

# DEEPTRIO™

DRILLING PRODUCTS

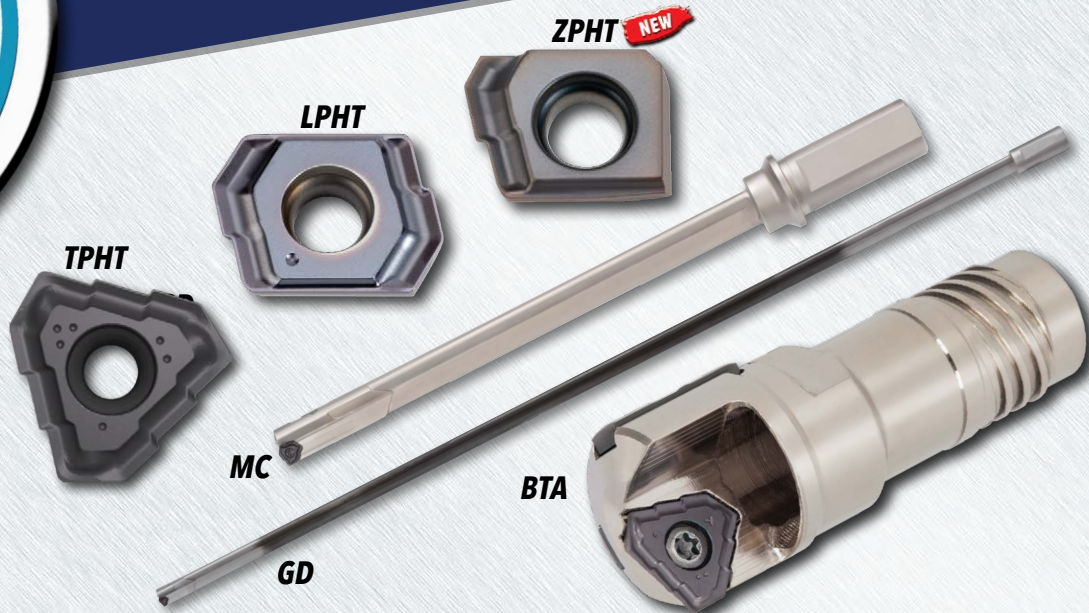
**Drilling Range:**  
 Ø .394 - 1.575" (10 mm-40 mm)

**Thread Types:**  
 STS Outer four start thread  
 STS Inner single start thread  
 DTS Outer four start thread

**Insert Grades\*:**  
 IN2005  
 IN2055

**Chip breakers:**  
 "DT" - Standard  
 "ML" - Low Feed/Power Applications

**Guide Pads\*:**  
 IN2040 (CD-SA) - Solid carbide pad, high wear resistance  
 IN2005 (CD-SB) - Solid carbide pad, high toughness  
 IN2030 (CD-SC) - Solid carbide pad, higher toughness



## An Extensive Family of Deep Hole Drilling Tools

**DEEPTRIO<sup>MC</sup>** - Conventional style drill for lathes or mills,  
 Conventional cross-hole style drill for lathes or mills  
 Standard Lengths 10xD, 15xD and 25xD  
 Dia. Range: .394" - 1.260" (10 mm - 32 mm)

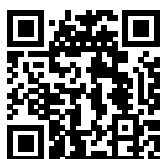
**DEEPTRIO<sup>GD</sup>** - Gundrill style  
 Gundrill cross-hole style  
 Both styles offer lengths up to 94.488" OAL (2400mm)  
 Dia. Range: .394" - 1.260" (10 mm - 32 mm)

**DEEPTRIO<sup>BTA</sup>** - BTA drilling head available for STS & DTS systems  
 Dia. Range: .629" - 1.575" (16 mm - 40 mm)

### Features & Benefits:

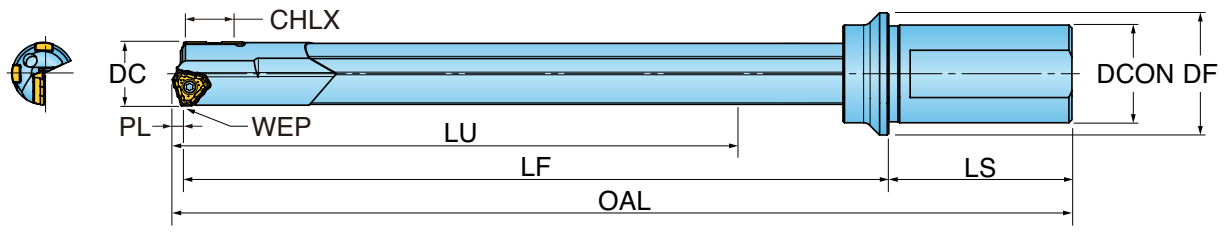
- Expanded Diameter Range: .394" (10 mm) - 1.575" (40 mm)
- Excellent Hole Accuracy (IT10) and Surface Finish
- Very High Feed Rates
- Replaceable Inserts Provide Long Tool Life and Eliminate Regrinding
- Cross-holes up to 1.259" (32 mm) Diameter
- Diameter Adjusting Shims
- Available in Two Chip Breakers
- TRH Replacement Heads for Brazing

\*Guide Pads and inserts must be purchased separately.





**DEEPTRIOMC™ CONVENTIONAL DRILLS: 10XD**



**INCH**

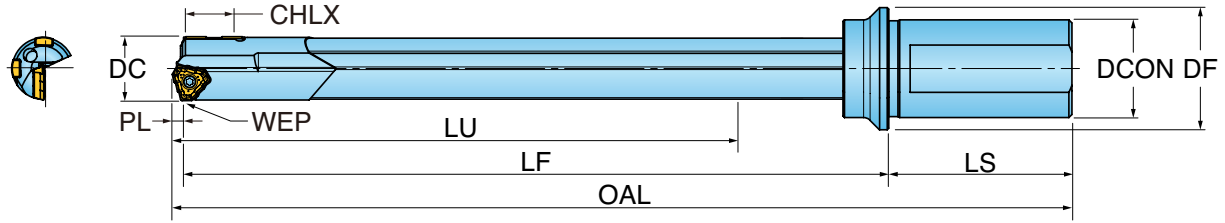
Part Number	DC Cutting Dia.	PL Point Length	CHLX Cross-Hole Length Max.	LU Usable Length Max.	LF Functional Length	LS Shank Length	OAL Overall Length	DCON Connection Dia.	DF Flange Dia.	ULDR Usable Length Dia. Ratio
GT14680146N5R01	0.578	0.079	0.63	5.91	7.36	2.21	9.65	1.000	1.26	10
GT15060146N5R01	0.593	0.079	0.63	6.30	7.80	2.21	10.08	1.000	1.26	10
GT15880160N5R01	0.625	0.079	0.63	6.30	7.84	2.21	10.12	1.000	1.26	10
GT17450175N5R01	0.687	0.087	0.63	7.17	8.66	2.21	10.95	1.000	1.26	10
GT18240182N5R01	0.718	0.118	0.63	7.60	9.13	2.21	11.46	1.000	1.26	10
GT18640186N5R01	0.734	0.118	0.63	7.60	9.13	2.21	11.46	1.000	1.26	10
GT19050191N5R01	0.750	0.118	0.63	7.99	9.57	2.21	11.89	1.000	1.26	10
GT20620206N6R01	0.812	0.126	0.63	8.39	10.04	2.36	12.53	1.250	1.26	10
GT22230222N6R01	0.875	0.134	0.63	9.19	10.95	2.36	13.44	1.250	1.26	10
GT23800238N6R01	0.937	0.134	0.63	9.98	11.85	2.36	14.34	1.250	1.26	10
GT25400254N6R01	1.000	0.134	0.63	10.38	12.28	2.36	14.78	1.250	1.26	10
GT26970270N6R01	1.062	0.146	0.63	11.17	13.19	2.36	15.70	1.250	1.26	10
GT28580285N6R01	1.125	0.181	0.63	11.42	14.17	2.36	16.71	1.250	1.26	10
GT29360285N6R01	1.156	0.181	0.63	11.81	14.65	2.36	17.19	1.250	1.57	10
GT31750318N6R01	1.250	0.181	0.63	12.60	15.55	2.36	18.09	1.250	1.57	10

**METRIC**

Part Number	DC Cutting Dia.	PL Point Length	CHLX Cross-Hole Length Max.	LU Usable Length Max.	LF Functional Length	LS Shank Length	OAL Overall Length	DCON Connection Dia.	DF Flange Dia.	ULDR Usable Length Dia. Ratio
GT16000160JFR02	16.00	2.20	16.0	172.2	209.0	56.0	267.2	25.00	32	10
GT16500160JFR02	16.50	2.20	16.0	172.2	209.0	56.0	267.2	25.00	32	10
GT17000170JFR02	17.00	2.20	16.0	182.2	220.0	56.0	278.2	25.00	32	10
GT18000180JFR02	18.00	2.20	16.0	192.2	232.0	56.0	290.2	25.00	32	10
GT19000190JFR01	19.00	3.00	16.0	203.0	243.0	56.0	302.0	25.00	32	10
GT20000200JGR01	20.00	3.00	16.0	213.0	255.0	60.0	318.0	32.00	40	10
GT21000210JGR01	21.00	3.20	16.0	223.2	266.0	60.0	329.2	32.00	40	10
GT22000220JGR01	22.00	3.40	16.0	233.4	278.0	60.0	341.4	32.00	40	10
GT23000230JGR01	23.00	3.40	16.0	243.4	289.0	60.0	352.4	32.00	40	10
GT24000240JGR01	24.00	3.40	16.0	253.4	301.0	60.0	364.4	32.00	40	10
GT25000250JGR01	25.00	3.40	16.0	263.4	312.0	60.0	375.4	32.00	40	10
GT26000260JHR01	26.00	3.60	16.0	273.7	324.0	70.0	397.6	40.00	50	10
GT27000270JHR01	27.00	3.60	16.0	283.7	335.0	70.0	408.6	40.00	50	10
GT28000280JHR01	28.00	3.60	16.0	283.7	337.0	70.0	410.6	40.00	50	10



**DEEPTRIOMC™ CONVENTIONAL DRILLS: 15XD (INCH)**

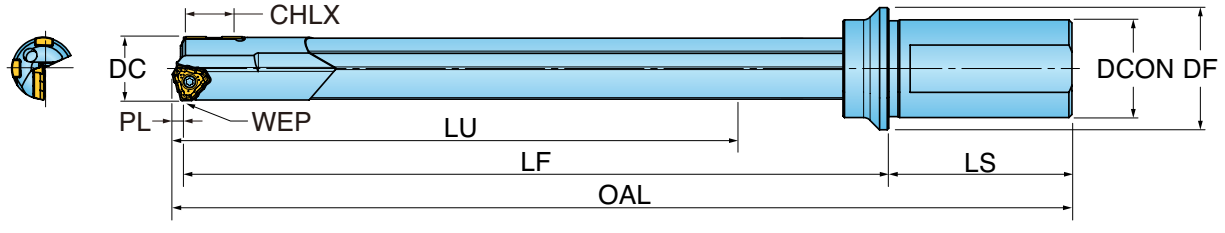


**INCH**

Part Number	DC Cutting Dia.	PL Point Length	CHLX Cross-Hole Length Max.	LU Usable Length Max.	LF Functional Length	LS Shank Length	OAL Overall Length	DCON Connection Dia.	DF Flange Dia.	ULDR Usable Length Dia. Ratio
<b>NEW</b> GT11110180N4R01	0.437	0.071	0.63	7.16	8.23	1.97	10.27	0.750	0.98	15
GT12700190N5R01	0.500	0.071	0.63	7.75	9.02	2.21	11.29	1.000	1.26	15
GT13490202N5R01	0.531	0.071	0.63	8.34	9.65	2.21	11.92	1.000	1.26	15
GT14270225N5R01	0.562	0.079	0.63	8.94	10.28	2.21	12.56	1.000	1.26	15
GT14680225N5R01	0.578	0.079	0.63	8.94	10.32	2.21	12.60	1.000	1.26	15
GT15060225N5R01	0.593	0.079	0.63	9.53	10.95	2.21	13.23	1.000	1.26	15
GT15880240N5R01	0.625	0.079	0.63	9.53	10.98	2.21	13.27	1.000	1.26	15
GT17450262N5R02	0.687	0.087	0.63	10.72	12.21	2.21	14.50	1.000	1.26	15
GT18240274N5R01	0.718	0.118	0.63	11.34	12.87	2.21	15.20	1.000	1.26	15
GT18640280N5R01	0.734	0.118	0.63	11.34	12.87	2.21	15.20	1.000	1.26	15
GT19050286N5R01	0.750	0.118	0.63	11.93	13.50	2.21	15.83	1.000	1.26	15
GT20620309N6R01	0.812	0.126	0.63	12.53	14.17	2.36	16.66	1.250	1.57	15
GT22230333N6R01	0.875	0.134	0.63	13.72	15.47	2.36	17.97	1.250	1.57	15
GT23800357N6R01	0.937	0.134	0.63	10.96	16.77	2.36	19.27	1.250	1.57	15
GT25400381N6R01	1.000	0.146	0.63	15.50	17.40	2.36	19.91	1.250	1.57	15
GT26970405N6R01	1.062	0.146	0.63	16.68	18.70	2.36	21.21	1.250	1.57	15
GT28580428N6R01	1.125	0.181	0.63	17.13	19.88	2.36	22.42	1.250	1.57	15
GT29360429N6R01	1.156	0.181	0.63	17.72	20.55	2.36	23.09	1.250	1.57	15
GT31750476N6R01	1.250	0.181	0.63	18.90	21.85	2.36	24.39	1.250	1.57	15



**DEEPTRIOMC™ CONVENTIONAL DRILLS: 15XD (METRIC)**

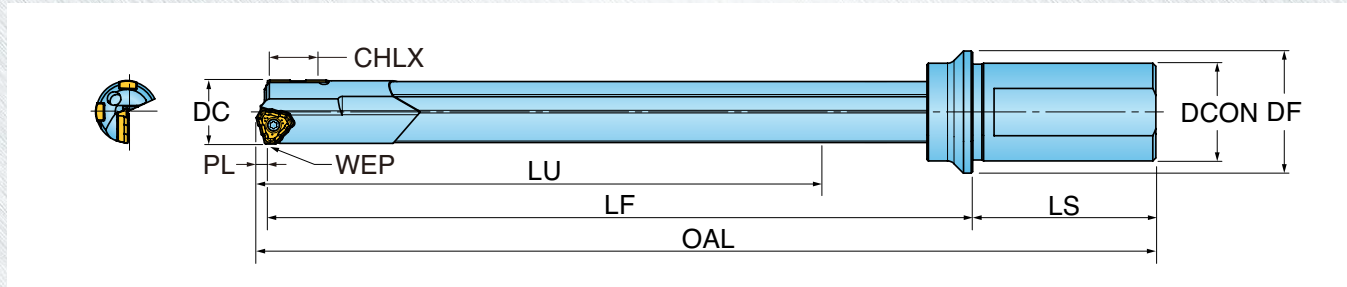


**METRIC**

Part Number	DC Cutting Dia.	PL Point Length	CHLX Cross-Hole Length Max.	LU Usable Length Max.	LF Functional Length	LS Shank Length	OAL Overall Length	DCON Connection Dia.	DF Flange Dia.	ULDR Usable Length Dia. Ratio
<b>NEW</b> GT10000158JER01	10.00	1.80	16.0	159.3	184.5	50.0	236.3	20.00	25	15
<b>NEW</b> GT10500165JER01	10.50	1.80	16.0	166.8	193.0	50.0	244.8	20.00	25	15
<b>NEW</b> GT11000180JER01	11.00	1.80	16.0	181.8	209.0	50.0	260.8	20.00	25	15
<b>NEW</b> GT11500180JER01	11.50	1.80	16.0	181.8	209.0	50.0	260.8	20.00	25	15
GT12000197JER01	12.00	1.80	16.0	196.8	225.0	50.0	276.8	20.00	25	15
GT12500197JER01	12.50	1.80	16.0	196.8	226.0	50.0	277.8	20.00	25	15
GT13000212JFR01	13.00	1.80	16.0	211.8	245.0	56.0	302.8	25.00	32	15
GT13500212JFR01	13.50	1.80	16.0	211.8	245.0	56.0	302.8	25.00	32	15
GT14000225JFR01	14.00	2.00	16.0	227.0	245.0	56.0	303.0	25.00	32	15
GT14500225JFR01	14.50	2.00	16.0	227.0	262.0	56.0	320.0	25.00	32	15
GT15000240JFR01	15.00	2.00	16.0	242.0	278.0	56.0	336.0	25.00	32	15
GT16000240JFR02	16.00	2.20	16.0	257.2	294.0	56.0	352.2	25.00	32	15
GT16500248JFR02	16.50	2.20	16.0	257.2	294.0	56.0	352.2	25.00	32	15
GT17000255JFR02	17.00	2.20	16.0	272.2	310.0	56.0	368.2	25.00	32	15
GT17500263JFR02	17.50	2.20	16.0	272.2	310.0	56.0	368.2	25.00	32	15
GT18000270JFR02	18.00	2.20	16.0	287.2	327.0	56.0	385.2	25.00	32	15
GT18500278JFR01	18.50	3.00	16.0	288.0	327.0	56.0	386.0	25.00	32	15
GT19000285JFR01	19.00	3.00	16.0	303.0	343.0	56.0	402.0	25.00	32	15
GT19500293JFR01	19.50	3.00	16.0	303.0	343.0	56.0	402.0	25.00	32	15
GT20000300JGR01	20.00	3.00	16.0	318.0	360.0	60.0	423.0	32.00	40	15
GT21000315JGR01	21.00	3.20	16.0	333.2	376.0	60.0	439.2	32.00	40	15
GT22000330JGR01	22.00	3.40	16.0	348.4	393.0	60.0	456.4	32.00	40	15
GT23000345JGR01	23.00	3.40	16.0	363.4	409.0	60.0	472.4	32.00	40	15
GT24000360JGR01	24.00	3.40	16.0	378.4	426.0	60.0	489.4	32.00	40	15
GT25000375JGR01	25.00	3.40	16.0	393.4	442.0	60.0	505.4	32.00	40	15
GT26000390JHR01	26.00	3.60	16.0	408.7	459.0	70.0	532.6	40.00	50	15
GT27000405JHR01	27.00	3.60	16.0	423.7	475.0	70.0	548.6	40.00	50	15
GT28000420JHR01	28.00	3.60	16.0	423.7	477.0	70.0	550.6	40.00	50	15



**DEEPTRIOMC™ CONVENTIONAL DRILLS: 20XD (METRIC)**

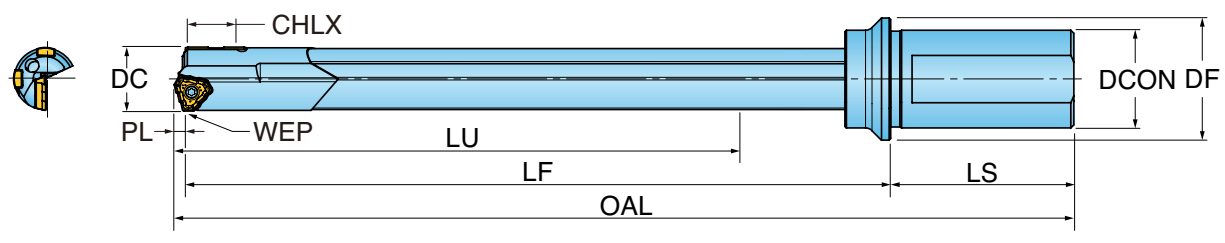


**METRIC**

Part Number	DC Cutting Dia.	PL Point Length	CHLX Cross-Hole Length Max.	LU Usable Length Max.	LF Functional Length	LS Shank Length	OAL Overall Length	DCON Connection Dia.	DF Flange Dia.	ULDR Usable Length Dia. Ratio
<b>NEW</b> GT10000210JER01	10.00	1.80	16.0	211.8	237.0	50.0	288.8	20.00	25	20
<b>NEW</b> GT10500220JER01	10.50	1.80	16.0	221.8	248.0	50.0	299.8	20.00	25	20
<b>NEW</b> GT11000240JER01	11.00	1.80	16.0	241.8	269.0	50.0	320.8	20.00	25	20
<b>NEW</b> GT11500240JER01	11.50	1.80	16.0	241.8	269.0	50.0	320.8	20.00	25	20



**DEEPTRIOMC™ CONVENTIONAL DRILLS: 25XD (INCH)**

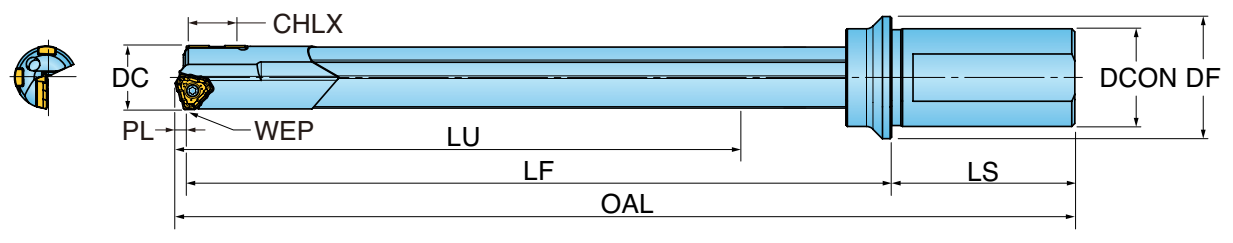


**INCH**

Part Number	DC Cutting Dia.	PL Point Length	CHLX Cross-Hole Length Max.	LU Usable Length Max.	LF Functional Length	LS Shank Length	OAL Overall Length	DCON Connection Dia.	DF Flange Dia.	ULDR Usable Length Dia. Ratio
<b>NEW</b> GT11110300N4R01	0.437	0.071	0.63	11.88	12.95	1.97	14.99	0.750	0.98	25
GT12700317N5R01	0.500	0.071	0.63	12.87	14.13	2.21	16.41	1.000	1.26	25
GT13490337N5R01	0.531	0.071	0.63	13.85	15.16	2.21	17.43	1.000	1.26	25
GT14270357N5R01	0.562	0.079	0.63	14.84	16.18	2.21	18.47	1.000	1.26	25
GT14680375N5R01	0.578	0.079	0.63	14.84	16.22	2.21	18.50	1.000	1.26	25
GT15060400N5R01	0.593	0.079	0.63	15.83	17.24	2.21	19.53	1.000	1.26	25
GT15880400N5R01	0.625	0.079	0.63	15.83	17.28	2.21	19.57	1.000	1.26	25
GT17450436N5R02	0.687	0.087	0.63	17.80	19.29	2.21	21.58	1.000	1.26	25
GT18240456N5R01	0.718	0.118	0.63	18.82	20.35	2.21	22.68	1.000	1.26	25
GT18640466N5R01	0.734	0.118	0.63	18.82	20.35	2.21	22.68	1.000	1.26	25
GT19050476N5R01	0.750	0.118	0.63	19.80	21.38	2.21	23.70	1.000	1.26	25
GT20620516N6R01	0.812	0.126	0.63	20.80	22.44	2.36	24.93	1.250	1.57	25
GT22230556N6R01	0.875	0.134	0.63	22.77	24.53	2.36	27.02	1.250	1.57	25
GT23800595N6R01	0.937	0.134	0.63	24.74	26.61	2.36	29.11	1.250	1.57	25
GT25400635N6R01	1.000	0.146	0.63	25.74	27.64	2.36	30.14	1.250	1.57	25
GT26970674N6R01	1.062	0.146	0.63	27.71	29.72	2.36	32.23	1.250	1.57	25
GT26970675N6R01	1.062	0.146	0.63	27.71	29.72	2.36	32.23	1.500	1.57	25
GT28580715N6R01	1.125	0.181	0.63	28.54	31.30	2.36	33.84	1.250	1.57	25
GT29360715N6R01	1.156	0.181	0.63	29.53	32.36	2.36	34.90	1.250	1.57	25
GT31750806N6R01	1.250	0.181	0.63	31.50	34.45	2.36	36.99	1.250	1.57	25



**DEEPTRIOMC™ CONVENTIONAL DRILLS: 25XD (METRIC)**

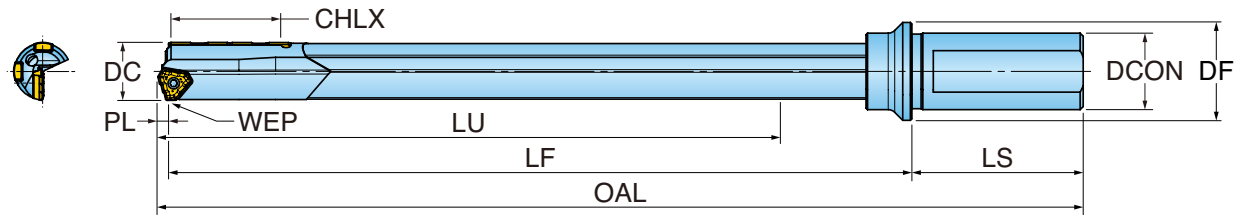


**METRIC**

Part Number	DC Cutting Dia.	PL Point Length	CHLX Cross-Hole Length Max.	LU Usable Length Max.	LF Functional Length	LS Shank Length	OAL Overall Length	DCON Connection Dia.	DF Flange Dia.	ULDR Usable Length Dia. Ratio
<b>NEW</b> GT10000263JER01	10.00	1.80	16.0	264.3	289.5	50.0	341.3	20.00	25	25
<b>NEW</b> GT10500275JER01	10.50	1.80	16.0	276.8	303.0	50.0	354.8	20.00	25	25
<b>NEW</b> GT11000300JER01	11.00	1.80	16.0	301.8	329.0	50.0	380.8	20.00	25	25
<b>NEW</b> GT11500300JER01	11.50	1.80	16.0	301.8	329.0	50.0	380.8	20.00	25	25
GT12000327JER01	12.00	1.8	16.0	326.8	355.0	50.0	406.8	20.00	25	25
GT12500327JER01	12.50	1.8	16.0	326.8	356.0	50.0	407.8	20.00	25	25
GT13000352JFR01	13.00	1.8	16.0	351.8	385.0	56.0	442.8	25.00	32	25
GT13500352JFR01	13.50	1.8	16.0	351.8	385.0	56.0	442.8	25.00	32	25
GT14000375JFR01	14.00	2.0	16.0	377.0	411.0	56.0	469.0	25.00	32	25
GT14500375JFR01	14.50	2.0	16.0	377.0	412.0	56.0	470.0	25.00	32	25
GT15000400JFR01	15.00	2.0	16.0	402.0	438.0	56.0	496.0	25.00	32	25
GT16000400JFR02	16.00	2.2	16.0	427.2	464.0	56.0	522.2	25.00	32	25
GT16500413JFR02	16.50	2.2	16.0	427.2	464.0	56.0	522.2	25.00	32	25
GT17000425JFR02	17.00	2.2	16.0	452.2	490.0	56.0	548.2	25.00	32	25
GT17500445JFR02	17.50	2.2	16.0	452.2	490.0	56.0	548.2	25.00	32	25
GT18000450JFR02	18.00	2.2	16.0	477.2	517.0	56.0	575.2	25.00	32	25
GT18500463JFR01	18.50	3.0	16.0	478.0	517.0	56.0	576.0	25.00	32	25
GT19000475JFR01	19.00	3.0	16.0	503.0	543.0	56.0	602.0	25.00	32	25
GT19500488JFR01	19.50	3.0	16.0	503.0	543.0	56.0	602.0	25.00	32	25
GT20000500JGR01	20.00	3.0	16.0	528.0	570.0	60.0	633.0	32.00	40	25
GT21000525JGR01	21.00	3.2	16.0	553.2	596.0	60.0	659.2	32.00	40	25
GT22000550JGR01	22.00	3.4	16.0	578.4	623.0	60.0	686.4	32.00	40	25
GT23000575JGR01	23.00	3.4	16.0	603.4	649.0	60.0	712.4	32.00	40	25
GT24000600JGR01	24.00	3.4	16.0	628.4	676.0	60.0	739.4	32.00	40	25
GT25000625JGR01	25.00	3.4	16.0	653.4	702.0	60.0	765.4	32.00	40	25
GT26000650JHR01	26.00	3.7	16.0	678.7	729.0	70.0	802.7	40.00	50	25
GT27000675JHR01	27.00	3.7	16.0	703.7	755.0	70.0	828.7	40.00	50	25
GT28000700JHR01	28.00	3.7	16.0	703.7	757.0	70.0	830.7	40.00	50	25



## DEEPTRIOMC™ CONVENTIONAL CROSS-HOLE DRILLS (INCH)

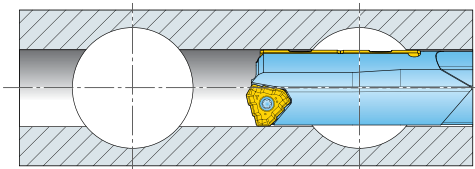


INCH

Part Number	DC Cutting Dia.	PL Point Length	CHLX Cross-Hole Length Max.	LU Usable Length Max.	LF Functional Length	LS Shank Length	OAL Overall Length	DCON Connection Dia.	DF Flange Dia.	ULDR Usable Length Dia. Ratio
GTADP14680147N5R01	0.578	0.079	1.26	5.91	7.36	2.21	9.65	1.000	1.26	10
GTADP15060151N5R01	0.593	0.079	1.26	6.30	7.79	2.21	10.08	1.000	1.26	10
GTADP18240182N5R01	0.718	0.118	1.26	7.48	9.13	2.21	11.46	1.000	1.26	10
GTADP18640186N5R01	0.734	0.118	1.26	7.48	9.13	2.21	11.46	1.000	1.26	10
GTADP23800238N6R01	0.937	0.134	1.26	9.84	11.85	2.36	14.35	1.250	1.57	10
GTADP29360293N6R01	1.156	0.181	1.26	11.81	14.65	2.36	17.19	1.250	1.57	10

Part Number	DC Cutting Dia.	PL Point Length	CHLX Cross-Hole Length Max.	LU Usable Length Max.	LF Functional Length	LS Shank Length	OAL Overall Length	DCON Connection Dia.	DF Flange Dia.	ULDR Usable Length Dia. Ratio
<b>NEW</b> GTADP11110180N4R01	0.437	0.071	1.26	7.16	8.23	1.97	10.27	0.750	0.98	15
GTADP14680220N5R01	0.578	0.079	1.26	8.86	10.31	2.21	12.60	1.000	1.26	15
GTADP15060226N5R01	0.593	0.079	1.26	9.45	10.94	2.21	13.23	1.000	1.26	15
GTADP18240274N5R01	0.718	0.118	1.26	11.22	12.87	2.21	15.20	1.000	1.26	15
GTADP18640280N5R01	0.734	0.118	1.26	11.22	12.87	2.21	15.20	1.000	1.26	15
GTADP23800357N6R01	0.937	0.134	1.26	14.76	16.77	2.36	19.27	1.250	1.57	15
GTADP29360440N6R01	1.156	0.181	1.26	17.72	20.55	2.36	23.09	1.250	1.57	15

Part Number	DC Cutting Dia.	PL Point Length	CHLX Cross-Hole Length Max.	LU Usable Length Max.	LF Functional Length	LS Shank Length	OAL Overall Length	DCON Connection Dia.	DF Flange Dia.	ULDR Usable Length Dia. Ratio
<b>NEW</b> GTADP11110300N4R01	0.437	0.071	1.26	11.88	12.95	1.97	14.99	0.750	0.98	25
GTADP14680367N5R01	0.578	0.079	1.26	14.84	16.22	2.21	18.50	1.000	1.26	25
GTADP15060377N5R01	0.593	0.079	1.26	15.83	17.24	2.21	19.53	1.000	1.26	25
GTADP18240456N5R01	0.718	0.118	1.26	18.82	20.35	2.21	22.68	1.000	1.26	25
GTADP18640466N5R01	0.734	0.118	1.26	18.82	20.35	2.21	22.68	1.000	1.26	25
GTADP23800507N6R01	0.937	0.134	1.26	21.27	23.15	2.36	25.65	1.250	1.57	21
GTADP23800595N6R01	0.937	0.134	1.26	24.74	26.61	2.36	29.11	1.250	1.57	25
GTADP29360734N6R01	1.156	0.102	1.26	28.90	31.55	2.36	34.09	1.250	1.57	25
GTADP-2936-1219-N6-R01	1.156	0.102	1.26	42.54	48.00	2.36	48.09	1.250	1.57	36
GTADP-2936-1524-N6-R01	1.156	0.102	1.26	54.55	60.00	2.36	60.10	1.250	1.57	47



Extra long guide pads allow drilling through cross-holes up to 1.26" (32mm) dia.

An additional guide pad stabilizes the drill when the insert passes the cross-hole

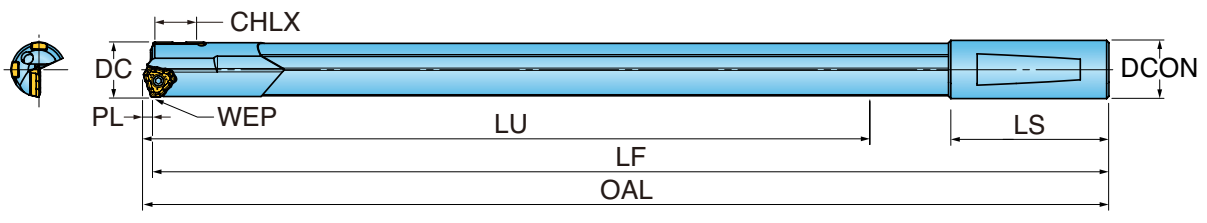
For Cross-Hole Applications: Deep-Trio BTA, MC and GD with single row of guide pads can cross up to a .63" (16 mm) hole.

Deep-Trio MC and GD with a double row of guide pads can cross up to a 1.26" (32 mm) hole.





## DEEPTRIO<sup>GD</sup> GUNDRILLS (INCH)



Deep-Trio Gundrills are made to order per application. Use the following guideline to determine the Description:

**GT**      **XXXX**      **YYYY**      **ZZ**      **RXX**  
 Series   Drill Dia. (mm)   Drill Length (OAL) (mm)   Driver   Variation

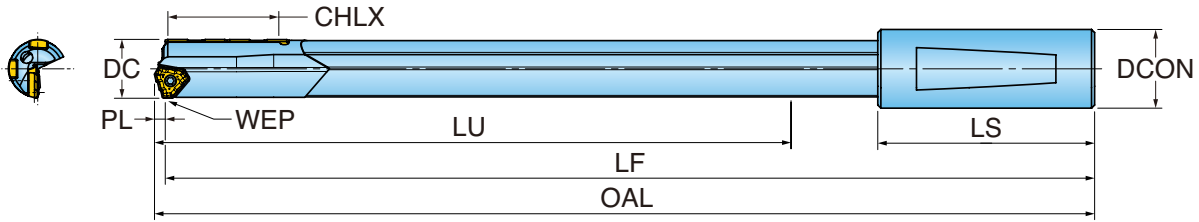
**Example:**  
 .75" diameter drill with 72" OAL and 1.00" driver = GT-1905-1828-58-RXX

Reference pages 15-18 for Insert and Guide Pad information.  
 Reference page 11 for Driver information.

### SEMI-STANDARD ITEMS

Part Number	DC Cutting Dia.	PL Point Length	CHLX Cross-Hole Length Max.	LU Usable Length Max.	LF Functional Length	LS Shank Length	OAL Overall Length	DCON Connection Dia.
GT-1270-1219-58-R01	0.500	0.071	0.630	43.78	48.00	2.21	48.07	1.000
GT-1270-1524-58-R01	0.500	0.071	0.630	55.78	60.00	2.21	60.07	1.000
GT-1348-1219-58-R01	0.531	0.071	0.630	43.66	48.00	2.21	48.07	1.000
GT-1348-1527-58-R01	0.531	0.071	0.630	55.66	60.00	2.21	60.07	1.000
GT-1745-1500-58-R01	0.687	0.086	0.630	55.40	59.05	2.21	59.14	1.000
GT-1824-1500-58-R01	0.718	0.118	0.630	55.35	59.05	2.21	59.17	1.000
GT-1864-1500-58-R01	0.734	0.118	0.630	55.81	59.05	2.21	59.17	1.000
GT-1905-1500-59-R01	0.750	0.118	0.630	55.35	59.05	2.76	59.17	1.250
GT-2062-1500-59-R01	0.812	0.118	0.630	55.24	59.05	2.76	59.18	1.250
GT-2223-1500-59-R01	0.875	0.134	0.630	55.13	59.05	2.76	59.19	1.250
GT-2380-1500-59-R01	0.937	0.134	0.630	55.02	59.05	2.76	59.19	1.250
GT-2540-1500-59-R01	1.000	0.146	0.630	54.98	59.05	2.76	59.20	1.250

## DEEPTRIO<sup>GD</sup>™ CROSS-HOLE GUNDRILLS (INCH)



Deep-Trio Gundrills are made to order per application. Use the following guideline to determine the Description:

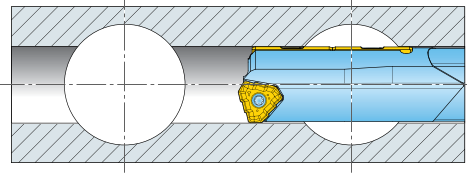
**GTADP**    **XXXX**                      **YYYY**                      **ZZ**                      **RXX**  
 Series    Drill Dia. (mm)                      Drill Length (OAL) (mm)    Driver                      Variation

**Example:**  
 .75" diameter drill with 72" OAL and 1.00" driver = GTADP-1905-1828-58-RXX

Reference pages 15-18 for Insert and Guide Pad information.  
 Reference page 11 for Driver information.

### STANDARD ITEMS

Part Number	DC Cutting Dia.	PL Point Length	CHLX Cross-Hole Length Max.	LU Usable Length Max.	LF Functional Length	LS Shank Length	OAL Overall Length	DCON Connection Dia.
<b>NEW</b> GTADP-1111-1524-S9-R01	0.437	0.071	1.26	56.58	60.00	2.76	60.07	1.25
GTADP-1427-1828-S9-R10	0.562	0.079	1.26	66.93	71.89	2.76	71.97	1.25
GTADP-1468-1524-S9-R01	0.578	0.079	1.26	55.00	60.20	2.76	60.28	1.25
GTADP-1468-1828-S9-R01	0.578	0.079	1.26	66.93	71.89	2.76	71.97	1.25
GTADP-1468-2286-S9-R01	0.578	0.079	1.26	84.72	89.92	2.76	90.00	1.25
GTADP-1506-1500-S9-R01	0.593	0.079	1.26	53.98	58.98	2.76	59.06	1.25
GTADP-1506-1828-S9-R01	0.593	0.079	1.26	66.89	71.89	2.76	71.97	1.25
GTADP-1824-1524-S9-R01	0.718	0.118	1.26	55.00	60.20	2.76	60.32	1.25
GTADP-1824-1828-S9-R01	0.718	0.118	1.26	66.65	71.65	2.76	71.77	1.25
GTADP-1824-2286-S9-R01	0.718	0.118	1.26	84.69	89.88	2.76	90.00	1.25
GTADP-1864-1500-S9-R01	0.734	0.118	1.26	53.70	58.94	2.76	59.06	1.25
GTADP-1864-1828-S9-R01	0.734	0.118	1.26	66.61	71.83	2.76	71.97	1.25
GTADP-2380-1500-S9-R01	0.937	0.126	1.26	52.76	58.93	2.76	59.06	1.25
GTADP-2380-1524-S9-R01	0.937	0.126	1.26	54.61	59.99	2.76	60.12	1.25
GTADP-2380-1828-S9-R01	0.937	0.126	1.26	65.67	71.84	2.76	71.97	1.25
GTADP-2380-2286-S9-R01	0.937	0.126	1.26	83.70	89.88	2.76	90.00	1.25
GTADP-2936-1828-S9-R01	1.156	0.102	1.26	66.52	71.97	2.76	92.07	1.25



Extra long guide pads allow drilling through cross-holes up to 1.26" (32mm) dia.

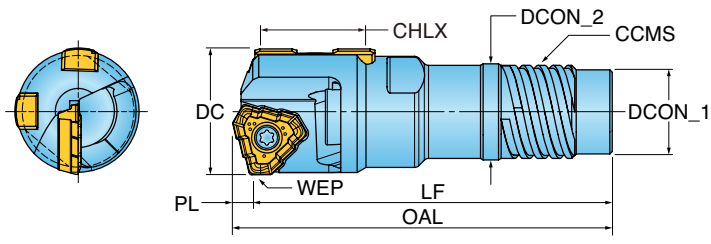
An additional guide pad stabilizes the drill when the insert passes the cross-hole

For Cross-Hole Applications:  
 Deep-Trio BTA, MC and GD with single row of guide pads can cross up to a .63" (16 mm) hole.  
 Deep-Trio MC and GD with a double row of guide pads can cross up to a 1.26" (32 mm) hole.





**DEEPTRIO<sup>BTA</sup>™ TBTA-DT DRILL HEADS** **STS** Single Tube System **OUTER FOUR START THREAD**



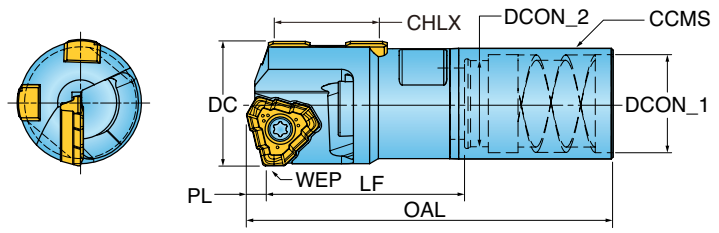
Part Number	DC Cutting Dia.	PL Point Length	CHLX Cross-Hole Length Max.	LF Functional Length	OAL Overall Length	DCON Shank Dia.	DCON2 Shank Dia.	CCMS Connection Code	TUBE Part Number
TBTA-DTX.XXXSE4-14	.630 - .657	0.087	0.63	2.17	2.25	0.425	0.496	BTA SE4-14	BTSI014
TBTA-DTX.XXXSE4-15	.658 - .696	0.087	0.63	2.17	2.25	0.465	0.535	BTA SE4-15	BTSI015
TBTA-DTX.XXXSE4-16	.697 - .744	0.118	0.63	2.21	2.32	0.492	0.571	BTA SE4-16	BTSI016
TBTA-DTX.XXXSE4-17	.745 - .787	0.118	0.63	2.21	2.32	0.531	0.610	BTA SE4-17	BTSI017
TBTA-DTX.XXXSE4-18	.788 - .858	0.126	0.63	2.36	2.49	0.551	0.630	BTA SE4-18	BTSI018
TBTA-DTX.XXXSE4-20	.859 - .866	0.126	0.63	2.50	2.63	0.630	0.709	BTA SE4-20	BTSI020
TBTA-DTX.XXXSE4-20	.867 - .948	0.134	0.63	2.58	2.71	0.630	0.709	BTA SE4-20	BTSI020
TBTA-DTX.XXXSE4-22	.949 - .984	0.134	0.63	2.58	2.71	0.689	0.768	BTA SE4-22	BTSI020
TBTA-DTX.XXXSE4-22	.985 - 1.039	0.142	0.63	2.66	2.80	0.689	0.768	BTA SE4-22	BTSI022
TBTA-DTX.XXXSE4-24	1.040 - 1.102	0.142	0.63	2.66	2.80	0.748	0.827	BTA SE4-24	BTSI024
TBTA-DTX.XXXSE4-24	1.103 - 1.130	0.180	0.63	2.76	2.94	0.748	0.827	BTA SE4-24	BTSI024
TBTA-DTX.XXXSE4-26	1.130 - 1.220	0.180	0.63	2.95	3.13	0.827	0.925	BTA SE4-26	BTSI026
TBTA-DTX.XXXSE4-28	1.221 - 1.260	0.180	0.63	2.95	3.13	0.906	1.004	BTA SE4-28	BTSI028
TBTA-DTX.XXXSE4-28	1.261 - 1.311	0.214	0.63	2.95	3.13	0.906	1.004	BTA SE4-28	BTSI028
TBTA-DTX.XXXSE4-30	1.312 - 1.425	0.214	0.63	3.13	3.34	1.004	1.102	BTA SE4-30	BTSI030
TBTA-DTX.XXXSE4-33	1.426 - 1.559	0.214	0.63	3.52	3.74	1.063	1.181	BTA SE4-33	BTSI033
TBTA-DTX.XXXSE4-36	1.560 - 1.575	0.214	0.63	3.72	3.93	1.181	1.299	BTA SE4-36	BTSI036

**STANDARD ITEMS**

Part Number	DC Cutting Dia.	PL Point Length	CHLX Cross-Hole Length Max.	LF Functional Length	OAL Overall Length	DCON Shank Dia.	DCON2 Shank Dia.	CCMS Connection Code	TUBE Part Number
TBTA-DT.687SE4-15	0.687	0.087	0.566	2.165	2.252	0.465	0.535	BTA SE4-15	BTSI014
TBTA-DT.718SE4-16	0.718	0.118	0.629	2.205	2.323	0.492	0.571	BTA SE4-16	BTSI015
TBTA-DT.734SE4-16	0.734	0.118	0.629	2.205	2.323	0.492	0.571	BTA SE4-16	BTSI016
TBTA-DT.750SE4-17	0.750	0.118	0.629	2.205	2.323	0.531	0.610	BTA SE4-17	BTSI017
TBTA-DT.812SE4-18	0.812	0.126	0.629	2.362	2.488	0.531	0.630	BTA SE4-18	BTSI018
TBTA-DT.875SE4-20	0.875	0.134	0.629	2.579	2.713	0.630	0.709	BTA SE4-20	BTSI020
TBTA-DT.937SE4-20	0.937	0.134	0.629	2.579	2.713	0.630	0.709	BTA SE4-20	BTSI020
TBTA-DT1.000SE4-22	1.000	0.142	0.629	2.657	2.799	0.689	0.768	BTA SE4-22	BTSI022
TBTA-DT1.031SE4-22	1.031	0.142	0.629	2.657	2.799	0.689	0.768	BTA SE4-22	BTSI022
TBTA-DT1.250SE4-28	1.250	0.214	0.629	2.933	2.950	0.906	1.004	BTA SE4-28	BTSI028
TBTA-DT1.299SE4-28	1.299	0.214	0.629	2.933	2.950	0.906	1.004	BTA SE4-28	BTSI028
TBTA-DT1.375SE4-30	1.375	0.214	0.629	3.130	3.344	1.004	1.102	BTA SE4-30	BTSI030
TBTA-DT1.378SE4-30	1.378	0.214	0.629	3.130	3.344	1.004	1.102	BTA SE4-30	BTSI030
TBTA-DT1.456SE4-33	1.456	0.214	0.629	3.524	3.737	1.063	1.181	BTA SE4-33	BTSI033
TBTA-DT1.496SE4-33	1.496	0.214	0.629	3.524	3.737	1.063	1.181	BTA SE4-33	BTSI033
TBTA-DT1.500SE4-33	1.500	0.214	0.629	3.524	3.737	1.063	1.181	BTA SE4-33	BTSI033
TBTA-DT1.575SE4-36	1.575	0.214	0.629	3.720	3.934	1.181	1.299	BTA SE4-36	BTSI036



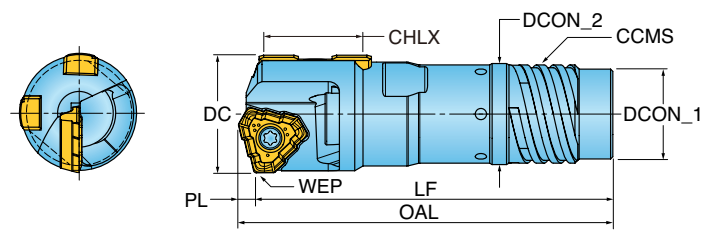
**DEEPTRIO<sup>BTA</sup>™ TBTA-DT DRILL HEADS** **STS** Single Tube System **INNER SINGLE START THREAD**



Part Number	DC Cutting Dia.	PL Point Length	CHLX Cross-Hole Length Max.	LF Functional Length	OAL Overall Length	DCON1 Shank Dia.	DCON2 Shank Dia.	CCMS Connection Code	TUBE Part Number
TBTA-DTX.XXXSI1-13A	0.629	0.087	0.63	2.11	2.19	0.488	0.425	BTA SI1-13A	BTSE013A
TBTA-DTX.XXXSI1-13B	.630 - .649	0.087	0.63	2.11	2.19	0.500	0.437	BTA SI1-13B	BTSE013B
TBTA-DTX.XXXSI1-14A	.650 - .679	0.087	0.63	2.11	2.19	0.528	0.465	BTA SI1-14A	BTSE014A
TBTA-DTX.XXXSI1-14B	.680 - .708	0.087	0.63	2.11	2.19	0.539	0.476	BTA SI1-14B	BTSE014B
TBTA-DTX.XXXSI1-15	.709 - .748	0.118	0.63	2.11	2.22	0.567	0.504	BTA SI1-15	BTSE015
TBTA-DTX.XXXSI1-16.5	.749 - .787	0.126	0.63	2.11	2.23	0.606	0.543	BTA SI1-16.5	BTSE016.5
TBTA-DTX.XXXSI1-18	.788 - .866	0.126	0.63	2.28	2.41	0.650	0.571	BTA SI1-18	BTSE018
TBTA-DTX.XXXSI1-20	.867 - .984	0.134	0.63	2.36	2.50	0.748	0.630	BTA SI1-20	BTSE020
TBTA-DTX.XXXSI1-22	.985 - 1.062	0.142	0.63	2.56	2.70	0.787	0.669	BTA SI1-22	BTSE022
TBTA-DTX.XXXSI1-24	1.063 - 1.102	0.142	0.63	2.56	2.70	0.866	0.748	BTA SI1-24	BTSE024
TBTA-DTX.XXXSI1-24	1.103 - 1.181	0.181	0.63	2.76	2.94	0.866	0.748	BTA SI1-24	BTSE024
TBTA-DTX.XXXSI1-26	1.182 - 1.259	0.181	0.63	2.95	3.13	0.945	0.827	BTA SI1-26	BTSE026
TBTA-DTX.XXXSI1-28	1.260 - 1.260	0.181	0.63	2.95	3.13	1.024	0.906	BTA SI1-28	BTSE028
TBTA-DTX.XXXSI1-28	1.261 - 1.338	0.213	0.63	2.93	3.15	1.024	0.906	BTA SI1-28	BTSE028
TBTA-DTX.XXXSI1-30	1.339 - 1.456	0.212	0.63	3.52	3.74	1.063	0.945	BTA SI1-30	BTSE030
TBTA-DTX.XXXSI1-33	1.457 - 1.535	0.213	0.63	3.72	3.93	1.181	1.063	BTA SI1-33	BTSE033
TBTA-DTX.XXXSI1-33	1.536 - 1.574	0.213	0.98	3.72	3.93	1.181	1.063	BTA SI1-33	BTSE033
TBTA-DTX.XXXSI1-36	1.575 - 1.575	0.213	0.98	3.92	4.13	1.299	1.181	BTA SI1-36	BTSE036



**DEEPTRIO<sup>BTA</sup>™ TBTA-DT DRILL HEADS** **DTS** **OUTER FOUR START THREAD**  
Double Tube System



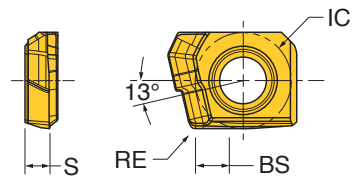
Part Number	DC Cutting Dia.	PL Point Length	CHLX Cross-Hole Length Max.	LF Functional Length	OAL Overall Length	DCON1 Shank Dia.	DCON2 Shank Dia.	CCMS Connection Code	TUBE Part No. (Outer)	TUBE Part No. (Inner)
TBTA-DTX.XXXDE4-18	.725 - .787	0.118	0.63	2.40	2.19	0.551	0.630	BTA DE4-18	BTDO018	BTDI012
TBTA-DTX.XXXDE4-19.5	.788 - .858	0.126	0.63	2.50	2.19	0.630	0.709	BTA DE4-19.5	BTDO019.5	BTDI014
TBTA-DTX.XXXDE4-21.5	.859 - .866	0.126	0.63	2.50	2.19	0.689	0.768	BTA DE4-21.5	BTDO021.5	BTDI015
TBTA-DTX.XXXDE4-21.5	.867 - .948	0.134	0.63	2.58	2.19	0.689	0.768	BTA DE4-21.5	BTDO021.5	BTDI015
TBTA-DTX.XXXDE4-23.5	.949 - .984	0.134	0.63	2.58	2.22	0.748	0.837	BTA DE4-23.5	BTDO023.5	BTDI016
TBTA-DTX.XXXDE4-23.5	.985 - 1.039	0.142	0.63	2.66	2.23	0.748	0.837	BTA DE4-23.5	BTDO023.5	BTDI016
TBTA-DTX.XXXDE4-26	1.040 - 1.102	0.142	0.623	2.78	2.41	0.827	0.925	BTA DE4-26	BTDO026	BTDI018
TBTA-DTX.XXXDE4-26	1.103 - 1.130	0.181	0.63	2.95	3.13	0.827	0.925	BTA DE4-26	BTDO026	BTDI018
TBTA-DTX.XXXDE4-28	1.131 - 1.181	0.181	0.63	2.95	3.13	0.906	1.004	BTA DE4-28	BTDO028	BTDI020
TBTA-DTX.XXXDE4-28	1.182 - 1.220	0.181	0.63	2.95	3.13	0.906	1.004	BTA DE4-28	BTDO028	BTDI020
TBTA-DTX.XXXDE4-30.5	1.221 - 1.260	0.181	0.63	3.15	3.33	1.004	1.102	BTA DE4-30.5	BTDO030.5	BTDI022
TBTA-DTX.XXXDE4-30.5	1.261 - 1.311	0.213	0.63	3.13	3.34	1.004	1.102	BTA DE4-30.5	BTDO030.5	BTDI022
TBTA-DTX.XXXDE4-33	1.312 - 1.425	0.212	0.63	3.52	3.74	1.063	1.181	BTA DE4-33	BTDO033	BTDI024
TBTA-DTX.XXXDE4-35.5	1.426 - 1.535	0.213	0.63	3.72	3.93	1.181	1.299	BTA DE4-35.5	BTDO035.5	BTDI026
TBTA-DTX.XXXDE4-35.5	1.536 - 1.559	0.213	0.98	3.72	3.93	1.181	1.299	BTA DE4-35.5	BTDO035.5	BTDI026
TBTA-DTX.XXXDE4-39	1.560 - 1.575	0.213	0.98	3.92	4.13	1.299	1.417	BTA DE4-39	BTDO039	BTDI029

**STANDARD ITEMS**

Part Number	DC Cutting Dia.	PL Point Length	CHLX Cross-Hole Length Max.	LF Functional Length	OAL Overall Length	DCON1 Shank Dia.	DCON2 Shank Dia.	CCMS Connection Code	TUBE Part No. (Outer)	TUBE Part No. (Inner)
TBTA-DT.750DE4-18	0.750	0.118	0.629	2.402	2.193	0.551	0.630	BTA DE4-18	BTDO018	BTDI012
TBTA-DT1.000DE4-23.5	1.000	0.142	0.629	2.657	2.232	0.748	0.837	BTA DE4-23.5	BTDO023.5	BTDI016



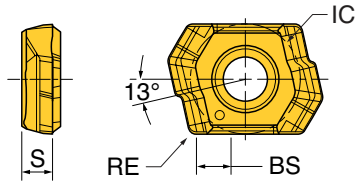
**DEEPTRIO™ ZPHT INSERT** **NEW**



Drill Diameter - inch (mm)	Insert Number	Dims (inch)		Grades	
		IC Inscribed Circle	S Thickness	IN2005*	IN2055
.394 - .471" (10.00mm - 11.99mm)	ZPHT060204R-DT	0.236	0.059		•

• = Stocked Items

**DEEPTRIO™ LPHT INSERT**



Drill Diameter - inch (mm)	Insert Number	Dims (inch)		Grades	
		IC Inscribed Circle	S Thickness	IN2005*	IN2055
.472 - .550" (12.00mm - 13.99mm)	LPHT060204R-DT	0.278	0.078	•	•

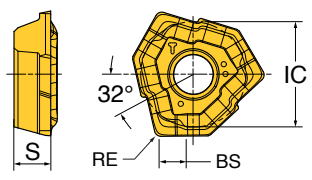
• = Stocked Items



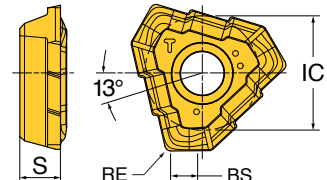
**DEEPTRIO™ TPHT...-DT INSERTS**



TPHT07...-DT - TPHT08...-DT



TPHT09...-DT - TPHT13...-DT



Drill Diameter - inch (mm)	Insert Number	Dims (inch)		Grades	
		IC Inscribed Circle	S Thickness	IN2005*	IN2055
.551 - .629" (14.00mm - 15.99mm)	TPHT070304R-DT	0.302	0.090	•	•
.630 - .708" (16.00mm - 18.00mm)	TPHT080304R-DT	0.336	0.090	•	•
.709 - .787" (18.01mm - 20.00mm)	TPHT090305R-DT	0.328	0.118	•	•
.788 - .865" (20.01mm - 21.99mm)	TPHT100305R-DT	0.363	0.130	•	•
.866 - .984" (22.00mm - 25.00mm)	TPHT110405R-DT	0.409	0.150	•	•
.985 - 1.102" (25.01mm - 28.00mm)	TPHT120405R-DT	0.456	0.169	•	•
1.103 - 1.260" (28.01mm - 32.00mm)	TPHT130408R-DT	0.506	0.187	•	
1.261 - 1.575" (32.01mm - 40.00mm)	TPHT140510R-DT	0.663	0.207	•	

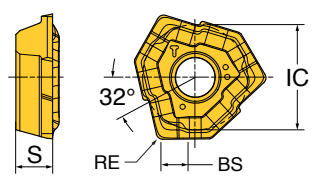
\*IN2005 to be phased out as stock is depleted.

• = Stocked Items

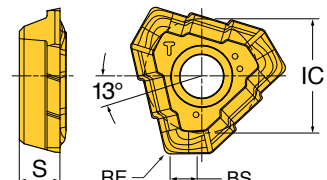
**DEEPTRIO™ TPHT...-ML INSERTS**



TPHT07...-DT - TPHT08...-DT



TPHT09...-DT - TPHT13...-DT

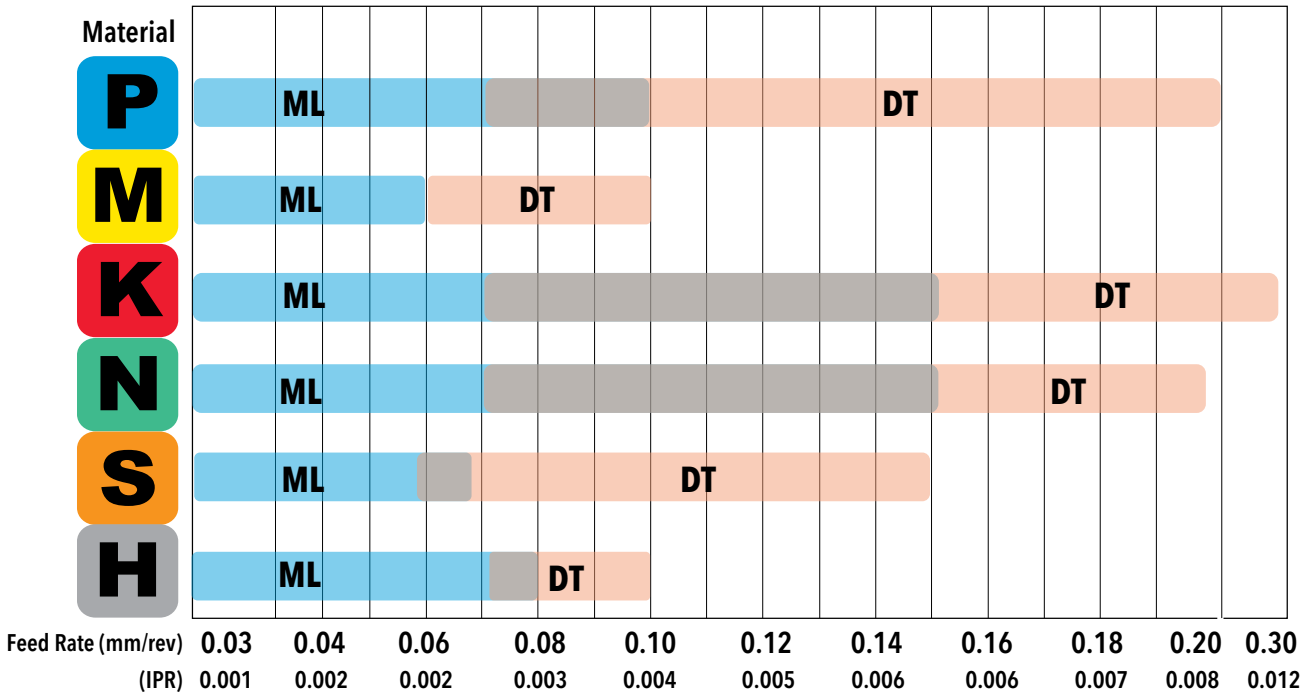
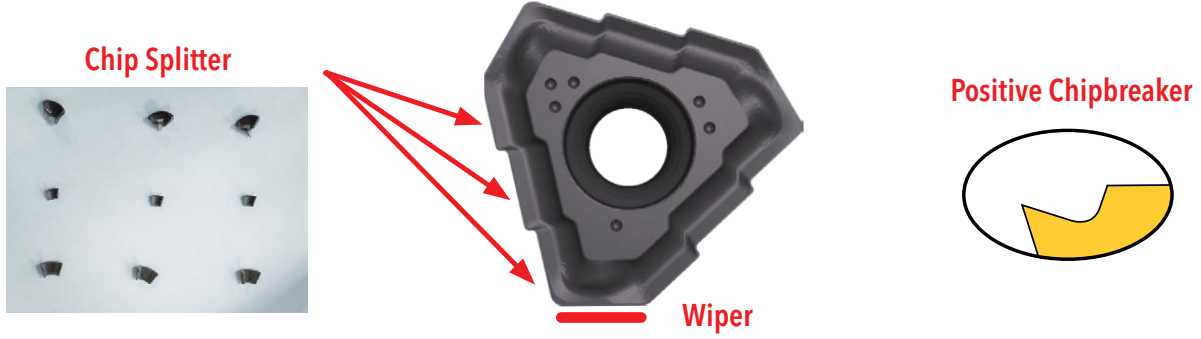


Drill Diameter - inch (mm)	Insert Number	Dims (inch)		Grades	
		IC Inscribed Circle	S Thickness	IN2005*	IN2055
.551 - .629" (14.00mm - 15.99mm)	TPHT070304R-ML	0.302	0.090	•	
.630 - .708" (16.00mm - 18.00mm)	TPHT080304R-ML	0.336	0.090	•	
.709 - .787" (18.01mm - 20.00mm)	TPHT090305R-ML	0.328	0.118	•	
.788 - .865" (20.01mm - 21.99mm)	TPHT100305R-ML	0.363	0.130	•	
.866 - .984" (22.00mm - 25.00mm)	TPHT110405R-ML	0.409	0.150	•	
.985 - 1.102" (25.01mm - 28.00mm)	TPHT120405R-ML	0.456	0.169	•	
1.103 - 1.260" (28.01mm - 32.00mm)	TPHT130408R-ML	0.506	0.187	•	

• = Stocked Items

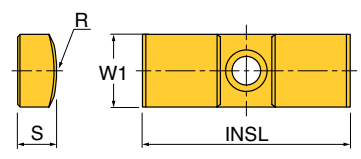


**DEEPTRIO™ TPHT INSERT FEATURES**

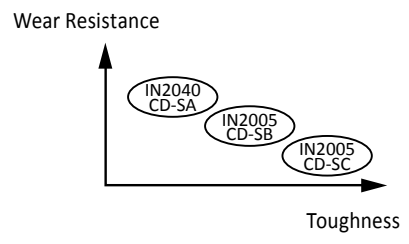




## DEEPTRIO™ GUIDE PADS - MC/GD



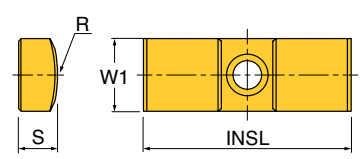
### GRADE APPLICATION



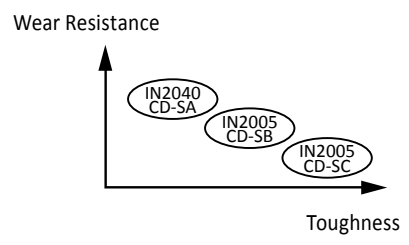
Drill Diameter - inch (mm)	Guide Pad Size	Dims (inch)				Grades		
		W1	S	INSL	R	IN2040 (CD-SA)	IN2005 (CD-SB)	IN2030 (CD-SC)
<b>NEW</b> .394" - .432" (10.00mm - 10.99mm)	<b>PAD-GP04-016-045</b>	0.157	0.071	0.63	0.177	•	•	•
<b>NEW</b> .434" - .472" (11.00mm - 11.99mm)	<b>PAD-GP04-016-050</b>	0.157	0.071	0.63	0.197	•	•	•
.472" - .550" (12.00mm - 13.99mm)	<b>PAD-GP04-016-055</b>	0.157	0.078	0.629	0.216	•	•	•
.551" - .708" (14.00mm - 18.00mm)	<b>PAD-GP05-018-060</b>	0.196	0.098	0.708	0.295	•	•	•
.709" - .826" (18.01mm - 20.99mm)	<b>PAD-GP06-020-085</b>	0.236	0.118	0.787	0.346	•	•	•
.827" - .865" (21.00mm - 21.99mm)	<b>PAD-GP06-020-100</b>	0.236	0.118	0.787	0.394	•	•	•
.866" - 1.180" (22.00mm - 29.99mm)	<b>PAD-GP06-020-120</b>	0.236	0.118	0.787	0.472	•	•	•
1.181" - 1.535" (30.00mm - 38.99mm)	<b>PAD-GP07-020-120</b>	0.276	0.138	0.787	0.472	•	•	•
1.536" - 1.575" (39.00mm - 40.00mm)	<b>PAD-GP08-025-155</b>	0.315	0.177	0.984	0.610	•	•	•

• = Stocked Items

## DEEPTRIO™ GUIDE PADS - BTA



### GRADE APPLICATION

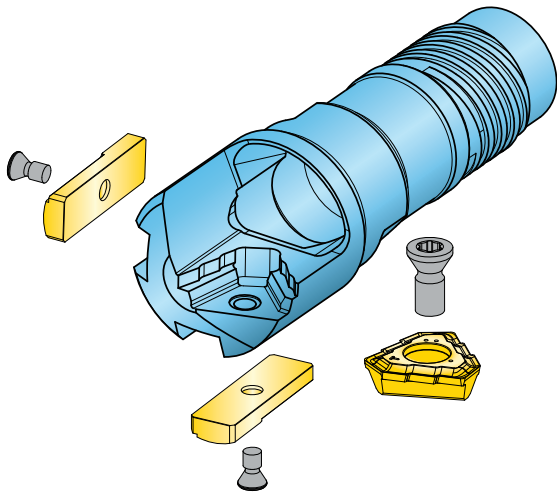


Drill Diameter - inch (mm)	Guide Pad Size	Dims (inch)				Grades		
		W1	S	INSL	R	IN2040 (CD-SA)	IN2005 (CD-SB)	IN2030 (CD-SC)
630 - 709" (16.00mm - 18.00mm)	<b>PAD-GP06-020-075</b>	0.236	0.118	0.787	0.295	•	•	•
.710" - .858" (18.01mm - 21.79mm)	<b>PAD-GP06-020-085</b>	0.236	0.118	0.787	0.346	•	•	•
.859" - 1.039" (21.80mm - 26.39mm)	<b>PAD-GP06-020-100</b>	0.236	0.118	0.787	0.394	•	•	•
1.040" - 1.180" (26.40mm - 29.99mm)	<b>PAD-GP06-020-120</b>	0.236	0.118	0.787	0.472	•	•	•
1.181" - 1.260" (30.00mm - 32.00mm)	<b>PAD-GP07-020-120</b>	0.276	0.138	0.787	0.472	•	•	•

• = Stocked Items



**DEEPTRIO™ PARTS LIST - BTA**



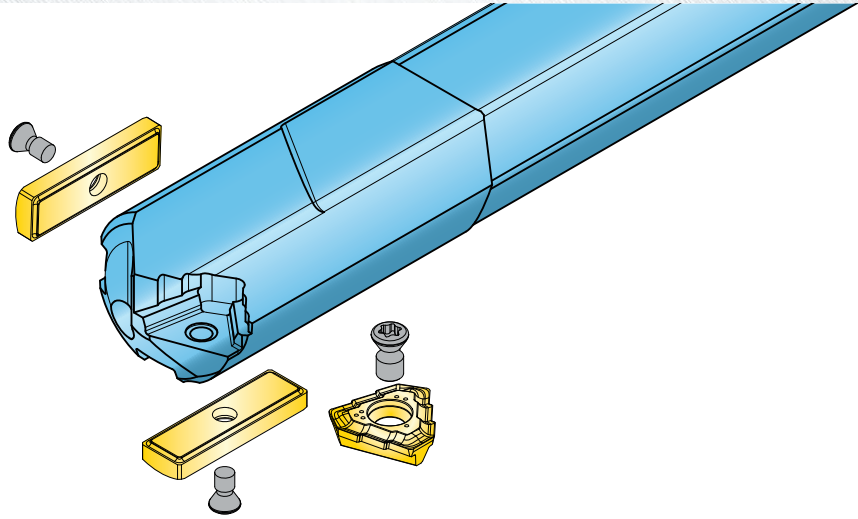
Components		Drill Diameter (inch)				
		.630 - .697	.698 - .709	.710 - .787	.788 - 858	.859 - 1.039
Insert	Part No.	TPHT080305R	TPHT090305R	TPHT090305R	TPHT100305R	TPHT110405R
	Screw	CSTB2.5S	CSTB2.5S	CSTB2.5S	CSTB3S	CSTB3.5H
	Wrench	T-8F	T-8F	T-8F	T-9F	T-15F
Guide Pads	Part No.	PAD-GP06-020-075	PAD-GP06-020-075	PAD-GP06-020-085	PAD-GP06-020-085	PAD-GP06-020-100
	Screw	CSTB2.2S	CSTB2.2S	CSTB2.2S	CSTB2.2S	CSTB2.2S
	Wrench	T-7F	T-7F	T-7F	T-7F	T-7F

Components		Drill Diameter (inch)				
		1.040 - 1.102	1.103 - 1.180	1.181 - 1.260	1.261 - 1.535	1.536 - 1.575
Insert	Part No.	TPHT120405R	TPHT130408R	TPHT130408R	TPHT140510R	TPHT140510R
	Screw	CSTB-4S	SR16-212/L10	SR16-212/L10	SR16-212/L10	SR16-212/L10
	Wrench	T-15F	T-20/5	T-20/5	T-20/5	T-20/5
Guide Pads	Part No.	PAD-GP06-020-120	PAD-GP06-020-120	PAD-GP07-020-120	PAD-GP07-020-120	PAD-GP08-025-155
	Screw	CSTB2.2S	CSTB2.2S	CSTB3S	CSTB-3S	CSTB-3S
	Wrench	T-7F	T-7F	T-9F	T-9F	T-9F



**DEEPTRIO™ PARTS LIST - MC/GD**



Components		Drill Diameter (inch)				
		.394 - .432	.432 - .464	.465 - .471	.472 - .550	.551 - .629

Insert	Part No.	ZPHT060204R	ZPHT060204R	LPHT060204R	LPHT060204R	TPHT070304R
	Screw	SR-M2.5X0.35L3.8	SR-M2.5X0.35L3.8	SR10503833L040	SR10503833L040	SR14-560/S
	Wrench	T-7F	T-7F	T-7F	T-7F	T-8F
Guide Pads	Part No.	PAD-GP04-016-045	PAD-GP04-016-050	PAD-GP04-016-050	PAD-GP04-016-055	PAD-GP05-018-060
	Screw	CSTB-2	CSTB-2	CSTB-2	CSPB-2L043	SR34-508
	Wrench	T-6F-S	T-6F-S	T-6F-S	IP-6F	T-7F

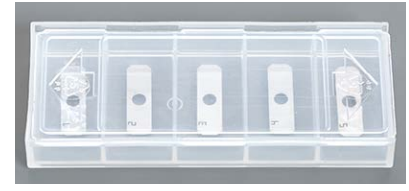
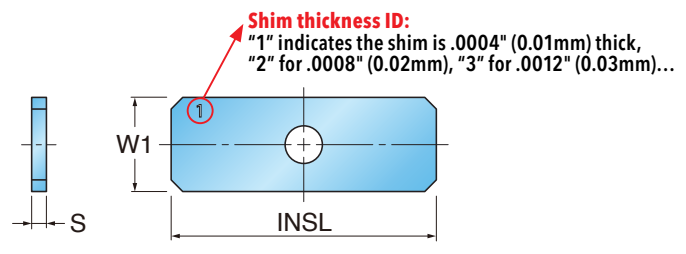
Components		Drill Diameter (inch)				
		.630 - .708	.709 - .787	.788 - .826	.827 - .865	.866 - .984

Insert	Part No.	TPHT080305R	TPHT090305R	TPHT100305R	TPHT100305R	TPHT110405R
	Screw	SR14-560/S	SR14-560/S	SR34-506	SR34-506	SR14-571/S
	Wrench	T-8F	T-8F	T-9F	T-9F	T-15F
Guide Pads	Part No.	PAD-GP05-018-060	PAD-GP06-020-085	PAD-GP06-020-085	PAD-GP06-020-100	PAD-GP06-020-120
	Screw	SR34-508	SR34-508	SR34-508	SR34-508	SR34-508
	Wrench	T-7F	T-7F	T-7F	T-7F	T-7F

Components		Drill Diameter (inch)		
		.985 - 1.102	1.103 - 1.180	1.181 - 1.260

Insert	Part No.	TPHT120405R	TPHT130408R	TPHT130408R
	Screw	SR14-506	SR16-212/L10	SR16-212/L10
	Wrench	T-15F	T-20/5	T-20/5
Guide Pads	Part No.	PAD-GP06-020-120	PAD-GP06-020-120	PAD-GP07-020-120
	Screw	SR34-508	SR34-508	CSTB-3L065
	Wrench	T-7F	T-7F	T-9F

## DEEPTRIO™ DIAMETER ADJUSTING SHIMS

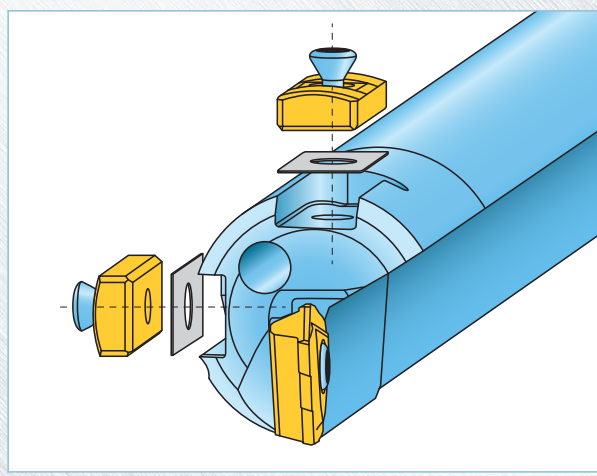


0.01mm / 0.02mm / 0.03mm / 0.04mm / 0.05mm  
 .0004" / .0008" / .0012" / .0016" / .0020"

Part Number	W1 Width inch (mm)	INSL Length inch (mm)	S Thickness inch (mm)	Application Guide Pad Size
SHIMSET-GP04	.157 (4)	.626 (15.9)	.0004 - .0020 (0.01 - 0.05)	PAD-G004
SHIMSET-GP05	.197 (5)	.709 (18)	.0004 - .0020 (0.01 - 0.05)	PAD-G005
SHIMSET-GP06	.236 (6)	.787 (20)	.0004 - .0020 (0.01 - 0.05)	PAD-G006

- A shim set contains 5 shims in thicknesses of .0004" (0.01mm), .0008" (0.02mm), .0012" (0.03mm), .0016" (0.04mm) and .0020" (0.05mm), respectively.
- **Adjusting shims are sold by set only, not to be sold separately.**

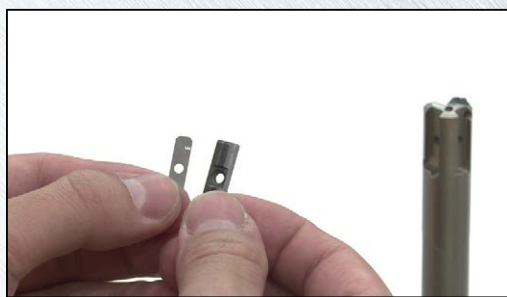
Diameter Adjustments inch (mm)	Shim(s) for measuring guide pad inch (mm)	Shim(s) for supporting guide pad inch (mm)	Number of shim sets needed
+0.0004 (+0.01)	.0004 (0.01)	-	1
+0.0008 (+0.02)	.0008 (0.02)	.0004 (0.01)	1
+0.0012 (+0.03)	.0012 (0.03)	.0004 + .0008 (0.01 + 0.02)	1
+0.0016 (+0.04)	.0016 (0.04)	.0004 + .0012 (0.01 + 0.03)	1
+0.0020 (+0.05)	.0020 (0.05)	.0008 + .0012 (0.02 + 0.03)	1
+0.0024 (+0.06)	.0004 + .0020 (0.01 + 0.05)	.0008 + .0016 (0.02 + 0.04)	1
+0.0028 (+0.07)	.0008 + .0020 (0.02 + 0.05)	.0012 + .0016 (0.03 + 0.04)	1
+0.0031 (+0.08)	.0012 + .0020 (0.03 + 0.05)	.0016 + .0016 (0.04 + 0.04)	2
+0.0035 (+0.09)	.0016 + .0020 (0.04 + 0.05)	.0016 + .0020 (0.04 + 0.05)	2
+0.0039 (+0.10)	.0020 + .0020 (0.05 + 0.05)	.0016 + .0016 + .0008 (0.04 + 0.04 + 0.02)	2



**DEEPTRIO™ HOW TO INSTALL ADJUSTING SHIMS**



**STEP 1:**  
 Measure the Deep•Trio drill diameter between the measuring guide pad and the insert cutting edge. If a presetter is not available, use a micrometer or caliper. For a precise drill diameter measurement, it is recommended to test-drill a hole and measure the hole diameter.



**STEP 2:**  
 Select the shim combinations according to the chart on Page 15 to obtain the required hole diameter. Take into consideration that the actual diameter of the drilled hole tends to be slightly larger (usually +.0008" to +.0012") than the drill's nominal diameter – i.e. add .0008"-.0012" to the measured drill diameter in Step 1 above before the final drill diameter.



**STEP 3:**  
 Remove the guide pads.



**STEP 4:**  
 Install the adjusting shims underneath the guide pads, respectively. Put the guide pads back on the tool.

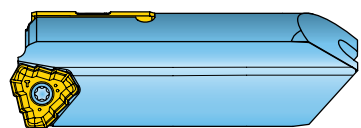

**STEP 5:**  
 Measure the drill diameter again to confirm the required diameter is obtained on the Deep•Trio.

**STEP 6:**  
 Test drill a hole to confirm that the required hole diameter is achieved.

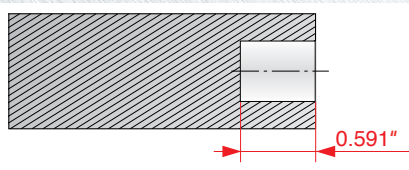


**DEEPTRIO™ TRH HEAD**

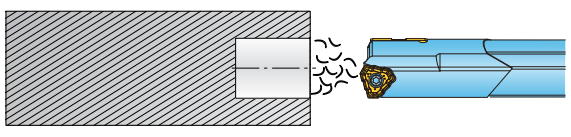
Now Available! The TRH brazed head of the Deep Trio tools are now available as a separate item which allows customers to repair their Deep Trio tools by brazing a new head onto the body after removing the old one.

	Type	Tool Dia(mm)	Tool Dia(in)	Part Number		
	1 insert type (metric)	12.70	0.500	TRH-12.70MKT		
		14.00	0.551	TRH-14.00 MKT		
		14.50	0.571	TRH-14.50 MKT		
		15.00	0.591	TRH-15.00 MKT		
		16.00	0.630	TRH-16.00 MKT		
		16.50	0.650	TRH-16.50 MKT		
		17.00	0.669	TRH-17.00 MKT		
		17.50	0.689	TRH-17.50 MKT		
		18.00	0.709	TRH-18.00 MKT		
		18.50	0.728	TRH-18.50 MKT		
		19.00	0.748	TRH-19.00 MKT		
		19.50	0.768	TRH-19.50 MKT		
		20.00	0.787	TRH-20.00 MKT		
		21.00	0.827	TRH-21.00 MKT		
		22.00	0.866	TRH-22.00 MKT		
		22.50	0.886	TRH-22.50 MKT		
		23.00	0.906	TRH-23.00 MKT		
		23.50	0.925	TRH-23.50 MKT		
		24.00	0.945	TRH-24.00 MKT		
		25.00	0.984	TRH-25.00 MKT		
		26.00	1.024	TRH-26.00 MKT		
		27.00	1.063	TRH-27.00 MKT		
		28.00	1.102	TRH-28.00 MKT		
			1 insert type (inch)	12.70	0.500	TRH-12.70 MKT
				14.30	0.563	TRH-14.30 MKT
				15.90	0.626	TRH-15.90 MKT
				17.50	0.689	TRH-17.50 MKT
				19.10	0.752	TRH-19.10 MKT
20.60	0.811			TRH-20.60 MKT		
22.20	0.874			TRH-22.20 MKT		
23.80	0.937			TRH-23.80 MKT		
25.40	1.000			TRH-25.40 MKT		
28.60	1.126			TRH-28.60 MKT		
31.80	1.252	TRH-31.80 MKT				
	Cross hole type	14.00	0.551	TRH-14.00CH MKT		
		15.00	0.591	TRH-15.00CH MKT		
		16.00	0.630	TRH-16.00CH MKT		
		17.00	0.669	TRH-17.00CH MKT		
		18.00	0.709	TRH-18.00CH MKT		
		19.00	0.748	TRH-19.00CH MKT		
		20.00	0.787	TRH-20.00CH MKT		
		21.00	0.827	TRH-21.00CH MKT		
		22.00	0.866	TRH-22.00CH MKT		
		23.00	0.906	TRH-23.00CH MKT		
		24.00	0.945	TRH-24.00CH MKT		
		25.00	0.984	TRH-25.00CH MKT		
		26.00	1.024	TRH-26.00CH MKT		
		27.00	1.063	TRH-27.00CH MKT		
28.00	1.102	TRH-28.00CH MKT				

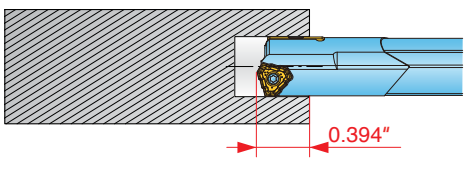
## DEEPTRIO™ DRILLING PROCESS (STARTING)



1. Pilot Hole  
Drill Diameter +0.0039" ~ +0.0012"  
Depth = 0.591"

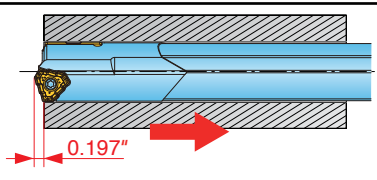


2. Approach - Rapid, Coolant On  
Vc = 16 ~ 32 SFM  
f = 0.02" ~ 0.039"/rev  
Depth = 0.394"



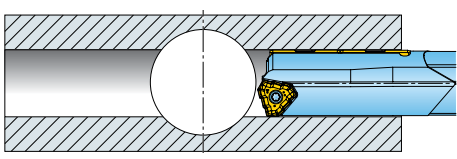
3. Enter Pilot Hole, Begin Drilling  
0.394" ~ 0.984"  
Vc: 100 %  
f: 80 %

4. Drill Feed After 1.00"  
Vc: 100 %  
f: 100 %

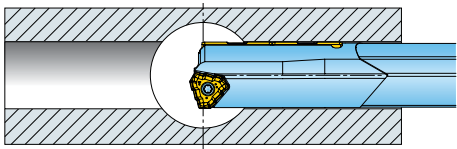


5. Retract. Stop rotation and coolant before moving the drill back to starting position.

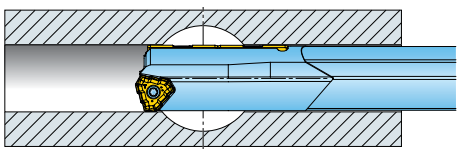
## DEEPTRIO™ DRILLING PROCESS (CROSS-HOLES)



1. 1 - 2 mm before cross-hole  
Reduce feed by 30 - 50%  
Maintain same RPM



2. Cross through hole  
Maintain same RPM



3. 1 - 2 mm after cross-hole.  
Resume original feed rate and RPM

**\*NOTE:**  
**Possible risks:** To prevent injuries, do NOT operate any deep hole drill, which uses pre-drilled pilot hole, at full speed before entering the pilot hole. The deep hole drill may fracture due to vibration and cause injuries.  
**Counter measures:** Do NOT operate the deep hole drill at full speed before engaging the pilot hole. Enter the pilot hole slowly at a speed of 50 - 100 RPM.





**DEEPTRIO<sup>BTA</sup>™ DRILL HEAD OPERATING PARAMETERS - DT**

ISO	M'tl	Condition	Speed (SFM) .394" - .471"	Speed (SFM) .472" - .550"	Speed (SFM) .551" - 1.575"	DT Chip Breaker										
						Feed (in/rev)		Drill Diameter (in)								
						.394" - .465"	.466" - .471"	.472" - .550"	.551" - .708"	.709" - 1.260"	1.261" - 1.575"					
<b>P</b>	1	Low carbon steels (C < 0.3)	197 - 328	262 - 459	262 - 394	.002 - .006	.003 - .006	.002 - .004	.003 - .004	.003 - .004	.004 - .008					
	2							.002 - .006	.003 - .006	.002 - .004	.003 - .004	.003 - .008	.004 - .008			
	3													Carbon steels (C > 0.3)	.002 - .006	.003 - .006
	4	.002 - .003				.002 - .008	.002 - .004	.003 - .004	.003 - .004	.004 - .008						
	5										Low alloy steels	.002 - .006	.003 - .006			
	6	.002 - .003				.002 - .008	.002 - .004	.003 - .004	.003 - .004	.004 - .008						
	7													Alloy steels	.002 - .006	.003 - .006
	8	.002 - .003				.002 - .008	.002 - .004	.003 - .004	.003 - .004	.004 - .008						
	9										.002 - .006	.003 - .006	.002 - .004			
	10	.002 - .003				.002 - .008	.002 - .004	.003 - .004	.003 - .004	.004 - .008						
	11										.002 - .006	.003 - .006	.002 - .004	.003 - .004	.003 - .004	.004 - .008
<b>M</b>	12	Stainless steels (Ferritic)	197 - 328	197 - 328	197 - 328	.002 - .006	.008 - .006	.002 - .004	.003 - .004	.003 - .004						
	13	Stainless steels (Martensitic)														
	14	Stainless steels (Austenitic)									.002 - .003	.002 - .005				
<b>K</b>	15	Grey Cast Iron	197 - 328	262 - 459	197 - 459	.002 - .006	.003 - .010	.002 - .010	.003 - .010	.003 - .012	.004 - .012					
	16															
	17	Nodular Cast Iron														
	18	Malleable cast iron														
	19															
20																
<b>N</b>	21	Aluminum Alloy Forging	197 - 328	328 - 656	328 - 656	.002 - .006	.003 - .008	.002 - .008	.003 - .008	.003 - .008	.004 - .010					
	22															
	23	Aluminum Alloy Casting														
	24															
	25															
	26	Copper Alloy														
	27															
	28	Non-Metallic														
	29															
	30															
<b>S</b>	31	High Temp Alloy, Inconel 718, etc.	66 - 164	66 - 164	66 - 164	.002 - .003	.003 - .006	.002 - .003	.002 - .003	.002 - .004	.002 - .005					
	32															
	33															
	34															
	35	Titanium Alloy, Ti-Al-4V etc...						98 - 197	98 - 197	.002 - .005	.003 - .005	.003 - .006	.004 - .007			
	36															
	37															
<b>H</b>	38	Hardened steel >40HRC	66 - 164	164 - 328	131 - 328	.002 - .003	.002 - .003	.002 - .003	.002 - .003	.002 - .004	.002 - .005					
	39															
	40	Chilled Cast Iron Cast Iron Hardened														
	41															



**DEEPTRIO<sup>BTA</sup>™ DRILL HEAD OPERATING PARAMETERS - ML**

ISO	Material	Condition	Speed (SFM)	ML Chip Breaker	
				Feed (in/rev) Drill Diameter (in)	
				.551" - .708"	.709" - 1.260"
<b>P</b>	1	Low carbon steels (C <0.3)	164 - 328	.001 - .004	.001 - .004
	2				
	3				
	4	Carbon steels (C >0.3)			.001 - .005
	5				
	6				
	7	Low alloy steels			.001 - .004
	8				
	9				
	10				
	11	Alloy steels			.001 - .005
<b>M</b>	12	Stainless steels (Ferritic)	164 - 328	.001 - .002	.001 - .002
	13	Stainless steels (Martensitic)			
	14	Stainless steels (Austenitic)			
<b>K</b>	15	Grey Cast Iron	164 - 328	.001 - .006	.001 - .007
	16				
	17				
	18	Nodular Cast Iron			
19	Malleable cast iron				
20					
<b>N</b>	21	Aluminum Alloy Forging	262 - 525	.001 - .006	.001 - .006
	22				
	23	Aluminum Alloy Casting			
	24				
	25				
	26	Copper Alloy			
	27				
	28	Non-Metallic			
	29				
	30				
<b>S</b>	31	High Temp Alloy, Inconel 718, etc.	66 - 164	.001 - .002	.001 - .003
	32				
	33				
	34				
	35	Titanium Alloy, Ti-Al-4V etc...			
	36				
	37				
<b>H</b>	38	Hardened steel >40HRC	131 - 328	.001 - .003	.001 - .004
	39				
	40	Chilled Cast Iron Cast Iron _ Hardened			
	41				