ALLIED MACHINE & ENGINEERING | WOHLHAUPTER®

Holemaking Solutions for Today's Manufacturing

Boring

Reaming

Burnishing

Threading

Specials



Structural Steel Solutions

▶ DRILLING

Replaceable Insert Drills

North America

Allied Machine
120 Deeds Drive
Dover, OH 44622
United States

Allied Machine
485 West 3rd Street
Dover, OH 44622
United States

ThreadMills USA™
4185 Crosstowne Ct #B
Evans, GA 30809
United States

Superion™
1285 S Patton St.
Xenia, OH 45385
United States

Europe

Allied Machine Europe
93 Vantage Point
Pensnett Estate
Kingswinford
West Midlands
DY6 7FR, United Kingdom

Wohlhaupter® GmbH
Maybachstrasse 4
72636 Frickenhausen
Germany

Asia

Wohlhaupter® India
B-23, 2nd Floor
B Block Community Centre
Janakpuri, New Delhi - 110058
India



Allied Machine & Engineering is a worldwide leader in holemaking and finishing solutions. We are committed to providing practical and dependable solutions to our customers through innovative designs and superior customer and technical support.

We continue to expand our product offering in order to provide new and different solutions. With Field Sales Engineers located around the world, we position ourselves to provide technical support on site, right at your spindle.

ALLIED MACHINE & ENGINEERING | WOHLHAUPTER®

Holemaking Solutions for Today's Manufacturing

www.alliedmachine.com

The Foundation

Since 1941, Allied Machine & Engineering has provided dependable and practical holemaking solutions to the world. What was once a small job shop in Ohio is now a worldwide leader in cutting tool technology. With three manufacturing facilities in Ohio, one in Georgia, another in Germany and headquarters in both the United States and Europe, Allied Machine is positioned to bring innovative solutions and technical expertise directly to the customers' hands.



The Beginning

Harold E. Stokey founded Allied Machine & Engineering to aid the war effort, manufacturing taper bearing lock nuts for the production of M1 tanks. Years later, after a sales meeting gone wrong, Stokey possessed a warehouse stocked with spade drill inserts. He set forth into the industry that would become Allied Machine's thriving identity: holemaking.



The T-A®

When Harold's son, William H. Stokey, became the president and CEO, he developed the Throw Away, or T-A®, spade drill insert system. The T-A® revolutionised the holemaking industry, launching Allied Machine ahead of the competition. Since then, numerous innovations and advancements have been created from the T-A®'s inspiration.



The Innovation

Since the development of the T-A®, Allied Machine has expanded its product offering to support a vast range of customer applications, including large diameter and deep hole drilling, boring, reaming, burnishing, porting and threading.

The People

Allied Machine understands that high quality products are only one facet of success. Our customer support is crucial to what we do and that's why we make sure the best engineers and customer service associates are in place to assist our customers around the world.

The Future

With over 75 years of experience, Allied Machine has encountered the challenges of growth and success. By investing in cutting edge technology and the brightest and sharpest minds, our knowledge and capabilities continue to expand and grow every day.



Steve Stokey
Executive Vice President
Allied Machine & Engineering Corp.

Frank-M. Wohlhaupter
Managing Director
Wohlhaupter GmbH

Paul Crawford
Managing Director
AMEC Europe

Mike Stokey
Executive Vice President
Allied Machine & Engineering Corp.



Allied Machine Dover, OH, USA



Wohlhaupter GmbH, Frickenhausen, Germany



Allied Machine Europe, Kingswinford, UK

ALLIED MACHINE & ENGINEERING

Holemaking Solutions for Today's Manufacturing

WOHLHAUPTER® ThreadMills USA™ SUPERION™ CRITERION™

Structural Steel Drilling Solutions

Replaceable Insert Drilling System | GEN3SYS® XT Structural Steel | T-A® Original and GEN2 T-A® Structural Steel

- **GEN3SYS®XT Pro ST and XT ST Diameter Range:** 12.00mm - 35.00mm (0.4331" - 1.3780")
- **T-A® Structural Steel Diameter Range:** 12.98mm - 47.80mm (0.511" - 1.882")



Take on Tough Drilling

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

Applicable Industries

Structural Steel

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

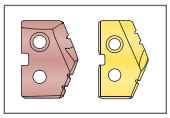
WARNING (shown above) means that failure to follow the precautions in this message could result in tool failure and serious injury.

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.

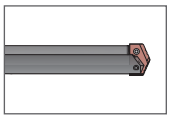
NOTE and **IMPORTANT** are also used. These are important that you read and follow but are not safety-related.

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

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



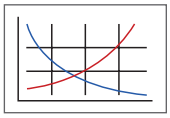
Corresponding T-A Inserts
Refers to the corresponding T-A insert items that connect with each specific holder series



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

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

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

Structural Steel Drilling Solutions Contents

GEN3SYS® XT Pro and XT Structural Steel

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GEN3SYS® XT Pro ST Structural Steel Drilling System

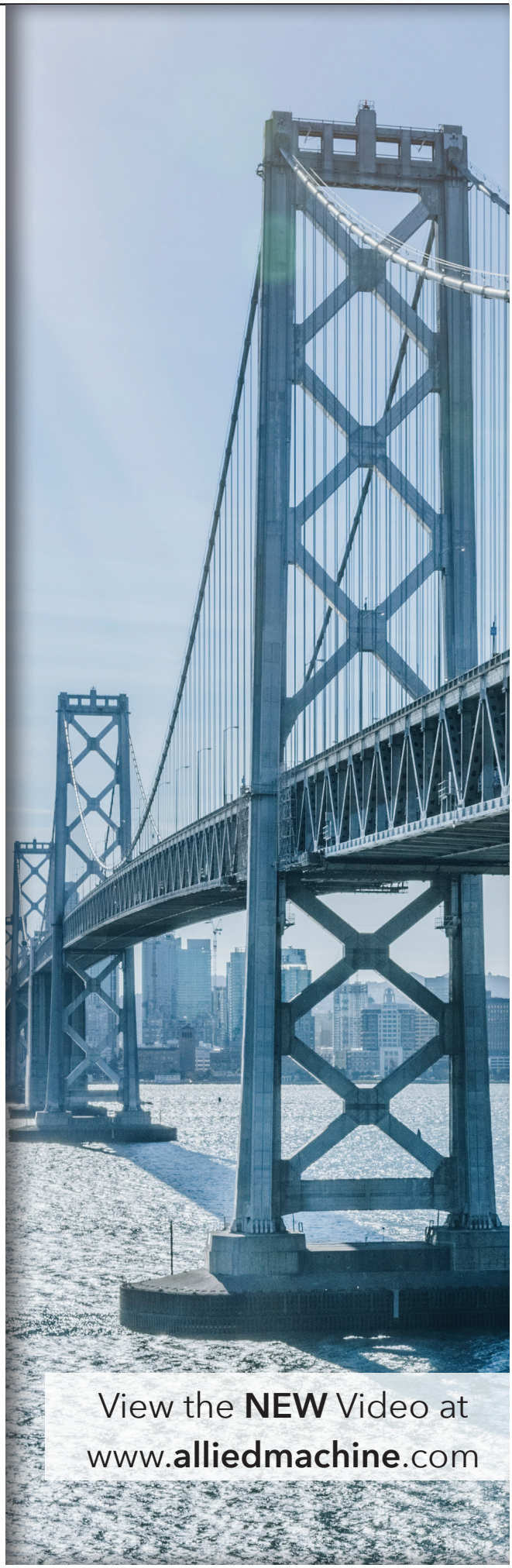
GEN3SYS®
XT PRO *ST*

REPLACEABLE TIP
HIGH PENETRATION
STRUCTURAL STEEL *SOLUTION*

The challenge of drilling structural steel materials is about to get a whole lot easier. Developed through a rigorous and thorough testing process, the modified and improved XT Pro ST is a product of innovation.

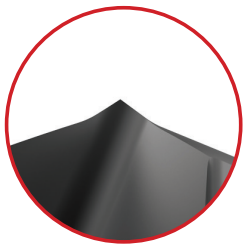
Achieve the ***consistent performance*** you need and exceed your current parameters.



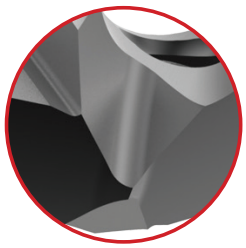


GEN3SYS® XT Pro ST Structural Steel Drilling System

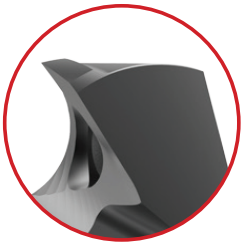




New Point Design
Increases stability without hindering penetration



Redesigned Insert
Provides consistent performance and adds durability



Improved Geometry
Extends tool life and increases insert strength without increasing horsepower consumption



AM420 Coating
Increases heat threshold and extends tool life



3xD 5xD 7xD

Get the Consistency You Need

The challenge of drilling structural steel materials is about to get a whole lot easier. Developed through a rigorous and thorough testing process, the modified and improved XT ST 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 ST the optimal drill for structural steel applications.

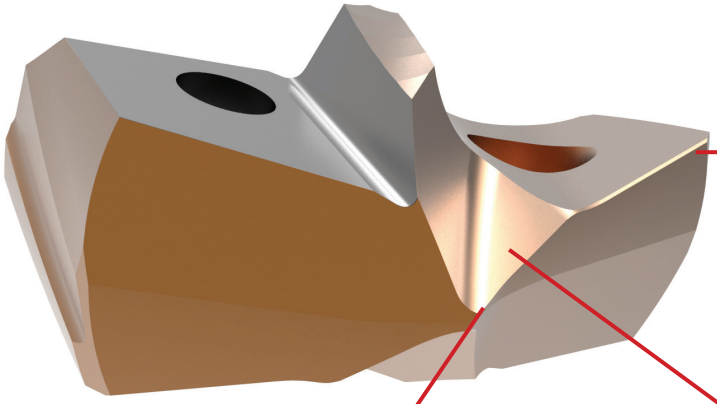
- Diameter range: 12mm - 35mm
- Holders available in 3xD, 5xD, and 7xD lengths
- Flanged shank with flat
- Through Tool Coolant
- Fits on to existing GEN3SYS®XT ST holders



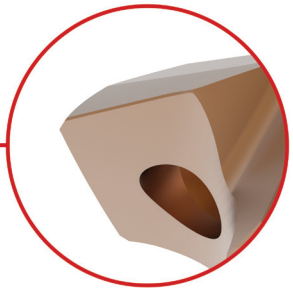
NOTICE: GEN3SYS XT Structural Steel holders are specifically designed to be used only with XT Pro ST or XT ST geometry inserts. Using other GEN3SYS XT Pro or XT insert geometries in these holders could lead to chip packing and tool failure. Contact Application Engineering for questions regarding proper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

GEN3SYS® XT Structural Steel Drilling System

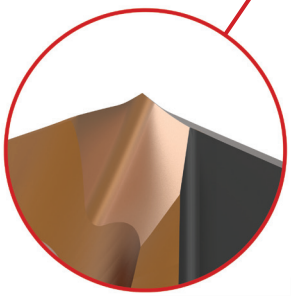
STRUCTURAL STEEL | GEN3SYS®XT ST



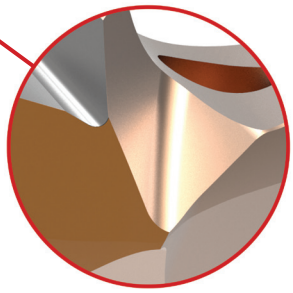
Available in AM300® Coating



Improved Radial Rake
Improves chip control



Spur Point
Increases stability



Improved Notch Point
Reduces lead-off



Holder Anatomy

1. Flanged Shank with Flat
2. Coolant Inlet
3. Flute (straight only)
4. Coolant Outlets



Straight Flute

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

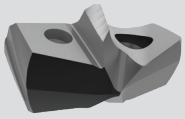
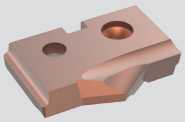
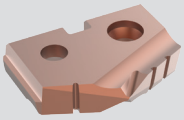
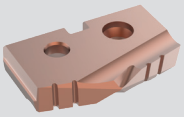
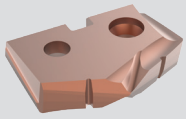
Structural Steel Drilling

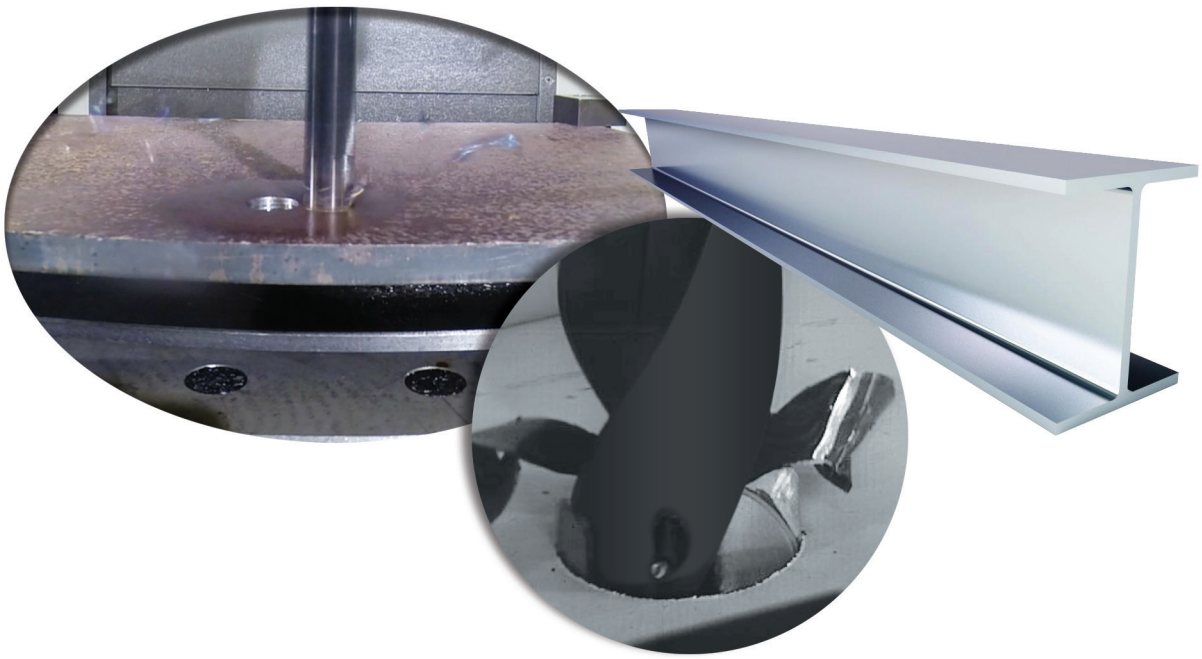
Achieving Optimal Results in Structural Steel

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

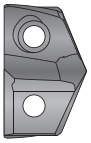
	 GEN3SYS® XT Pro ST GEN3SYS®XT ST	 Original T-A® Thin Wall	 Original T-A® Notch Point®	 Original T-A® 150° Structural Steel	 GEN2 T-A® High Efficiency
High penetration	✓				
Material less than 6mm thick		✓			
Material over 6mm thick	✓		✓	✓	✓
Reduced exit burr			✓	✓	
Includes Notch Point® geometry			✓	✓	✓
Available from carbide	✓				✓
Stocked in common sizes for the Structural Steel industry	✓	✓	✓	✓	✓



GEN3SYS® XT Pro ST / GEN3SYS® XT ST Drill Insert Nomenclature

GEN3SYS®XT Pro Drill Inserts

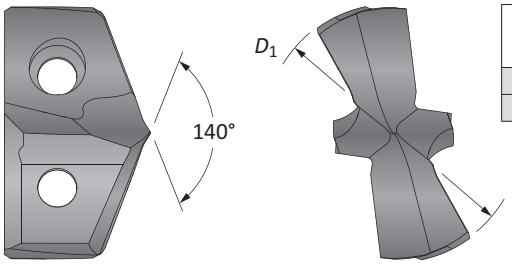
XT	ST	20	–	20.00
1	2	3		4



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

Reference Key

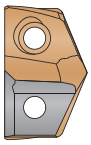
Symbol	Attribute
D_1	Insert diameter



Sizes not shown are available upon request. When ordering, please follow the example below:	
Metric:	20.10mm, 20 series = use Part No. **XTST20-20.10**
Imperial:	0.7913", 20 series = use Part No. **XTST20-20.10**

GEN3SYS®XT ST Drill Inserts

7	C2	14	P	–	0018	ST
1	2	3	4		5	6

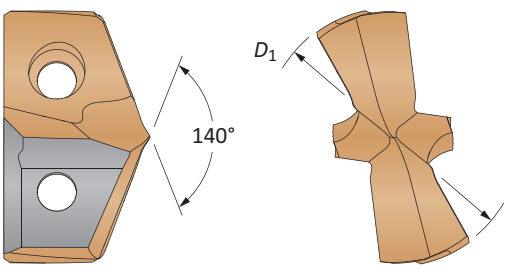


1. XT Drill Insert	2. Insert Material	3. Series	4. Coating
7 = XT insert	**C2** = K20 (C2) carbide	**12** = 12 series **14** = 14 series **15** = 15 series **16** = 16 series **17** = 17 series **18** = 18 series **20** = 20 series **22** = 22 series **24** = 24 series **26** = 26 series **29** = 29 series **32** = 32 series	**P** = AM300®

5. Diameter	6. Geometry
18 = Metric **0102** = Inch	**ST** = Structural steel

Reference Key

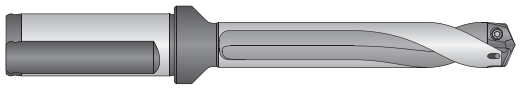
Symbol	Attribute
D_1	Insert diameter



GEN3SYS® XT Structural Steel Drill Holder Nomenclature

GEN3SYS®XT Structural Steel Drill Holders

ST	03	12	0	–	20	FM
1	2	3	4		5	6



1. Holder

ST = Structural steel holder

2. Length

03 = 3x Diameter

05 = 5x Diameter

07 = 7x Diameter

3. Series

12 = 12 series
13 = 13 series
14 = 14 series
15 = 15 series
16 = 16 series
17 = 17 series
18 = 18 series
20 = 20 series
22 = 22 series
24 = 24 series
26 = 26 series
29 = 29 series
32 = 32 series

4. Body Diameter

0 = Standard

5 = Oversized

5. Shank Diameter

Metric (mm)		Imperial (in)	
16 = 16mm	**32** = 32mm	**063** = 5/8”	**125** = 1-1/4”
20 = 20mm	**40** = 40mm	**075** = 3/4”	**150** = 1-1/2”
25 = 25mm		**100** = 1”	

6. Shank Style

F = Flanged with flat

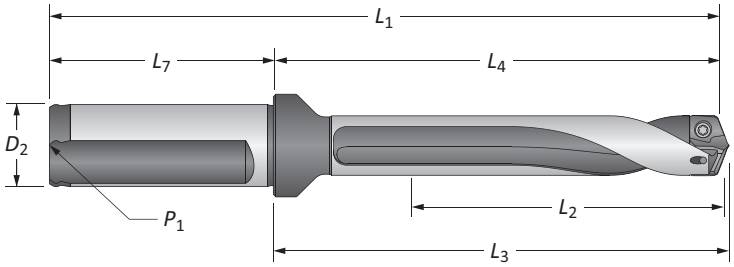
FM = Flanged metric with flat

C = Cylindrical (no flat)

CM = Cylindrical metric (no flat)

Reference Key

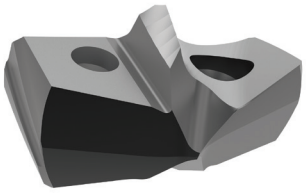
Symbol	Attribute
D_2	Shank diameter
L_1	Overall length
L_2	Drill depth
L_3	Holder reference length
L_4	Holder body length
L_7	Shank length
P_1	Rear pipe tap

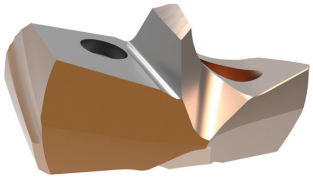


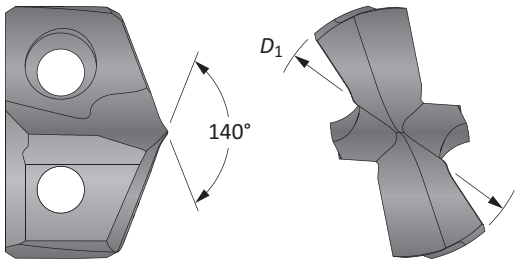
NOTICE: GEN3SYS®XT Structural Steel Holders are suitable for both GEN3SYS®XT Pro ST and GEN3SYS®XT ST Inserts ONLY.

GEN3SYS® XT Pro ST / GEN3SYS® XT ST Structural Steel Drilling System

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



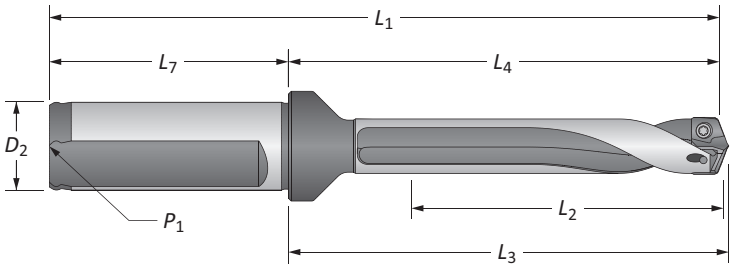




Inserts

Insert				
D_1 mm	D_1 inch	Fractional Equivalent	XT Pro ST Part No.	XT ST Part No.
12.00	0.4724	–	**XTST12-12.00**	**7C212P-12ST**
13.00	0.5118	–	-	**7C212P-13ST**



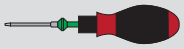


Holders

		Body				Shank				
	Length	L_2	L_4	L_3	L_1	L_7	D_2	P_1	Flat	Part No.
ⓜ	3xD	39.0	66.6	68.6	116.6	50	20	3.18*	YES	**ST03120-20FM**
ⓜ	5xD	65.0	92.6	94.8	142.6	50	20	3.18*	YES	**ST05120-20FM**
ⓜ	7xD	91.0	118.5	120.8	168.5	50	20	3.18*	YES	**ST07120-20FM**
ⓘ	3xD	1-17/32	2-5/8	2-45/64	4-21/32	2-1/32	3/4	1/8	YES	**ST03120-075F**
ⓘ	5xD	2-9/16	3-41/64	3-47/64	5-43/64	2-1/32	3/4	1/8	YES	**ST05120-075F**
ⓘ	7xD	3-37/64	4-43/64	4-3/4	6-45/64	2-1/32	3/4	1/8	YES	**ST07120-075F**

*Thread to BSP and ISO 7-1

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	84 N-cm (7.4 in-lbs)

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

40-41
Key on A91: 1

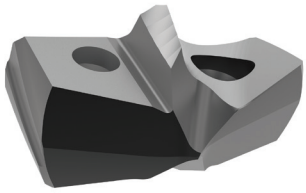
ⓜ = Metric (mm)
ⓘ = Imperial (in)

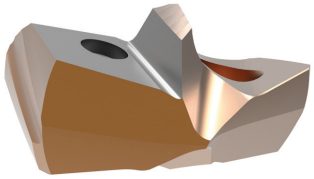
Inserts sold in multiples of 1 | Screws sold in multiples of 10

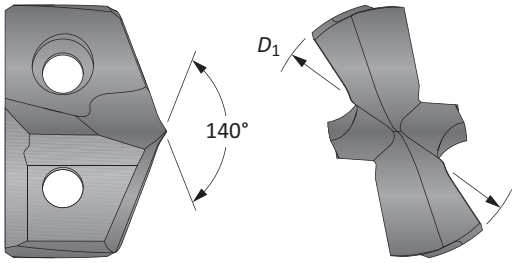
NOTICE: GEN3SYS XT Structural Steel holders are specifically designed to be used only with XT Pro ST or XT ST geometry inserts. Using other GEN3SYS XT Pro or XT insert geometries in these holders could lead to chip packing and tool failure. Contact Application Engineering for questions regarding proper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

GEN3SYS® XT Pro ST / GEN3SYS® XT ST Structural Steel Drilling System

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



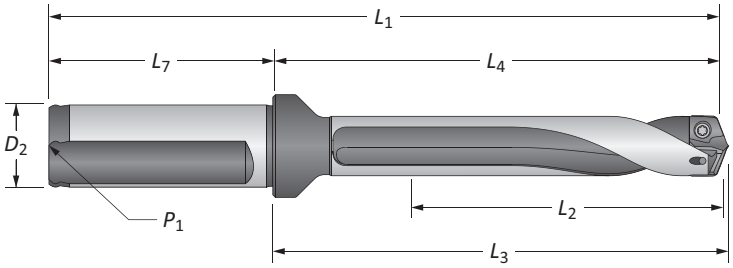




Inserts

Insert				
D_1 mm	D_1 inch	Fractional Equivalent	XT Pro ST Part No.	XT ST Part No.
13.00	0.5118	–	**XTST13-13.00**	-



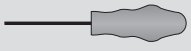


Holders

		Body				Shank				
	Length	L_2	L_4	L_3	L_1	L_7	D_2	P_1	Flat	Part No.
ⓜ	3xD	39.0	66.6	68.6	116.6	50	20	3.18*	YES	**ST03130-20FM**
ⓜ	5xD	65.0	92.6	94.8	142.6	50	20	3.18*	YES	**ST05130-20FM**
ⓜ	7xD	91.0	118.5	120.8	168.5	50	20	3.18*	YES	**ST07130-20FM**
ⓘ	3xD	1-17/32	2-5/8	2-45/64	4-21/32	2-1/32	3/4	1/8	YES	**ST03130-075F**
ⓘ	5xD	2-9/16	3-41/64	3-47/64	5-43/64	2-1/32	3/4	1/8	YES	**ST05130-075F**
ⓘ	7xD	3-37/64	4-43/64	4-3/4	6-45/64	2-1/32	3/4	1/8	YES	**ST07130-075F**

*Thread to BSP and ISO 7-1

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	84 N-cm (7.4 in-lbs)

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

40-41
Key on A91: 1

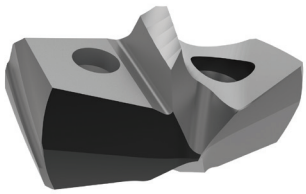
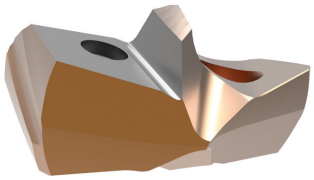
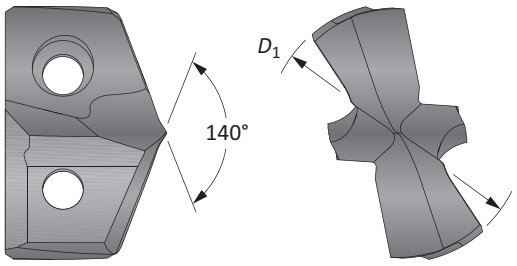
ⓜ = Metric (mm)
ⓘ = Imperial (in)

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

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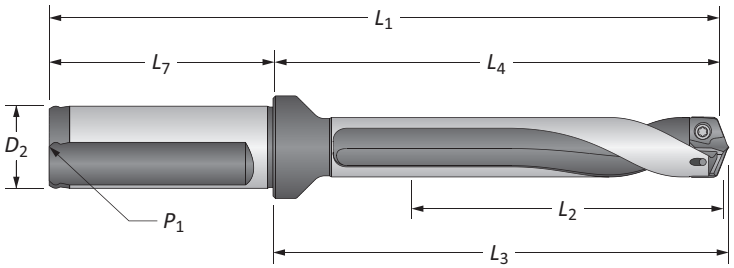
GEN3SYS® XT Pro ST / GEN3SYS® XT ST Structural Steel Drilling System

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

Inserts

Insert				
D_1 mm	D_1 inch	Fractional Equivalent	XT Pro ST Part No.	XT ST Part No.
14.00	0.5512	–	**XTST14-14.00**	**7C214P-14ST**
14.29	0.5625	9/16	**XTST14-14.29**	**7C214P-0018ST**

Holders

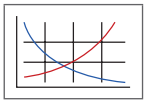
	Length	Body L_2	Body L_4	Body L_3	Body L_1	Shank L_7	Shank D_2	Shank P_1	Shank Flat	Part No.
ⓜ	3xD	45.0	72.4	75.0	122.4	50	20	3.18*	YES	**ST03140-20FM**
ⓜ	5xD	75.0	102.4	104.9	152.4	50	20	3.18*	YES	**ST05140-20FM**
ⓜ	7xD	104.9	132.3	134.9	182.3	50	20	3.18*	YES	**ST07140-20FM**
ⓘ	3xD	1-25/32	2-27/32	2-61/64	4-7/8	2-1/32	3/4	1/8	YES	**ST03140-075F**
ⓘ	5xD	2-61/64	4-1/32	4-1/8	6-1/16	2-1/32	3/4	1/8	YES	**ST05140-075F**
ⓘ	7xD	4-9/64	5-13/64	5-5/16	7-15/64	2-1/32	3/4	1/8	YES	**ST07140-075F**

*Thread to BSP and ISO 7-1

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	84 N-cm (7.4 in-lbs)

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

40-41
Key on A91: 1


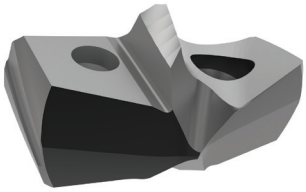
ⓜ = Metric (mm)
ⓘ = Imperial (in)

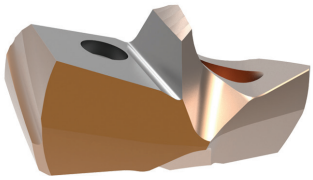
Inserts sold in multiples of 1 | Screws sold in multiples of 10

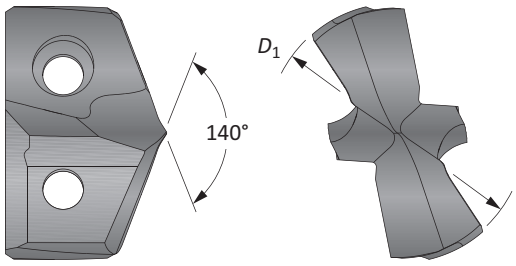
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GEN3SYS® XT Pro ST / GEN3SYS® XT ST Structural Steel Drilling System

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



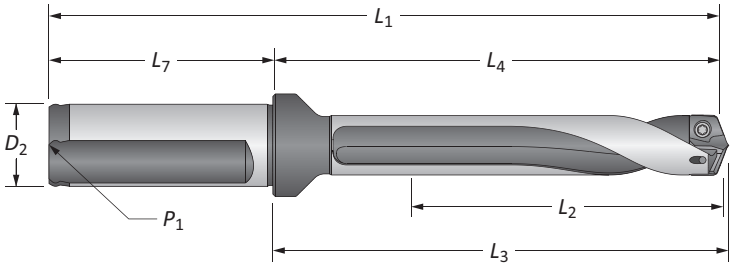




Inserts

Insert				
D_1 mm	D_1 inch	Fractional Equivalent	XT Pro ST Part No.	XT ST Part No.
15.00	0.5906	–	**XTST15-15.00**	**7C215P-15ST**
15.88	0.6250	5/8	**XTST15-15.88**	**7C215P-0020ST**





Holders

		Body				Shank				
	Length	L_2	L_4	L_3	L_1	L_7	D_2	P_1	Flat	Part No.
ⓜ	3xD	48.0	75.1	77.6	125.1	50	20	3.18*	YES	**ST03150-20FM**
ⓜ	5xD	80.0	107.0	109.6	157.0	50	20	3.18*	YES	**ST05150-20FM**
ⓜ	7xD	111.9	139.0	141.6	189.0	50	20	3.18*	YES	**ST07150-20FM**
ⓘ	3xD	1-57/64	2-61/64	3-3/64	4-63/64	2-1/32	3/4	1/8	YES	**ST03150-075F**
ⓘ	5xD	3-5/32	4-7/32	4-5/16	6-1/4	2-1/32	3/4	1/8	YES	**ST05150-075F**
ⓘ	7xD	4-27/64	5-15/32	5-37/64	7-1/2	2-1/32	3/4	1/8	YES	**ST07150-075F**

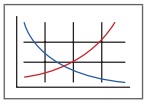
*Thread to BSP and ISO 7-1

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	84 N-cm (7.4 in-lbs)

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

40-41
Key on A91: 1



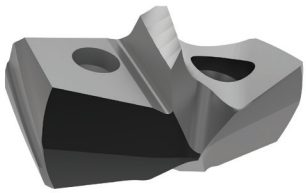
ⓜ = Metric (mm)
ⓘ = Imperial (in)

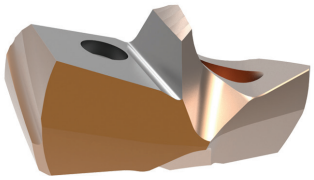
Inserts sold in multiples of 1 | Screws sold in multiples of 10

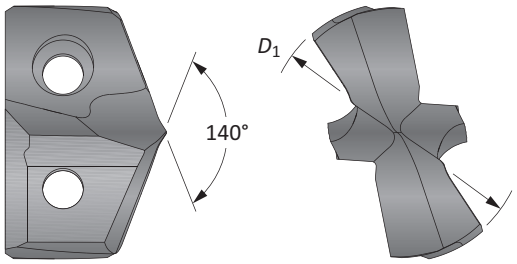
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GEN3SYS® XT Pro ST / GEN3SYS® XT ST Structural Steel Drilling System

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



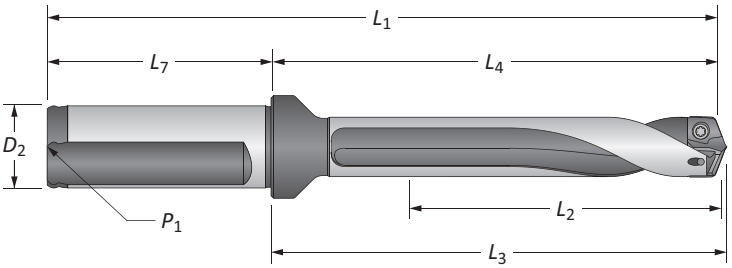




Inserts

Insert				
D_1 mm	D_1 inch	Fractional Equivalent	XT Pro ST Part No.	XT ST Part No.
16.00	0.6299	–	**XTST16-16.00**	**7C216P-16ST**



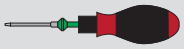


Holders

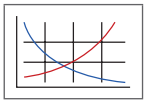
	Length	Body L_2	Body L_4	Body L_3	Body L_1	Shank L_7	Shank D_2	Shank P_1	Shank Flat	Part No.
ⓜ	3xD	51.0	81.3	84.2	131.3	50	20	3.18*	YES	**ST03160-20FM**
ⓜ	5xD	84.9	115.3	118.2	165.3	50	20	3.18*	YES	**ST05160-20FM**
ⓜ	7xD	118.9	149.3	152.2	199.3	50	20	3.18*	YES	**ST07160-20FM**
ⓘ	3xD	3-1/64	3-13/64	3-5/16	5-15/64	2-1/32	3/4	1/8	YES	**ST03160-075F**
ⓘ	5xD	3-23/64	4-17/32	4-21/32	6-9/16	2-1/32	3/4	1/8	YES	**ST05160-075F**
ⓘ	7xD	4-11/16	5-7/8	5-63/64	7-29/32	2-1/32	3/4	1/8	YES	**ST07160-075F**

*Thread to BSP and ISO 7-1

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	175 N-cm (15.5 in-lbs)

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

40-41
Key on A91:1


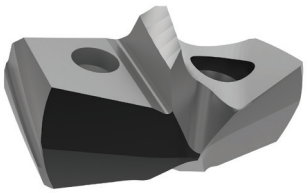
ⓜ = Metric (mm)
ⓘ = Imperial (in)

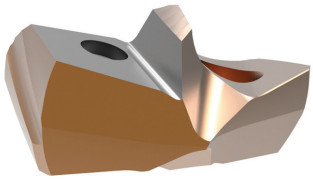
Inserts sold in multiples of 1 | Screws sold in multiples of 10

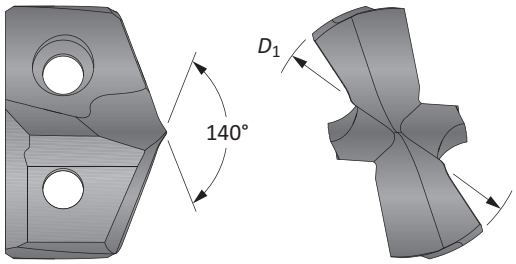
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GEN3SYS® XT Pro ST / GEN3SYS® XT ST Structural Steel Drilling System

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



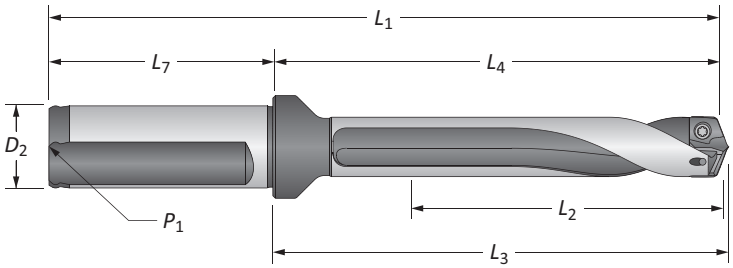




Inserts

Insert				
D_1 mm	D_1 inch	Fractional Equivalent	XT Pro ST Part No.	XT ST Part No.
17.00	0.6693	–	**XTST17-17.00**	**7C217P-17ST**
17.46	0.6875	11/16	**XTST17-17.46**	**7C217P-0022ST**



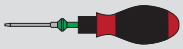


Holders

		Body				Shank				
	Length	L_2	L_4	L_3	L_1	L_7	D_2	P_1	Flat	Part No.
ⓜ	3xD	54.0	84.1	87.0	134.1	50	20	3.18*	YES	**ST03170-20FM**
ⓜ	5xD	89.9	120.0	122.9	170.0	50	20	3.18*	YES	**ST05170-20FM**
ⓜ	7xD	125.9	156.0	158.9	206.0	50	20	3.18*	YES	**ST07170-20FM**
ⓘ	3xD	2-1/8	3-5/16	3-27/64	5-11/32	2-1/32	3/4	1/8	YES	**ST03170-075F**
ⓘ	5xD	3-35/64	4-23/32	4-27/32	6-3/4	2-1/32	3/4	1/8	YES	**ST05170-075F**
ⓘ	7xD	4-31/32	6-9/64	6-1/4	8-11/64	2-1/32	3/4	1/8	YES	**ST07170-075F**

*Thread to BSP and ISO 7-1

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	175 N-cm (15.5 in-lbs)

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

40-41
Key on A91: 1

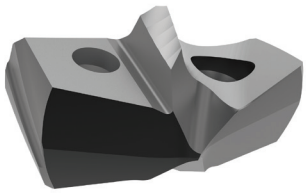
ⓜ = Metric (mm)
ⓘ = Imperial (in)

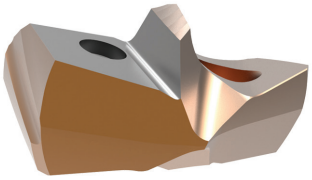
Inserts sold in multiples of 1 | Screws sold in multiples of 10

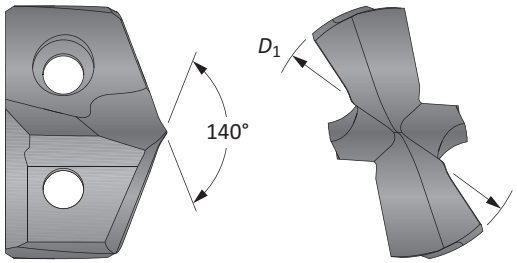
NOTICE: GEN3SYS XT Structural Steel holders are specifically designed to be used only with XT Pro ST or XT ST geometry inserts. Using other GEN3SYS XT Pro or XT insert geometries in these holders could lead to chip packing and tool failure. Contact Application Engineering for questions regarding proper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

GEN3SYS® XT Pro ST / GEN3SYS® XT ST Structural Steel Drilling System

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



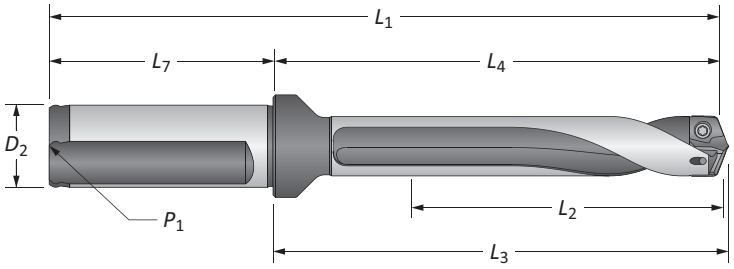




Inserts

Insert				
D_1 mm	D_1 inch	Fractional Equivalent	XT Pro ST Part No.	XT ST Part No.
18.00	0.7087	–	**XTST18-18.00**	**7C218P-18ST**
19.00	0.7480	–	**XTST18-19.00**	**7C218P-19ST**



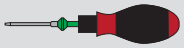


Holders

		Body				Shank				
	Length	L_2	L_4	L_3	L_1	L_7	D_2	P_1	Flat	Part No.
ⓜ	3xD	60.0	94.0	97.1	144.0	50	20	3.18*	YES	**ST03180-20FM**
ⓜ	5xD	99.9	134.0	137.1	184.0	50	20	3.18*	YES	**ST05180-20FM**
ⓜ	7xD	139.9	174.0	177.1	224.0	50	20	3.18*	YES	**ST07180-20FM**
ⓘ	3xD	2-3/8	3-45/64	3-53/64	5-63/64	2-9/32	1	1/8	YES	**ST03180-075F**
ⓘ	5xD	3-15/16	5-9/32	5-25/64	7-9/16	2-9/32	1	1/8	YES	**ST05180-075F**
ⓘ	7xD	5-33/64	6-27/32	6-31/32	9-1/8	2-9/32	1	1/8	YES	**ST07180-075F**

*Thread to BSP and ISO 7-1

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	305 N-cm (27.0 in-lbs)

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

40-41
Key on A91:1

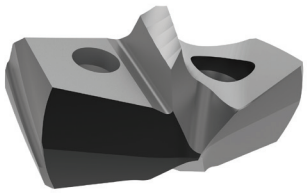
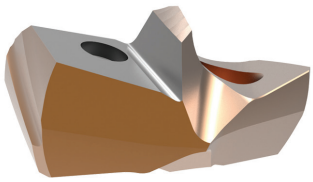
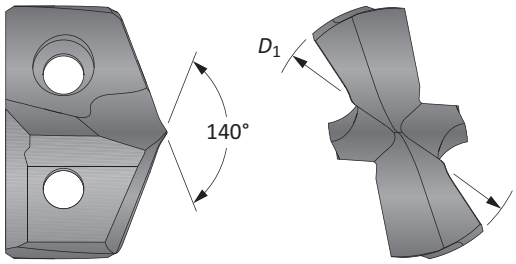
ⓜ = Metric (mm)
ⓘ = Imperial (in)

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

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

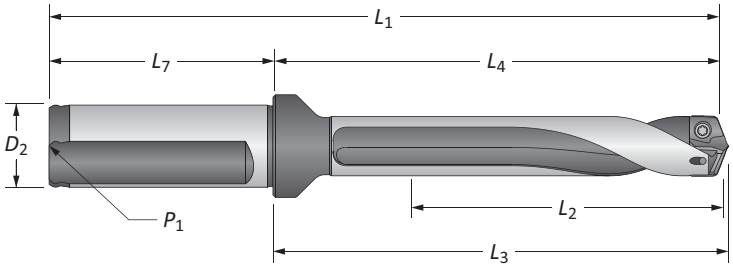
GEN3SYS® XT Pro ST / GEN3SYS® XT ST Structural Steel Drilling System

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

Inserts

Insert				
D_1 mm	D_1 inch	Fractional Equivalent	XT Pro ST Part No.	XT ST Part No.
20.00	0.7874	–	**XTST20-20.00**	**7C220P-20ST**
20.64	0.8125	13/16	**XTST20-20.64**	**7C220P-0026ST**
21.00	0.8268	–	**XTST20-21.00**	**7C220P-21ST**
21.82	0.8594	55/64	**XTST20-21.82**	**7C220P-0026ST**

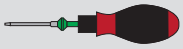



Holders

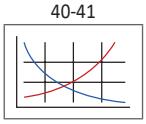
		Body				Shank				
	Length	L_2	L_4	L_3	L_1	L_7	D_2	P_1	Flat	Part No.
ⓜ	3xD	66.0	100.1	103.3	156.1	56	25	3.18*	YES	**ST03200-25FM**
ⓜ	5xD	110.0	144.1	147.2	200.1	56	25	3.18*	YES	**ST05200-25FM**
ⓜ	7xD	153.9	188.1	191.2	244.1	56	25	3.18*	YES	**ST07200-25FM**
ⓘ	3xD	2-17/32	3-15/16	4-1/16	6-7/32	2-9/32	1	1/8	YES	**ST03200-100F**
ⓘ	5xD	4-11/32	5-43/64	5-51/64	7-61/64	2-9/32	1	1/8	YES	**ST05200-100F**
ⓘ	7xD	6-1/16	7-13/32	7-17/32	9-11/16	2-9/32	1	1/8	YES	**ST07200-100F**

*Thread to BSP and ISO 7-1

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	305 N-cm (27.0 in-lbs)

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

40-41
Key on A91:1


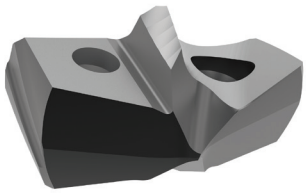
ⓜ = Metric (mm)
ⓘ = Imperial (in)

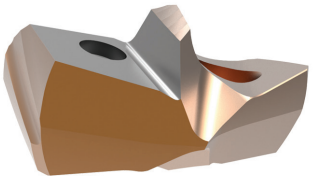
Inserts sold in multiples of 1 | Screws sold in multiples of 10

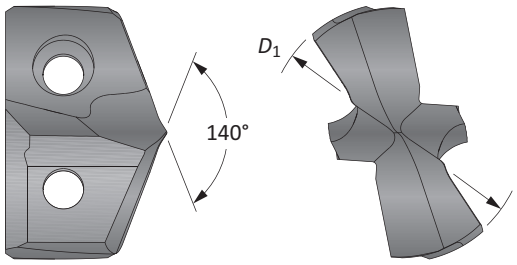
NOTICE: GEN3SYS XT Structural Steel holders are specifically designed to be used only with XT Pro ST or XT ST geometry inserts. Using other GEN3SYS XT Pro or XT insert geometries in these holders could lead to chip packing and tool failure. Contact Application Engineering for questions regarding proper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

GEN3SYS® XT Pro ST / GEN3SYS® XT ST Structural Steel Drilling System

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



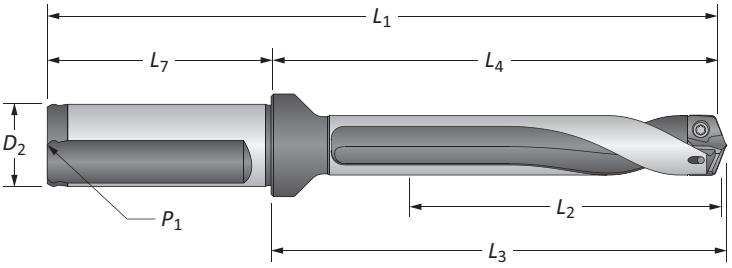




Inserts

Insert				
D_1 mm	D_1 inch	Fractional Equivalent	XT Pro ST Part No.	XT ST Part No.
22.00	0.8661	–	**XTST22-22.00**	**7C222P-22ST**
22.23	0.8750	7/8	**XTST22-22.23**	**7C222P-0028ST**
23.00	0.9055	–	**XTST22-23.00**	**7C222P-23ST**
23.81	0.9375	15/16	**XTST22-23.81**	**7C222P-0030ST**



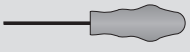


Holders

		Body				Shank				
	Length	L_2	L_4	L_3	L_1	L_7	D_2	P_1	Flat	Part No.
ⓜ	3xD	72.0	105.3	108.7	161.3	56	25	3.18*	YES	**ST03220-25FM**
	3xD	72.0	105.3	108.7	161.3	56	25	3.18*	YES	**ST03225-25FM****
	5xD	119.9	153.3	156.7	209.3	56	25	3.18*	YES	**ST05220-25FM**
	5xD	119.9	153.3	156.7	209.3	56	25	3.18*	YES	**ST05225-25FM****
	7xD	167.9	201.3	204.7	257.3	56	25	3.18*	YES	**ST07220-25FM**
	7xD	167.9	201.3	204.7	257.3	56	25	3.18*	YES	**ST07225-25FM****
ⓘ	3xD	2-53/64	4-9/64	4-9/32	6-27/64	2-9/32	1	1/8	YES	**ST03220-100F**
	3xD	2-53/64	4-9/64	4-9/32	6-27/64	2-9/32	1	1/8	YES	**ST03225-100F****
	5xD	4-23/32	6-1/32	6-11/64	8-5/16	2-9/32	1	1/8	YES	**ST05220-100F**
	5xD	4-23/32	6-1/32	6-11/64	8-5/16	2-9/32	1	1/8	YES	**ST05225-100F****
	7xD	6-39/64	7-59/64	8-1/16	10-13/64	2-9/32	1	1/8	YES	**ST07220-100F**
	7xD	6-39/64	7-59/64	8-1/16	10-13/64	2-9/32	1	1/8	YES	**ST07225-100F****

*Thread to BSP and ISO 7-1 | **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	305 N-cm (27.0 in-lbs)

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

40-41
Key on A91: 1

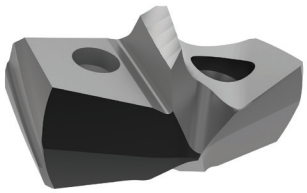
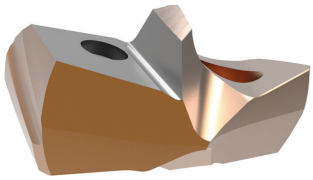
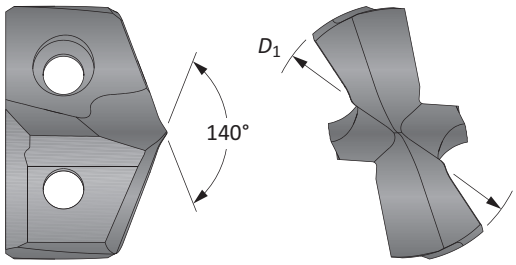
ⓜ = Metric (mm)
ⓘ = Imperial (in)

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

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

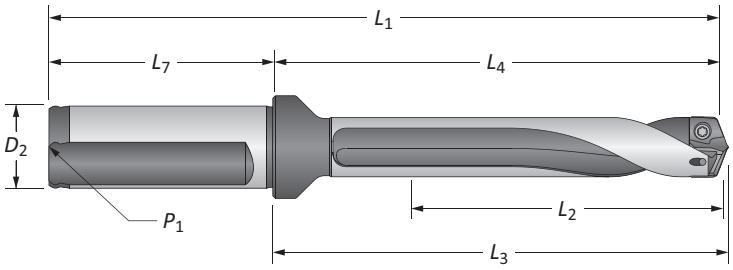
GEN3SYS® XT Pro ST / GEN3SYS® XT ST Structural Steel Drilling System

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

Inserts

Insert				
D_1 mm	D_1 inch	Fractional Equivalent	XT Pro ST Part No.	XT ST Part No.
24.00	0.9449	–	**XTST24-24.00**	**7C224P-24ST**
24.60	0.9685	–	**XTST24-24.60**	-
25.00	0.9843	–	-	**7C224P-25ST**
25.40	1.0000	1	**XTST24-25.40**	**7C224P-0100ST**
25.78	1.0150	–	**XTST24-25.78**	-

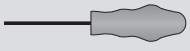



Holders

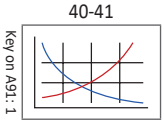
	Length	Body L_2	Body L_4	Body L_3	Body L_1	Shank L_7	Shank D_2	Shank P_1	Shank Flat	Part No.
ⓜ	3xD	78.0	113.8	117.3	169.8	56	25	3.18*	YES	**ST03240-25FM**
ⓜ	5xD	129.9	165.8	169.2	221.8	56	25	3.18*	YES	**ST05240-25FM**
ⓜ	7xD	181.9	217.8	221.2	273.8	56	25	3.18*	YES	**ST07240-25FM**
ⓘ	3xD	3-5/64	4-31/64	4-5/8	6-49/64	2-9/32	1	1/8	YES	**ST03240-100F**
ⓘ	5xD	5-1/8	6-17/32	6-21/32	8-13/16	2-9/32	1	1/8	YES	**ST05240-100F**
ⓘ	7xD	7-11/64	8-37/64	8-45/64	10-55/64	2-9/32	1	1/8	YES	**ST07240-100F**

*Thread to BSP and ISO 7-1

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	305 N-cm (27.0 in-lbs)

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



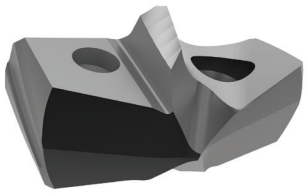
ⓜ = Metric (mm)
ⓘ = Imperial (in)

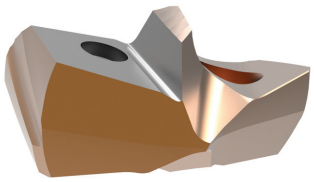
Inserts sold in multiples of 1 | Screws sold in multiples of 10

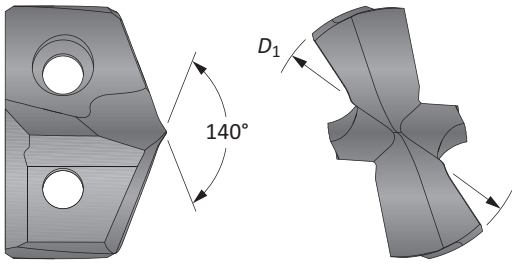
NOTICE: GEN3SYS XT Structural Steel holders are specifically designed to be used only with XT Pro ST or XT ST geometry inserts. Using other GEN3SYS XT Pro or XT insert geometries in these holders could lead to chip packing and tool failure. Contact Application Engineering for questions regarding proper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

GEN3SYS® XT Pro ST / GEN3SYS® XT ST Structural Steel Drilling System

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



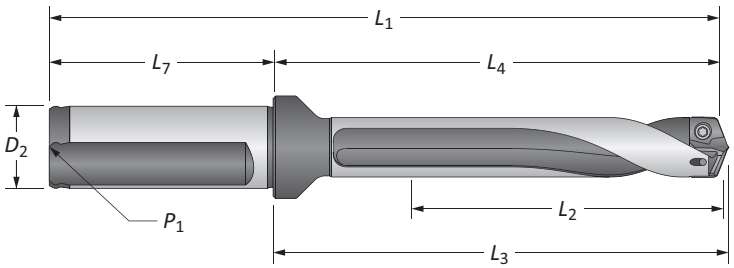




Inserts

Insert				
D_1 mm	D_1 inch	Fractional Equivalent	XT Pro ST Part No.	XT ST Part No.
26.00	1.0236	–	**XTST26-26.00**	**7C226P-26ST**
26.99	1.0625	1-1/16	**XTST26-26.99**	**7C226P-0102ST**
27.00	1.0630	–	**XTST26-27.00**	**7C226P-27ST**
28.00	1.1024	–	**XTST26-28.00**	**7C226P-28ST**
28.58	1.1250	1-1/8	**XTST26-28.58**	**7C226P-0104ST**





Holders

		Body				Shank				
	Length	L_2	L_4	L_3	L_1	L_7	D_2	P_1	Flat	Part No.
ⓜ	3xD	87.0	128.1	131.4	188.1	60	32	6.35*	YES	**ST03260-32FM**
ⓜ	5xD	145.0	186.1	189.4	246.1	60	32	6.35*	YES	**ST05260-32FM**
ⓜ	7xD	202.9	244.0	247.4	304.0	60	32	6.35*	YES	**ST07260-32FM**
ⓘ	3xD	3-27/64	5-1/16	5-3/16	7-11/32	2-9/32	1-1/4	1/4	YES	**ST03260-125F**
ⓘ	5xD	5-23/32	7-11/32	7-31/64	9-5/8	2-9/32	1-1/4	1/4	YES	**ST05260-125F**
ⓘ	7xD	7-63/64	9-5/8	9-49/64	11-29/32	2-9/32	1-1/4	1/4	YES	**ST07260-125F**

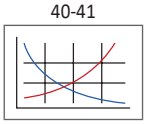
*Thread to BSP and ISO 7-1

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	690 N-cm (61.0 in-lbs)

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

40-41
Key on A91: 1



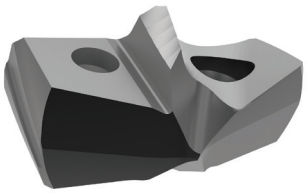
ⓜ = Metric (mm)
ⓘ = Imperial (in)

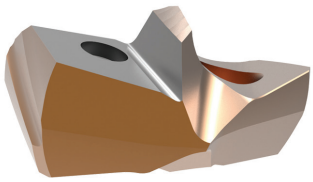
Inserts sold in multiples of 1 | Screws sold in multiples of 10

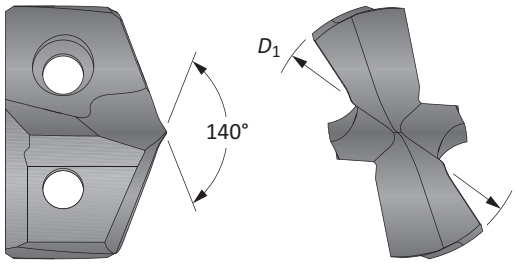
NOTICE: GEN3SYS XT Structural Steel holders are specifically designed to be used only with XT Pro ST or XT ST geometry inserts. Using other GEN3SYS XT Pro or XT insert geometries in these holders could lead to chip packing and tool failure. Contact Application Engineering for questions regarding proper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

GEN3SYS® XT Pro ST / GEN3SYS® XT ST Structural Steel Drilling System

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



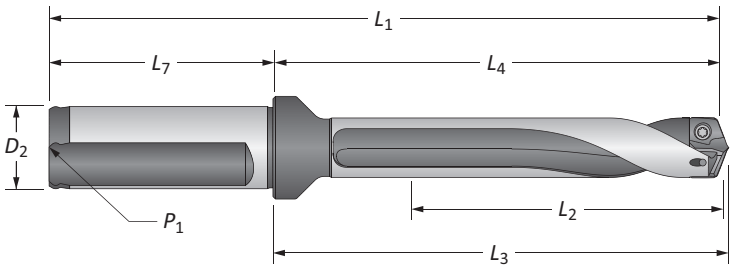




Inserts

Insert				
D_1 mm	D_1 inch	Fractional Equivalent	XT Pro ST Part No.	XT ST Part No.
29.00	1.1417	–	**XTST29-29.00**	**7C229P-29ST**
30.00	1.1811	–	**XTST29-30.00**	**7C229P-30ST**
30.16	1.1875	1-3/16	**XTST29-30.16**	**7C229P-0106ST**
30.50	1.2007	–	-	**7C229P-30.5ST**
31.00	1.2205	–	**XTST29-31.00**	**7C229P-31ST**
31.75	1.2500	1-1/4	**XTST29-31.75**	**7C229P-0108ST**



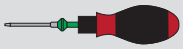


Holders

		Body				Shank				
	Length	L_2	L_4	L_3	L_1	L_7	D_2	P_1	Flat	Part No.
ⓜ	3xD	96.0	136.2	139.7	196.2	60	32	6.35*	YES	**ST03290-32FM**
ⓜ	5xD	159.9	200.1	203.7	260.1	60	32	6.35*	YES	**ST05290-32FM**
ⓜ	7xD	223.9	264.1	267.7	324.1	60	32	6.35*	YES	**ST07290-32FM**
ⓘ	3xD	3-25/32	5-3/8	5-33/64	7-21/32	2-9/32	1-1/4	1/4	YES	**ST03290-125F**
ⓘ	5xD	6-19/64	7-29/32	8-3/64	10-3/16	2-9/32	1-1/4	1/4	YES	**ST05290-125F**
ⓘ	7xD	8-13/16	10-27/64	10-9/16	12-45/64	2-9/32	1-1/4	1/4	YES	**ST07290-125F**

*Thread to BSP and ISO 7-1

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	690 N-cm (61.0 in-lbs)

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

40-41
Key on A91: 1

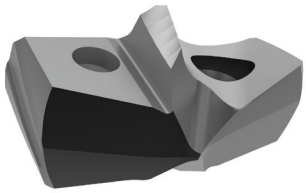
ⓜ = Metric (mm)
ⓘ = Imperial (in)

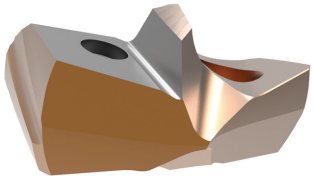
Inserts sold in multiples of 1 | Screws sold in multiples of 10

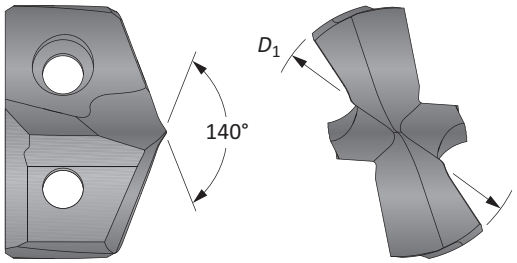
NOTICE: GEN3SYS XT Structural Steel holders are specifically designed to be used only with XT Pro ST or XT ST geometry inserts. Using other GEN3SYS XT Pro or XT insert geometries in these holders could lead to chip packing and tool failure. Contact Application Engineering for questions regarding proper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

GEN3SYS® XT Pro ST / GEN3SYS® XT ST Structural Steel Drilling System

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



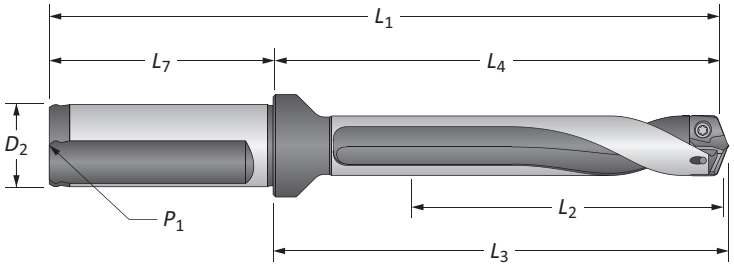




Inserts

Insert				
D_1 mm	D_1 inch	Fractional Equivalent	XT Pro ST Part No.	XT ST Part No.
32.00	1.2598	–	**XTST32-32.00**	**7C232P-32ST**
33.00	1.2992	–	**XTST32-33.00**	**7C232P-33ST**
33.34	1.3125	1-5/16	**XTST32-33.34**	**7C232P-0110ST**
34.00	1.3386	–	**XTST32-34.00**	**7C232P-34ST**
34.93	1.3750	1-3/8	**XTST32-34.93**	**7C232P-0112ST**



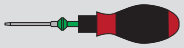


Holders

	Length	Body L_2	Body L_4	Body L_3	Body L_1	Shank L_7	Shank D_2	Shank P_1	Flat	Part No.
ⓜ	3xD	105.0	157.7	162.0	217.7	60	32	6.35*	YES	**ST03320-32FM**
	3xD	105.0	157.7	162.0	227.7	70	40	6.35*	YES	**ST03320-40FM**
	5xD	175.0	227.7	232.0	287.7	60	32	6.35*	YES	**ST05320-32FM**
	5xD	175.0	227.7	232.0	297.7	70	40	6.35*	YES	**ST05320-40FM**
	7xD	244.9	297.7	302.2	357.7	60	32	6.35*	YES	**ST07320-32FM**
	7xD	244.9	297.7	302.2	367.7	70	40	6.35*	YES	**ST07320-40FM**
ⓘ	3xD	4-9/64	6-7/32	6-3/8	8-29/32	2-11/16	1-1/2	1/4	YES	**ST03320-150F**
	5xD	6-59/64	8-31/32	9-1/8	11-21/32	2-11/16	1-1/2	1/4	YES	**ST05320-150F**
	7xD	9-41/64	11-23/32	11-57/64	14-13/32	2-11/16	1-1/2	1/4	YES	**ST07320-150F**

*Thread to BSP and ISO 7-1

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	690 N-cm (61.0 in-lbs)

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

40-41
Key on A91: 1

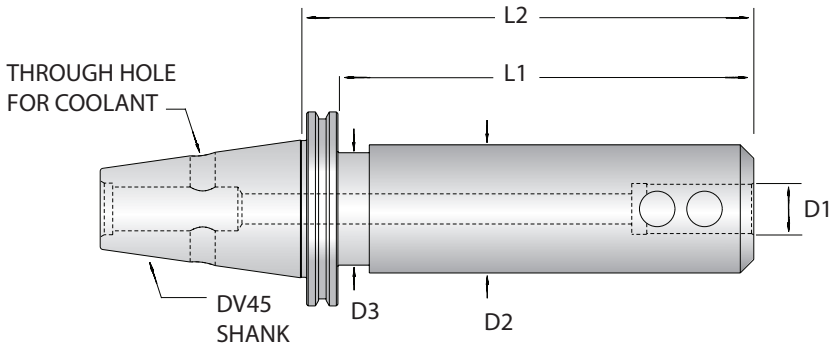
ⓜ = Metric (mm)
ⓘ = Imperial (in)

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

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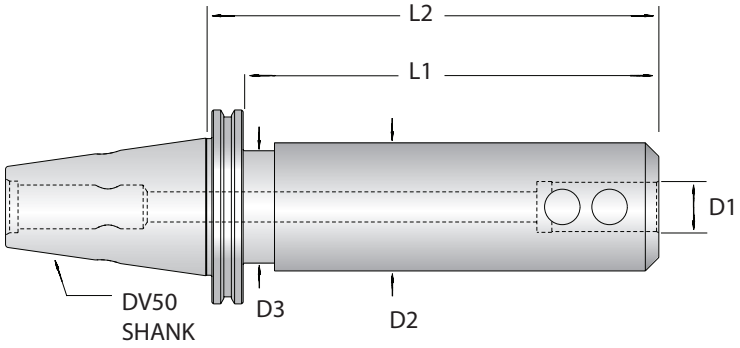
Structural Steel Adaptors

DV45 & DV50 Adaptors



DV45 Adaptor

Item Number	Outer Taper	D1 Inner Ø mm	D2 Ø	D3 Ø	L1	L2	Qty of Clamping Screws
AMDV45-EM20-120	DV45	20	52	57	101	120	**1**
AMDV45-EM25-120	DV45	25	65	57	101	120	**2**
AMDV45-EM32-120	DV45	32	78	57	101	120	**2**
AMDV45-EM20-230	DV45	20	52	57	211	230	**1**
AMDV45-EM25-230	DV45	25	65	57	211	230	**2**
AMDV45-EM32-230	DV45	32	78	57	211	230	**2**



DV50 Adaptor

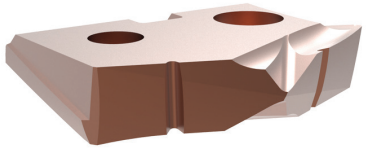
Item Number	Outer Taper	D1 Inner Ø mm	D2 Ø	D3 Ø	L1	L2	Qty of Clamping Screws
AMDV45-EM50-120	DV50	50	100	69.858	100	120	**2**

T-A® Structural Steel Drilling System

STRUCTURAL STEEL ENHANCEMENTS
T-A® Original & GEN2 T-A®

GEN2 T-A® Insert

Available in AM200® Coating

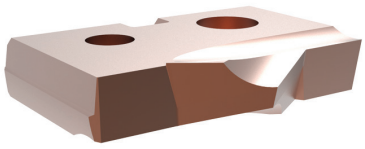


High Efficiency (-HE)

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

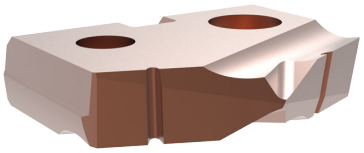
T-A® Original Inserts

Available in AM200® and TiAlN Coatings



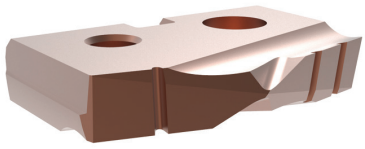
Thin Wall (-TW)

- Designed for drilling 6mm thick or less H-Beam or structural materials
- Increases hole diameter tolerance
- Improves hole roundness
- Decreases material deflection



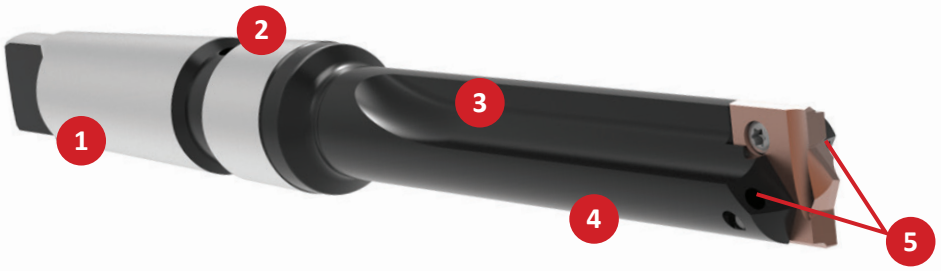
Notch Point® (-NP)

- Provides excellent self-centring characteristics
- Reduces bell mouth and tool lead-off
- Reduces axial thrust requirements



Structural Steel (-SS)

- Designed for drilling 6mm thick or thicker H-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

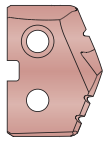


Helical Flute

T-A® Drill Nomenclature

T-A® Drill Inserts

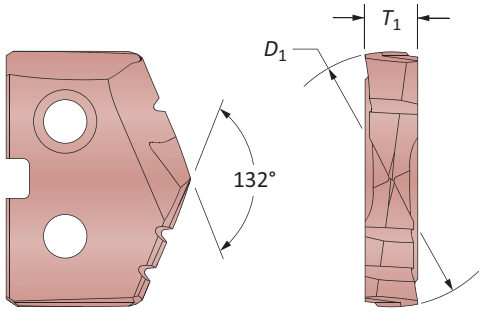
4	5	3	H	–	0115	–	HE
1	2	3	4		5		6



1. Insert	2. Material	3. Series	4. Coating	5. Diameter	6. Geometry
1 = T-A® Original **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	**13** = Metric **.515** = Decimal **0017** = Inch	**TW** = Thin Wall **NP** = Notch Point® **SS** = Structural Steel **HE** = High Efficiency

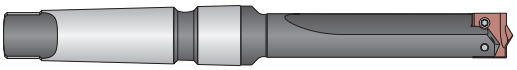
Reference Key

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



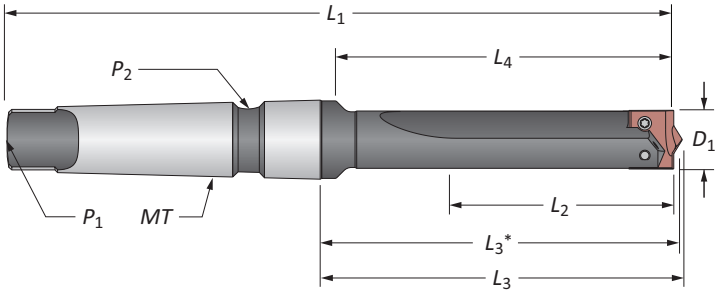
1. Holder	2. Length	3. Series	4. Flute
2 = T-A® holder	**20** = Short **40** = Standard **50** = Extended **60** = Long	**00** = 0 series **05** = 0.5 series **10** = 1 series **15** = 1.5 series **20** = 2 series **25** = 2.5 series **30** = 3 series	**S** = Straight **H** = Helical

5. Shank Designator	6. Shank Code	7. Minimum Insert Diameter
003 = 3MT **004** = 4MT	**IS** = Imperial Morse taper structural steel	In increments of 0.4mm (1/64”)

Reference Key

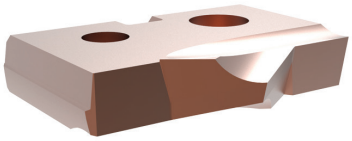
Symbol	Attribute	Symbol	Attribute
D_1	Drill insert range	L_4	Flute length
L_1	Overall length	P_1	Rear pipe tap
L_2	Drill depth	P_2	Side pipe tap
L_3	Holder reference length	*MT*	Morse taper size
L_3*	Holder reference length		

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

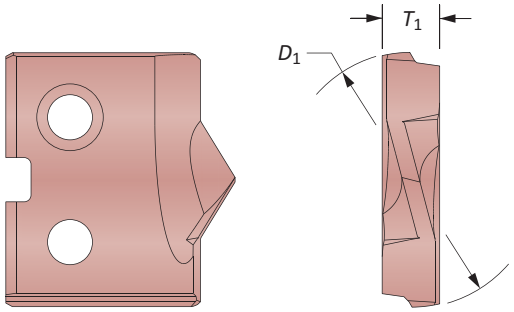


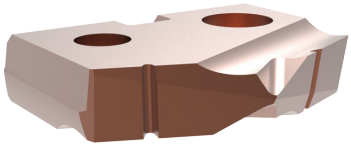
T-A® Original Structural Steel Drill Inserts

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

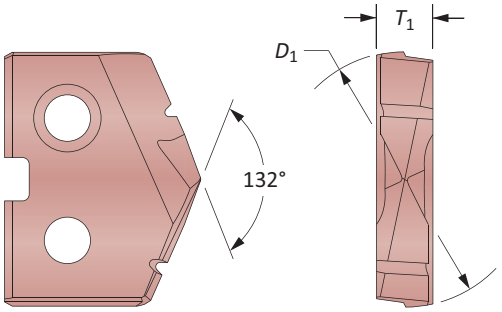


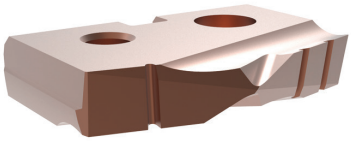
Thin Wall
For material up to 6mm thick



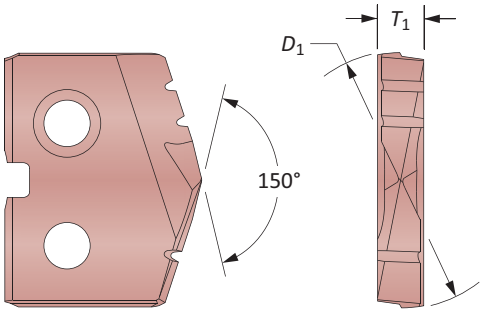


Notch Point®
For material over 6mm thick





150° Structural Steel
For material over 6mm thick and for reduced exit burr



HSS Inserts – Super Cobalt

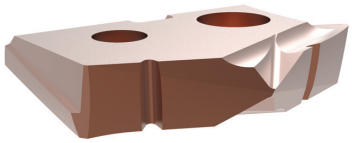
Series	Insert				Thin Wall		Notch Point		150° Structural Steel	
	Fractional Equivalent	D_1 mm	D_1 inch	T_1	AM200 Part No.	TiAlN Part No.	AM200 Part No.	TiAlN Part No.	AM200 Part No.	TiAlN Part No.
0	–	14.00	0.5512	3.18	**150H-14-TW**	**150A-14-TW**	**150H-14-NP**	**150A-14-NP**	**150H-14-SS**	**150A-14-SS**
	9/16	14.29	0.5625	3.18	**150H-0018-TW**	**150A-0018-TW**	**150H-0018-NP**	**150A-0018-NP**	**150H-0018-SS**	**150A-0018-SS**
0.5	5/8	15.88	0.6250	3.18	**150H-0020-TW**	**150A-0020-TW**	**150H-0020-NP**	**150A-0020-NP**	**150H-0020-SS**	**150A-0020-SS**
	–	16.00	0.6299	3.18	**150H-16-TW**	**150A-16-TW**	**150H-16-NP**	**150A-16-NP**	**150H-16-SS**	**150A-16-SS**
	11/16	17.46	0.6875	3.18	**150H-0022-TW**	**150A-0022-TW**	**150H-0022-NP**	**150A-0022-NP**	**150H-0022-SS**	**150A-0022-SS**

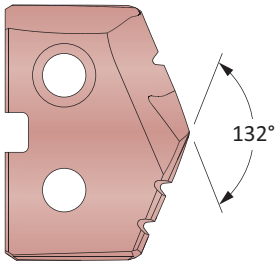
40-41
Key on A91: 1
A91: 5
A91: 22 - 23

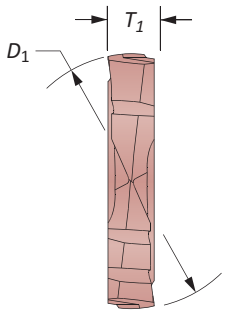
Inserts sold in multiples of 2

GEN2 T-A® Structural Steel Drill Inserts

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







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

Series	Insert: Fractional Equivalent	Insert: D_1 mm	Insert: D_1 inch	Insert: T_1	Part No.: Super Cobalt	Part No.: C1 (K35)
0	–	14.00	0.5512	3.18	**450H-14-HE**	**4C10H-14-HE**
	9/16	14.29	0.5625	3.18	**450H-0018-HE**	**4C10H-0018-HE**
0.5	5/8	15.88	0.6250	3.18	**450H-0020-HE**	**4C10H-0020-HE**
	–	16.00	0.6299	3.18	**450H-16-HE**	**4C10H-16-HE**
	11/16	17.46	0.6875	3.18	**450H-0022-HE**	**4C10H-0022-HE**

40-41 A91: 5 A91: 22 - 23

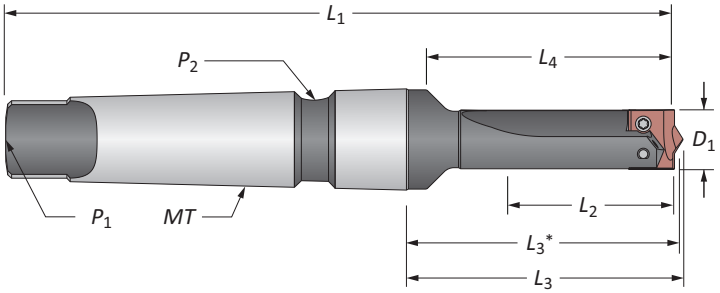
Key on A91: 1

Inserts sold in multiples of 2

T-A® Structural Steel Drill Insert Holders

0 Series | Taper Shank





Straight Flute #3 Morse Taper

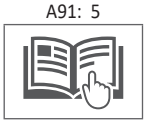
	Series	Length	D_1	Body L_2	Body L_4	Body L_3	Body L_3*	Body L_1	Shank MT	Shank P_1	Shank P_2	Part No.
ⓜ	0	Short	14	35	56	64.7	63.1	154	#3	TTC	TSC	**22000S-003IS036**
		Short	16	35	56	64.7	63.1	154	#3	TTC	TSC	**22000S-003IS040**
		Short	17.46	35	56	64.7	63.1	154	#3	TTC	TSC	**22000S-003IS044**
ⓘ	0	Short	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**

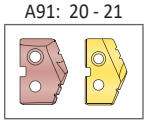
*If using Structural Steel holder with Notch Point®, GEN2 T-A®, or 150° Structural Steel T-A® drill insert geometry

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	175 N-cm (15.5 in-lbs)
0.5	72567-IP8-1	72567N-IP8-1	8IP-8	8IP-8TL	8IP-8B	175 N-cm (15.5 in-lbs)

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

A91: 5 
Key on A91: 1

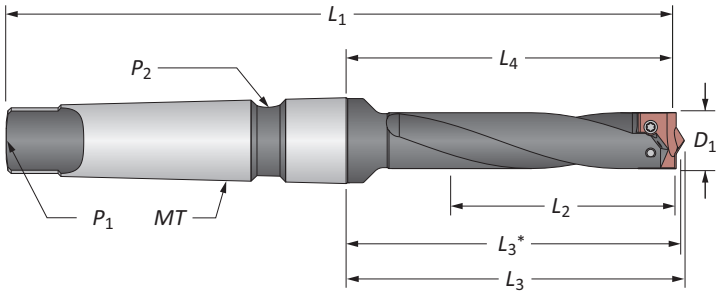
A91: 20 - 21 

ⓜ = Metric (mm)
ⓘ = Imperial (in)
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 L_2	Body L_4	Body L_3	Body L_3*	Body L_1	Shank MT	Shank P_1	Shank P_2	Part No.
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
		Standard	17.46	64	84	93.3	91.7	183	#3	TTC	TSC	24005H-003IS044
		Extended	17.46	165	240	248.8	243.7	338	#3	TTC	TSC	⚠ 25005H-003IS044
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
		Standard	11/16	2-1/2	3-5/16	3-43/64	3-39/64	7-3/16	#3	TTC	TSC	24005H-003IS044
		Extended	11/16	6-1/2	9-7/16	9-51/64	9-19/32	13-5/64	#3	TTC	TSC	⚠ 25005H-003IS044

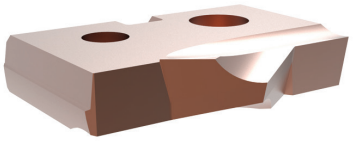
*If using Structural Steel holder with Notch Point®, GEN2 T-A®, or 150° Structural Steel T-A® drill insert geometry

m = Metric (mm)
i = Imperial (in)
Screws sold in multiples of 10

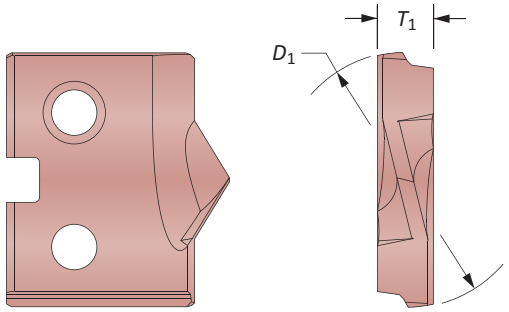
⚠ WARNING Refer to Speed and Feed charts for recommended adjustments to speeds and feeds. Refer to page A91: 35 for deep hole drilling guidelines in this section of the catalogue. Visit **www.alliedmachine.com/deepholeguidelines.aspx** for the most up-to-date information and procedures. Factory technical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

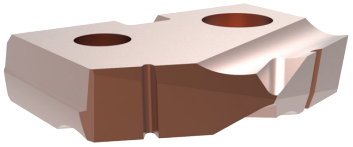
T-A® Original Structural Steel Drill Inserts

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

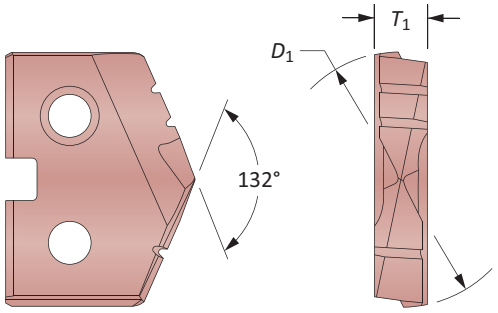


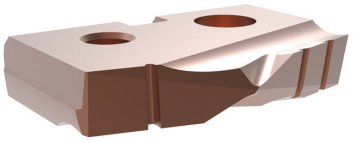
Thin Wall
For material up to 6mm thick



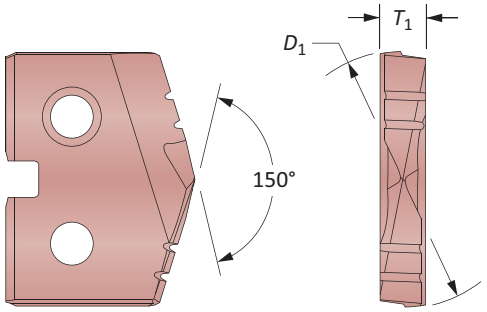


Notch Point®
For material over 6mm thick





150° Structural Steel
For material over 6mm thick and for reduced exit burr



HSS Inserts – Super Cobalt

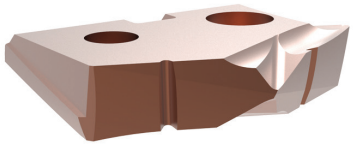
Series	Insert: Fractional Equivalent	Insert: D_1 mm	Insert: D_1 inch	Insert: T_1	Thin Wall: AM200 Part No.	Thin Wall: TiAlN Part No.	Notch Point: AM200 Part No.	Notch Point: TiAlN Part No.	150° Structural Steel: AM200 Part No.	150° Structural Steel: TiAlN Part No.
1	–	18.00	0.7087	3.97	**151H-18-TW**	**151A-18-TW**	**151H-18-NP**	**151A-18-NP**	**151H-18-SS**	**151A-18-SS**
	13/16	20.64	0.8125	3.97	**151H-0026-TW**	**151A-0026-TW**	**151H-0026-NP**	**151A-0026-NP**	**151H-0026-SS**	**151A-0026-SS**
	–	21.00	0.8268	3.97	**151H-21-TW**	**151A-21-TW**	**151H-21-NP**	**151A-21-NP**	**151H-21-SS**	**151A-21-SS**
	–	22.00	0.8661	3.97	**151H-22-TW**	**151A-22-TW**	**151H-22-NP**	**151A-22-NP**	**151H-22-SS**	**151A-22-SS**
1.5	7/8	22.23	0.8750	3.97	**151H-0028-TW**	**151A-0028-TW**	**151H-0028-NP**	**151A-0028-NP**	**151H-0028-SS**	**151A-0028-SS**
	15/16	23.81	0.9375	3.97	**151H-0030-TW**	**151A-0030-TW**	**151H-0030-NP**	**151A-0030-NP**	**151H-0030-SS**	**151A-0030-SS**
	–	24.00	0.9449	3.97	**151H-24-TW**	**151A-24-TW**	**151H-24-NP**	**151A-24-NP**	**151H-24-SS**	**151A-24-SS**

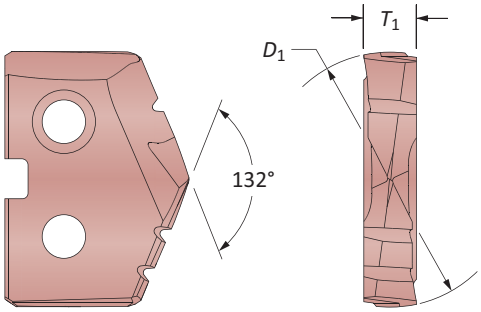
40-41
Key on A91: 1
A91: 5
A91: 26 - 27

Inserts sold in multiples of 2

GEN2 T-A® Structural Steel Drill Inserts

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





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

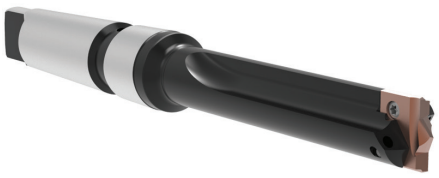
Series	Insert: Fractional Equivalent	Insert: D_1 mm	Insert: D_1 inch	Insert: T_1	Part No.: Super Cobalt	Part No.: C1 (K35)
1	–	18.00	0.7087	3.97	**451H-18-HE**	**4C11H-18-HE**
	13/16	20.64	0.8125	3.97	**451H-0026-HE**	**4C11H-0026-HE**
	–	21.00	0.8268	3.97	**451H-21-HE**	**4C11H-21-HE**
	–	22.00	0.8661	3.97	**451H-22-HE**	**4C11H-22-HE**
1.5	7/8	22.23	0.8750	3.97	**451H-0028-HE**	**4C11H-0028-HE**
	15/16	23.81	0.9375	3.97	**451H-0030-HE**	**4C11H-0030-HE**
	–	24.00	0.9449	3.97	**451H-24-HE**	**4C11H-24-HE**

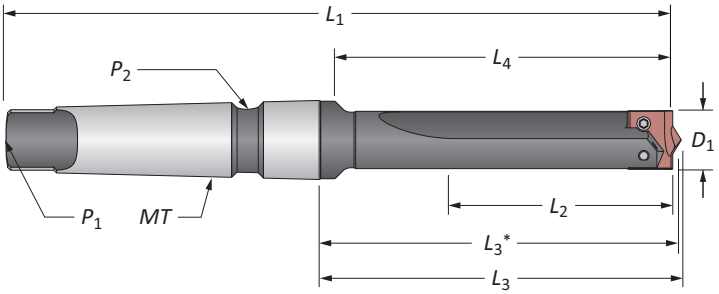
40-41
Key on A91: 1
A91: 5
A91: 26 - 27

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_2	Body L_4	Body L_3	Body L_3*	Body L_1	Shank MT	Shank P_1	Shank P_2	Part No.
ⓜ	1	Short	18	70	98	108.4	106.8	197	#3	TTC	TSC	**22010S-003IS045**
		Short	20.64	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**
ⓘ	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**

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

Straight Flute #4 Morse Taper

	Series	Length	D_1	Body L_2	Body L_4	Body L_3	Body L_3*	Body L_1	Shank MT	Shank P_1	Shank P_2	Part No.
ⓜ	1	Short	18	70	98	109.9	108.3	222	#4	TTC	TSC	**22010S-004IS045**
		Short	20.64	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**
ⓘ	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**

*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*
1	7375-IP9-1	7375N-IP9-1	8IP-9	8IP-9TL	8IP-9B	305 N-cm (27.0 in-lbs)
1.5	739-IP9-1	739N-IP9-1	8IP-9	8IP-9TL	8IP-9B	305 N-cm (27.0 in-lbs)

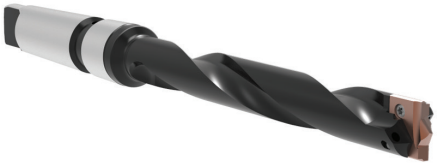
*Tightening torques are calculated with a friction coefficient of μ = 0.14 and develop 90% of ultimate yield strength

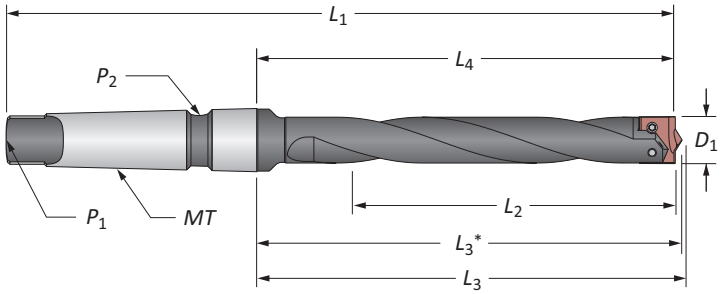
A91: 5
Key on A91: 1
A91: 24 - 25

ⓜ = Metric (mm)
ⓘ = Imperial (in)
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 L_2	Body L_4	Body L_3	Body L_3*	Body L_1	Shank MT	Shank P_1	Shank P_2	Part No.
m	1	Standard	18	121	149	159.2	157.6	248	#3	TTC	TSC	24010H-003IS045
		Standard	20.64	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
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
		Extended	13/16	6-1/2	9-11/32	9-47/64	9-1/2	13-7/32	#3	TTC	TSC	⚠ 25010H-003IS052
	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

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

Helical Flute #4 Morse Taper

	Series	Length	D_1	Body L_2	Body L_4	Body L_3	Body L_3*	Body L_1	Shank MT	Shank P_1	Shank P_2	Part No.
m	1	Standard	18	121	149	159.2	157.6	248	#4	TTC	TSC	24010H-004IS045
		Standard	20.64	121	149	159.2	157.6	248	#4	TTC	TSC	24010H-004IS056
		Extended	20.64	165	237	247.3	241.3	336	#4	TTC	TSC	⚠ 25010H-004IS056
		Long	20.64	165	237	247.3	241.3	336	#4	TTC	TSC	⚠ 26010H-004IS056
	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	149	159.2	157.6	248	#4	TTC	TSC	⚠ 25015H-004IS060
		Long	24	165	237	247.3	234.5	336	#4	TTC	TSC	⚠ 26015H-004IS060
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
		Long	15/16	6-1/2	15-13/16	16-17/64	16-13/64	20-11/16	#4	TTC	TSC	⚠ 26015H-004IS060

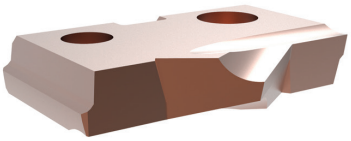
*If using Structural Steel holder with Notch Point®, GEN2 T-A®, or 150° Structural Steel T-A® drill insert geometry

m = Metric (mm)
i = Imperial (in)
Screws sold in multiples of 10

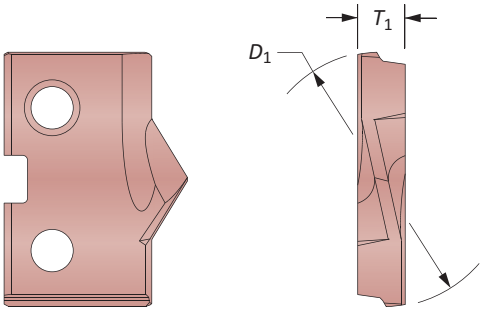
⚠ WARNING Refer to Speed and Feed charts for recommended adjustments to speeds and feeds. Refer to page A91: 35 for deep hole drilling guidelines in this section of the catalogue. Visit **www.alliedmachine.com/deepholeguidelines.aspx** for the most up-to-date information and procedures. Factory technical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

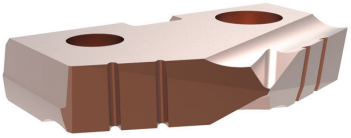
T-A® Original Structural Steel Drill Inserts

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

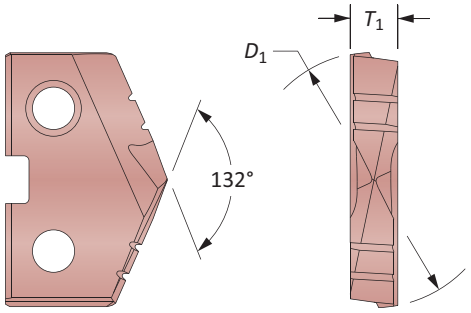


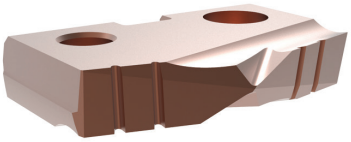
Thin Wall
For material up to 6mm thick



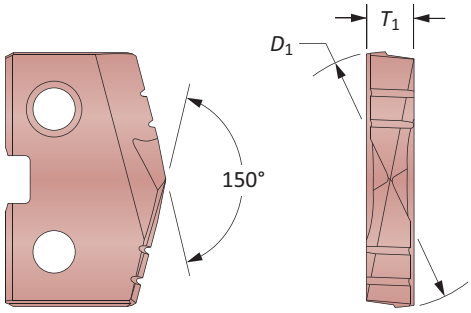


Notch Point®
For material over 6mm thick





150° Structural Steel
For material over 6mm thick and for reduced exit burr



HSS Inserts – Super Cobalt

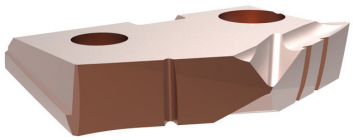
Series	Insert				Thin Wall		Notch Point		150° Structural Steel	
	Fractional Equivalent	D_1 mm	D_1 inch	T_1	AM200 Part No.	TiAlN Part No.	AM200 Part No.	TiAlN Part No.	AM200 Part No.	TiAlN Part No.
2	1	25.40	1.0000	4.76	**152H-0100-TW**	**152A-0100-TW**	**152H-0100-NP**	**152A-0100-NP**	**152H-0100-SS**	**152A-0100-SS**
	–	26.00	1.0236	4.76	**152H-26-TW**	**152A-26-TW**	**152H-26-NP**	**152A-26-NP**	**152H-26-SS**	**152A-26-SS**
	1-1/16	26.99	1.0625	4.76	**152H-0102-TW**	**152A-0102-TW**	**152H-0102-NP**	**152A-0102-NP**	**152H-0102-SS**	**152A-0102-SS**
	–	27.00	1.0630	4.76	**152H-27-TW**	**152A-27-TW**	**152H-27-NP**	**152A-27-NP**	**152H-27-SS**	**152A-27-SS**
	1-1/8	28.58	1.1250	4.76	**152H-0104-TW**	**152A-0104-TW**	**152H-0104-NP**	**152A-0104-NP**	**152H-0104-SS**	**152A-0104-SS**
2.5	1-3/16	30.16	1.1875	4.76	**152H-0106-TW**	**152A-0106-TW**	**152H-0106-NP**	**152A-0106-NP**	**152H-0106-SS**	**152A-0106-SS**
	–	31.00	1.2205	4.76	**152H-31-TW**	**152A-31-TW**	**152H-31-NP**	**152A-31-NP**	**152H-31-SS**	**152A-31-SS**
	1-1/4	31.75	1.2500	4.76	**152H-0108-TW**	**152A-0108-TW**	**152H-0108-NP**	**152A-0108-NP**	**152H-0108-SS**	**152A-0108-SS**
	–	33.00	1.2992	4.76	**152H-33-TW**	**152A-33-TW**	**152H-33-NP**	**152A-33-NP**	**152H-33-SS**	**152A-33-SS**
	1-5/16	33.34	1.3125	4.76	**152H-0110-TW**	**152A-0110-TW**	**152H-0110-NP**	**152A-0110-NP**	**152H-0110-SS**	**152A-0110-SS**
	1-3/8	34.93	1.3750	4.76	**152H-0112-TW**	**152A-0112-TW**	**152H-0112-NP**	**152A-0112-NP**	**152H-0112-SS**	**152A-0112-SS**

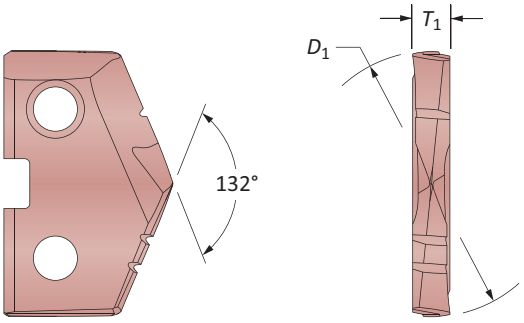
40-41
Key on A91: 1
A91: 5
A91: 30 - 31

Inserts sold in multiples of 2

GEN2 T-A® Structural Steel Drill Inserts

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





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

Series	Insert: Fractional Equivalent	Insert: D_1 mm	Insert: D_1 inch	Insert: T_1	Part No.: Super Cobalt	Part No.: C1 (K35)
2	1	25.40	1.0000	4.76	**452H-0100-HE**	**4C12H-0100-HE**
	–	26.00	1.0236	4.76	**452H-26-HE**	**4C12H-26-HE**
	1-1/16	26.99	1.0625	4.76	**452H-0102-HE**	**4C12H-0102-HE**
	–	27.00	1.0630	4.76	**452H-27-HE**	**4C12H-27-HE**
	1-1/8	28.58	1.1250	3/16	**452H-0104-HE**	**4C12H-0104-HE**
2.5	1-3/16	30.16	1.1875	4.76	**452H-0106-HE**	**4C12H-0106-HE**
	–	31.00	1.2205	4.76	**452H-31-HE**	**4C12H-31-HE**
	1-1/4	31.75	1.2500	4.76	**452H-0108-HE**	**4C12H-0108-HE**
	–	33.00	1.2992	4.76	**452H-33-HE**	**4C12H-33-HE**
	1-5/16	33.34	1.3125	4.76	**452H-0110-HE**	**4C12H-0110-HE**
	1-3/8	34.93	1.3750	4.76	**452H-0112-HE**	**4C12H-0112-HE**

40-41 | A91: 5 | A91: 30 - 31

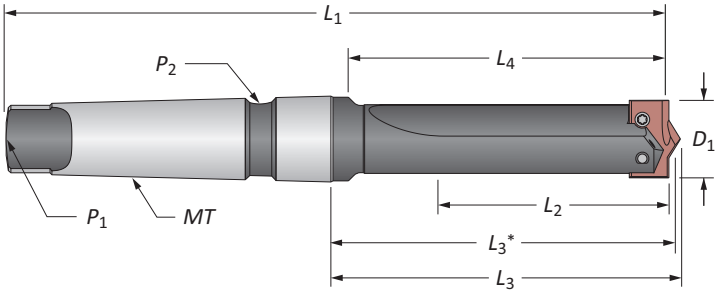
Key on A91: 1

Inserts sold in multiples of 2

T-A® Structural Steel Drill Insert Holders

2 Series | Taper Shank





Straight Flute #4 Morse Taper

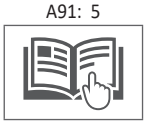
	Series	Length	D_1	Body L_2	Body L_4	Body L_3	Body L_3*	Body L_1	Shank MT	Shank P_1	Shank P_2	Part No.
ⓜ	2	Short	26	86	114	126.6	124.2	238	#4	TTC	TSC	**22020S-004IS100**
	2.5	Short	30.16	86	114	126.6	124.2	238	#4	TTC	TSC	**22025S-004IS112**
ⓘ	2	Short	1 – 1-3/8	3-3/8	4-1/2	4-63/64	4-57/64	9-3/8	#4	TTC	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**

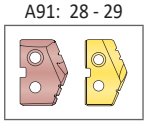
*If using Structural Steel holder with Notch Point®, GEN2 T-A®, or 150° Structural Steel T-A® drill insert geometry

Connection Accessories

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

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

A91: 5 
Key on A91: 1

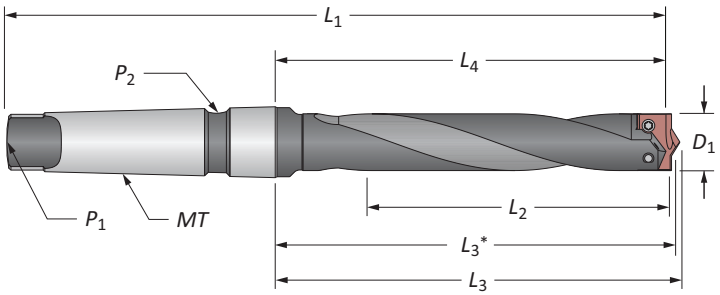
A91: 28 - 29 

ⓜ = Metric (mm)
ⓘ = Imperial (in)
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 L_2	Body L_4	Body L_3	Body L_3*	Body L_1	Shank MT	Shank P_1	Shank P_2	Part No.
ⓜ	2	Extended	26	165	237	247.7	240.1	336	#3	TTC	TSC	⚠ 25020H-003IS100
ⓘ	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

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

Helical Flute #4 Morse Taper

	Series	Length	D_1	Body L_2	Body L_4	Body L_3	Body L_3*	Body L_1	Shank MT	Shank P_1	Shank P_2	Part No.
ⓜ	2	Standard	26	137	165	177.4	175.0	289	#4	TTC	TSC	24020H-004IS100
		Extended	26	165	237	247.7	240.1	336	#4	TTC	TSC	⚠ 25020H-004IS100
		Long	26	165	406	418.3	416.3	530	#4	TTC	TSC	⚠ 26020H-004IS100
	2.5	Standard	30.16	137	165	177.4	175.0	289	#4	TTC	TSC	24025H-004IS112
ⓘ	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	15-5/32	#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

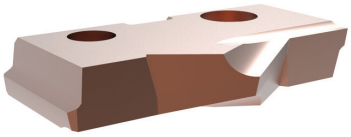
*If using Structural Steel holder with Notch Point®, GEN2 T-A®, or 150° Structural Steel T-A® drill insert geometry

ⓜ = Metric (mm)
ⓘ = Imperial (in)
Screws sold in multiples of 10

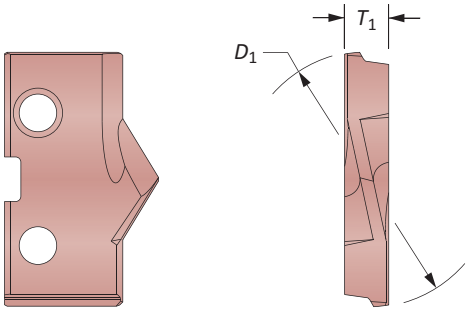
⚠ WARNING Refer to Speed and Feed charts for recommended adjustments to speeds and feeds. Refer to page A91: 35 for deep hole drilling guidelines in this section of the catalogue. Visit **www.alliedmachine.com/deepholeguidelines.aspx** for the most up-to-date information and procedures. Factory technical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

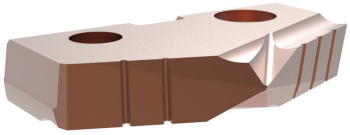
T-A® Original Structural Steel Drill Inserts

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

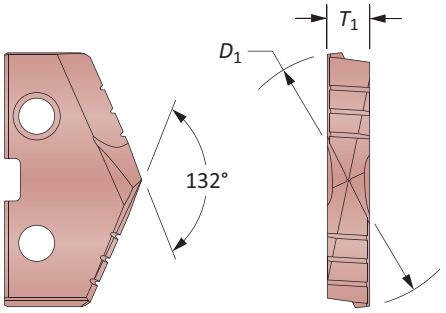


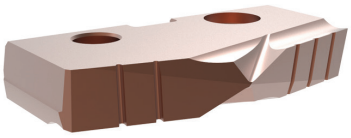
Thin Wall
For material up to 6mm thick



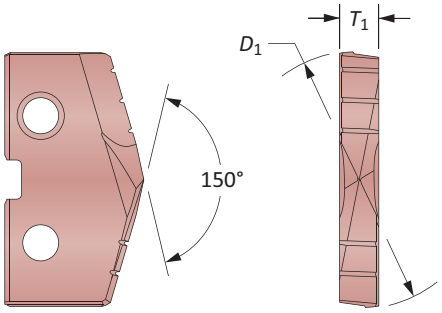


Notch Point®
For material over 6mm thick





150° Structural Steel
For material over 6mm thick and for reduced exit burr



HSS Inserts – Super Cobalt

Insert				Thin Wall		Notch Point		150° Structural Steel	
Fractional Equivalent	D_1 mm	D_1 inch	T_1	AM200 Part No.	TiAlN Part No.	AM200 Part No.	TiAlN Part No.	AM200 Part No.	TiAlN Part No.
1-7/16	36.51	1.4375	6.35	**153H-0114-TW**	**153A-0114-TW**	**153H-0114-NP**	**153A-0114-NP**	**153H-0114-SS**	**153A-0114-SS**
1-1/2	38.10	1.5000	6.35	**153H-0116-TW**	**153A-0116-TW**	**153H-0116-NP**	**153A-0116-NP**	**153H-0116-SS**	**153A-0116-SS**
–	39.00	1.5354	6.35	**153H-39-TW**	**153A-39-TW**	**153H-39-NP**	**153A-39-NP**	**153H-39-SS**	**153A-39-SS**
1-9/16	39.69	1.5625	6.35	**153H-0118-TW**	**153A-0118-TW**	**153H-0118-NP**	**153A-0118-NP**	**153H-0118-SS**	**153A-0118-SS**

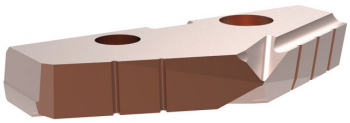
40-41 A91: 5 A91: 34

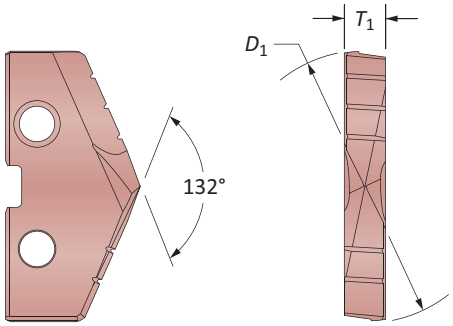
Key on A91: 1

Inserts sold in multiples of 1

GEN2 T-A® Structural Steel Drill Inserts

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





HSS Inserts – Super Cobalt

Insert				Part No.
Fractional Equivalent	D_1 mm	D_1 inch	T_1	Super Cobalt
1-7/16	36.51	1.4375	6.35	**453H-0114-HE**
1-1/2	38.10	1.5000	6.35	**453H-0116-HE**
–	39.00	1.5354	6.35	**453H-39-HE**
1-9/16	39.69	1.5625	6.35	**453H-0118-HE**

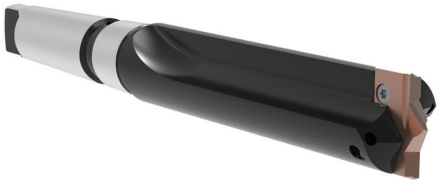
40-41 A91: 5 A91: 34

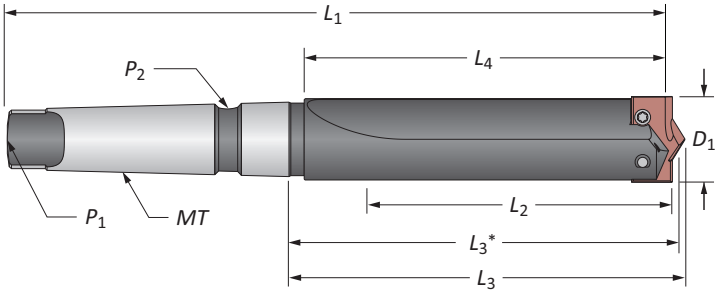
Key on A91: 1

Inserts sold in multiples of 1

T-A® Structural Steel Drill Insert Holders

3 Series | Taper Shank

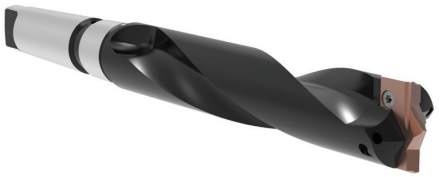


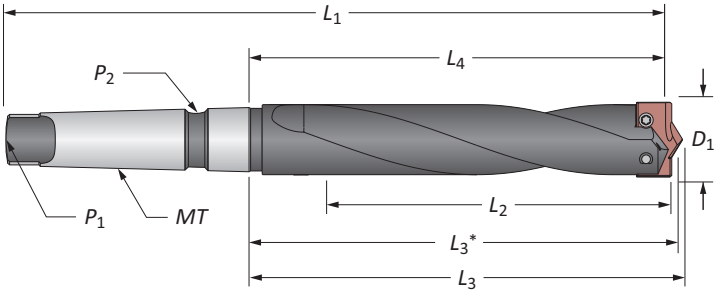


Straight Flute #4 Morse Taper

	Length	D_1	Body L_2	Body L_4	Body L_3	Body L_3*	Body L_1	Shank MT	Shank P_1	Shank P_2	Part No.
ⓜ	Short	39	121	152.14	165.1	163.5	276	4	TTC	TSC	**22030S-004IS126**
ⓘ	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®, GEN2 T-A®, or 150° Structural Steel T-A® drill insert geometry





Helical Flute #4 Morse Taper

	Length	D_1	Body L_2	Body L_4	Body L_3	Body L_3*	Body L_1	Shank MT	Shank P_1	Shank P_2	Part No.
ⓜ	Short	35.71	165.1	197	209.55	207.9	320.68	4	TTC	TSC	**24030H-004IS126**
ⓘ	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**

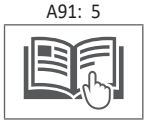
*If using Structural Steel holder with Notch Point®, GEN2 T-A®, or 150° Structural Steel T-A® drill insert geometry

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	–	–	1370 N-cm (121.3 in-lbs)

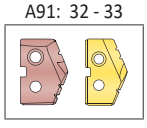
*Tightening torques are calculated with a friction coefficient of μ = 0.14 and develop 90% of ultimate yield strength

A91: 5



Key on A91: 1

A91: 32 - 33



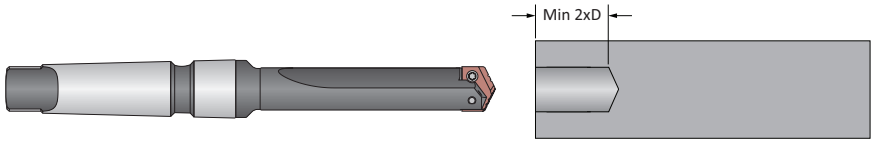
ⓜ = Metric (mm)
ⓘ = Imperial (in)
Screws sold in multiples of 10

Deep Hole Drilling Guidelines

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

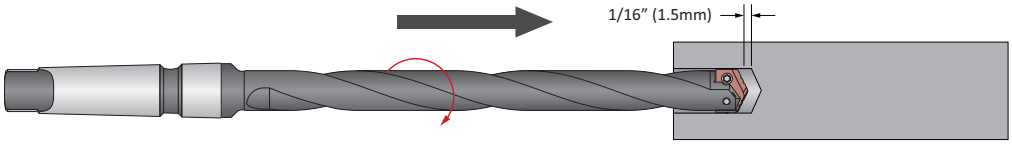
1. Pilot Hole
100 % RPM
100% IPR (mm/rev)

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.



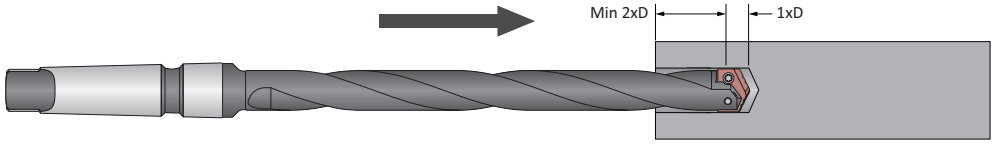
2. Feed-in
50 RPM max
12 IPM (300 mm/min)

Feed the longer drill within 1/16" (1.5mm) short of the established pilot hole bottom at a **maximum of 50 RPM** and 12 IPM (300 mm/min) feed rate.



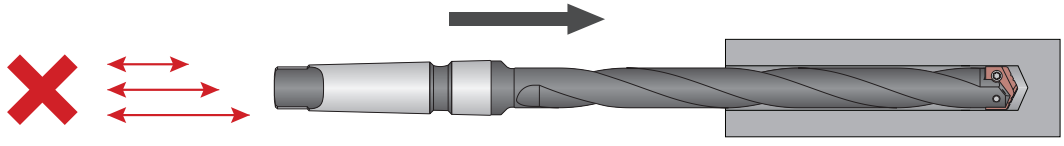
3. Deep Hole Transition Drilling
50 % RPM
75% IPR (mm/rev)

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.



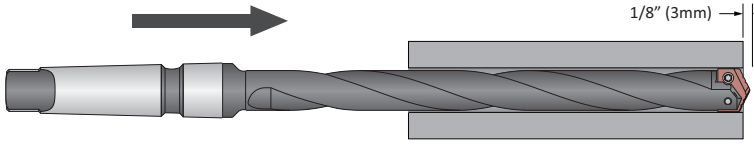
4. Deep Hole Drilling - Blind
100% RPM
100% IPR (mm/rev)

Drill to full depth at recommended speed and feed for longer drill according to Allied speed and feed charts.
No peck cycle recommended.



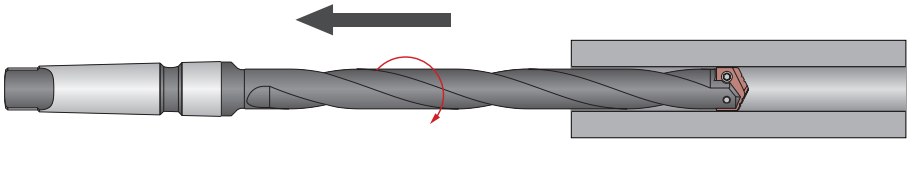
5. Deep Hole Drilling - at Breakout
50% RPM
75% IPR (mm/rev)

For through holes only:
Reduce speed by 50% and feed by 25% prior to breakout.
Do not break out more than 1/8" (3mm) past the full diameter of the drill.



6. Drill Retract
50 RPM max

Reduce speed to a **maximum of 50 RPM** before retracting from the hole.



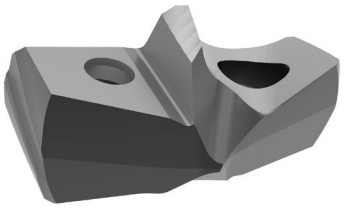
⚠ WARNING **Tool failure can cause serious injury. To prevent:**

- 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.

Recommended Cutting Data

GEN3SYS® XT Pro (XT ST)



Metric (mm)

ISO	Material	Hardness (BHN)	Speed (M/mm) - Mist Coolant AM420 Speed	Feed Rate (mm/rev) by Diameter 12 series 12.00 - 12.99	13 series 13.00 - 13.99	14 series 14.00 - 14.99	15 series 15.00 - 15.99
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

Imperial (inch)

ISO	Material	Hardness (BHN)	Speed (SFM) - Mist Coolant AM420 Speed	Feed Rate (IPR) by Diameter 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

Speed and Feed Multiplier

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

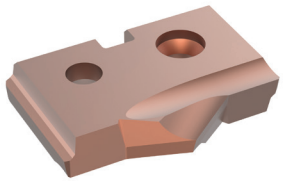
NOTE: The speeds and feeds listed above are based on a rigid setup using air mist through tool coolant. Speed may be increased up to 50% if using high pressure flood or through coolant.
NOTE: If drilling dry without coolant, speed must be reduced significantly based on setup, drill depth, and material hardness. Up to 50% speed and feed reduction may be necessary in these types of applications. Contact the Application Engineering department for assistance.
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 (mm/rev) by Diameter								
16 series 16.00 - 16.99	**17 series 17.00 - 17.99**	**18 series 18.00 - 19.99**	**20 series 20.00 - 21.99**	**22 series 22.00 - 23.99**	**24 series 24.00 - 25.99**	**26 series 26.00 - 28.99**	**29 series 29.00 - 31.99**	**32 series 32.00 - 35.00**
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

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

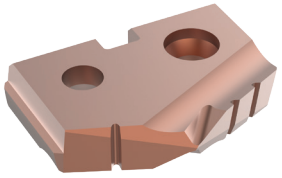
Recommended Cutting Data | Metric (mm)

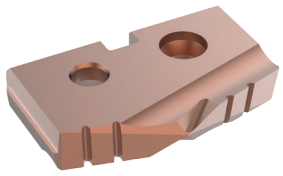
Original T-A® | GEN2 T-A®



Thin Wall Inserts
Super Cobalt

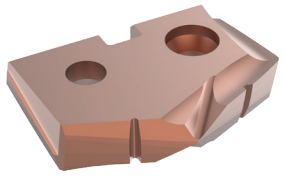
ISO	Material	Hardness (BHN)	Speed (M/mm) - Mist Coolant AM200 Speed	Speed (M/mm) - Mist Coolant TiAlN Speed	Feed Rate (mm/rev) by Diameter 0 series 14 - 16	1 series 18 - 24	2 series 25 - 35	3 series 36 - 47
P	**Structural Steel** A36, A285, A516, etc.	100 - 150	39	34	0.30	0.45	0.48	0.50
		150 - 250	35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

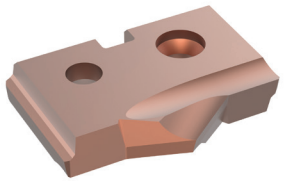
GEN2 T-A Inserts
Carbide C1 (K35)

ISO	Material	Hardness (BHN)	Speed (M/mm) - Mist Coolant AM200 Speed	Feed Rate (mm/rev) by Diameter 0 series 14 - 16	1 series 18 - 24	2 series 25 - 35	3 series 36 - 47
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.

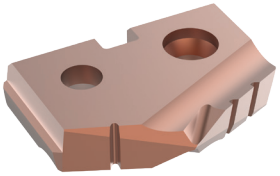
Recommended Cutting Data | Imperial (inch)

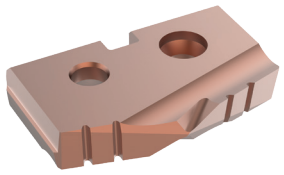
Original T-A® | GEN2 T-A®



Thin Wall Inserts
Super Cobalt

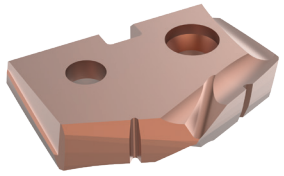
ISO	Material	Hardness (BHN)	Speed (SFM) - Mist Coolant: AM200 Speed	Speed (SFM) - Mist Coolant: TiAlN Speed	Feed Rate (IPR) by Diameter: 0 series 9/16 - 11/16	1 series 13/16 - 15/16	2 series 1 - 1-3/8	3 series 1-13/32 - 1-7/8
P	**Structural Steel** A36, A285, A516, etc.	100 - 150	125	110	0.012	0.018	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	Hardness (BHN)	Speed (SFM) - Mist Coolant: AM200 Speed	Speed (SFM) - Mist Coolant: TiAlN Speed	Feed Rate (IPR) by Diameter: 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	Hardness (BHN)	Speed (SFM) - Mist Coolant: AM200 Speed	Feed Rate (IPR) by Diameter: 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	Hardness (BHN)	Speed (SFM) - Mist Coolant: AM200 Speed	Feed Rate (IPR) by Diameter: 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.

Guaranteed Application Request Structural Steel

Guidelines on use

Guidelines for use of the Guaranteed Request Form

The request for a Guaranteed Application is a method of proving AMEC tooling on demonstration.

The Guaranteed Application form must be completed as fully as possible and sent to the Allied Machine Technical Department.

Example - Required Informations

Contact Details:

Purchase Order Number
Date
Customer Name
Customer Telephone and Fax Number
Proposed Date of the Demonstration
Customer Contact Name

Application Information:

Material:	Type, Specification, Hardness, Condition, Thickness
Hole:	Diameter, Diameter Range

Machine and Set-up Information:

Machine:	Type, Model, Feedline, Control, Speed, Preferred Shank Type
Spindle:	Orientation, Type
Coolant:	Type, Feed

Current Drill Information:

Details of current, or previous tooling used on application, and its performance history

What defines a successful test:

The objective of the demonstration i.e. Decreased Cycle Time, Better Chip Control, Safer Process, Longer Tool Life and Reduced Cost per Hole

Providing the Allied Machine Technical Department have enough information to judge the application, and its objectives are feasible, the test will be approved.

Structural Steel Guaranteed Application Form

Distributor PO #

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

CONTACT DETAILS

Trial P.O No*..... Date*..... Proposed Test Date*.....

Distributor*..... Distributor Contact*.....

Customer Name*..... Industry..... Contact Name*.....

Contact Telephone*..... Contact E-mail*.....

APPLICATION INFORMATION

ATTENTION: The following Information is required to enable the best combination of tooling to be recommended. Please complete all that apply.

Material Type*..... Specification*..... Material Hardness ..... ☐ Kg ☐ BRN ☐ RC ☐ N/mm²

Material Condition ☐ Angle ☐ H-Section ☐ Tubular Stock
☐ Stacked Plate ☐ Plate ☐ U-Section

Hole Diameter .....☐ mm ☐Inch ☐ Hole Diameter Range used..... ☐ mm ☐ Inch

Material Thickness this test ..... Material Thickness Range used * .....

MACHINE AND SET-UP INFORMATION

Machine Tool Type ☐ Ficep ☐ Steeltec ☐ Pedestal Drill
☐ Peddinghaus ☐ Voortman ☐ Vernet Behringer
☐ Kaltenbach ☐ Radial Arm ☐ Other

Model* .....

Feedline* ☐ Hydraulic ☐ Ball Screw

Machine Tool Control* ☐ CNC ☐ NC ☐ Manual ☐ Other .....

Spindle Orientation* ☐ Vertical ☐ Horizontal ☐ Other .....

Spindle Type* ☐ ISO ☐ Quick Change ☐ Morse Taper No ..... Gauge Length ..... ☐ mm ☐ Inch

Available Speed* ☐ Variable ☐ Fixed ☐ RPM ☐ m/Min

Preferred Shank Type* ☐ Flanged ☐ Morse Taper N°..... Diameter ..... ☐ mm ☐ Inch

Coolant Type* ☐ Cutting Oil ☐ Water Soluble Oil ☐ Air Mist ☐ Air ☐ Dry

Coolant Feed* ☐ Constant ☐ Pulsed ☐ Through Coolant ☐ External

CURRENT DRILL INFORMATION

Drill Manufacturer ..... Point Angle .....

Drill Type ..... ☐ Twist ☐ Brazed ☐ Indexable Insert
☐ Removable Tip ☐ Other .....

Tool Grade ☐ HSS ☐ Carbide ☐ Other .....

Tool Coating ☐ Uncoated ☐ TiN ☐ TiCN ☐ TiAlN ☐ Other .....

Current Speed ..... ☐ RPM ☐ m/Min ☐ Current Feed Rate ..... ☐ mm/rev ☐ mm/min

Average Number of Holes Drilled New ..... After Regrind? .....

Reason(s) for Tool change ☐ Wear ☐ Fracture ☐ Chipping
☐ Losing Hole Tolerance ☐ Losing Chip Control ☐ Other .....
☐ Other ..... ☐ Chatter ☐ New Application

What Criteria define a successful test* ☐ Decreased Cycle Time ☐ Better Chip Control ☐ Safer Process
☐ Longer Tool Life ☐ Reduced Cost per Hole ☐ Other .....

Potential this application: Current Annual Usage €/£: Tools per Annum?

*Required Fields where applicable

FOR OFFICE USE ONLY

Application Engineer: Number: Status:

ALLIED MACHINE & ENGINEERING

Warranty Information

Allied Machine & Engineering warrants to original equipment manufacturers, distributors, industrial and commercial users of its products that each new product manufactured or supplied by Allied Machine shall be free from defects in material and workmanship.

Allied Machine's obligation under this warranty is limited to furnishing without additional charge a replacement or, at its option repairing or issuing credit for any product which shall within one year from the date of sale 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 materials or workmanship.

Complete information as to operating conditions, machine, set-up and application of cutting fluid should accompany any product returned for inspection. The provisions of this warranty shall not apply to any Allied Machine products which have been subjected to misuse, improper operating conditions, machine set-up or application of cutting fluid or which have been repaired or altered if such repair or alteration in the judgment of Allied Machine would adversely affect 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 on any claim of any kind, 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.

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

Certified Management System

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Registered to ISO 9001
10001329

38 APX 5XD
CV50 SHK
REV.A(60)

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Your local Allied Machine representative:

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