increased up to 50% if using high pressure flood or through coolant.
NOTE: If drilling dry without coolant, speed must be reduced significantly based on setup, drill depth, and material hardness. Up to 50% speed and feed reduction may be necessary in these types of applications. Contact the Application Engineering department for assistance. ext: 7611 | email: appeng@alliedmachine.com

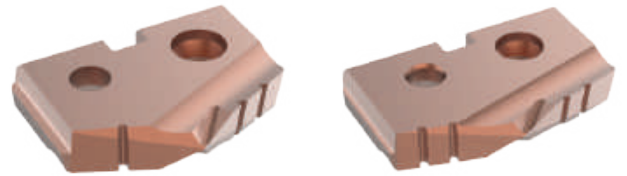
Recommended Cutting Data | Metric (mm)

T-A® | GEN2 T-A®





Thin Wall Inserts Super Cobalt

ISO	Material	Speed (M/min) - Mist Coolant		Feed Rate (mm/rev) by Diameter				
		Hardness (BHN)	 AM200® Speed	 TiAlN Speed	0 series 14 mm - 16 mm	1 series 18 mm - 24 mm	2 series 25 mm - 35 mm	3 series 36 mm - 47 mm
P	Structural Steel A36, A285, A516, etc.	100 - 150	39	34	0.30	0.45	0.48	0.50
		150 - 250	35	31	0.28	0.40	0.43	0.48
		250 - 350	32	28	0.25	0.36	0.40	0.45




Notch Point® and 150° Structural Steel Inserts Super Cobalt


ISO	Material	Speed (M/min) - Mist Coolant		Feed Rate (mm/rev) by Diameter				
		Hardness (BHN)	 AM200® Speed	 TiAlN Speed	0 series 14 mm - 16 mm	1 series 18 mm - 24 mm	2 series 25 mm - 35 mm	3 series 36 mm - 47 mm
P	Structural Steel A36, A285, A516, etc.	100 - 150	39	34	0.25	0.30	0.36	0.45
		150 - 250	35	31	0.23	0.28	0.30	0.40
		250 - 350	35	28	0.20	0.25	0.28	0.36



GEN2 T-A Inserts Super Cobalt

ISO	Material	Speed (M/min) - Mist Coolant		Feed Rate (mm/rev) by Diameter			
		Hardness (BHN)	 AM200® Speed	0 series 14 mm - 16 mm	1 series 18 mm - 24 mm	2 series 25 mm - 35 mm	3 series 36 mm - 47 mm
P	Structural Steel A36, A285, A516, etc.	100 - 150	39	0.25	0.30	0.36	0.46
		150 - 250	35	0.23	0.28	0.30	0.40
		250 - 350	35	0.20	0.25	0.28	0.36

GEN2 T-A Inserts Carbide C1 (K35)

ISO	Material	Speed (M/min) - Mist Coolant		Feed Rate (mm/rev) by Diameter			
		Hardness (BHN)	 AM300® Speed	0 series 14 mm - 16 mm	1 series 18 mm - 24 mm	2 series 25 mm - 35 mm	3 series 36 mm - 47 mm
P	Structural Steel A36, A285, A516, etc.	100 - 150	50	0.20	0.28	0.38	0.43
		150 - 250	47	0.15	0.25	0.33	0.38
		250 - 350	43	0.13	0.23	0.30	0.33

NOTE: The speeds and feeds listed above are based on a rigid setup using air mist through tool coolant. Speed may be increased up to 50% if using high pressure flood or through coolant.
NOTE: If drilling dry without coolant, speed must be reduced significantly based on setup, drill depth, and material hardness. Up to 50% speed and feed reduction may be necessary in these types of applications. Contact the Application Engineering department for assistance. ext: 7611 | email: appeng@alliedmachine.com

Guaranteed Test / Demo Application Form

Distributor PO #	
------------------	--

The following must be filled out completely before your test will be considered

Distributor Information

Company Name: _____
 Contact: _____
 Account Number: _____
 Phone: _____
 Email: _____

End User Information

Company Name: _____
 Contact: _____
 Industry: _____
 Phone: _____
 Email: _____

Current Process List all tooling, coatings, substrates, speeds and feeds, tool life, and any problems you are experiencing

Test Objective List what would make this a successful test (i.e. penetration rate, finish, tool life, hole size, etc.)

Application Information

Hole Diameter: _____ in/mm	Tolerance: _____	Material: _____ (4150 / A36 / Cast Iron / etc.)
Preexisting Diameter: _____ in/mm	Depth of Cut: _____ in/mm	Hardness: _____ (BHN / Rc)
Required Finish: _____ RMS	State: _____	(Casting / Hot rolled / Forging)

Machine Information

Machine Type: _____ (Lathe / Screw machine / Machine center / etc.)	Builder: _____ (Haas, Mori Seiki, etc.)	Model #: _____
Shank Required: _____ (CAT50 / Morse taper, etc.)		Power: _____ HP/KW
Rigidity: _____	Orientation: _____	Tool Rotating: _____
<input type="checkbox"/> Excellent	<input type="checkbox"/> Vertical	<input type="checkbox"/> Yes
<input type="checkbox"/> Good	<input type="checkbox"/> Horizontal	<input type="checkbox"/> No
<input type="checkbox"/> Poor		Thrust: _____ lbs/N

Coolant Information

Coolant Delivery: _____ (Through tool / Flood)	Coolant Pressure: _____ PSI / bar
Coolant Type: _____ (Air mist, oil, synthetic, water soluble, etc.)	Coolant Volume: _____ GPM / LPM

Requested Tooling

QTY	Item Number	QTY	Item Number



Allied Machine & Engineering
 120 Deeds Drive
 Dover, OH 44622

Telephone: (330) 343-4283
 Toll Free USA & Canada: (800) 321-5537
 Fax: (330) 602-3400

Warranty Information



Allied Machine & Engineering ("Allied Machine") warrants to original equipment manufacturers, distributors, industrial and commercial users of its products for one year from the original date of sale that each new product manufactured or supplied by Allied Machine shall be free from defects in material and workmanship.

Allied Machine's sole and exclusive obligation under this warranty is limited to, at its option, without additional charge, replacing or repairing this product or issuing a credit. For this warranty to be applied, the product must be returned freight prepaid to the plant designated by an Allied Machine representative and which, upon inspection, is determined by Allied Machine to be defective in material and workmanship.

Complete information as to operating conditions, machine, setup, and the application of cutting fluid should accompany any product returned for inspection. This warranty shall not apply to any Allied Machine products which have been subjected to misuse, abuse, improper operating conditions, improper machine setup or improper application of cutting fluid or which have been repaired or altered if such repair or alteration, in the judgement of Allied Machine, would adversely affect the performance of the product.

THIS WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. Allied Machine shall have no liability or responsibility for any claim, whether in contract, tort or otherwise, for any loss or damage arising out of, connected with, or resulting from the manufacture, sale, delivery or use of any product sold hereunder, in excess of the cost of replacement or repair as provided herein.

Allied Machine shall not be liable in contract or in tort (including, without limitation, negligence, strict liability or otherwise) for economic losses of any kind or for any special, incidental, indirect, consequential, punitive or exemplary damages arising in any way out of the performance of, or failure to perform this agreement.

ALL PRICES, DELIVERIES, DESIGNS, AND MATERIALS ARE SUBJECT TO CHANGE WITHOUT NOTICE.



Allied Machine & Engineering
is registered to
ISO 9001:2015 by DQS

United States

Allied Machine & Engineering

120 Deeds Drive
Dover OH 44622
United States

Phone:
+1.330.343.4283

Fax:
+1.330.602.3400

Toll Free USA and Canada:
800.321.5537

Toll Free USA and Canada:
800.223.5140

Allied Machine & Engineering

485 W Third Street
Dover OH 44622
United States

Phone:
+1.330.343.4283

Fax:
+1.330.364.7666
(Engineering Dept.)

Toll Free USA and Canada:
800.321.5537

Europe

Allied Machine & Engineering Co. (Europe) Ltd.

93 Vantage Point
Pensnett Estate
Kingswinford
West Midlands
DY6 7FR England

Phone:
+44 (0) 1384.400900

Wohlhaupter GmbH

Maybachstrasse 4
Postfach 1264
72636 Frickenhausen
Germany

Phone:
+49 (0) 7022.408.0

Fax:
+49 (0) 7022.408.212

Asia

Wohlhaupter India Pvt. Ltd.

B-23, 3rd Floor
B Block Community Centre
Janakpuri, New Delhi - 110058
India

Phone:
+91 (0) 11.41827044

Your local Allied Machine representative:

www.alliedmachine.com

Allied Machine & Engineering is registered to ISO 9001:2015 by DQS



Copyright © 2022 Allied Machine & Engineering Corp. All rights reserved.
All trademarks designated with the ® symbol are registered in the United States and other countries.
Available Online Only
Publish Date: August 2022