

Member IMC Group  
**Ingersoll**  
Cutting Tools

**FINE GOLD**  
2016/2017



**Holemaking**



**GOLD RUSH**

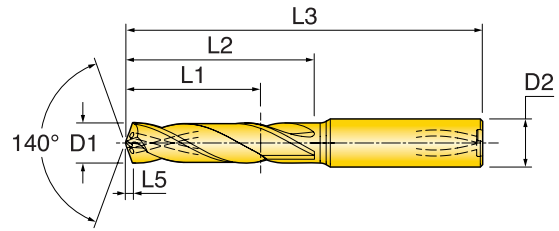


HOLEMAKING	DESCRIPTION	SERIES	PAGE
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	<b>GOLD<sup>o</sup>TWIST</b>	Replaceable Tips - TPA, TPA-M2, TMA, TKA, TNA, TPF	<a href="#">134</a>
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## SOLID CARBIDE DRILLS 3:1 GEOMETRY WITH INTERNAL COOLANT



Part Number		D1 Max. Diam. Of Spot (inch)	D1 Max. Diam. Of Spot (mm)	D2 Shank Size/Style	L1 Maximum Depth of Cut	L2 Flute Length	L3 Overall Length	L5
DH0300014T7R01	IN2005	0.118	3.00mm	6mm Cylind.	14.00mm	20.00mm	62.00mm	0.50mm
DH0310014T7R01	IN2005	0.122	3.10mm	6mm Cylind.	14.00mm	20.00mm	62.00mm	0.50mm
DH0320014T7R01	IN2005	0.126	3.20mm	6mm Cylind.	14.00mm	20.00mm	62.00mm	0.50mm
DH0330014T7R01	IN2005	0.130	3.30mm	6mm Cylind.	14.00mm	20.00mm	62.00mm	0.50mm
DH0340014T7R01	IN2005	0.134	3.40mm	6mm Cylind.	14.00mm	20.00mm	62.00mm	0.50mm
DH0350014T7R01	IN2005	0.138	3.50mm	6mm Cylind.	14.00mm	20.00mm	62.00mm	0.60mm
DH0360014T7R01	IN2005	0.142	3.60mm	6mm Cylind.	14.00mm	20.00mm	62.00mm	0.60mm
DH0370017T7R01	IN2005	0.146	3.70mm	6mm Cylind.	14.00mm	20.00mm	62.00mm	0.60mm
DH0380017T7R01	IN2005	0.150	3.80mm	6mm Cylind.	17.00mm	24.00mm	66.00mm	0.60mm
DH0390017T7R01	IN2005	0.154	3.90mm	6mm Cylind.	17.00mm	24.00mm	66.00mm	0.60mm
DH0400017T7R01	IN2005	0.157	4.00mm	6mm Cylind.	17.00mm	24.00mm	66.00mm	0.60mm
DH0410017T7R01	IN2005	0.161	4.10mm	6mm Cylind.	17.00mm	24.00mm	66.00mm	0.70mm
DH0420017T7R01	IN2005	0.165	4.20mm	6mm Cylind.	17.00mm	24.00mm	66.00mm	0.70mm
DH0430017T7R01	IN2005	0.169	4.30mm	6mm Cylind.	17.00mm	24.00mm	66.00mm	0.70mm
DH0440017T7R01	IN2005	0.173	4.40mm	6mm Cylind.	17.00mm	24.00mm	66.00mm	0.70mm
DH0450017T7R01	IN2005	0.177	4.50mm	6mm Cylind.	17.00mm	24.00mm	66.00mm	0.70mm
DH0460017T7R01	IN2005	0.181	4.60mm	6mm Cylind.	17.00mm	24.00mm	66.00mm	0.70mm
DH0470017T7R01	IN2005	0.185	4.70mm	6mm Cylind.	17.00mm	24.00mm	66.00mm	0.80mm
DH0480020T7R01	IN2005	0.189	4.80mm	6mm Cylind.	20.00mm	28.00mm	66.00mm	0.80mm
DH0490020T7R01	IN2005	0.193	4.90mm	6mm Cylind.	20.00mm	28.00mm	66.00mm	0.80mm
DH0500020T7R01	IN2005	0.197	5.00mm	6mm Cylind.	20.00mm	28.00mm	66.00mm	0.80mm
DH0510020T7R01	IN2005	0.201	5.10mm	6mm Cylind.	20.00mm	28.00mm	66.00mm	0.80mm
DH0520020T7R01	IN2005	0.205	5.20mm	6mm Cylind.	20.00mm	28.00mm	66.00mm	0.80mm
DH0530020T7R01	IN2005	0.209	5.30mm	6mm Cylind.	20.00mm	28.00mm	66.00mm	0.80mm
DH0540020T7R01	IN2005	0.213	5.40mm	6mm Cylind.	20.00mm	28.00mm	66.00mm	0.80mm
DH0550020T7R01	IN2005	0.217	5.50mm	6mm Cylind.	20.00mm	28.00mm	66.00mm	0.90mm
DH0560020T7R01	IN2005	0.220	5.60mm	6mm Cylind.	20.00mm	28.00mm	66.00mm	0.90mm
DH0570020T7R01	IN2005	0.224	5.70mm	6mm Cylind.	20.00mm	28.00mm	66.00mm	0.90mm
DH0580020T7R01	IN2005	0.228	5.80mm	6mm Cylind.	20.00mm	28.00mm	66.00mm	0.90mm
DH0590020T7R01	IN2005	0.232	5.90mm	6mm Cylind.	20.00mm	28.00mm	66.00mm	0.90mm
DH0600020T7R01	IN2005	0.236	6.00mm	6mm Cylind.	20.00mm	28.00mm	66.00mm	0.90mm
DH0610024T0R01	IN2005	0.240	6.10mm	8mm Cylind.	24.00mm	24.00mm	79.00mm	1.00mm
DH0620024T0R01	IN2005	0.244	6.20mm	8mm Cylind.	24.00mm	34.00mm	79.00mm	1.00mm
DH0630024T0R01	IN2005	0.248	6.30mm	8mm Cylind.	24.00mm	34.00mm	79.00mm	1.00mm
DH0640024T0R01	IN2005	0.252	6.40mm	8mm Cylind.	24.00mm	34.00mm	79.00mm	1.00mm
DH0650024T0R01	IN2005	0.256	6.50mm	8mm Cylind.	24.00mm	34.00mm	79.00mm	1.00mm
DH0660024T0R01	IN2005	0.260	6.60mm	8mm Cylind.	24.00mm	34.00mm	79.00mm	1.00mm
DH0670024T0R01	IN2005	0.264	6.70mm	8mm Cylind.	24.00mm	34.00mm	79.00mm	1.10mm
DH0680024T0R01	IN2005	0.268	6.80mm	8mm Cylind.	24.00mm	34.00mm	79.00mm	1.10mm
DH0690024T0R01	IN2005	0.272	6.90mm	8mm Cylind.	24.00mm	34.00mm	79.00mm	1.10mm

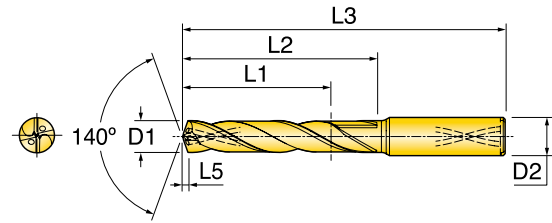


Part Number		D1 Max. Diam. Of Spot (inch)	D1 Max. Diam. Of Spot (mm)	D2 Shank Size/Style	L1 Maximum Depth of Cut	L2 Flute Length	L3 Overall Length	L5
DH0700024T0R01	IN2005	0.276	7.00mm	8mm Cylind.	24.00mm	34.00mm	79.00mm	1.10mm
DH0710029T0R01	IN2005	0.280	7.10mm	8mm Cylind.	29.00mm	41.00mm	79.00mm	1.10mm
DH0720029T0R01	IN2005	0.283	7.20mm	8mm Cylind.	29.00mm	41.00mm	79.00mm	1.10mm
DH0730029T0R01	IN2005	0.287	7.30mm	8mm Cylind.	29.00mm	41.00mm	79.00mm	1.10mm
DH0740029T0R01	IN2005	0.291	7.40mm	8mm Cylind.	29.00mm	41.00mm	79.00mm	1.20mm
DH0750029T0R01	IN2005	0.295	7.50mm	8mm Cylind.	29.00mm	41.00mm	79.00mm	1.20mm
DH0760029T0R01	IN2005	0.299	7.60mm	8mm Cylind.	29.00mm	41.00mm	79.00mm	1.20mm
DH0770029T0R01	IN2005	0.303	7.70mm	8mm Cylind.	29.00mm	41.00mm	79.00mm	1.20mm
DH0780029T0R01	IN2005	0.307	7.80mm	8mm Cylind.	29.00mm	41.00mm	79.00mm	1.20mm
DH0790029T0R01	IN2005	0.311	7.90mm	8mm Cylind.	29.00mm	41.00mm	79.00mm	1.30mm
DH0800029T0R01	IN2005	0.315	8.00mm	8mm Cylind.	29.00mm	41.00mm	79.00mm	1.30mm
DH0810035T1R01	IN2005	0.319	8.10mm	10mm Cylind.	35.00mm	47.00mm	89.00mm	1.30mm
DH0820035T1R01	IN2005	0.323	8.20mm	10mm Cylind.	35.00mm	47.00mm	89.00mm	1.30mm
DH0830035T1R01	IN2005	0.327	8.30mm	10mm Cylind.	35.00mm	47.00mm	89.00mm	1.30mm
DH0840035T1R01	IN2005	0.331	8.40mm	10mm Cylind.	35.00mm	47.00mm	89.00mm	1.30mm
DH0850035T1R01	IN2005	0.335	8.50mm	10mm Cylind.	35.00mm	47.00mm	89.00mm	1.30mm
DH0860035T1R01	IN2005	0.339	8.60mm	10mm Cylind.	35.00mm	47.00mm	89.00mm	1.40mm
DH0870035T1R01	IN2005	0.343	8.70mm	10mm Cylind.	35.00mm	47.00mm	89.00mm	1.40mm
DH0880035T1R01	IN2005	0.346	8.80mm	10mm Cylind.	35.00mm	47.00mm	89.00mm	1.40mm
DH0890035T1R01	IN2005	0.350	8.90mm	10mm Cylind.	35.00mm	47.00mm	89.00mm	1.40mm
DH0900035T1R01	IN2005	0.354	9.00mm	10mm Cylind.	35.00mm	47.00mm	89.00mm	1.40mm
DH0910035T1R01	IN2005	0.358	9.10mm	10mm Cylind.	35.00mm	47.00mm	89.00mm	1.40mm
DH0920035T1R01	IN2005	0.362	9.20mm	10mm Cylind.	35.00mm	47.00mm	89.00mm	1.40mm
DH0930035T1R01	IN2005	0.366	9.30mm	10mm Cylind.	35.00mm	47.00mm	89.00mm	1.50mm
DH0940035T1R01	IN2005	0.370	9.40mm	10mm Cylind.	35.00mm	47.00mm	89.00mm	1.50mm
DH0950035T1R01	IN2005	0.374	9.50mm	10mm Cylind.	35.00mm	47.00mm	89.00mm	1.50mm
DH0960035T1R01	IN2005	0.378	9.60mm	10mm Cylind.	35.00mm	47.00mm	89.00mm	1.50mm
DH0970035T1R01	IN2005	0.382	9.70mm	10mm Cylind.	35.00mm	47.00mm	89.00mm	1.50mm
DH0980035T1R01	IN2005	0.386	9.80mm	10mm Cylind.	35.00mm	47.00mm	89.00mm	1.60mm
DH0990035T1R01	IN2005	0.390	9.90mm	10mm Cylind.	35.00mm	47.00mm	89.00mm	1.60mm
DH1000035T1R01	IN2005	0.394	10.00mm	10mm Cylind.	35.00mm	47.00mm	89.00mm	1.60mm
DH1010040T2R01	IN2005	0.398	10.10mm	12mm Cylind.	40.00mm	55.00mm	102.00mm	1.60mm
DH1020040T2R01	IN2005	0.402	10.20mm	12mm Cylind.	40.00mm	55.00mm	102.00mm	1.60mm
DH1030040T2R01	IN2005	0.406	10.30mm	12mm Cylind.	40.00mm	55.00mm	102.00mm	1.60mm
DH1040040T2R01	IN2005	0.409	10.40mm	12mm Cylind.	40.00mm	55.00mm	102.00mm	1.60mm
DH1050040T2R01	IN2005	0.413	10.50mm	12mm Cylind.	40.00mm	55.00mm	102.00mm	1.60mm
DH1060040T2R01	IN2005	0.417	10.60mm	12mm Cylind.	40.00mm	55.00mm	102.00mm	1.70mm
DH1070040T2R01	IN2005	0.421	10.70mm	12mm Cylind.	40.00mm	55.00mm	102.00mm	1.70mm
DH1080040T2R01	IN2005	0.425	10.80mm	12mm Cylind.	40.00mm	55.00mm	102.00mm	1.70mm
DH1090040T2R01	IN2005	0.429	10.90mm	12mm Cylind.	40.00mm	55.00mm	102.00mm	1.70mm
DH1100040T2R01	IN2005	0.433	11.00mm	12mm Cylind.	40.00mm	55.00mm	102.00mm	1.70mm
DH1110040T2R01	IN2005	0.437	11.10mm	12mm Cylind.	40.00mm	55.00mm	102.00mm	1.70mm
DH1120040T2R01	IN2005	0.441	11.20mm	12mm Cylind.	40.00mm	55.00mm	102.00mm	1.80mm
DH1130040T2R01	IN2005	0.445	11.30mm	12mm Cylind.	40.00mm	55.00mm	102.00mm	1.80mm
DH1140040T2R01	IN2005	0.449	11.40mm	12mm Cylind.	40.00mm	55.00mm	102.00mm	1.80mm
DH1150040T2R01	IN2005	0.453	11.50mm	12mm Cylind.	40.00mm	55.00mm	102.00mm	1.80mm
DH1160040T2R01	IN2005	0.457	11.60mm	12mm Cylind.	40.00mm	55.00mm	102.00mm	1.80mm
DH1170040T2R01	IN2005	0.461	11.70mm	12mm Cylind.	40.00mm	55.00mm	102.00mm	1.90mm
DH1180040T2R01	IN2005	0.465	11.80mm	12mm Cylind.	40.00mm	55.00mm	102.00mm	1.90mm
DH1190040T2R01	IN2005	0.469	11.90mm	12mm Cylind.	40.00mm	55.00mm	102.00mm	1.90mm
DH1200040T2R01	IN2005	0.472	12.00mm	12mm Cylind.	40.00mm	55.00mm	102.00mm	1.90mm

Metric Standard - (dimensions in mm unless noted)



## SOLID CARBIDE DRILLS 5:1 GEOMETRY WITH INTERNAL COOLANT



Part Number		D1 Max. Diam. Of Spot (inch)	D1 Max. Diam. Of Spot (mm)	D2 Shank Size/Style	L1 Maximum Depth of Cut	L2 Flute Length	L3 Overall Length	L5
DH0300023T7R01	IN2005	0.118	3.00mm	6mm Cylind.	23.00mm	28.00mm	66.00mm	0.50mm
DH0310023T7R01	IN2005	0.122	3.10mm	6mm Cylind.	23.00mm	28.00mm	66.00mm	0.50mm
DH0320023T7R01	IN2005	0.126	3.20mm	6mm Cylind.	23.00mm	28.00mm	66.00mm	0.50mm
DH0330023T7R01	IN2005	0.130	3.30mm	6mm Cylind.	23.00mm	28.00mm	66.00mm	0.50mm
DH0340023T7R01	IN2005	0.134	3.40mm	6mm Cylind.	23.00mm	28.00mm	66.00mm	0.50mm
DH0350023T7R01	IN2005	0.138	3.50mm	6mm Cylind.	23.00mm	28.00mm	66.00mm	0.60mm
DH0360023T7R01	IN2005	0.142	3.60mm	6mm Cylind.	23.00mm	28.00mm	66.00mm	0.60mm
DH0370023T7R01	IN2005	0.146	3.70mm	6mm Cylind.	23.00mm	28.00mm	66.00mm	0.60mm
DH0380029T7R01	IN2005	0.150	3.80mm	6mm Cylind.	29.00mm	36.00mm	74.00mm	0.60mm
DH0390029T7R01	IN2005	0.154	3.90mm	6mm Cylind.	29.00mm	36.00mm	74.00mm	0.60mm
DH0400029T7R01	IN2005	0.157	4.00mm	6mm Cylind.	29.00mm	36.00mm	74.00mm	0.60mm
DH0410029T7R01	IN2005	0.161	4.10mm	6mm Cylind.	29.00mm	36.00mm	74.00mm	0.70mm
DH0420029T7R01	IN2005	0.165	4.20mm	6mm Cylind.	29.00mm	36.00mm	74.00mm	0.70mm
DH0430029T7R01	IN2005	0.169	4.30mm	6mm Cylind.	29.00mm	36.00mm	74.00mm	0.70mm
DH0440029T7R01	IN2005	0.173	4.40mm	6mm Cylind.	29.00mm	36.00mm	74.00mm	0.70mm
DH0450029T7R01	IN2005	0.177	4.50mm	6mm Cylind.	29.00mm	36.00mm	74.00mm	0.70mm
DH0460029T7R01	IN2005	0.181	4.60mm	6mm Cylind.	29.00mm	36.00mm	74.00mm	0.70mm
DH0470029T7R01	IN2005	0.185	4.70mm	6mm Cylind.	29.00mm	36.00mm	74.00mm	0.80mm
DH0480035T7R01	IN2005	0.189	4.80mm	6mm Cylind.	35.00mm	44.00mm	74.00mm	0.80mm
DH0490035T7R01	IN2005	0.193	4.90mm	6mm Cylind.	35.00mm	44.00mm	82.00mm	0.80mm
DH0500035T7R01	IN2005	0.197	5.00mm	6mm Cylind.	35.00mm	44.00mm	82.00mm	0.80mm
DH0510035T7R01	IN2005	0.201	5.10mm	6mm Cylind.	35.00mm	44.00mm	82.00mm	0.80mm
DH0520035T7R01	IN2005	0.209	5.20mm	6mm Cylind.	35.00mm	44.00mm	82.00mm	0.80mm
DH0535035T7R01	IN2005	0.205	5.30mm	6mm Cylind.	35.00mm	44.00mm	82.00mm	0.80mm
DH0540035T7R01	IN2005	0.213	5.40mm	6mm Cylind.	35.00mm	44.00mm	82.00mm	0.80mm
DH0550035T7R01	IN2005	0.217	5.50mm	6mm Cylind.	35.00mm	44.00mm	82.00mm	0.90mm
DH0560035T7R01	IN2005	0.220	5.60mm	6mm Cylind.	35.00mm	44.00mm	82.00mm	0.90mm
DH0570035T7R01	IN2005	0.224	5.70mm	6mm Cylind.	35.00mm	44.00mm	82.00mm	0.90mm
DH0580035T7R01	IN2005	0.228	5.80mm	6mm Cylind.	35.00mm	44.00mm	82.00mm	0.90mm
DH0590035T7R01	IN2005	0.232	5.90mm	6mm Cylind.	35.00mm	44.00mm	82.00mm	0.90mm
DH0600035T7R01	IN2005	0.236	6.00mm	6mm Cylind.	35.00mm	44.00mm	82.00mm	0.90mm
DH0610043TOR01	IN2005	0.240	6.10mm	8mm Cylind.	43.00mm	53.00mm	91.00mm	1.00mm
DH0620043TOR01	IN2005	0.244	6.20mm	8mm Cylind.	43.00mm	53.00mm	91.00mm	1.00mm
DH0630043TOR01	IN2005	0.248	6.30mm	8mm Cylind.	43.00mm	53.00mm	91.00mm	1.00mm
DH0640043TOR01	IN2005	0.252	6.40mm	8mm Cylind.	43.00mm	53.00mm	91.00mm	1.00mm
DH0650043TOR01	IN2005	0.256	6.50mm	8mm Cylind.	43.00mm	53.00mm	91.00mm	1.00mm
DH0660043TOR01	IN2005	0.260	6.60mm	8mm Cylind.	43.00mm	53.00mm	91.00mm	1.00mm
DH0670043TOR01	IN2005	0.264	6.70mm	8mm Cylind.	43.00mm	53.00mm	91.00mm	1.10mm
DH0680043TOR01	IN2005	0.268	6.80mm	8mm Cylind.	43.00mm	53.00mm	91.00mm	1.10mm
DH0690043TOR01	IN2005	0.272	6.90mm	8mm Cylind.	43.00mm	53.00mm	91.00mm	1.10mm

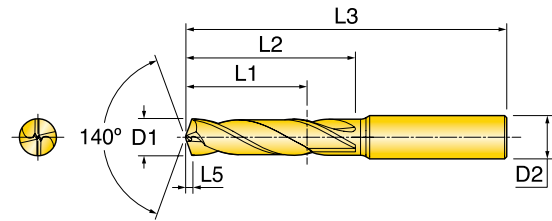


Part Number		D1 Max. Diam. Of Spot (inch)	D1 Max. Diam. Of Spot (mm)	D2 Shank Size/Style	L1 Maximum Depth of Cut	L2 Flute Length	L3 Overall Length	L5
DH0700043TOR01	IN2005	0.276	7.00mm	8mm Cylind.	43.00mm	53.00mm	91.00mm	1.10mm
DH0710043TOR01	IN2005	0.280	7.10mm	8mm Cylind.	43.00mm	53.00mm	91.00mm	1.10mm
DH0720043TOR01	IN2005	0.283	7.20mm	8mm Cylind.	43.00mm	53.00mm	91.00mm	1.10mm
DH0730043TOR01	IN2005	0.287	7.30mm	8mm Cylind.	43.00mm	53.00mm	91.00mm	1.10mm
DH0740043TOR01	IN2005	0.291	7.40mm	8mm Cylind.	43.00mm	53.00mm	91.00mm	1.20mm
DH0750043TOR01	IN2005	0.295	7.50mm	8mm Cylind.	43.00mm	53.00mm	91.00mm	1.20mm
DH0760043TOR01	IN2005	0.299	7.60mm	8mm Cylind.	43.00mm	53.00mm	91.00mm	1.20mm
DH0770043TOR01	IN2005	0.303	7.70mm	8mm Cylind.	43.00mm	53.00mm	91.00mm	1.20mm
DH0780043TOR01	IN2005	0.307	7.80mm	8mm Cylind.	43.00mm	53.00mm	91.00mm	1.20mm
DH0790043TOR01	IN2005	0.311	7.90mm	8mm Cylind.	43.00mm	53.00mm	91.00mm	1.30mm
DH0800043TOR01	IN2005	0.315	8.00mm	8mm Cylind.	43.00mm	53.00mm	91.00mm	1.30mm
DH0810049T1R01	IN2005	0.319	8.10mm	10mm Cylind.	49.00mm	61.00mm	103.00mm	1.30mm
DH0820049T1R01	IN2005	0.323	8.20mm	10mm Cylind.	49.00mm	61.00mm	103.00mm	1.30mm
DH0830049T1R01	IN2005	0.327	8.30mm	10mm Cylind.	49.00mm	61.00mm	103.00mm	1.30mm
DH0840049T1R01	IN2005	0.331	8.40mm	10mm Cylind.	49.00mm	61.00mm	103.00mm	1.30mm
DH0850049T1R01	IN2005	0.335	8.50mm	10mm Cylind.	49.00mm	61.00mm	103.00mm	1.30mm
DH0860049T1R01	IN2005	0.339	8.60mm	10mm Cylind.	49.00mm	61.00mm	103.00mm	1.40mm
DH0870049T1R01	IN2005	0.343	8.70mm	10mm Cylind.	49.00mm	61.00mm	103.00mm	1.40mm
DH0880049T1R01	IN2005	0.346	8.80mm	10mm Cylind.	49.00mm	61.00mm	103.00mm	1.40mm
DH0890049T1R01	IN2005	0.350	8.90mm	10mm Cylind.	49.00mm	61.00mm	103.00mm	1.40mm
DH0900049T1R01	IN2005	0.354	9.00mm	10mm Cylind.	49.00mm	61.00mm	103.00mm	1.40mm
DH0910049T1R01	IN2005	0.358	9.10mm	10mm Cylind.	49.00mm	61.00mm	103.00mm	1.40mm
DH0920049T1R01	IN2005	0.362	9.20mm	10mm Cylind.	49.00mm	61.00mm	103.00mm	1.40mm
DH0930049T1R01	IN2005	0.366	9.30mm	10mm Cylind.	49.00mm	61.00mm	103.00mm	1.50mm
DH0940049T1R01	IN2005	0.370	9.40mm	10mm Cylind.	49.00mm	61.00mm	103.00mm	1.50mm
DH0950049T1R01	IN2005	0.374	9.50mm	10mm Cylind.	49.00mm	61.00mm	103.00mm	1.50mm
DH0960049T1R01	IN2005	0.378	9.60mm	10mm Cylind.	49.00mm	61.00mm	103.00mm	1.50mm
DH0970049T1R01	IN2005	0.382	9.70mm	10mm Cylind.	49.00mm	61.00mm	103.00mm	1.50mm
DH0980049T1R01	IN2005	0.386	9.80mm	10mm Cylind.	49.00mm	61.00mm	103.00mm	1.60mm
DH0990049T1R01	IN2005	0.390	9.90mm	10mm Cylind.	49.00mm	61.00mm	103.00mm	1.60mm
DH1000049T1R01	IN2005	0.394	10.00mm	10mm Cylind.	49.00mm	61.00mm	103.00mm	1.60mm
DH1010056T2R01	IN2005	0.398	10.10mm	12mm Cylind.	56.00mm	71.00mm	118.00mm	1.60mm
DH1020056T2R01	IN2005	0.402	10.20mm	12mm Cylind.	56.00mm	71.00mm	118.00mm	1.60mm
DH1030056T2R01	IN2005	0.406	10.30mm	12mm Cylind.	56.00mm	71.00mm	118.00mm	1.60mm
DH1050056T2R01	IN2005	0.413	10.50mm	12mm Cylind.	56.00mm	71.00mm	118.00mm	1.60mm
DH1056056T2R01	IN2005	0.409	10.40mm	12mm Cylind.	56.00mm	71.00mm	118.00mm	1.60mm
DH1060056T2R01	IN2005	0.417	10.60mm	12mm Cylind.	56.00mm	71.00mm	118.00mm	1.70mm
DH1070056T2R01	IN2005	0.421	10.70mm	12mm Cylind.	56.00mm	71.00mm	118.00mm	1.70mm
DH1080056T2R01	IN2005	0.425	10.80mm	12mm Cylind.	56.00mm	71.00mm	118.00mm	1.70mm
DH1090056T2R01	IN2005	0.429	10.90mm	12mm Cylind.	56.00mm	71.00mm	118.00mm	1.70mm
DH1100056T2R01	IN2005	0.433	11.00mm	12mm Cylind.	56.00mm	71.00mm	118.00mm	1.70mm
DH1110056T2R01	IN2005	0.437	11.10mm	12mm Cylind.	56.00mm	71.00mm	118.00mm	1.70mm
DH1120056T2R01	IN2005	0.441	11.20mm	12mm Cylind.	56.00mm	71.00mm	118.00mm	1.80mm
DH1130056T2R01	IN2005	0.445	11.30mm	12mm Cylind.	56.00mm	71.00mm	118.00mm	1.80mm
DH1140056T2R01	IN2005	0.453	11.40mm	12mm Cylind.	56.00mm	71.00mm	118.00mm	1.80mm
DH1156056T2R01	IN2005	0.449	11.50mm	12mm Cylind.	56.00mm	71.00mm	118.00mm	1.80mm
DH1160056T2R01	IN2005	0.457	11.60mm	12mm Cylind.	56.00mm	71.00mm	118.00mm	1.80mm
DH1170056T2R01	IN2005	0.461	11.70mm	12mm Cylind.	56.00mm	71.00mm	118.00mm	1.90mm
DH1180056T2R01	IN2005	0.465	11.80mm	12mm Cylind.	56.00mm	71.00mm	118.00mm	1.90mm
DH1190056T2R01	IN2005	0.469	11.90mm	12mm Cylind.	56.00mm	71.00mm	118.00mm	1.90mm
DH1200056T2R01	IN2005	0.472	12.00mm	12mm Cylind.	56.00mm	71.00mm	118.00mm	1.90mm

Metric Standard - (dimensions in mm unless noted)



SOLID CARBIDE DRILLS 3:1 GEOMETRY WITH EXTERNAL COOLANT



Part Number		D1 Max. Diam. Of Spot (inch)	D1 Max. Diam. Of Spot (mm)	D2 Shank Size/Style	L1 Maximum Depth of Cut	L2 Flute Length	L3 Overall Length	L5
DJ0300014T7R01	IN2005	0.118	3.00mm	6mm Cylind.	14.00mm	20.00mm	62.00mm	0.50mm
DJ0310014T7R01	IN2005	0.122	3.10mm	6mm Cylind.	14.00mm	20.00mm	62.00mm	0.50mm
DJ0320014T7R01	IN2005	0.126	3.20mm	6mm Cylind.	14.00mm	20.00mm	62.00mm	0.50mm
DJ0330014T7R01	IN2005	0.130	3.30mm	6mm Cylind.	14.00mm	20.00mm	62.00mm	0.50mm
DJ0340014T7R01	IN2005	0.134	3.40mm	6mm Cylind.	14.00mm	20.00mm	62.00mm	0.50mm
DJ0350014T7R01	IN2005	0.138	3.50mm	6mm Cylind.	14.00mm	20.00mm	62.00mm	0.60mm
DJ0360014T7R01	IN2005	0.142	3.60mm	6mm Cylind.	14.00mm	20.00mm	62.00mm	0.60mm
DJ0370017T7R01	IN2005	0.146	3.70mm	6mm Cylind.	14.00mm	20.00mm	62.00mm	0.60mm
DJ0380017T7R01	IN2005	0.150	3.80mm	6mm Cylind.	17.00mm	24.00mm	66.00mm	0.60mm
DJ0390017T7R01	IN2005	0.154	3.90mm	6mm Cylind.	17.00mm	24.00mm	66.00mm	0.60mm
DJ0400017T7R01	IN2005	0.157	4.00mm	6mm Cylind.	17.00mm	24.00mm	66.00mm	0.60mm
DJ0410017T7R01	IN2005	0.161	4.10mm	6mm Cylind.	17.00mm	24.00mm	66.00mm	0.70mm
DJ0420017T7R01	IN2005	0.165	4.20mm	6mm Cylind.	17.00mm	24.00mm	66.00mm	0.70mm
DJ0430017T7R01	IN2005	0.169	4.30mm	6mm Cylind.	17.00mm	24.00mm	66.00mm	0.70mm
DJ0440017T7R01	IN2005	0.173	4.40mm	6mm Cylind.	17.00mm	24.00mm	66.00mm	0.70mm
DJ0450017T7R01	IN2005	0.177	4.50mm	6mm Cylind.	17.00mm	24.00mm	66.00mm	0.70mm
DJ0460017T7R01	IN2005	0.181	4.60mm	6mm Cylind.	17.00mm	24.00mm	66.00mm	0.80mm
DJ0470017T7R01	IN2005	0.185	4.70mm	6mm Cylind.	17.00mm	24.00mm	66.00mm	0.80mm
DJ0480020T7R01	IN2005	0.189	4.80mm	6mm Cylind.	20.00mm	28.00mm	66.00mm	0.80mm
DJ0490020T7R01	IN2005	0.193	4.90mm	6mm Cylind.	20.00mm	28.00mm	66.00mm	0.80mm
DJ0500020T7R01	IN2005	0.197	5.00mm	6mm Cylind.	20.00mm	28.00mm	66.00mm	0.80mm
DJ0510020T7R01	IN2005	0.201	5.10mm	6mm Cylind.	20.00mm	28.00mm	66.00mm	0.80mm
DJ0520020T7R01	IN2005	0.205	5.20mm	6mm Cylind.	20.00mm	28.00mm	66.00mm	0.80mm
DJ0530020T7R01	IN2005	0.209	5.30mm	6mm Cylind.	20.00mm	28.00mm	66.00mm	0.80mm
DJ0540020T7R01	IN2005	0.213	5.40mm	6mm Cylind.	20.00mm	28.00mm	66.00mm	0.80mm
DJ0550020T7R01	IN2005	0.217	5.50mm	6mm Cylind.	20.00mm	28.00mm	66.00mm	0.90mm
DJ0560020T7R01	IN2005	0.220	5.60mm	6mm Cylind.	20.00mm	28.00mm	66.00mm	0.90mm
DJ0570020T7R01	IN2005	0.224	5.70mm	6mm Cylind.	20.00mm	28.00mm	66.00mm	0.90mm
DJ0580020T7R01	IN2005	0.228	5.80mm	6mm Cylind.	20.00mm	28.00mm	66.00mm	0.90mm
DJ0590020T7R01	IN2005	0.232	5.90mm	6mm Cylind.	20.00mm	28.00mm	66.00mm	0.90mm
DJ0610020T7R01	IN2005	0.236	6.00mm	6mm Cylind.	20.00mm	28.00mm	66.00mm	0.90mm
DJ0610024T0R01	IN2005	0.240	6.10mm	8mm Cylind.	24.00mm	34.00mm	79.00mm	1.00mm
DJ0620024T0R01	IN2005	0.244	6.20mm	8mm Cylind.	24.00mm	34.00mm	79.00mm	1.00mm
DJ0630024T0R01	IN2005	0.248	6.30mm	8mm Cylind.	24.00mm	34.00mm	79.00mm	1.00mm
DJ0640024T0R01	IN2005	0.252	6.40mm	8mm Cylind.	24.00mm	34.00mm	79.00mm	1.00mm
DJ0650024T0R01	IN2005	0.256	6.50mm	8mm Cylind.	24.00mm	34.00mm	79.00mm	1.00mm
DJ0660024T0R01	IN2005	0.260	6.60mm	8mm Cylind.	24.00mm	34.00mm	79.00mm	1.00mm
DJ0670024T0R01	IN2005	0.264	6.70mm	8mm Cylind.	24.00mm	34.00mm	79.00mm	1.10mm
DJ0680024T0R01	IN2005	0.268	6.80mm	8mm Cylind.	24.00mm	34.00mm	79.00mm	1.10mm
DJ0690024T0R01	IN2005	0.272	6.90mm	8mm Cylind.	24.00mm	34.00mm	79.00mm	1.10mm

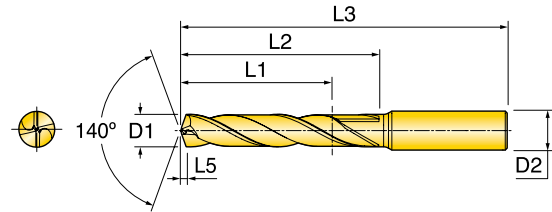


Part Number		D1 Max. Diam. Of Spot (inch)	D1 Max. Diam. Of Spot (mm)	D2 Shank Size/Style	L1 Maximum Depth of Cut	L2 Flute Length	L3 Overall Length	L5
DJ0700024T0R01	IN2005	0.276	7.00mm	8mm Cylind.	24.00mm	34.00mm	79.00mm	1.10mm
DJ0710029T0R01	IN2005	0.280	7.10mm	8mm Cylind.	29.00mm	41.00mm	79.00mm	1.10mm
DJ0720029T0R01	IN2005	0.283	7.20mm	8mm Cylind.	29.00mm	41.00mm	79.00mm	1.10mm
DJ0730029T0R01	IN2005	0.287	7.30mm	8mm Cylind.	29.00mm	41.00mm	79.00mm	1.10mm
DJ0740029T0R01	IN2005	0.291	7.40mm	8mm Cylind.	29.00mm	41.00mm	79.00mm	1.20mm
DJ0750029T0R01	IN2005	0.295	7.50mm	8mm Cylind.	29.00mm	41.00mm	79.00mm	1.20mm
DJ0760029T0R01	IN2005	0.299	7.60mm	8mm Cylind.	29.00mm	41.00mm	79.00mm	1.20mm
DJ0770029T0R01	IN2005	0.303	7.70mm	8mm Cylind.	29.00mm	41.00mm	79.00mm	1.20mm
DJ0780029T0R01	IN2005	0.307	7.80mm	8mm Cylind.	29.00mm	41.00mm	79.00mm	1.20mm
DJ0790029T0R01	IN2005	0.311	7.90mm	8mm Cylind.	29.00mm	41.00mm	79.00mm	1.30mm
DJ0800029T0R01	IN2005	0.315	8.00mm	8mm Cylind.	29.00mm	41.00mm	79.00mm	1.30mm
DJ0810035T1R01	IN2005	0.319	8.10mm	10mm Cylind.	35.00mm	47.00mm	89.00mm	1.30mm
DJ0820035T1R01	IN2005	0.323	8.20mm	10mm Cylind.	35.00mm	47.00mm	89.00mm	1.30mm
DJ0830035T1R01	IN2005	0.327	8.30mm	10mm Cylind.	35.00mm	47.00mm	89.00mm	1.30mm
DJ0840035T1R01	IN2005	0.331	8.40mm	10mm Cylind.	35.00mm	47.00mm	89.00mm	1.30mm
DJ0850035T1R01	IN2005	0.335	8.50mm	10mm Cylind.	35.00mm	47.00mm	89.00mm	1.30mm
DJ0860035T1R01	IN2005	0.339	8.60mm	10mm Cylind.	35.00mm	47.00mm	89.00mm	1.40mm
DJ0870035T1R01	IN2005	0.343	8.70mm	10mm Cylind.	35.00mm	47.00mm	89.00mm	1.40mm
DJ0880035T1R01	IN2005	0.346	8.80mm	10mm Cylind.	35.00mm	47.00mm	89.00mm	1.40mm
DJ0890035T1R01	IN2005	0.350	8.90mm	10mm Cylind.	35.00mm	47.00mm	89.00mm	1.40mm
DJ0900035T1R01	IN2005	0.354	9.00mm	10mm Cylind.	35.00mm	47.00mm	89.00mm	1.40mm
DJ0910035T1R01	IN2005	0.358	9.10mm	10mm Cylind.	35.00mm	47.00mm	89.00mm	1.40mm
DJ0920035T1R01	IN2005	0.362	9.20mm	10mm Cylind.	35.00mm	47.00mm	89.00mm	1.40mm
DJ0930035T1R01	IN2005	0.366	9.30mm	10mm Cylind.	35.00mm	47.00mm	89.00mm	1.50mm
DJ0940035T1R01	IN2005	0.370	9.40mm	10mm Cylind.	35.00mm	47.00mm	89.00mm	1.50mm
DJ0950035T1R01	IN2005	0.374	9.50mm	10mm Cylind.	35.00mm	47.00mm	89.00mm	1.50mm
DJ0960035T1R01	IN2005	0.378	9.60mm	10mm Cylind.	35.00mm	47.00mm	89.00mm	1.50mm
DJ0970035T1R01	IN2005	0.382	9.70mm	10mm Cylind.	35.00mm	47.00mm	89.00mm	1.50mm
DJ0980035T1R01	IN2005	0.386	9.80mm	10mm Cylind.	35.00mm	47.00mm	89.00mm	1.60mm
DJ0990035T1R01	IN2005	0.390	9.90mm	10mm Cylind.	35.00mm	47.00mm	89.00mm	1.60mm
DJ1000035T1R01	IN2005	0.394	10.00mm	10mm Cylind.	35.00mm	47.00mm	89.00mm	1.60mm
DJ1010040T2R01	IN2005	0.398	10.10mm	12mm Cylind.	40.00mm	55.00mm	101.00mm	1.60mm
DJ1020040T2R01	IN2005	0.402	10.20mm	12mm Cylind.	40.00mm	55.00mm	101.00mm	1.60mm
DJ1030040T2R01	IN2005	0.406	10.30mm	12mm Cylind.	40.00mm	55.00mm	101.00mm	1.60mm
DJ1040040T2R01	IN2005	0.409	10.40mm	12mm Cylind.	40.00mm	55.00mm	101.00mm	1.60mm
DJ1050040T2R01	IN2005	0.413	10.50mm	12mm Cylind.	40.00mm	55.00mm	101.00mm	1.60mm
DJ1060040T2R01	IN2005	0.417	10.60mm	12mm Cylind.	40.00mm	55.00mm	101.00mm	1.70mm
DJ1070040T2R01	IN2005	0.421	10.70mm	12mm Cylind.	40.00mm	55.00mm	101.00mm	1.70mm
DJ1080040T2R01	IN2005	0.425	10.80mm	12mm Cylind.	40.00mm	55.00mm	101.00mm	1.70mm
DJ1090040T2R01	IN2005	0.429	10.90mm	12mm Cylind.	40.00mm	55.00mm	101.00mm	1.70mm
DJ1100040T2R01	IN2005	0.433	11.00mm	12mm Cylind.	40.00mm	55.00mm	101.00mm	1.70mm
DJ1110040T2R01	IN2005	0.437	11.10mm	12mm Cylind.	40.00mm	55.00mm	101.00mm	1.70mm
DJ1120040T2R01	IN2005	0.441	11.20mm	12mm Cylind.	40.00mm	55.00mm	101.00mm	1.80mm
DJ1130040T2R01	IN2005	0.445	11.30mm	12mm Cylind.	40.00mm	55.00mm	101.00mm	1.80mm
DJ1140040T2R01	IN2005	0.449	11.40mm	12mm Cylind.	40.00mm	55.00mm	101.00mm	1.80mm
DJ1150040T2R01	IN2005	0.453	11.50mm	12mm Cylind.	40.00mm	55.00mm	101.00mm	1.80mm
DJ1160040T2R01	IN2005	0.457	11.60mm	12mm Cylind.	40.00mm	55.00mm	101.00mm	1.80mm
DJ1170040T2R01	IN2005	0.461	11.70mm	12mm Cylind.	40.00mm	55.00mm	101.00mm	1.90mm
DJ1180040T2R01	IN2005	0.465	11.80mm	12mm Cylind.	40.00mm	55.00mm	101.00mm	1.90mm
DJ1190040T2R01	IN2005	0.469	11.90mm	12mm Cylind.	40.00mm	55.00mm	101.00mm	1.90mm
DJ1200040T2R01	IN2005	0.472	12.00mm	12mm Cylind.	40.00mm	55.00mm	101.00mm	1.90mm

Metric Standard - (dimensions in mm unless noted)



SOLID CARBIDE DRILLS 5:1 GEOMETRY WITH EXTERNAL COOLANT



Part Number		D1 Max. Diam. Of Spot (inch)	D1 Max. Diam. Of Spot (mm)	D2 Shank Size/Style	L1 Maximum Depth of Cut	L2 Flute Length	L3 Overall Length	L5
DJ0300023T7R01	IN2005	0.118	3.00mm	6mm Cylind.	23.00mm	28.00mm	66.00mm	0.50mm
DJ0310023T7R01	IN2005	0.122	3.10mm	6mm Cylind.	23.00mm	28.00mm	66.00mm	0.50mm
DJ0320023T7R01	IN2005	0.126	3.20mm	6mm Cylind.	23.00mm	28.00mm	66.00mm	0.50mm
DJ0330023T7R01	IN2005	0.130	3.30mm	6mm Cylind.	23.00mm	28.00mm	66.00mm	0.50mm
DJ0340023T7R01	IN2005	0.134	3.40mm	6mm Cylind.	23.00mm	28.00mm	66.00mm	0.50mm
DJ0350023T7R01	IN2005	0.138	3.50mm	6mm Cylind.	23.00mm	28.00mm	66.00mm	0.60mm
DJ0360023T7R01	IN2005	0.142	3.60mm	6mm Cylind.	23.00mm	28.00mm	66.00mm	0.60mm
DJ0370023T7R01	IN2005	0.146	3.70mm	6mm Cylind.	23.00mm	28.00mm	66.00mm	0.60mm
DJ0380029T7R01	IN2005	0.150	3.80mm	6mm Cylind.	29.00mm	36.00mm	74.00mm	0.60mm
DJ0390029T7R01	IN2005	0.154	3.90mm	6mm Cylind.	29.00mm	36.00mm	74.00mm	0.60mm
DJ0400029T7R01	IN2005	0.157	4.00mm	6mm Cylind.	29.00mm	36.00mm	74.00mm	0.60mm
DJ0410029T7R01	IN2005	0.161	4.10mm	6mm Cylind.	29.00mm	36.00mm	74.00mm	0.70mm
DJ0420029T7R01	IN2005	0.165	4.20mm	6mm Cylind.	29.00mm	36.00mm	74.00mm	0.70mm
DJ0430029T7R01	IN2005	0.169	4.30mm	6mm Cylind.	29.00mm	36.00mm	74.00mm	0.70mm
DJ0440029T7R01	IN2005	0.173	4.40mm	6mm Cylind.	29.00mm	36.00mm	74.00mm	0.70mm
DJ0450029T7R01	IN2005	0.177	4.50mm	6mm Cylind.	29.00mm	36.00mm	74.00mm	0.70mm
DJ0460029T7R01	IN2005	0.181	4.60mm	6mm Cylind.	29.00mm	36.00mm	74.00mm	0.70mm
DJ0470029T7R01	IN2005	0.185	4.70mm	6mm Cylind.	29.00mm	36.00mm	74.00mm	0.80mm
DJ0480035T7R01	IN2005	0.189	4.80mm	6mm Cylind.	35.00mm	44.00mm	74.00mm	0.80mm
DJ0490035T7R01	IN2005	0.193	4.90mm	6mm Cylind.	35.00mm	44.00mm	82.00mm	0.80mm
DJ0500035T7R01	IN2005	0.197	5.00mm	6mm Cylind.	35.00mm	44.00mm	82.00mm	0.80mm
DJ0510035T7R01	IN2005	0.201	5.10mm	6mm Cylind.	35.00mm	44.00mm	82.00mm	0.80mm
DJ0520035T7R01	IN2005	0.209	5.20mm	6mm Cylind.	35.00mm	44.00mm	82.00mm	0.80mm
DJ0535035T7R01	IN2005	0.205	5.30mm	6mm Cylind.	35.00mm	44.00mm	82.00mm	0.80mm
DJ0540035T7R01	IN2005	0.213	5.40mm	6mm Cylind.	35.00mm	44.00mm	82.00mm	0.80mm
DJ0550035T7R01	IN2005	0.217	5.50mm	6mm Cylind.	35.00mm	44.00mm	82.00mm	0.90mm
DJ0560035T7R01	IN2005	0.220	5.60mm	6mm Cylind.	35.00mm	44.00mm	82.00mm	0.90mm
DJ0570035T7R01	IN2005	0.224	5.70mm	6mm Cylind.	35.00mm	44.00mm	82.00mm	0.90mm
DJ0580035T7R01	IN2005	0.228	5.80mm	6mm Cylind.	35.00mm	44.00mm	82.00mm	0.90mm
DJ0590035T7R01	IN2005	0.232	5.90mm	6mm Cylind.	35.00mm	44.00mm	82.00mm	0.90mm
DJ0610035T7R01	IN2005	0.236	6.00mm	6mm Cylind.	35.00mm	44.00mm	82.00mm	0.90mm
DJ0610043T0R01	IN2005	0.240	6.10mm	8mm Cylind.	43.00mm	53.00mm	91.00mm	1.00mm
DJ0620043T0R01	IN2005	0.244	6.20mm	8mm Cylind.	43.00mm	53.00mm	91.00mm	1.00mm
DJ0630043T0R01	IN2005	0.248	6.30mm	8mm Cylind.	43.00mm	53.00mm	91.00mm	1.00mm
DJ0640043T0R01	IN2005	0.252	6.40mm	8mm Cylind.	43.00mm	53.00mm	91.00mm	1.00mm
DJ0650043T0R01	IN2000	0.256	6.50mm	8mm Cylind.	43.00mm	53.00mm	91.00mm	1.00mm
DJ0660043T0R01	IN2005	0.260	6.60mm	8mm Cylind.	43.00mm	53.00mm	91.00mm	1.00mm
DJ0670043T0R01	IN2005	0.264	6.70mm	8mm Cylind.	43.00mm	53.00mm	91.00mm	1.10mm
DJ0680043T0R01	IN2005	0.268	6.80mm	8mm Cylind.	43.00mm	53.00mm	91.00mm	1.10mm
DJ0690043T0R01	IN2005	0.272	6.90mm	8mm Cylind.	43.00mm	53.00mm	91.00mm	1.10mm



Part Number		D1 Max. Diam. Of Spot (inch)	D1 Max. Diam. Of Spot (mm)	D2 Shank Size/Style	L1 Maximum Depth of Cut	L2 Flute Length	L3 Overall Length	L5
DJ0700043T0R01	IN2005	0.276	7.00mm	8mm Cylind.	43.00mm	53.00mm	91.00mm	1.10mm
DJ0710043T0R01	IN2005	0.280	7.10mm	8mm Cylind.	43.00mm	53.00mm	91.00mm	1.10mm
DJ0720043T0R01	IN2005	0.283	7.20mm	8mm Cylind.	43.00mm	53.00mm	91.00mm	1.10mm
DJ0730043T0R01	IN2005	0.287	7.30mm	8mm Cylind.	43.00mm	53.00mm	91.00mm	1.10mm
DJ0740043T0R01	IN2005	0.291	7.40mm	8mm Cylind.	43.00mm	53.00mm	91.00mm	1.20mm
DJ0750043T0R01	IN2005	0.295	7.50mm	8mm Cylind.	43.00mm	53.00mm	91.00mm	1.20mm
DJ0760043T0R01	IN2005	0.299	7.60mm	8mm Cylind.	43.00mm	53.00mm	91.00mm	1.20mm
DJ0770043T0R01	IN2005	0.303	7.70mm	8mm Cylind.	43.00mm	53.00mm	91.00mm	1.20mm
DJ0780043T0R01	IN2005	0.307	7.80mm	8mm Cylind.	43.00mm	53.00mm	91.00mm	1.20mm
DJ0790043T0R01	IN2005	0.311	7.90mm	8mm Cylind.	43.00mm	53.00mm	91.00mm	1.30mm
DJ0800043T0R01	IN2005	0.315	8.00mm	8mm Cylind.	43.00mm	53.00mm	91.00mm	1.30mm
DJ0810049T1R01	IN2005	0.319	8.10mm	10mm Cylind.	49.00mm	61.00mm	103.00mm	1.30mm
DJ0820049T1R01	IN2005	0.323	8.20mm	10mm Cylind.	49.00mm	61.00mm	103.00mm	1.30mm
DJ0830049T1R01	IN2005	0.327	8.30mm	10mm Cylind.	49.00mm	61.00mm	103.00mm	1.30mm
DJ0840049T1R01	IN2005	0.331	8.40mm	10mm Cylind.	49.00mm	61.00mm	103.00mm	1.30mm
DJ0850049T1R01	IN2005	0.335	8.50mm	10mm Cylind.	49.00mm	61.00mm	103.00mm	1.30mm
DJ0860049T1R01	IN2005	0.339	8.60mm	10mm Cylind.	49.00mm	61.00mm	103.00mm	1.40mm
DJ0870049T1R01	IN2005	0.343	8.70mm	10mm Cylind.	49.00mm	61.00mm	103.00mm	1.40mm
DJ0880049T1R01	IN2005	0.346	8.80mm	10mm Cylind.	49.00mm	61.00mm	103.00mm	1.40mm
DJ0890049T1R01	IN2005	0.350	8.90mm	10mm Cylind.	49.00mm	61.00mm	103.00mm	1.40mm
DJ0900049T1R01	IN2005	0.354	9.00mm	10mm Cylind.	49.00mm	61.00mm	103.00mm	1.40mm
DJ0910049T1R01	IN2005	0.358	9.10mm	10mm Cylind.	49.00mm	61.00mm	103.00mm	1.40mm
DJ0920049T1R01	IN2005	0.362	9.20mm	10mm Cylind.	49.00mm	61.00mm	103.00mm	1.40mm
DJ0930049T1R01	IN2005	0.366	9.30mm	10mm Cylind.	49.00mm	61.00mm	103.00mm	1.50mm
DJ0940049T1R01	IN2005	0.370	9.40mm	10mm Cylind.	49.00mm	61.00mm	103.00mm	1.50mm
DJ0950049T1R01	IN2005	0.374	9.50mm	10mm Cylind.	49.00mm	61.00mm	103.00mm	1.50mm
DJ0960049T1R01	IN2005	0.378	9.60mm	10mm Cylind.	49.00mm	61.00mm	103.00mm	1.50mm
DJ0970049T1R01	IN2005	0.382	9.70mm	10mm Cylind.	49.00mm	61.00mm	103.00mm	1.50mm
DJ0980049T1R01	IN2005	0.386	9.80mm	10mm Cylind.	49.00mm	61.00mm	103.00mm	1.60mm
DJ0990049T1R01	IN2005	0.390	9.90mm	10mm Cylind.	49.00mm	61.00mm	103.00mm	1.60mm
DJ1000049T1R01	IN2005	0.394	10.00mm	10mm Cylind.	49.00mm	61.00mm	103.00mm	1.60mm
DJ1010056T2R01	IN2005	0.398	10.10mm	12mm Cylind.	56.00mm	71.00mm	118.00mm	1.60mm
DJ1020056T2R01	IN2005	0.402	10.20mm	12mm Cylind.	56.00mm	71.00mm	118.00mm	1.60mm
DJ1030056T2R01	IN2005	0.406	10.30mm	12mm Cylind.	56.00mm	71.00mm	118.00mm	1.60mm
DJ1040056T2R01	IN2005	0.413	10.40mm	12mm Cylind.	56.00mm	71.00mm	118.00mm	1.60mm
DJ1056056T2R01	IN2005	0.409	10.50mm	12mm Cylind.	56.00mm	71.00mm	118.00mm	1.60mm
DJ1060056T2R01	IN2005	0.417	10.60mm	12mm Cylind.	56.00mm	71.00mm	118.00mm	1.70mm
DJ1070056T2R01	IN2005	0.421	10.70mm	12mm Cylind.	56.00mm	71.00mm	118.00mm	1.70mm
DJ1080056T2R01	IN2005	0.425	10.80mm	12mm Cylind.	56.00mm	71.00mm	118.00mm	1.70mm
DJ1090056T2R01	IN2005	0.429	10.90mm	12mm Cylind.	56.00mm	71.00mm	118.00mm	1.70mm
DJ1100056T2R01	IN2005	0.433	11.00mm	12mm Cylind.	56.00mm	71.00mm	118.00mm	1.70mm
DJ1110056T2R01	IN2005	0.437	11.10mm	12mm Cylind.	56.00mm	71.00mm	118.00mm	1.70mm
DJ1120056T2R01	IN2005	0.441	11.20mm	12mm Cylind.	56.00mm	71.00mm	118.00mm	1.80mm
DJ1130056T2R01	IN2005	0.445	11.30mm	12mm Cylind.	56.00mm	71.00mm	118.00mm	1.80mm
DJ1150056T2R01	IN2005	0.453	11.50mm	12mm Cylind.	56.00mm	71.00mm	118.00mm	1.80mm
DJ1156056T2R01	IN2005	0.449	11.40mm	12mm Cylind.	56.00mm	71.00mm	118.00mm	1.80mm
DJ1160056T2R01	IN2005	0.457	11.60mm	12mm Cylind.	56.00mm	71.00mm	118.00mm	1.80mm
DJ1170056T2R01	IN2005	0.461	11.70mm	12mm Cylind.	56.00mm	71.00mm	118.00mm	1.90mm
DJ1180056T2R01	IN2005	0.465	11.80mm	12mm Cylind.	56.00mm	71.00mm	118.00mm	1.90mm
DJ1190056T2R01	IN2005	0.469	11.90mm	12mm Cylind.	56.00mm	71.00mm	118.00mm	1.90mm
DJ1200056T2R01	IN2005	0.472	12.00mm	12mm Cylind.	56.00mm	71.00mm	118.00mm	1.90mm

Metric Standard - (dimensions in mm unless noted)

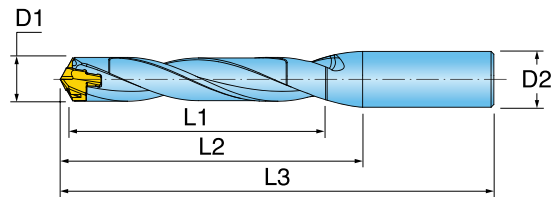


## Features & Benefits:

- Twisted coolant hole with optimum flute design
- Polished flute for smooth chip evacuation
- PVD coated body for prolonged body life
- Innovative quick change system
- IN2505 and IN05S grades - Long tool life
- One drill body can cover 5-10 different tip diameters

## GOLD TWIST SERIES TD 1.5:1 CYLINDRICAL SHANK (INCH)



REPLACEABLE TIPPED DRILL BODIES



D1 Nom. Dia. inch	D1 Nom. Dia. mm	Body Number	L1 DOC	L2 Ext.	L3 Overall	D2 Shank Size/Style	Pocket Size	Coolant Thru Point
.2362-.2520	6.0-6.4	TD0600009S4R01	0.35	0.91	2.67	.500" Cylind.	6	Yes
.2560-.2717	6.5-6.9	TD0650010S4R01	0.39	0.95	2.72	.500" Cylind.	6.5	Yes
.2756-.2913	7.0-7.4	TD0700010S4R01	0.43	0.99	2.76	.500" Cylind.	7.0	Yes
.2953-.3110	7.5-7.9	TD0750011S4R01	0.44	1.02	2.79	.500" Cylind.	7.5	Yes
.3150-.3504	8.0-8.9	TD0800012S4R01	0.47	1.10	2.87	.500" Cylind.	8	Yes
.3543-.3898	9.0-9.9	TD0900013S4R01	0.55	1.15	2.92	.500" Cylind.	9	Yes
.3937-.4291	10.0-10.9	TD1000015S6R01	0.59	1.23	3.12	.625" Cylind.	10	Yes
.4331-.4685	11.0-11.9	TD1100016S6R01	0.67	1.30	3.19	.625" Cylind.	11	Yes
.4724-.5079	12.0-12.9	TD1200018S6R01	0.71	1.38	3.27	.625" Cylind.	12	Yes
.5118-.5472	13.0-13.9	TD1300019S6R01	0.79	1.46	3.35	.625" Cylind.	13	Yes
.5512-.5866	14.0-14.9	TD1400021S6R01	0.83	1.62	3.51	.625" Cylind.	14	Yes
.5906-.6260	15.0-15.9	TD1500022S7R01	0.91	1.82	3.79	.750" Cylind.	15	Yes
.6299-.6654	16.0-16.9	TD1600024S7R01	0.94	1.94	3.91	.750" Cylind.	16	Yes
.6693-.7047	17.0-17.9	TD1700025S7R01	1.02	2.06	4.03	.750" Cylind.	17	Yes
.7087-.7441	18.0-18.9	TD1800027S1R01	1.06	2.19	4.39	1.000" Cylind.	18	Yes
.7480-.7835	19.0-19.9	TD1900028S1R01	1.14	2.30	4.50	1.000" Cylind.	19	Yes
.7874-.8228	20.0-20.9	TD2000030S1R01	1.18	2.43	4.63	1.000" Cylind.	20	Yes
.8268-.8622	21.0-21.9	TD2100031S1R01	1.26	2.55	4.75	1.000" Cylind.	21	Yes
.8661-.9016	22.0-22.9	TD2200033S1R01	1.30	2.67	4.87	1.000" Cylind.	22	Yes
.9055-.9409	23.0-23.9	TD2300034S9R01	1.38	2.79	5.15	1.250" Cylind.	23	Yes
.9449-.9803	24.0-24.9	TD2400036S9R01	1.42	2.91	5.27	1.250" Cylind.	24	Yes
.9843-1.0197	25.0-25.9	TD2500037S9R01	1.50	3.03	5.39	1.250" Cylind.	25	Yes

\*Do not mount a smaller drill point than the one listed with the tool.

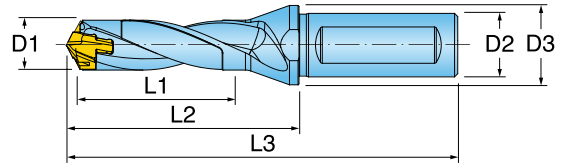


HARDWARE			
	Clamping Key	Coolant Plug	
TD060009S4R01	KTD6.0-D9.9	DL-12	
TD0650010S4R01	KTD6.0-D9.9	DL-12	
TD0700010S4R01	KTD6.0-D9.9	DL-12	
TD0750011S4R01	KTD6.0-D9.9	DL-12	
TD0800012S4R01	KTD6.0-D9.9	DL-12	
TD0900013S4R01	KTD6.0-D9.9	DL-12	
TD1000015S6R01	KTD10.0-19.9	DL-16	
TD1100016S6R01	KTD10.0-19.9	DL-16	
TD1200018S6R01	KTD10.0-19.9	DL-16	
TD1300019S6R01	KTD10.0-19.9	DL-16	
TD1400021S6R01	KTD10.0-19.9	DL-16	
TD1500022S7R01	KTD10.0-19.9	DL-20	
TD1600024S7R01	KTD10.0-19.9	DL-20	
TD1700025S7R01	KTD10.0-19.9	DL-20	
TD1800027S1R01	KTD10.0-19.9	DL-25	
TD1900028S1R01	KTD10.0-19.9	DL-25	
TD2000030S1R01	KTD20.0-D26.9	DL-25	
TD2100031S1R01	KTD20.0-D26.9	DL-25	
TD2200033S1R01	KTD20.0-D26.9	DL-25	
TD2300034S9R01	KTD20.0-D26.9	DL-32	
TD2400036S9R01	KTD20.0-D26.9	DL-32	
TD2500037S9R01	KTD20.0-D26.9	DL-32	



# GOLD TWIST SERIES TD 1.5:1 UNIVERSAL SHANK (INCH)

REPLACEABLE TIPPED DRILL BODIES



D1 Nom. Dia. inch	D1 Nom. Dia. mm	Body Number	L1 DOC	L2 Ext.	L3 Overall	D2 Shank Size/Style	D3 Flange Dia.	Pocket Size	Coolant Thru Point
.2362-.2520	6.0-6.4	TD0600009B9R01	0.35	0.91	2.67	.500" Univ.	0.63	6	Yes
.2540-.2717	6.5-6.9	TD0650010B9R01	0.39	0.95	2.72	.500" Univ.	0.63	6.5	Yes
.2756-.2913	7.0-7.4	TD0700010B9R01	0.43	0.99	2.76	.500" Univ.	0.63	7.0	Yes
.2953-.3110	7.5-7.9	TD0750011B9R01	0.44	1.02	2.79	.500" Univ.	0.63	7.5	Yes
.3150-.3504	8.0-8.9	TD0800012B9R01	0.47	1.10	2.87	.500" Univ.	0.63	8	Yes
.3543-.3898	9.0-9.9	TD0900013B9R01	0.55	1.15	2.92	.500" Univ.	0.63	9	Yes
.3937-.4291	10.0-10.9	TD1000015COR01	0.59	1.23	3.12	.625" Univ.	0.79	10	Yes
.4331-.4685	11.0-11.9	TD1100016COR01	0.67	1.30	3.19	.625" Univ.	0.79	11	Yes
.4724-.5079	12.0-12.9	TD1200018COR01	0.71	1.38	3.27	.625" Univ.	0.79	12	Yes
.5118-.5472	13.0-13.9	TD1300019COR01	0.79	1.46	3.35	.625" Univ.	0.79	13	Yes
.5512-.5866	14.0-14.9	TD1400021COR01	0.83	1.62	3.51	.625" Univ.	0.79	14	Yes
.5906-.6260	15.0-15.9	TD150002218R01	0.91	1.82	3.79	.750" Univ.	0.98	15	Yes
.6299-.6654	16.0-16.9	TD160002418R01	0.94	1.94	3.91	.750" Univ.	0.98	16	Yes
.6693-.7047	17.0-17.9	TD170002518R01	1.02	2.06	4.03	.750" Univ.	0.98	17	Yes
.7087-.7441	18.0-18.9	TD1800027C8R01	1.06	2.19	4.39	1.000" Univ.	1.26	18	Yes
.7480-.7835	19.0-19.9	TD1900028C8R01	1.14	2.30	4.50	1.000" Univ.	1.26	19	Yes
.7874-.8228	20.0-20.9	TD2000030C8R01	1.18	2.43	4.63	1.000" Univ.	1.26	20	Yes
.8268-.8622	21.0-21.9	TD2100031C8R01	1.26	2.55	4.75	1.000" Univ.	1.26	21	Yes
.8661-.9016	22.0-22.9	TD2200033C8R01	1.30	2.67	4.87	1.000" Univ.	1.26	22	Yes
.9055-.9409	23.0-23.9	TD2300034B7R01	1.38	2.79	5.15	1.250" Univ.	1.65	23	Yes
.9449-.9803	24.0-24.9	TD2400036B7R01	1.42	2.91	5.27	1.250" Univ.	1.65	24	Yes
.9843-1.0197	25.0-25.9	TD2500037B7R01	1.50	3.03	5.39	1.250" Univ.	1.65	25	Yes

\*Do not mount a smaller drill point than the one listed with the tool.  
Metric shanks available as non-stock standard.



**HARDWARE**



Clamping Key

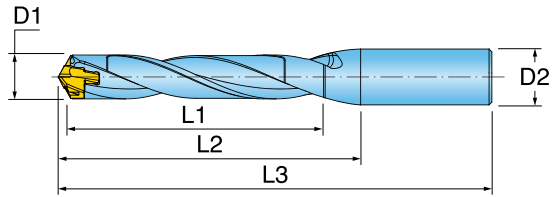
Coolant Plug

	Clamping Key	Coolant Plug
TD0600009B9R01	KTD6.0-D9.9	DL-12
TD0650010B9R01	KTD6.0-D9.9	DL-12
TD0700010B9R01	KTD6.0-D9.9	DL-12
TD0750011B9R01	KTD6.0-D9.9	DL-12
TD0800012B9R01	KTD6.0-D9.9	DL-12
TD0900013B9R01	KTD6.0-D9.9	DL-12
TD1000015C0R01	KTD10.0-19.9	DL-16
TD1100016C0R01	KTD10.0-19.9	DL-16
TD1200018C0R01	KTD10.0-19.9	DL-16
TD1300019C0R01	KTD10.0-19.9	DL-16
TD1400021C0R01	KTD10.0-19.9	DL-16
TD150002218R01	KTD10.0-19.9	DL-20
TD160002418R01	KTD10.0-19.9	DL-20
TD170002518R01	KTD10.0-19.9	DL-20
TD1800027C8R01	KTD10.0-19.9	DL-25
TD1900028C8R01	KTD10.0-19.9	DL-25
TD2000030C8R01	KTD20.0-D26.9	DL-25
TD2100031C8R01	KTD20.0-D26.9	DL-25
TD2200033C8R01	KTD20.0-D26.9	DL-25
TD2300034B7R01	KTD20.0-D26.9	DL-32
TD2400036B7R01	KTD20.0-D26.9	DL-32
TD2500037B7R01	KTD20.0-D26.9	DL-32



# GOLD TWIST SERIES TD 3:1 CYLINDRICAL SHANK (INCH)



REPLACEABLE TIPPED DRILL BODIES



D1 Nom. Dia. inch	D1 Nom. Dia. mm	Body Number	L1 DOC	L2 Ext.	L3 Overall	D2 Shank Size/Style	Pocket Size	Chamfer Ring	Coolant Thru Point
.2362-.2520	6.0-6.4	TD0600018S4R01	0.71	1.26	3.03	.500" Cylind.	6	NA	Yes
.2540-.2717	6.5-6.9	TD0650020S4R01	0.79	1.33	3.10	.500" Cylind.	6.5	NA	Yes
.2756-.2913	7.0-7.4	TD0700021S4R01	0.83	1.40	3.17	.500" Cylind.	7.0	NA	Yes
.2953-.3110	7.5-7.9	TD0750022S4R01	0.89	1.46	3.23	.500" Cylind.	7.5	NA	Yes
.3150-.3307	8.0-8.4	TD0800024S4R01	0.94	1.55	3.32	.500" Cylind.	8	NA	Yes
.3346-.3504	8.5-8.9	TD0850025S4R01	1.00	1.61	3.38	.500" Cylind.	8.5	NA	Yes
.3543-.3701	9.0-9.4	TD0900027S4R01	1.06	1.69	3.46	.500" Cylind.	9	NA	Yes
.3740-.3898	9.5-9.9	TD0950028S4R01	1.12	1.74	3.51	.500" Cylind.	9.5	NA	Yes
.3937-.4094	10.0-10.4	TD1000030S6R01	1.18	1.82	3.71	.625" Cylind.	10	NA	Yes
.4134-.4291	10.5-10.9	TD1050031S6R01	1.26	1.88	3.77	.625" Cylind.	10.5	NA	Yes
.4331-.4488	11.0-11.4	TD1100033S6R01	1.30	1.95	3.84	.625" Cylind.	11	NA	Yes
.4528-.4685	11.5-11.9	TD1150034S6R01	1.38	2.01	3.90	.625" Cylind.	11.5	NA	Yes
.4724-.4882	12.0-12.4	TD1200036S6R01	1.42	2.09	3.98	.625" Cylind.	12	NA	Yes
.4912-.5079	12.5-12.9	TD1250037S6R01	1.46	2.15	4.04	.625" Cylind.	12.5	NA	Yes
.5118-.5276	13.0-13.4	TD1300039S6R01	1.54	2.23	4.12	.625" Cylind.	13	CB130R02	Yes
.5315-.5472	13.5-13.9	TD1350040S6R01	1.61	2.29	4.18	.625" Cylind.	13.5	CB135R02	Yes
.5512-.5669	14.0-14.4	TD1400042S6R01	1.65	2.44	4.33	.625" Cylind.	14	CB140R02	Yes
.5709-.5866	14.5-14.9	TD1450043S6R01	1.73	2.50	4.39	.625" Cylind.	14.5	CB145R02	Yes
.5906-.6260	15.0-15.9	TD1500045S7R01	1.77	2.70	4.67	.750" Cylind.	15	CB150R02	Yes
.6299-.6654	16.0-16.9	TD1600048S7R01	1.89	2.89	4.86	.750" Cylind.	16	CB160R02	Yes
.6693-.7047	17.0-17.9	TD1700051S7R01	2.01	3.07	5.04	.750" Cylind.	17	CB170R02	Yes
.7087-.7441	18.0-18.9	TD1800054S1R01	2.13	3.25	5.45	1.000" Cylind.	18	CB180R02	Yes
.7480-.7835	19.0-19.9	TD1900057S1R01	2.24	3.43	5.63	1.000" Cylind.	19	CB190R02	Yes
.7874-.8228	20.0-20.9	TD2000060S1R01	2.36	3.61	5.81	1.000" Cylind.	20	CB200R02	Yes
.8268-.8622	21.0-21.9	TD2100063S1R01	2.48	3.79	5.99	1.000" Cylind.	21	CB210R02	Yes
.8661-.9016	22.0-22.9	TD2200066S1R01	2.60	3.97	6.17	1.000" Cylind.	22	CB220R02	Yes
.9055-.9409	23.0-23.9	TD2300069S9R01	2.72	4.15	6.51	1.250" Cylind.	23	CB230R02	Yes
.9449-.9803	24.0-24.9	TD2400072S9R01	2.83	4.33	6.69	1.250" Cylind.	24	CB240R02	Yes
.9843-1.0197	25.0-25.9	TD2500075S9R01	2.95	4.51	6.87	1.250" Cylind.	25	CB250R02	Yes

\*Do not mount a smaller drill point than the one listed with the tool.

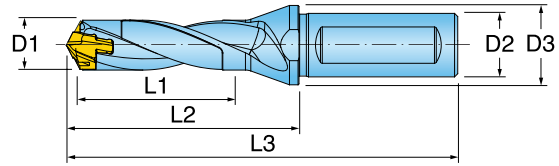


HARDWARE		
	Clamping Key	Coolant Plug
TD0600018S4R01	KTD6.0-D9.9	DL-12
TD0650020S4R01	KTD6.0-D9.9	DL-12
TD0700021S4R01	KTD6.0-D9.9	DL-12
TD0750022S4R01	KTD6.0-D9.9	DL-12
TD0800024S4R01	KTD6.0-D9.9	DL-12
TD0850025S4R01	KTD6.0-D9.9	DL-12
TD0900027S4R01	KTD6.0-D9.9	DL-12
TD0950028S4R01	KTD6.0-D9.9	DL-12
TD1000030S6R01	KTD10.0-19.9	DL-16
TD1050031S6R01	KTD10.0-19.9	DL-16
TD1100033S6R01	KTD10.0-19.9	DL-16
TD1150034S6R01	KTD10.0-19.9	DL-16
TD1200036S6R01	KTD10.0-19.9	DL-16
TD1250037S6R01	KTD10.0-19.9	DL-16
TD1300039S6R01	KTD10.0-19.9	DL-16
TD1350040S6R01	KTD10.0-19.9	DL-16
TD1400042S6R01	KTD10.0-19.9	DL-16
TD1450043S6R01	KTD10.0-19.9	DL-16
TD1500045S7R01	KTD10.0-19.9	DL-20
TD1600048S7R01	KTD10.0-19.9	DL-20
TD1700051S7R01	KTD10.0-19.9	DL-20
TD1800054S1R01	KTD10.0-19.9	DL-25
TD1900057S1R01	KTD10.0-19.9	DL-25
TD2000060S1R01	KTD20.0-D26.9	DL-25
TD2100063S1R01	KTD20.0-D26.9	DL-25
TD2200066S1R01	KTD20.0-D26.9	DL-25
TD2300069S9R01	KTD20.0-D26.9	DL-32
TD2400072S9R01	KTD20.0-D26.9	DL-32
TD2500075S9R01	KTD20.0-D26.9	DL-32



# GOLD TWIST SERIES TD 3:1 UNIVERSAL SHANK (INCH)



REPLACEABLE TIPPED DRILL BODIES



D1 Nom. Dia. inch	D1 Nom. Dia. mm	Body Number	L1 DOC	L2 Ext.	L3 Overall	D2 Shank Size/Style	D3 Flange Dia.	Pocket Size	Chamfer Ring	Coolant Thru Point
.2362-.2520	6.0-6.4	TD0600018B9R01	0.71	1.26	3.03	.500" Univ.	0.63	6	NA	Yes
.2560-.2717	6.5-6.9	TD0650020B9R01	0.79	1.33	3.10	.500" Univ.	0.63	6.5	NA	Yes
.2756-.2913	7.0-7.4	TD0700021B9R01	0.83	1.40	3.17	.500" Univ.	0.63	7.0	NA	Yes
.2953-.3110	7.5-7.9	TD0750022B9R01	0.89	1.46	3.23	.500" Univ.	0.63	7.5	NA	Yes
.3150-.3307	8.0-8.4	TD0800024B9R01	0.94	1.55	3.32	.500" Univ.	0.63	8	NA	Yes
.3346-.3504	8.5-8.9	TD0850025B9R01	1.00	1.61	3.38	.500" Univ.	0.63	8.5	NA	Yes
.3543-.3701	9.0-9.4	TD0900027B9R01	1.06	1.69	3.46	.500" Univ.	0.63	9	NA	Yes
.3740-.3898	9.5-9.9	TD0950028B9R01	1.12	1.74	3.51	.500" Univ.	0.63	9.5	NA	Yes
.3937-.4094	10.0-10.4	TD1000030COR01	1.18	1.82	3.71	.625" Univ.	0.79	10	NA	Yes
.4134-.4291	10.5-10.9	TD1050031COR01	1.26	1.90	3.79	.625" Univ.	0.79	10.5	NA	Yes
.4331-.4488	11.0-11.4	TD1100033COR01	1.30	1.95	3.84	.625" Univ.	0.79	11	NA	Yes
.4528-.4685	11.5-11.9	TD1150034COR01	1.38	2.01	3.90	.625" Univ.	0.79	11.5	NA	Yes
.4724-.4882	12.0-12.4	TD1200036COR01	1.42	2.09	3.98	.625" Univ.	0.79	12	NA	Yes
.4912-.5079	12.5-12.9	TD1250037COR01	1.46	2.15	4.04	.625" Univ.	0.79	12.5	NA	Yes
.5118-.5276	13.0-13.4	TD1300039COR01	1.54	2.23	4.12	.625" Univ.	0.79	13	CB130R02	Yes
.5315-.5472	13.5-13.9	TD1350040COR01	1.61	2.30	4.19	.625" Univ.	0.79	13.5	CB135R02	Yes
.5512-.5669	14.0-14.4	TD1400042COR01	1.65	2.44	4.33	.625" Univ.	0.79	14	CB140R02	Yes
.5709-.5866	14.5-14.9	TD1450043COR01	1.73	2.50	4.39	.625" Univ.	0.79	14.5	CB145R02	Yes
.5906-.6260	15.0-15.9	TD150004518R01	1.77	2.70	4.67	.750" Univ.	0.98	15	CB150R02	Yes
.6299-.6654	16.0-16.9	TD160004818R01	1.89	2.89	4.86	.750" Univ.	0.98	16	CB160R02	Yes
.6693-.7047	17.0-17.9	TD170005118R01	2.01	3.07	5.04	.750" Univ.	0.98	17	CB170R02	Yes
.7087-.7441	18.0-18.9	TD1800054C8R01	2.13	3.25	5.45	1.000" Univ.	1.26	18	CB180R02	Yes
.7480-.7835	19.0-19.9	TD1900057C8R01	2.24	3.43	5.63	1.000" Univ.	1.26	19	CB190R02	Yes
.7874-.8228	20.0-20.9	TD2000060C8R01	2.36	3.61	5.81	1.000" Univ.	1.26	20	CB200R02	Yes
.8268-.8622	21.0-21.9	TD2100063C8R01	2.48	3.79	5.99	1.000" Univ.	1.26	21	CB210R02	Yes
.8661-.9016	22.0-22.9	TD2200066C8R01	2.60	3.97	6.17	1.000" Univ.	1.26	22	CB220R02	Yes
.9055-.9409	23.0-23.9	TD2300069B7R01	2.72	4.15	6.51	1.250" Univ.	1.65	23	CB230R02	Yes
.9449-.9803	24.0-24.9	TD2400072B7R01	2.83	4.33	6.69	1.250" Univ.	1.65	24	CB240R02	Yes
.9843-1.0197	25.0-25.9	TD2500075B7R01	2.95	4.51	6.87	1.250" Univ.	1.65	25	CB250R02	Yes

\*Do not mount a smaller drill point than the one listed with the tool.  
Metric shanks available as non-stock standard.

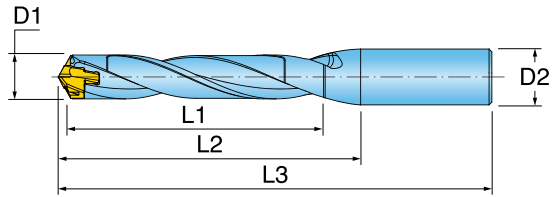


HARDWARE		
	Clamping Key	Coolant Plug
TD0600018B9R01	KTD6.0-D9.9	DL-12
TD0650020B9R01	KTD6.0-D9.9	DL-12
TD0700021B9R01	KTD6.0-D9.9	DL-12
TD0750022B9R01	KTD6.0-D9.9	DL-12
TD0800024B9R01	KTD6.0-D9.9	DL-12
TD0850025B9R01	KTD6.0-D9.9	DL-12
TD0900027B9R01	KTD6.0-D9.9	DL-12
TD0950028B9R01	KTD6.0-D9.9	DL-12
TD1000030C0R01	KTD10.0-19.9	DL-16
TD1050031C0R01	KTD10.0-19.9	DL-16
TD1100033C0R01	KTD10.0-19.9	DL-16
TD1150034C0R01	KTD10.0-19.9	DL-16
TD1200036C0R01	KTD10.0-19.9	DL-16
TD1250037C0R01	KTD10.0-19.9	DL-16
TD1300039C0R01	KTD10.0-19.9	DL-16
TD1350040C0R01	KTD10.0-19.9	DL-16
TD1400042C0R01	KTD10.0-19.9	DL-16
TD1450043C0R01	KTD10.0-19.9	DL-16
TD150004518R01	KTD10.0-19.9	DL-20
TD160004818R01	KTD10.0-19.9	DL-20
TD170005118R01	KTD10.0-19.9	DL-20
TD1800054C8R01	KTD10.0-19.9	DL-25
TD1900057C8R01	KTD10.0-19.9	DL-25
TD2000060C8R01	KTD20.0-D26.9	DL-25
TD2100063C8R01	KTD20.0-D26.9	DL-25
TD2200066C8R01	KTD20.0-D26.9	DL-25
TD2300069B7R01	KTD20.0-D26.9	DL-32
TD2400072B7R01	KTD20.0-D26.9	DL-32
TD2500075B7R01	KTD20.0-D26.9	DL-32



# GOLD TWIST SERIES TD 5:1 CYLINDRICAL SHANK (INCH)



REPLACEABLE TIPPED DRILL BODIES



D1 Nom. Dia. inch	D1 Nom. Dia. mm	Body Number	L1 DOC	L2 Ext.	L3 Overall	D2 Shank Size/Style	Pocket Size	Chamfer Ring	Coolant Thru Point
.2362-.2520	6.0-6.4	TD0600030S4R01	1.18	1.73	3.50	.500" Cylind.	6	NA	Yes
.2540-.2717	6.5-6.9	TD0650033S4R01	1.30	1.84	3.61	.500" Cylind.	6.5	NA	Yes
.2756-.2913	7.0-7.4	TD0700035S4R01	1.38	1.95	3.72	.500" Cylind.	7.0	NA	Yes
.2953-.3110	7.5-7.9	TD0750037S4R01	1.48	2.05	3.82	.500" Cylind.	7.5	NA	Yes
.3150-.3307	8.0-8.4	TD0800040S4R01	1.57	2.18	3.95	.500" Cylind.	8	NA	Yes
.3346-.3504	8.5-8.9	TD0850042S4R01	1.67	2.28	4.05	.500" Cylind.	8.5	NA	Yes
.3543-.3701	9.0-9.4	TD0900045S4R01	1.77	2.39	4.16	.500" Cylind.	9	NA	Yes
.3740-.3898	9.5-9.9	TD0950047S4R01	1.87	2.49	4.26	.500" Cylind.	9.5	NA	Yes
.3937-.4094	10.0-10.4	TD1000050S6R01	1.97	2.61	4.50	.625" Cylind.	10	CB100R02	Yes
.4134-.4291	10.5-10.9	TD1050052S6R01	2.09	2.70	4.59	.625" Cylind.	10.5	CB105R02	Yes
.4331-.4488	11.0-11.4	TD1100055S6R01	2.17	2.82	4.71	.625" Cylind.	11	CB110R02	Yes
.4528-.4685	11.5-11.9	TD1150057S6R01	2.28	2.92	4.81	.625" Cylind.	11.5	CB115R02	Yes
.4724-.4882	12.0-12.4	TD1200060S6R01	2.36	3.03	4.92	.625" Cylind.	12	CB120R02	Yes
.4912-.5079	12.5-12.9	TD1250062S6R01	2.44	3.13	5.02	.625" Cylind.	12.5	CB125R02	Yes
.5118-.5276	13.0-13.4	TD1300065S6R01	2.56	3.25	5.14	.625" Cylind.	13	CB130R02	Yes
.5315-.5472	13.5-13.9	TD1350067S6R01	2.68	3.35	5.24	.625" Cylind.	13.5	CB135R02	Yes
.5512-.5669	14.0-14.4	TD1400070S6R01	2.76	3.55	5.44	.625" Cylind.	14	CB140R02	Yes
.5709-.5866	14.5-14.9	TD1450072S6R01	2.87	3.65	5.54	.625" Cylind.	14.5	CB145R02	Yes
.5906-.6260	15.0-15.9	TD1500075S7R01	2.95	3.89	5.86	.750" Cylind.	15	CB150R02	Yes
.6299-.6654	16.0-16.9	TD1600080S7R01	3.15	4.15	6.12	.750" Cylind.	16	CB160R02	Yes
.6693-.7047	17.0-17.9	TD1700085S7R01	3.35	4.41	6.38	.750" Cylind.	17	CB170R02	Yes
.7087-.7441	18.0-18.9	TD1800090S1R01	3.54	4.67	6.87	1.000" Cylind.	18	CB180R02	Yes
.7480-.7835	19.0-19.9	TD1900095S1R01	3.74	4.92	7.12	1.000" Cylind.	19	CB190R02	Yes
.7874-.8228	20.0-20.9	TD2000100S1R01	3.94	5.18	7.38	1.000" Cylind.	20	CB200R02	Yes
.8268-.8622	21.0-21.9	TD2100105S1R01	4.13	5.44	7.64	1.000" Cylind.	21	CB210R02	Yes
.8661-.9016	22.0-22.9	TD2200110S1R01	4.33	5.70	7.90	1.000" Cylind.	22	CB220R02	Yes
.9055-.9409	23.0-23.9	TD2300115S9R01	4.53	5.96	8.32	1.250" Cylind.	23	CB230R02	Yes
.9449-.9803	24.0-24.9	TD2400120S9R01	4.72	6.22	8.58	1.250" Cylind.	24	CB240R02	Yes
.9843-1.0197	25.0-25.9	TD2500125S9R01	4.92	6.48	8.84	1.250" Cylind.	25	CB250R02	Yes

\*Do not mount a smaller drill point than the one listed with the tool.

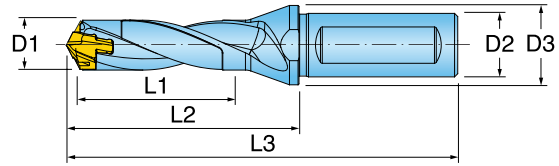


HARDWARE		
	Clamping Key	Coolant Plug
TD0600030S4R01	KTD6.0-D9.9	DL-12
TD0650033S4R01	KTD6.0-D9.9	DL-12
TD0700035S4R01	KTD6.0-D9.9	DL-12
TD0750037S4R01	KTD6.0-D9.9	DL-12
TD0800040S4R01	KTD6.0-D9.9	DL-12
TD0850042S4R01	KTD6.0-D9.9	DL-12
TD0900045S4R01	KTD6.0-D9.9	DL-12
TD0950047S4R01	KTD6.0-D9.9	DL-12
TD1000050S6R01	KTD10.0-19.9	DL-16
TD1050052S6R01	KTD10.0-19.9	DL-16
TD1100055S6R01	KTD10.0-19.9	DL-16
TD1150057S6R01	KTD10.0-19.9	DL-16
TD1200060S6R01	KTD10.0-19.9	DL-16
TD1250062S6R01	KTD10.0-19.9	DL-16
TD1300065S6R01	KTD10.0-19.9	DL-16
TD1350067S6R01	KTD10.0-19.9	DL-16
TD1400070S6R01	KTD10.0-19.9	DL-16
TD1450072S6R01	KTD10.0-19.9	DL-16
TD1500075S7R01	KTD10.0-19.9	DL-20
TD1600080S7R01	KTD10.0-19.9	DL-20
TD1700085S7R01	KTD10.0-19.9	DL-20
TD1800090S1R01	KTD10.0-19.9	DL-25
TD1900095S1R01	KTD10.0-19.9	DL-25
TD2000100S1R01	KTD20.0-D26.9	DL-25
TD2100105S1R01	KTD20.0-D26.9	DL-25
TD2200110S1R01	KTD20.0-D26.9	DL-25
TD2300115S9R01	KTD20.0-D26.9	DL-32
TD2400120S9R01	KTD20.0-D26.9	DL-32
TD2500125S9R01	KTD20.0-D26.9	DL-32



# GOLD TWIST SERIES TD 5:1 UNIVERSAL SHANK (INCH)



REPLACEABLE TIPPED DRILL BODIES



D1 Nom. Dia. inch	D1 Nom. Dia. mm	Body Number	L1 DOC	L2 Ext.	L3 Overall	D2 Shank Size/Style	D3 Flange Dia.	Pocket Size	Chamfer Ring	Coolant Thru Point
.2362-.2520	6.0-6.4	TD0600030B9R01	1.18	1.73	3.50	.500" Univ.	0.63	6	NA	Yes
.2560-.2717	6.5-6.9	TD0650033B9R01	1.30	1.84	3.61	.500" Univ.	0.63	6.5	NA	Yes
.2756-.2913	7.0-7.4	TD0700035B9R01	1.38	1.95	3.72	.500" Univ.	0.63	7.0	NA	Yes
.2953-.3110	7.5-7.9	TD0750037B9R01	1.48	2.05	3.82	.500" Univ.	0.63	7.5	NA	Yes
.3150-.3307	8.0-8.4	TD0800040B9R01	1.57	2.18	3.95	.500" Univ.	0.63	8	NA	Yes
.3346-.3504	8.5-8.9	TD0850042B9R01	1.67	2.28	4.05	.500" Univ.	0.63	8.5	NA	Yes
.3543-.3701	9.0-9.4	TD0900045B9R01	1.77	2.39	4.16	.500" Univ.	0.63	9	NA	Yes
.3740-.3898	9.5-9.9	TD0950047B9R01	1.87	2.49	4.26	.500" Univ.	0.63	9.5	NA	Yes
.3937-.4094	10.0-10.4	TD1000050COR01	1.97	2.61	4.50	.625" Univ.	0.79	10	CB100R02	Yes
.4134-.4291	10.5-10.9	TD1050052COR01	2.09	2.70	4.59	.625" Univ.	0.79	10.5	CB105R02	Yes
.4331-.4488	11.0-11.4	TD1100055COR01	2.17	2.82	4.71	.625" Univ.	0.79	11	CB110R02	Yes
.4528-.4685	11.5-11.9	TD1150057COR01	2.28	2.92	4.81	.625" Univ.	0.79	11.5	CB115R02	Yes
.4724-.4882	12.0-12.4	TD1200060COR01	2.36	3.03	4.92	.625" Univ.	0.79	12	CB120R02	Yes
.4912-.5079	12.5-12.9	TD1250062COR01	2.44	3.13	5.02	.625" Univ.	0.79	12.5	CB125R02	Yes
.5118-.5276	13.0-13.4	TD1300065COR01	2.56	3.25	5.14	.625" Univ.	0.79	13	CB130R02	Yes
.5315-.5472	13.5-13.9	TD1350067COR01	2.68	3.35	5.24	.625" Univ.	0.79	13.5	CB135R02	Yes
.5512-.5669	14.0-14.4	TD1400070COR01	2.76	3.55	5.44	.625" Univ.	0.79	14	CB140R02	Yes
.5709-.5866	14.5-14.9	TD1450072COR01	2.87	3.65	5.54	.625" Univ.	0.79	14.5	CB145R02	Yes
.5906-.6260	15.0-15.9	TD150007518R01	2.95	3.89	5.86	.750" Univ.	0.98	15	CB150R02	Yes
.6299-.6654	16.0-16.9	TD160008018R01	3.15	4.15	6.12	.750" Univ.	0.98	16	CB160R02	Yes
.6693-.7047	17.0-17.9	TD170008518R01	3.35	4.41	6.38	.750" Univ.	0.98	17	CB170R02	Yes
.7087-.7441	18.0-18.9	TD1800090C8R01	3.54	4.67	6.87	1.000" Univ.	1.26	18	CB180R02	Yes
.7480-.7835	19.0-19.9	TD1900095C8R01	3.74	4.92	7.12	1.000" Univ.	1.26	19	CB190R02	Yes
.7874-.8228	20.0-20.9	TD2000100C8R01	3.94	5.18	7.38	1.000" Univ.	1.26	20	CB200R02	Yes
.8268-.8622	21.0-21.9	TD2100105C8R01	4.13	5.44	7.64	1.000" Univ.	1.26	21	CB210R02	Yes
.8661-.9016	22.0-22.9	TD2200110C8R01	4.33	5.70	7.90	1.000" Univ.	1.26	22	CB220R02	Yes
.9055-.9409	23.0-23.9	TD2300115B7R01	4.53	5.96	8.32	1.250" Univ.	1.65	23	CB230R02	Yes
.9449-.9803	24.0-24.9	TD2400120B7R01	4.72	6.22	8.58	1.250" Univ.	1.65	24	CB240R02	Yes
.9843-1.0197	25.0-25.9	TD2500125B7R01	4.92	6.48	8.84	1.250" Univ.	1.65	25	CB250R02	Yes

\*Do not mount a smaller drill point than the one listed with the tool.  
Metric shanks available as non-stock standard.

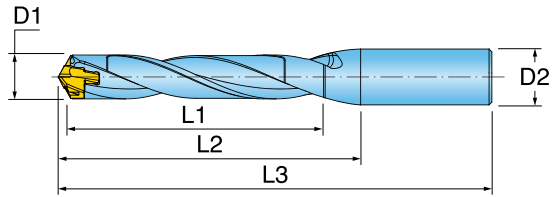


HARDWARE		
	Clamping Key	Coolant Plug
TD0600030B9R01	KTD6.0-D9.9	DL-12
TD0650033B9R01	KTD6.0-D9.9	DL-12
TD0700035B9R01	KTD6.0-D9.9	DL-12
TD0750037B9R01	KTD6.0-D9.9	DL-12
TD0800040B9R01	KTD6.0-D9.9	DL-12
TD0850042B9R01	KTD6.0-D9.9	DL-12
TD0900045B9R01	KTD6.0-D9.9	DL-12
TD0950047B9R01	KTD6.0-D9.9	DL-12
TD1000050C0R01	KTD10.0-19.9	DL-16
TD1050052C0R01	KTD10.0-19.9	DL-16
TD1100055C0R01	KTD10.0-19.9	DL-16
TD1150057C0R01	KTD10.0-19.9	DL-16
TD1200060C0R01	KTD10.0-19.9	DL-16
TD1250062C0R01	KTD10.0-19.9	DL-16
TD1300065C0R01	KTD10.0-19.9	DL-16
TD1350067C0R01	KTD10.0-19.9	DL-16
TD1400070C0R01	KTD10.0-19.9	DL-16
TD1450072C0R01	KTD10.0-19.9	DL-16
TD150007518R01	KTD10.0-19.9	DL-20
TD160008018R01	KTD10.0-19.9	DL-20
TD170008518R01	KTD10.0-19.9	DL-20
TD1800090C8R01	KTD10.0-19.9	DL-25
TD1900095C8R01	KTD10.0-19.9	DL-25
TD2000100C8R01	KTD20.0-D26.9	DL-25
TD2100105C8R01	KTD20.0-D26.9	DL-25
TD2200110C8R01	KTD20.0-D26.9	DL-25
TD2300115B7R01	KTD20.0-D26.9	DL-32
TD2400120B7R01	KTD20.0-D26.9	DL-32
TD2500125B7R01	KTD20.0-D26.9	DL-32



# GOLD TWIST SERIES TD 8:1 CYLINDRICAL SHANK (INCH)



REPLACEABLE TIPPED DRILL BODIES



D1 Nom. Dia. inch	D1 Nom. Dia. mm	Body Number	L1 DOC	L2 Ext.	L3 Overall	D2 Shank Size/Style	Pocket Size	Chamfer Ring	Coolant Thru Point
.2756-.2913	7.0-7.4	TD0700056S4R01	2.20	2.78	4.55	.500" Cylind.	7.0	NA	Yes
.2953-.3110	7.5-7.9	TD0750060S4R01	2.28	2.94	4.71	.500" Cylind.	7.5	NA	Yes
.3150-.3307	8.0-8.4	TD0800064S4R01	2.52	3.13	4.90	.500" Cylind.	8	NA	Yes
.3346-.3504	8.5-8.9	TD0850068S4R01	2.68	3.32	5.09	.500" Cylind.	8.5	NA	Yes
.3543-.3701	9.0-9.4	TD0900072S4R01	2.83	3.46	5.23	.500" Cylind.	9	NA	Yes
.3740-.3898	9.5-9.9	TD0950076S4R01	2.99	3.65	5.42	.500" Cylind.	9.5	NA	Yes
.3937-.4094	10.0-10.4	TD1000080S6R01	3.15	3.79	5.68	.625" Cylind.	10	CB100R02	Yes
.4134-.4291	10.5-10.9	TD1050084S6R01	3.31	3.94	5.83	.625" Cylind.	10.5	CB105R02	Yes
.4331-.4488	11.0-11.4	TD1100088S6R01	3.46	4.12	6.01	.625" Cylind.	11	CB110R02	Yes
.4528-.4685	11.5-11.9	TD1150092S6R01	3.62	4.28	6.17	.625" Cylind.	11.5	CB115R02	Yes
.4724-.4882	12.0-12.4	TD1200096S6R01	3.78	4.45	6.34	.625" Cylind.	12	CB120R02	Yes
.4912-.5079	12.5-12.9	TD1250100S6R01	3.94	4.61	6.50	.625" Cylind.	12.5	CB125R02	Yes
.5118-.5276	13.0-13.4	TD1300104S6R01	4.09	4.79	6.68	.625" Cylind.	13	CB130R02	Yes
.5315-.5472	13.5-13.9	TD1350108S6R01	4.25	4.94	6.83	.625" Cylind.	13.5	CB135R02	Yes
.5512-.5669	14.0-14.4	TD1400112S6R01	4.41	5.20	7.09	.625" Cylind.	14	CB140R02	Yes
.5709-.5866	14.5-14.9	TD1450116S6R01	4.57	5.36	7.25	.625" Cylind.	14.5	CB145R02	Yes
.5906-.6260	15.0-15.9	TD1500120S7R01	4.72	5.66	7.63	.750" Cylind.	15	CB150R02	Yes
.6299-.6654	16.0-16.9	TD1600128S7R01	5.04	6.04	8.01	.750" Cylind.	16	CB160R02	Yes
.6693-.7047	17.0-17.9	TD1700136S7R01	5.35	6.41	8.38	.750" Cylind.	17	CB170R02	Yes
.7087-.7441	18.0-18.9	TD1800144S1R01	5.67	6.79	8.99	1.000" Cylind.	18	CB180R02	Yes
.7480-.7835	19.0-19.9	TD1900152S1R01	5.98	7.17	9.37	1.000" Cylind.	19	CB190R02	Yes
.7874-.8228	20.0-20.9	TD2000160S1R01	6.30	7.54	9.74	1.000" Cylind.	20	CB200R02	Yes
.8268-.8622	21.0-21.9	TD2100168S1R01	6.61	7.92	10.12	1.000" Cylind.	21	CB210R02	Yes
.8661-.9016	22.0-22.9	TD2200176S1R01	6.93	8.30	10.50	1.000" Cylind.	22	CB220R02	Yes
.9055-.9409	23.0-23.9	TD2300184S9R01	7.24	8.68	11.04	1.250" Cylind.	23	CB230R02	Yes
.9449-.9803	24.0-24.9	TD2400192S9R01	7.56	9.06	11.42	1.250" Cylind.	24	CB240R02	Yes
.9843-1.0197	25.0-25.9	TD2500200S9R01	7.87	9.43	11.79	1.250" Cylind.	25	CB250R02	Yes

\*Do not mount a smaller drill point than the one listed with the tool.  
Metric shanks available as non-stock standards.

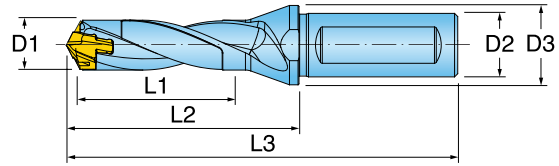


HARDWARE			
	Clamping Key	Coolant Plug	
TD0700056S4R01	KTD6.0-D9.9	DL-12	
TD0750060S4R01	KTD6.0-D9.9	DL-12	
TD0800064S4R01	KTD6.0-D9.9	DL-12	
TD0850068S4R01	KTD6.0-D9.9	DL-12	
TD0900072S4R01	KTD6.0-D9.9	DL-12	
TD0950076S4R01	KTD6.0-D9.9	DL-12	
TD1000080S6R01	KTD10.0-19.9	DL-16	
TD1050084S6R01	KTD10.0-19.9	DL-16	
TD1100088S6R01	KTD10.0-19.9	DL-16	
TD1150092S6R01	KTD10.0-19.9	DL-16	
TD1200096S6R01	KTD10.0-19.9	DL-16	
TD1250100S6R01	KTD10.0-19.9	DL-16	
TD1300104S6R01	KTD10.0-19.9	DL-16	
TD1350108S6R01	KTD10.0-19.9	DL-16	
TD1400112S6R01	KTD10.0-19.9	DL-16	
TD1450116S6R01	KTD10.0-19.9	DL-16	
TD1500120S7R01	KTD10.0-19.9	DL-20	
TD1600128S7R01	KTD10.0-19.9	DL-20	
TD1700136S7R01	KTD10.0-19.9	DL-20	
TD1800144S1R01	KTD10.0-19.9	DL-25	
TD1900152S1R01	KTD10.0-19.9	DL-25	
TD2000160S1R01	KTD20.0-D26.9	DL-25	
TD2100168S1R01	KTD20.0-D26.9	DL-25	
TD2200176S1R01	KTD20.0-D26.9	DL-25	
TD2300184S9R01	KTD20.0-D26.9	DL-32	
TD2400192S9R01	KTD20.0-D26.9	DL-32	
TD2500200S9R01	KTD20.0-D26.9	DL-32	



# GOLD TWIST SERIES TD 8:1 UNIVERSAL SHANK (INCH)



REPLACEABLE TIPPED DRILL BODIES



D1 Nom. Dia. inch	D1 Nom. Dia. mm	Body Number	L1 DOC	L2 Ext.	L3 Overall	D2 Shank Size/Style	D3 Flange Dia.	Pocket Size	Chamfer Ring	Coolant Thru Point
.2756-.2913	7.0-7.4	TD0700056B9R01	2.20	2.78	4.55	.500" Univ.	0.63	7.0	NA	Yes
.2958-.3110	7.5-7.9	TD0750060B9R01	2.28	2.94	4.71	.500" Univ.	0.63	7.5	NA	Yes
.3150-.3307	8.0-8.4	TD0800064B9R01	2.52	3.13	4.90	.500" Univ.	0.63	8	NA	Yes
.3346-.3504	8.5-8.9	TD0850068B9R01	2.68	3.32	5.09	.500" Univ.	0.63	8.5	NA	Yes
.3543-.3701	9.0-9.4	TD0900072B9R01	2.83	3.46	5.23	.500" Univ.	0.63	9	NA	Yes
.3740-.3898	9.5-9.9	TD0950076B9R01	2.99	3.65	5.42	.500" Univ.	0.63	9.5	NA	Yes
.3937-.4094	10.0-10.4	TD1000080COR01	3.15	3.79	5.68	.625" Univ.	0.79	10	CB100R02	Yes
.4134-.4291	10.5-10.9	TD1050084COR01	3.31	3.94	5.83	.625" Univ.	0.79	10.5	CB105R02	Yes
.4331-.4488	11.0-11.4	TD1100088COR01	3.46	4.12	6.01	.625" Univ.	0.79	11	CB110R02	Yes
.4528-.4685	11.5-11.9	TD1150092COR01	3.62	4.28	6.17	.625" Univ.	0.79	11.5	CB115R02	Yes
.4724-.4882	12.0-12.4	TD1200096COR01	3.78	4.45	6.34	.625" Univ.	0.79	12	CB120R02	Yes
.4912-.5079	12.5-12.9	TD1250100COR01	3.94	4.61	6.50	.625" Univ.	0.79	12.5	CB125R02	Yes
.5118-.5276	13.0-13.4	TD1300104COR01	4.09	4.79	6.68	.625" Univ.	0.79	13	CB130R02	Yes
.5315-.5472	13.5-13.9	TD1350108COR01	4.25	4.94	6.83	.625" Univ.	0.79	13.5	CB135R02	Yes
.5512-.5669	14.0-14.4	TD1400112COR01	4.41	5.20	7.09	.625" Univ.	0.79	14	CB140R02	Yes
.5709-.5866	14.5-14.9	TD1450116COR01	4.57	5.36	7.25	.625" Univ.	0.79	14.5	CB145R02	Yes
.5906-.6260	15.0-15.9	TD150012018R01	4.72	5.66	7.63	.750" Univ.	0.98	15	CB150R02	Yes
.6299-.6654	16.0-16.9	TD160012818R01	5.04	6.04	8.01	.750" Univ.	0.98	16	CB160R02	Yes
.6693-.7047	17.0-17.9	TD170013618R01	5.35	6.41	8.38	.750" Univ.	0.98	17	CB170R02	Yes
.7087-.7441	18.0-18.9	TD1800144C8R01	5.67	6.79	8.99	1.000" Univ.	1.26	18	CB180R02	Yes
.7480-.7835	19.0-19.9	TD1900152C8R01	5.98	7.17	9.37	1.000" Univ.	1.26	19	CB190R02	Yes
.7874-.8228	20.0-20.9	TD2000160C8R01	6.30	7.54	9.74	1.000" Univ.	1.26	20	CB200R02	Yes
.8268-.8622	21.0-21.9	TD2100168C8R01	6.61	7.92	10.12	1.000" Univ.	1.26	21	CB210R02	Yes
.8661-.9016	22.0-22.9	TD2200176C8R01	6.93	8.30	10.50	1.000" Univ.	1.26	22	CB220R02	Yes
.9055-.9409	23.0-23.9	TD2300184B7R01	7.24	8.68	11.04	1.250" Univ.	1.65	23	CB230R02	Yes
.9449-.9803	24.0-24.9	TD2400192B7R01	7.56	9.06	11.42	1.250" Univ.	1.65	24	CB240R02	Yes
.9843-1.0197	25.0-25.9	TD2500200B7R01	7.87	9.43	11.79	1.250" Univ.	1.65	25	CB250R02	Yes

\*Do not mount a smaller drill point than the one listed with the tool.  
Metric shanks available as non-stock standards.

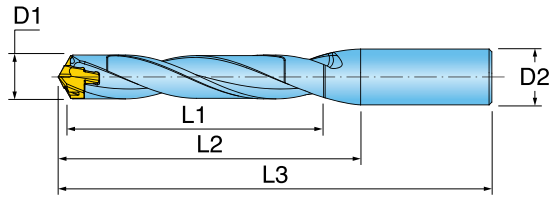


HARDWARE		
	Clamping Key	Coolant Plug
TD0700056B9R01	KTD6.0-D9.9	DL-12
TD0750060B9R01	KTD6.0-D9.9	DL-12
TD0800064B9R01	KTD6.0-D9.9	DL-12
TD0850068B9R01	KTD6.0-D9.9	DL-12
TD0900072B9R01	KTD6.0-D9.9	DL-12
TD0950076B9R01	KTD6.0-D9.9	DL-12
TD1000080C0R01	KTD10.0-19.9	DL-16
TD1050084C0R01	KTD10.0-19.9	DL-16
TD1100088C0R01	KTD10.0-19.9	DL-16
TD1150092C0R01	KTD10.0-19.9	DL-16
TD1200096C0R01	KTD10.0-19.9	DL-16
TD1250100C0R01	KTD10.0-19.9	DL-16
TD1300104C0R01	KTD10.0-19.9	DL-16
TD1350108C0R01	KTD10.0-19.9	DL-16
TD1400112C0R01	KTD10.0-19.9	DL-16
TD1450116C0R01	KTD10.0-19.9	DL-16
TD150012018R01	KTD10.0-19.9	DL-20
TD160012818R01	KTD10.0-19.9	DL-20
TD170013618R01	KTD10.0-19.9	DL-20
TD1800144C8R01	KTD10.0-19.9	DL-25
TD1900152C8R01	KTD10.0-19.9	DL-25
TD2000160C8R01	KTD20.0-D26.9	DL-25
TD2100168C8R01	KTD20.0-D26.9	DL-25
TD2200176C8R01	KTD20.0-D26.9	DL-25
TD2300184B7R01	KTD20.0-D26.9	DL-32
TD2400192B7R01	KTD20.0-D26.9	DL-32
TD2500200B7R01	KTD20.0-D26.9	DL-32



# GOLD TWIST SERIES TD 12:1 CYLINDRICAL SHANK (INCH)



REPLACEABLE TIPPED DRILL BODIES



D1 Nom. Dia. inch	D1 Nom. Dia. mm	Body Number	L1 DOC	L2 Ext.	L3 Overall	D2 Shank Size/Style	Pocket Size	Chamfer Ring	Coolant Thru Point
.4724-.4882	12.0-12.4	TD1200144S6R01	5.67	6.34	8.23	.625" Cyland.	12	CB120R02	Yes
.4912-.5079	12.5-12.9	TD1250150S6R01	5.91	6.57	8.46	.625" Cyland.	12.5	CB125R02	Yes
.5118-.5276	13.0-13.4	TD1300156S6R01	6.14	6.81	8.70	.625" Cyland.	13	CB130R02	Yes
.5315-.5472	13.5-13.9	TD1350162S6R01	6.38	7.05	8.94	.625" Cyland.	13.5	CB135R02	Yes
.5512-.5669	14.0-14.4	TD1400168S6R01	6.61	7.40	9.29	.625" Cyland.	14	CB140R02	Yes
.5709-.5866	14.5-14.9	TD1450174S6R01	6.85	7.64	9.53	.625" Cyland.	14.5	CB145R02	Yes
.5906-.6260	15.0-15.9	TD1500180S7R01	7.09	8.27	10.24	.750" Cyland.	15	CB150R02	Yes
.6299-.6654	16.0-16.9	TD1600192S7R01	7.56	8.82	10.79	.750" Cyland.	16	CB160R02	Yes
.6693-.7047	17.0-17.9	TD1700204S7R01	8.03	9.37	11.34	.750" Cyland.	17	CB170R02	Yes
.7087-.7441	18.0-18.9	TD1800216S1R01	8.50	9.92	12.13	1.000" Cyland.	18	CB180R02	Yes
.7480-.7835	19.0-19.9	TD1900228S1R01	8.98	10.47	12.68	1.000" Cyland.	19	CB190R02	Yes
.7874-.8228	20.0-20.9	TD2000240S1R01	9.45	11.02	13.23	1.000" Cyland.	20	CB200R02	Yes
.8268-.8622	21.0-21.9	TD2100252S1R01	9.92	11.57	13.78	1.000" Cyland.	21	CB210R02	Yes
.8661-.9016	22.0-22.9	TD2200264S1R01	10.39	12.13	14.33	1.000" Cyland.	22	CB220R02	Yes
.9055-.9409	23.0-23.9	TD2300276S9R01	10.87	12.68	15.04	1.250" Cyland.	23	CB230R02	Yes
.9449-.9803	24.0-24.9	TD2400288S9R01	11.34	13.23	15.59	1.250" Cyland.	24	CB240R02	Yes
.9843-1.0197	25.0-25.9	TD2500300S9R01	11.81	13.78	16.14	1.250" Cyland.	25	CB250R02	Yes

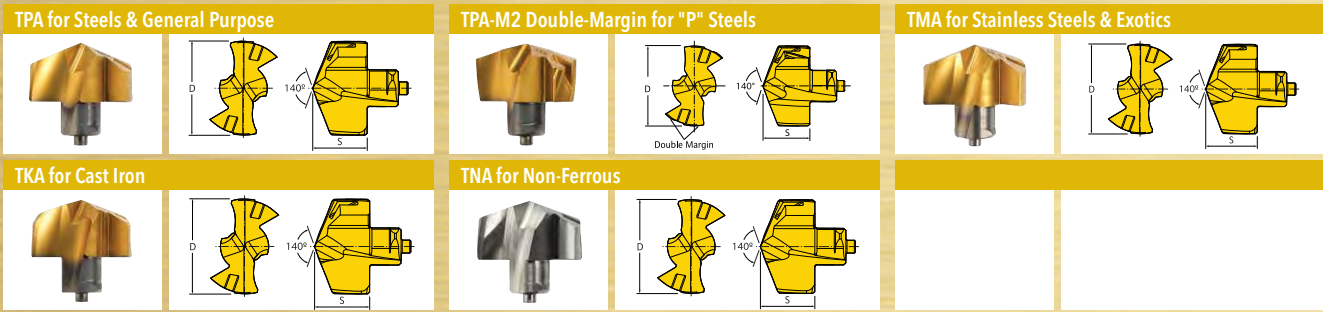
\*Do not mount a smaller drill point than the one listed with the tool.  
Metric shanks available as non-stock standard.



HARDWARE			
	Clamping Key	Coolant Plug	
TD1200144S6R01	KTD10.0-19.9	DL-16	
TD1250150S6R01	KTD10.0-19.9	DL-16	
TD1300156S6R01	KTD10.0-19.9	DL-16	
TD1350162S6R01	KTD10.0-19.9	DL-16	
TD1400168S6R01	KTD10.0-19.9	DL-16	
TD1450174S6R01	KTD10.0-19.9	DL-16	
TD1500180S7R01	KTD10.0-19.9	DL-20	
TD1600192S7R01	KTD10.0-19.9	DL-20	
TD1700204S7R01	KTD10.0-19.9	DL-20	
TD1800216S1R01	KTD10.0-19.9	DL-25	
TD1900228S1R01	KTD10.0-19.9	DL-25	
TD2000240S1R01	KTD20.0-D26.9	DL-25	
TD2100252S1R01	KTD20.0-D26.9	DL-25	
TD2200264S1R01	KTD20.0-D26.9	DL-25	
TD2300276S9R01	KTD20.0-D26.9	DL-25	
TD2400288S9R01	KTD20.0-D26.9	DL-25	
TD2500300S9R01	KTD20.0-D26.9	DL-25	



# GOLD TWIST REPLACEABLE TIPS: 6MM-13.8MM DIA.



TPA Steels & GP	TPA-M2 "P" Steels	TMA Stainless & Exotics	TKA Cast Iron	TNA Non-Ferrous	D Diameter		S	Pocket Size
					in	mm		
TPA0600R01		TMA0600R01	TKA0600R01		6.00	0.2362	0.157	6.0
TPA0610R01		TMA0610R01	TKA0610R01		6.10	0.2402	0.157	6.0
TPA0620R01		TMA0620R01	TKA0620R01		6.20	0.2441	0.157	6.0
TPA0630R01		TMA0630R01	TKA0630R01		6.30	0.2480	0.157	6.0
				TNA0635R01	6.35	0.2500	0.157	6.0
TPA0640R01		TMA0640R01	TKA0640R01		6.40	0.2520	0.157	6.0
TPA0650R01		TMA0650R01	TKA0650R01		6.50	0.2559	0.169	6.5
TPA0660R01		TMA0660R01	TKA0660R01		6.60	0.2598	0.169	6.5
TPA0670R01		TMA0670R01	TKA0670R01		6.70	0.2638	0.169	6.5
TPA0680R01		TMA0680R01	TKA0680R01		6.80	0.2677	0.169	6.5
TPA0690R01		TMA0690R01	TKA0690R01		6.90	0.2717	0.169	6.5
TPA0700R01		TMA0700R01	TKA0700R01		7.00	0.2756	0.181	7.0
TPA0710R01		TMA0710R01	TKA0710R01		7.10	0.2795	0.181	7.0
				TNA0714R01	7.14	0.2812	0.181	7.0
TPA0720R01		TMA0720R01	TKA0720R01		7.20	0.2835	0.181	7.0
TPA0730R01		TMA0730R01	TKA0730R01		7.30	0.2874	0.181	7.0
TPA0740R01		TMA0740R01	TKA0740R01		7.40	0.2913	0.181	7.0
TPA0750R01		TMA0750R01	TKA0750R01		7.50	0.2953	0.181	7.5
TPA0760R01		TMA0760R01	TKA0760R01		7.60	0.2992	0.181	7.5
TPA0770R01		TMA0770R01	TKA0770R01		7.70	0.3031	0.181	7.5
TPA0780R01		TMA0780R01	TKA0780R01		7.80	0.3071	0.181	7.5
TPA0790R01		TMA0790R01	TKA0790R01		7.90	0.3110	0.181	7.5
				TNA0794R01	7.94	0.3125	0.181	7.5
TPA0800R01	TPA0800R01-M2	TMA0800R01	TKA0800R01	TNA0800R01	8.00	0.3150	0.213	8.0
TPA0810R01		TMA0810R01	TKA0810R01		8.10	0.3189	0.213	8.0
TPA0820R01		TMA0820R01	TKA0820R01		8.20	0.3228	0.213	8.0
TPA0830R01		TMA0830R01	TKA0830R01		8.30	0.3268	0.213	8.0
TPA0840R01		TMA0840R01	TKA0840R01		8.40	0.3307	0.213	8.0
TPA0850R01	TPA0850R01-M2	TMA0850R01	TKA0850R01	TNA0850R01	8.50	0.3346	0.213	8.5
TPA0860R01		TMA0860R01	TKA0860R01		8.60	0.3386	0.213	8.5
TPA0870R01		TMA0870R01	TKA0870R01	TNA0870R01	8.70	0.3425	0.213	8.5
	TPA0873R01-M2			TNA0873R01	8.73	0.3437	0.213	8.5
TPA0880R01		TMA0880R01	TKA0880R01		8.80	0.3465	0.213	8.5
TPA0890R01		TMA0890R01	TKA0890R01		8.90	0.3504	0.213	8.5
TPA0900R01	TPA0900R01-M2	TMA0900R01	TKA0900R01	TNA0900R01	9.00	0.3543	0.228	9.0
TPA0910R01		TMA0910R01	TKA0910R01		9.10	0.3583	0.228	9.0
TPA0920R01		TMA0920R01	TKA0920R01		9.20	0.3622	0.228	9.0
TPA0930R01		TMA0930R01	TKA0930R01		9.30	0.3661	0.228	9.0
TPA0940R01		TMA0940R01	TKA0940R01	TNA0940R01	9.40	0.3701	0.228	9.0

\*\*\* Grade IN2505 for ISO P, P-M2, M and K Geometries/Materials

\*\*\* Grade IN05S for ISO N Geometry/Materials

● = P ● = M ● = K ● = N ● = S ○ = H



TPA Steels & GP	TPA-M2 "P" Steels	TMA Stainless & Exotics	TKA Cast Iron	TNA Non-Ferrous	D Diameter		S	Pocket Size
					in	mm		
TPA0950R01	TPA0950R01-M2	TMA0950R01	TKA0950R01	TNA0950R01	9.50	0.3740	0.228	9.5
				TNA0953R01	9.53	0.3750	0.228	9.5
TPA0960R01		TMA0960R01	TKA0960R01		9.60	0.3780	0.228	9.5
TPA0970R01		TMA0970R01	TKA0970R01		9.70	0.3819	0.228	9.5
TPA0980R01		TMA0980R01	TKA0980R01		9.80	0.3858	0.228	9.5
TPA0990R01		TMA0990R01	TKA0990R01	TNA0990R01	9.90	0.3898	0.228	9.5
TPA1000R01	TPA1000R01-M2	TMA1000R01	TKA1000R01	TNA1000R01	10.00	0.3937	0.244	10.0
TPA1010R01		TMA1010R01	TKA1010R01		10.10	0.3976	0.244	10.0
TPA1020R01		TMA1020R01	TKA1020R01	TNA1020R01	10.20	0.4016	0.244	10.0
TPA1030R01		TMA1030R01	TKA1030R01		10.30	0.4055	0.244	10.0
	TPA1032R01-M2			TNA1032R01	10.32	0.4062	0.244	10.0
TPA1040R01		TMA1040R01	TKA1040R01		10.40	0.4094	0.244	10.0
TPA1050R01	TPA1050R01-M2	TMA1050R01	TKA1050R01	TNA1050R01	10.50	0.4134	0.244	10.5
TPA1060R01		TMA1060R01	TKA1060R01		10.60	0.4173	0.244	10.5
TPA1070R01		TMA1070R01	TKA1070R01		10.70	0.4213	0.244	10.5
TPA1080R01		TMA1080R01	TKA1080R01	TNA1080R01	10.80	0.4252	0.244	10.5
TPA1090R01		TMA1090R01	TKA1090R01		10.90	0.4291	0.244	10.5
TPA1100R01	TPA1100R01-M2	TMA1100R01	TKA1100R01	TNA1100R01	11.00	0.4331	0.260	11.0
TPA1110R01		TMA1110R01	TKA1110R01		11.10	0.4370	0.260	11.0
	TPA1111R01-M2			TNA1111R01	11.11	0.4375	0.260	11.0
TPA1120R01		TMA1120R01	TKA1120R01		11.20	0.4409	0.260	11.0
TPA1130R01		TMA1130R01	TKA1130R01		11.30	0.4449	0.260	11.0
TPA1140R01		TMA1140R01	TKA1140R01		11.40	0.4488	0.260	11.0
TPA1150R01	TPA1150R01-M2	TMA1150R01	TKA1150R01	TNA1150R01	11.50	0.4528	0.260	11.5
TPA1160R01		TMA1160R01	TKA1160R01		11.60	0.4567	0.260	11.5
TPA1170R01		TMA1170R01	TKA1170R01		11.70	0.4606	0.260	11.5
TPA1180R01		TMA1180R01	TKA1180R01		11.80	0.4646	0.260	11.5
TPA1190R01		TMA1190R01	TKA1190R01	TNA1190R01	11.90	0.4685	0.260	11.5
	TPA1191R01-M2				11.91	0.4689	0.260	11.5
TPA1200R01	TPA1200R01-M2	TMA1200R01	TKA1200R01	TNA1200R01	12.00	0.4724	0.275	12.0
TPA1210R01		TMA1210R01	TKA1210R01		12.10	0.4764	0.275	12.0
TPA1220R01		TMA1220R01	TKA1220R01		12.20	0.4803	0.275	12.0
TPA1230R01		TMA1230R01	TKA1230R01	TNA1230R01	12.30	0.4843	0.275	12.0
TPA1240R01		TMA1240R01	TKA1240R01		12.40	0.4882	0.275	12.0
TPA1250R01	TPA1250R01-M2	TMA1250R01	TKA1250R01	TNA1250R01	12.50	0.4921	0.275	12.5
TPA1260R01		TMA1260R01	TKA1260R01		12.60	0.4961	0.275	12.5
TPA1270R01	TPA1270R01-M2	TMA1270R01	TKA1270R01	TNA1270R01	12.70	0.5000	0.275	12.5
TPA1280R01		TMA1280R01	TKA1280R01		12.80	0.5039	0.275	12.5
TPA1290R01	TPA1290R01-M2	TMA1290R01	TKA1290R01		12.90	0.5079	0.275	12.5
TPA1300R01	TPA1300R01-M2	TMA1300R01	TKA1300R01	TNA1300R01	13.00	0.5118	0.299	13.0
TPA1310R01		TMA1310R01	TKA1310R01		13.10	0.5157	0.299	13.0
TPA1320R01		TMA1320R01	TKA1320R01		13.20	0.5197	0.299	13.0
TPA1330R01		TMA1330R01	TKA1330R01		13.30	0.5236	0.299	13.0
TPA1340R01		TMA1340R01	TKA1340R01		13.40	0.5276	0.299	13.0
TPA1350R01	TPA1350R01-M2	TMA1350R01	TKA1350R01	TNA1350R01	13.50	0.5315	0.299	13.5
TPA1360R01		TMA1360R01	TKA1360R01		13.60	0.5354	0.299	13.5
TPA1370R01		TMA1370R01	TKA1370R01	TNA1370R01	13.70	0.5394	0.299	13.5
TPA1380R01		TMA1380R01	TKA1380R01		13.80	0.5433	0.299	13.5

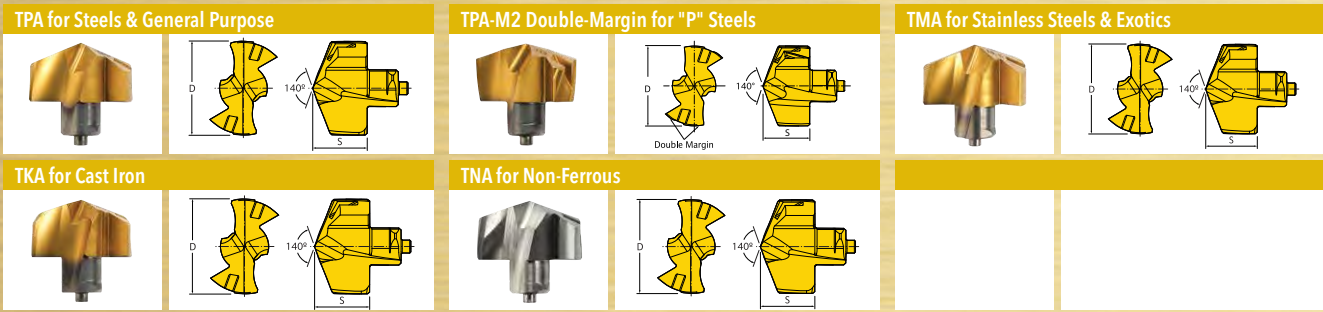
\*\*\* Grade IN2505 for ISO P, P-M2, M and K Geometries/Materials

\*\*\* Grade IN05S for ISO N Geometry/Materials

● = P ● = M ● = K ● = N ● = S ○ = H



# GOLD TWIST REPLACEABLE TIPS (CONT.): 13.9MM-21.43MM DIA.



TPA Steels & GP	TPA-M2 "P" Steels	TMA Stainless & Exotics	TKA Cast Iron	TNA Non-Ferrous	D Diameter		S	Pocket Size
					in	mm		
TPA1390R01		TMA1390R01	TKA1390R01		13.90	0.5472	0.299	13.5
TPA1400R01	TPA1400R01-M2	TMA1400R01	TKA1400R01	TNA1400R01	14.00	0.5512	0.321	14.0
TPA1410R01		TMA1410R01	TKA1410R01		14.10	0.5551	0.321	14.0
TPA1420R01		TMA1420R01	TKA1420R01		14.20	0.5591	0.321	14.0
	TPA1429R01-M2			TNA1429R01	14.29	0.5625	0.321	14.0
TPA1430R01		TMA1430R01	TKA1430R01		14.30	0.5630	0.321	14.0
TPA1440R01		TMA1440R01	TKA1440R01		14.40	0.5669	0.321	14.0
TPA1450R01	TPA1450R01-M2	TMA1450R01	TKA1450R01	TNA1450R01	14.50	0.5709	0.321	14.5
TPA1460R01		TMA1460R01	TKA1460R01		14.60	0.5748	0.321	14.5
TPA1470R01		TMA1470R01	TKA1470R01		14.70	0.5787	0.321	14.5
TPA1480R01		TMA1480R01	TKA1480R01		14.80	0.5827	0.321	14.5
TPA1490R01		TMA1490R01	TKA1490R01		14.90	0.5866	0.321	14.5
TPA1500R01	TPA1500R01-M2	TMA1500R01	TKA1500R01	TNA1500R01	15.00	0.5906	0.344	15.0
				TNA1508R01	15.08	0.5937	0.344	15.0
TPA1510R01		TMA1510R01	TKA1510R01		15.10	0.5945	0.344	15.0
TPA1520R01		TMA1520R01	TKA1520R01		15.20	0.5984	0.344	15.0
TPA1530R01		TMA1530R01	TKA1530R01		15.30	0.6024	0.344	15.0
TPA1540R01		TMA1540R01	TKA1540R01		15.40	0.6063	0.344	15.0
TPA1550R01	TPA1550R01-M2	TMA1550R01	TKA1550R01		15.50	0.6102	0.344	15.0
TPA1560R01		TMA1560R01	TKA1560R01		15.60	0.6142	0.344	15.0
TPA1570R01		TMA1570R01	TKA1570R01		15.70	0.6181	0.344	15.0
TPA1580R01		TMA1580R01	TKA1580R01		15.80	0.6220	0.344	15.0
	TPA1588R01-M2			TNA1588R01	15.88	0.6250	0.344	15.0
TPA1590R01	TPA1590R01-M2	TMA1590R01	TKA1590R01		15.90	0.6260	0.344	15.0
TPA1600R01	TPA1600R01-M2	TMA1600R01	TKA1600R01	TNA1600R01	16.00	0.6299	0.366	16.0
TPA1610R01		TMA1610R01	TKA1610R01		16.10	0.6339	0.366	16.0
TPA1620R01		TMA1620R01	TKA1620R01		16.20	0.6378	0.366	16.0
TPA1630R01		TMA1630R01	TKA1630R01		16.30	0.6417	0.366	16.0
TPA1640R01		TMA1640R01	TKA1640R01		16.40	0.6457	0.366	16.0
TPA1650R01	TPA1650R01-M2	TMA1650R01	TKA1650R01	TNA1650R01	16.50	0.6496	0.366	16.0
TPA1660R01		TMA1660R01	TKA1660R01		16.60	0.6535	0.366	16.0
				TNA1667R01	16.67	0.6562	0.366	16.0
TPA1670R01	TPA1670R01-M2	TMA1670R01	TKA1670R01	TNA1670R01	16.70	0.6575	0.366	16.0
TPA1680R01		TMA1680R01	TKA1680R01		16.80	0.6614	0.366	16.0
TPA1690R01		TMA1690R01	TKA1690R01		16.90	0.6654	0.366	16.0
TPA1700R01	TPA1700R01-M2	TMA1700R01	TKA1700R01	TNA1700R01	17.00	0.6693	0.390	17.0
TPA1710R01		TMA1710R01	TKA1710R01		17.10	0.6732	0.390	17.0
TPA1720R01		TMA1720R01	TKA1720R01		17.20	0.6772	0.390	17.0
TPA1730R01		TMA1730R01	TKA1730R01		17.30	0.6811	0.390	17.0

\*\*\* Grade IN2505 for ISO P, P-M2, M and K Geometries/Materials

\*\*\* Grade IN055 for ISO N Geometry/Materials

● = P ● = M ● = K ● = N ● = S ○ = H



TPA Steels & GP	TPA-M2 "P" Steels	TMA Stainless & Exotics	TKA Cast Iron	TNA Non-Ferrous	D Diameter		S	Pocket Size
					in	mm		
TPA1740R01		TMA1740R01	TKA1740R01		17.40	0.6850	0.390	17.0
				TNA1746R01	17.46	0.6875	0.390	17.0
TPA1750R01	TPA1750R01-M2	TMA1750R01	TKA1750R01	TNA1750R01	17.50	0.6890	0.390	17.0
TPA1760R01		TMA1760R01	TKA1760R01		17.60	0.6929	0.390	17.0
TPA1770R01		TMA1770R01	TKA1770R01		17.70	0.6968	0.390	17.0
TPA1780R01		TMA1780R01	TKA1780R01		17.80	0.7008	0.390	17.0
TPA1790R01		TMA1790R01	TKA1790R01		17.90	0.7047	0.390	17.0
TPA1800R01	TPA1800R01-M2	TMA1800R01	TKA1800R01	TKA1800R01	18.00	0.7087	0.413	18.0
TPA1810R01		TMA1810R01	TKA1810R01		18.10	0.7126	0.413	18.0
TPA1820R01		TMA1820R01	TKA1820R01		18.20	0.7165	0.413	18.0
				TNA1826R01	18.26	0.7188	0.413	18.0
TPA1830R01		TMA1830R01	TKA1830R01		18.30	0.7205	0.413	18.0
TPA1840R01		TMA1840R01	TKA1840R01		18.40	0.7244	0.413	18.0
TPA1850R01	TPA1850R01-M2	TMA1850R01	TKA1850R01	TNA1850R01	18.50	0.7283	0.413	18.0
TPA1860R01		TMA1860R01	TKA1860R01		18.60	0.7323	0.413	18.0
TPA1870R01		TMA1870R01	TKA1870R01		18.70	0.7362	0.413	18.0
TPA1880R01		TMA1880R01	TKA1880R01		18.80	0.7402	0.413	18.0
TPA1890R01		TMA1890R01	TKA1890R01		18.90	0.7441	0.413	18.0
TPA1900R01	TPA1900R01-M2	TMA1900R01	TKA1900R01	TNA1900R01	19.00	0.7480	0.433	19.0
TPA1905R01	TNA1905R01-M2	TMA1905R01	TKA1905R01	TNA1905R01	19.05	0.7500	0.433	19.0
TPA1910R01		TMA1910R01	TKA1910R01		19.10	0.7520	0.433	19.0
TPA1920R01		TMA1920R01	TKA1920R01		19.20	0.7559	0.433	19.0
	TPA1926R01-M2				19.26	0.7559	0.433	19.0
TPA1930R01	TPA1930R01-M2	TMA1930R01	TKA1930R01		19.30	0.7598	0.433	19.0
TPA1940R01		TMA1940R01	TKA1940R01		19.40	0.7638	0.433	19.0
TPA1950R01	TPA1950R01-M2	TMA1950R01	TKA1950R01	TNA1950R01	19.50	0.7677	0.433	19.0
TPA1960R01		TMA1960R01	TKA1960R01		19.60	0.7717	0.433	19.0
TPA1970R01		TMA1970R01	TKA1970R01		19.70	0.7756	0.433	19.0
TPA1980R01		TMA1980R01	TKA1980R01		19.80	0.7795	0.433	19.0
				TNA1984R01	19.84	0.7795	0.433	19.0
TPA1990R01		TMA1990R01	TKA1990R01		19.90	0.7835	0.433	19.0
TPA2000R01		TMA2000R01	TKA2000R01	TNA2000R01	20.00	0.7874	0.344	20.0
TPA2010R01		TMA2010R01	TKA2010R01		20.10	0.7913	0.344	20.0
TPA2020R01		TMA2020R01	TKA2020R01		20.20	0.7953	0.344	20.0
TPA2030R01		TMA2030R01	TKA2030R01		20.30	0.7992	0.344	20.0
TPA2040R01		TMA2040R01	TKA2040R01		20.40	0.8031	0.344	20.0
TPA2050R01		TMA2050R01	TKA2050R01	TNA2050R01	20.50	0.8071	0.344	20.0
TPA2060R01		TMA2060R01	TKA2060R01		20.60	0.8110	0.344	20.0
				TNA2064R01	20.64	0.8125	0.344	20.0
TPA2070R01		TMA2070R01	TKA2070R01		20.70	0.8150	0.344	20.0
TPA2080R01		TMA2080R01	TKA2080R01		20.80	0.8189	0.344	20.0
TPA2090R01		TMA2090R01	TKA2090R01		20.90	0.8228	0.344	20.0
TPA2100R01		TMA2100R01	TKA2100R01	TNA2100R01	21.00	0.8268	0.366	21.0
TPA2110R01		TMA2110R01	TKA2110R01		21.10	0.8307	0.366	21.0
TPA2120R01		TMA2120R01	TKA2120R01		21.20	0.8346	0.366	21.0
TPA2130R01		TMA2130R01	TKA2130R01		21.30	0.8386	0.366	21.0
TPA2140R01		TMA2140R01	TKA2140R01		21.40	0.8425	0.366	21.0
				TNA2143R01	21.43	0.8437	0.366	21.0

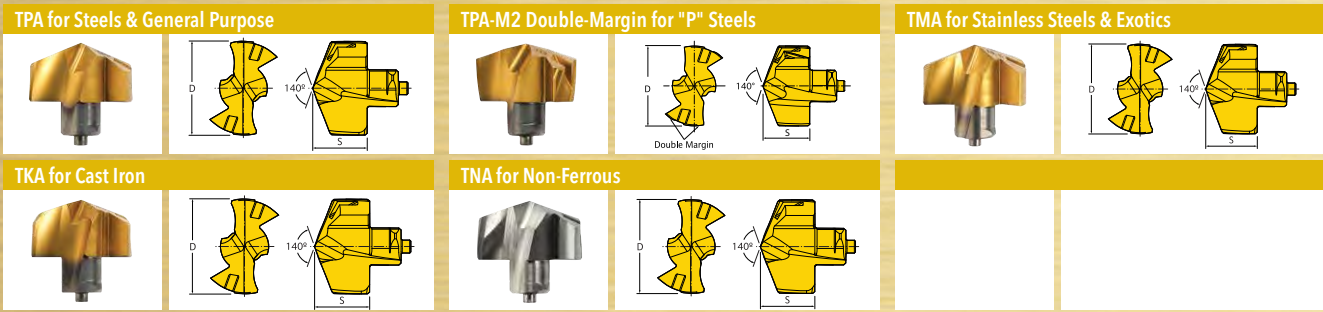
\*\*\* Grade IN2505 for ISO P, P-M2, M and K Geometries/Materials

\*\*\* Grade IN05S for ISO N Geometry/Materials

● = P ● = M ● = K ● = N ● = S ○ = H



# GOLDOTWIST REPLACEABLE TIPS (CONT.): 21.5MM-25.9MM DIA.



TPA Steels & GP	TPA-M2 "P" Steels	TMA Stainless & Exotics	TKA Cast Iron	TNA Non-Ferrous	D Diameter		S	Pocket Size
					in	mm		
TPA2150R01		TMA2150R01	TKA2150R01		21.50	0.8465	0.366	21.0
TPA2160R01		TMA2160R01	TKA2160R01		21.60	0.8504	0.366	21.0
TPA2170R01		TMA2170R01	TKA2170R01		21.70	0.8543	0.366	21.0
TPA2180R01		TMA2180R01	TKA2180R01		21.80	0.8583	0.366	21.0
TPA2190R01		TMA2190R01	TKA2190R01		21.90	0.8622	0.366	21.0
TPA2200R01		TMA2200R01	TKA2200R01	TNA2200R01	22.00	0.8661	0.390	22.0
TPA2210R01		TMA2210R01	TKA2210R01		22.10	0.8701	0.390	22.0
TPA2220R01		TMA2220R01	TKA2220R01		22.20	0.8740	0.390	22.0
TPA2222R01		TMA2222R01	TKA2222R01	TNA2222R01	22.22	0.8750	0.390	22.0
TPA2230R01		TMA2230R01	TKA2230R01		22.30	0.8780	0.390	22.0
TPA2240R01		TMA2240R01	TKA2240R01		22.40	0.8819	0.390	22.0
TPA2250R01		TMA2250R01	TKA2250R01		22.50	0.8858	0.390	22.0
TPA2260R01		TMA2260R01	TKA2260R01		22.60	0.8898	0.390	22.0
TPA2270R01		TMA2270R01	TKA2270R01		22.70	0.8937	0.390	22.0
TPA2280R01		TMA2280R01	TKA2280R01		22.80	0.8976	0.390	22.0
TPA2290R01		TMA2290R01	TKA2290R01		22.90	0.9016	0.390	22.0
TPA2300R01		TMA2300R01	TKA2300R01	TNA2300R01	23.00	0.9055	0.413	23.0
TPA2310R01		TMA2310R01	TKA2310R01		23.10	0.9094	0.413	23.0
TPA2320R01		TMA2320R01	TKA2320R01		23.20	0.9134	0.413	23.0
TPA2330R01		TMA2330R01	TKA2330R01		23.30	0.9173	0.413	23.0
TPA2340R01		TMA2340R01	TKA2340R01		23.40	0.9213	0.413	23.0
TPA2350R01		TMA2350R01	TKA2350R01		23.50	0.9252	0.413	23.0
TPA2360R01		TMA2360R01	TKA2360R01		23.60	0.9291	0.413	23.0
TPA2370R01		TMA2370R01	TKA2370R01		23.70	0.9331	0.413	23.0
TPA2380R01		TMA2380R01	TKA2380R01	TNA2380R01	23.80	0.9370	0.413	23.0
TPA2390R01		TMA2390R01	TKA2390R01		23.90	0.9409	0.413	23.0
TPA2400R01		TMA2400R01	TKA2400R01	TNA2400R01	24.00	0.9449	0.433	24.0
TPA2410R01		TMA2410R01	TKA2410R01		24.10	0.9488	0.433	24.0
TPA2420R01		TMA2420R01	TKA2420R01		24.20	0.9528	0.433	24.0
TPA2430R01		TMA2430R01	TKA2430R01		24.30	0.9567	0.433	24.0
TPA2440R01		TMA2440R01	TKA2440R01		24.40	0.9606	0.433	24.0
TPA2450R01		TMA2450R01	TKA2450R01	TNA2450R01	24.50	0.9646	0.433	24.0
TPA2460R01		TMA2460R01	TKA2460R01	TNA2460R01	24.60	0.9685	0.433	24.0
TPA2470R01		TMA2470R01	TKA2470R01		24.70	0.9724	0.433	24.0
TPA2480R01		TMA2480R01	TKA2480R01		24.80	0.9764	0.433	24.0
TPA2490R01		TMA2490R01	TKA2490R01		24.90	0.9803	0.433	24.0
TPA2500R01		TMA2500R01	TKA2500R01	TNA2500R01	25.00	0.9843	0.433	25.0
TPA2510R01		TMA2510R01	TKA2510R01		25.10	0.9882	0.433	25.0
TPA2520R01		TMA2520R01	TKA2520R01		25.20	0.9921	0.433	25.0

\*\*\* Grade IN2505 for ISO P, P-M2, M and K Geometries/Materials

\*\*\* Grade IN05S for ISO N Geometry/Materials

● = P ● = M ● = K ● = N ● = S ○ = H



TPA Steels & GP	TPA-M2 "P" Steels	TMA Stainless & Exotics	TKA Cast Iron	TNA Non-Ferrous	D Diameter		S	Pocket Size
					in	mm		
TPA2530R01		TMA2530R01	TKA2530R01		25.30	0.9961	0.433	25.0
TPA2540R01		TMA2540R01	TKA2540R01	IN2540R01	25.40	1.0000	0.433	25.0
TPA2550R01		TMA2550R01	TKA2550R01		25.50	1.0039	0.433	25.0
TPA2560R01		TMA2560R01	TKA2560R01		25.60	1.0079	0.433	25.0
TPA2570R01		TMA2570R01	TKA2570R01		25.70	1.0118	0.433	25.0
TPA2580R01		TMA2580R01	TKA2580R01		25.80	1.0157	0.433	25.0
TPA2590R01		TMA2590R01	TKA2590R01		25.90	1.0197	0.433	25.0

\*\*\* Grade IN2505 for ISO P, P-M2, M and K Geometries/Materials

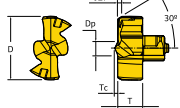
\*\*\* Grade IN05S for ISO N Geometry/Materials

● = P   ● = M   ● = K   ● = N   ● = S   ● = H



# GOLDOTWIST REPLACEABLE TIPS: FLAT BOTTOM

## TPF Flat Bottom for Steel & General Purpose



TPF Steel & GP	D Diameter		T	Tc	Dp Point Dia.	Pocket Size
	in	mm				
TPF0794R01	7.94	0.3125	0.157	0.015	0.091	7.5
TPF0800R01	8.00	0.3150	0.157	0.015	0.091	8.0
TPF0850R01	8.50	0.3346	0.157	0.015	0.091	8.5
TPF0900R01	9.00	0.3543	0.165	0.016	0.090	9.0
TPF0930R01	9.30	0.3661	0.165	0.016	0.090	9.0
TPF0950R01	9.50	0.3740	0.165	0.016	0.090	9.5
TPF1000R01	10.00	0.3937	0.173	0.018	0.096	10.0
TPF1020R01	10.20	0.4016	0.173	0.018	0.096	10.0
TPF1050R01	10.50	0.4134	0.173	0.018	0.096	10.5
TPF1070R01	10.70	0.4213	0.173	0.018	0.096	10.5
TPF1100R01	11.00	0.4331	0.177	0.021	0.122	11.0
TPF1110R01	11.10	0.4370	0.177	0.021	0.122	11.0
TPF1150R01	11.50	0.4528	0.177	0.021	0.122	11.5
TPF1200R01	12.00	0.4724	0.189	0.022	0.116	12.0
TPF1230R01	12.30	0.4843	0.189	0.022	0.116	12.0
TPF1250R01	12.50	0.4921	0.189	0.022	0.116	12.5
TPF1270R01	12.70	0.5000	0.189	0.022	0.116	12.5
TPF1300R01	13.00	0.5118	0.201	0.023	0.120	13.0
TPF1350R01	13.50	0.5315	0.201	0.023	0.120	13.5
TPF1400R01	14.00	0.5512	0.217	0.024	0.130	14.0
TPF1429R01	14.29	0.5620	0.217	0.024	0.130	14.0
TPF1450R01	14.50	0.5709	0.217	0.024	0.130	14.5
TPF1500R01	15.00	0.5906	0.233	0.026	0.139	15.0
TPF1550R01	15.50	0.6102	0.233	0.026	0.139	15.0
TPF1588R01	15.88	0.6250	0.233	0.026	0.139	15.0
TPF1600R01	16.00	0.6299	0.248	0.027	0.147	16.0
TPF1650R01	16.50	0.6496	0.248	0.027	0.147	16.0
TPF1670R01	16.70	0.6575	0.248	0.027	0.147	16.0
TPF1700R01	17.00	0.6693	0.260	0.028	0.148	17.0
TPF1750R01	17.50	0.6890	0.260	0.028	0.148	17.0
TPF1800R01	18.00	0.7087	0.271	0.028	0.151	18.0
TPF1830R01	18.30	0.7205	0.271	0.028	0.151	18.0
TPF1850R01	18.50	0.7283	0.271	0.028	0.151	18.0
TPF1900R01	19.00	0.7480	0.283	0.029	0.152	19.0
TPF1905R01	19.05	0.7500	0.283	0.029	0.152	19.0
TPF1930R01	19.30	0.7598	0.283	0.029	0.152	19.0
TPF1950R01	19.50	0.7677	0.283	0.029	0.152	19.0
TPF2000R01	20.00	0.7874	0.323	0.042	0.266	20.0
TPF2050R01	20.50	0.8071	0.323	0.042	0.266	20.0
TPF2060R01	20.60	0.8110	0.323	0.042	0.266	20.0
TPF2100R01	21.00	0.8268	0.339	0.043	0.276	21.0
TPF2150R01	21.50	0.8465	0.339	0.043	0.276	21.0
TPF2200R01	22.00	0.8661	0.350	0.044	0.292	22.0
TPF2222R01	22.22	0.8750	0.350	0.044	0.292	22.0

\*\*\* All FlatBottom Tips Available in Grade IN2505

● = P ○ = M ● = K ● = N ● = S ○ = H



TPA Steels & GP	TPA-M2 "P" Steels	TMA Stainless & Exotics	TKA Cast Iron	TNA Non-Ferrous	D Diameter		S	Pocket Size
					in	mm		
TPF2250R01	22.50	0.8858	0.350	0.044	0.292		22.0	
TPF2300R01	23.00	0.9055	0.366	0.045	0.299		23.0	
TPF2350R01	23.50	0.9252	0.366	0.045	0.299		23.0	
TPF2381R01	23.81	0.9375	0.366	0.045	0.299		23.0	
TFP2400R01	24.00	0.9449	0.382	0.046	0.320		24.0	
TPF2450R01	24.50	0.9646	0.382	0.046	0.320		24.0	
TPF2500R01	25.00	0.9843	0.398	0.047	0.321		25.0	
TPF2540R01	25.40	1.0000	0.398	0.047	0.321		25.0	
TPF2550R01	25.50	1.0039	0.398	0.047	0.321		25.0	
TPF2570R01	25.70	1.0118	0.398	0.047	0.321		25.0	

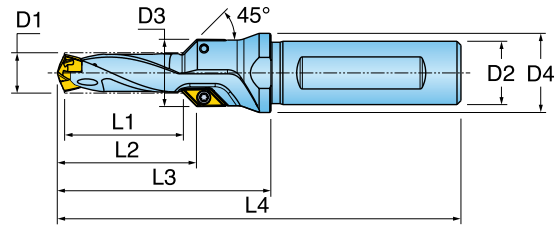
\*\*\* All FlatBottom Tips Available in Grade IN2505

● = P   ● = M   ● = K   ● = N   ● = S   ● = H






# GOLD TWIST SERIES TC TAP DRILL/CHAMFER BODIES INCH SHANK

TAP DRILL/CHAMFER REPLACEABLE TIPPED BODIES



Body Number	Thread Size	D1 Nominal Point Size (inch, mm)	D1 Point Range	L1 Full Dia. to Chamfer	L2 Full Dia. to Top of Chamfer	L3 Ext.	L4 OAL	D2 Shank Dia. (mm, inch)	D3 Chamfer Dia.	D4 Flange Dia.	Pocket Size
TC0790025B9R01	3/8 UNC	0.311", 7.90mm	.2953-.3110	1.000	1.180	1.970	3.74	12.00mm, 0.472"	0.590	0.63	7.5
TC0850025B9R01	3/8 UNF	0.335", 8.50mm	.3346-.3504	1.000	1.180	2.010	3.78	12.70mm, 0.500"	0.610	0.63	8.5
TC0940026B9R01	7/16 UNC	0.370", 9.40mm	.3543-.3701	1.059	1.240	2.130	3.90	12.70mm, 0.500"	0.650	0.63	9
TC0990026B9R01	7/16 UNF	0.390", 9.90mm	.3740-.3898	1.059	1.240	2.130	3.90	12.70mm, 0.500"	0.669	0.63	9.5
TC1080026C0R01	1/2 UNC	0.425", 10.80mm	.4134-.4291	1.059	1.240	2.170	4.06	15.88mm, 0.625"	0.709	0.79	10.5
TC1150026C0R01	1/2 UNF	0.453", 11.50mm	.4528-.4685	1.059	1.240	2.200	4.09	15.88mm, 0.625"	0.728	0.79	11.5
TC1230026C0R01	9/16 UNC	0.484", 12.30mm	.4724-.4882	1.059	1.240	2.240	4.13	15.88mm, 0.625"	0.768	0.79	12
TC1300026C0R01	9/16 UNF	0.512", 13.00mm	.5118-.5276	1.059	1.240	2.280	4.17	15.88mm, 0.625"	0.787	0.79	13
TC137003018R01	5/8 UNC	0.539", 13.70mm	.5315-.5472	1.201	1.380	2.400	4.37	19.05mm, 0.750"	0.807	0.98	13.5
TC146003018R01	5/8 UNF	0.575", 14.60mm	.5709-.5866	1.201	1.380	2.440	4.41	19.05mm, 0.750"	0.827	0.98	14.5
TC167003518R01	3/4 UNC	0.658", 16.70mm	.6299-.6654	1.402	1.580	2.760	4.73	19.05mm, 0.750"	0.925	0.98	16
TC175003518R01	3/4 UNF	0.689", 17.50mm	.6693-.7047	1.402	1.580	2.830	4.80	19.05mm, 0.750"	0.965	0.98	17
TC1950041C8R01	7/8 UNC	0.768", 19.50mm	.7480-.7835	1.650	1.830	3.150	5.35	25.40mm, 1.000"	1.043	1.26	19
TC2050041C8R01	7/8 UNF	0.807", 20.50mm	.7874-.8228	1.650	1.830	3.230	5.43	25.40mm, 1.000"	1.083	1.26	20

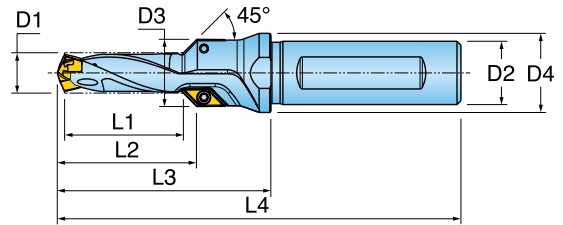


HARDWARE	 Screw	 Torx Key	 Clamping Key	
TC0790025B9R01	SM22-046-00	T7	KTD6.0-D9.9	
TC0850025B9R01	SM22-046-00	T7	KTD6.0-D9.9	
TC0940026B9R01	SM22-046-00	T7	KTD6.0-D9.9	
TC0990026B9R01	SM22-046-00	T7	KTD6.0-D9.9	
TC1080026C0R01	SM22-046-00	T7	KTD10.0-19.9	
TC1150026C0R01	SM22-046-00	T7	KTD10.0-19.9	
TC1230026C0R01	SM22-046-00	T7	KTD10.0-19.9	
TC1300026C0R01	SM22-046-00	T7	KTD10.0-19.9	
TC137003018R01	SM22-046-00	T7	KTD10.0-19.9	
TC146003018R01	SM22-046-00	T7	KTD10.0-19.9	
TC167003518R01	SM22-046-00	T7	KTD10.0-19.9	
TC175003518R01	SM22-046-00	T7	KTD10.0-19.9	
TC1950041C8R01	SM22-046-00	T7	KTD10.0-19.9	
TC2050041C8R01	SM22-046-00	T7	KTD20.0-D26.9	






# GOLD TWIST SERIES TC TAP DRILL/CHAMFER BODIES METRIC SHANK

TAP DRILL/CHAMFER REPLACEABLE TIPPED BODIES



Body Number	Thread Size	D1 Nominal Point Size (inch, mm)	D1 Point Range	L1 Full Dia. to Chamfer	L2 Full Dia. to Top of Chamfer	L3 Ext.	L4 OAL	D2 Shank Dia. (mm, inch)	D3 Chamfer Dia.	D4 Flange Dia.	Pocket Size
TC0680021JCR01	M08	0.268", 6.80mm	.2560-.2717	0.827	1.050	1.772	3.75	12.00mm, 0.472"	0.532	0.63	6.5
TC0850026JCR01	M10	0.335", 8.50mm	.3346-.3504	1.024	1.200	1.960	3.73	12.00mm, 0.472"	0.610	0.63	8.5
TC1020030JDR01	M12	0.402", 10.20mm	.3937-.4094	1.181	1.360	2.130	4.02	16.00mm, 0.630"	0.669	0.787	10
TC1200035JDR01	M14	0.472", 12.00mm	.4724-.4882	1.378	1.560	2.400	4.29	16.00mm, 0.630"	0.748	0.787	12
TC1400039JER01	M16	0.551", 14.00mm	.5512-.5669	1.535	1.710	2.720	4.69	20.00mm, 0.787"	0.827	0.984	14
TC1750042JER01	M20	0.689", 17.50mm	.6693-.7047	1.653	1.830	2.830	4.80	20.00mm, 0.787"	0.965	0.984	17
TC2100048JFR01	M24	0.827", 21.00mm	.8268-.8622	1.890	2.070	3.150	5.35	25.00mm, 0.984"	1.102	1.259	21



HARDWARE	 Screw	 Torx Key	 Clamping Key	
TC0680021JCR01	SM22-046-00	T7	KTD6.0-D9.9	
TC0850026JCR01	SM22-046-00	T7	KTD6.0-D9.9	
TC1020030JDR01	SM22-046-00	T7	KTD6.0-D9.9	
TC1200035JDR01	SM22-046-00	T7	KTD10.0-19.9	
TC1400039JER01	SM22-046-00	T7	KTD10.0-19.9	
TC1750042JER01	SM22-046-00	T7	KTD10.0-19.9	
TC2100048JFR01	SM22-046-00	T7	KTD20.0-D26.9	

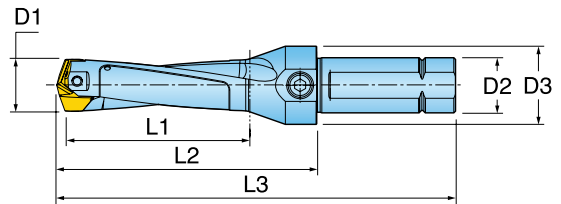


## Features & Benefits:

- Unique quick-change clamping system
- 2-effective cutting edges for higher productivity
- Self-centering design means no need for a pilot hole
- Easier replacement of the drill head in the machine
- Asymmetrical pocket design for error proof mounting, close tolerance and excellent surface finish
- Stronger rigidity of the unique screw clamp design means improved productivity
- Through coolant hole
- Drill Body(L/D) : 3xD, 5xD

## SPADE TWIST™ SERIES LD UNIV EXT LGTH INCH SHK 3:1




REPLACEABLE TIPPED DRILL BODIES



D1 Nom. Dia. inch	D1 Nom. Dia. mm	Body Number	L1 DOC	L2 Ext.	L3 Overall	D2 Shank Size/Style	D3 Flange Dia.	Pocket Size	Coolant Thru Point
1.0236-1.0590	26-26.9	LD2600078N6R01	3.07	5.32	8.47	1.250 Univ	1.77	26	Yes
1.0630-1.0984	27-27.9	LD2700081N6R01	3.19	5.45	8.60	1.250 Univ	1.77	27	Yes
1.1024-1.1378	28-28.9	LD2800084N6R01	3.31	5.61	8.76	1.250 Univ	1.77	28	Yes
1.1417-1.1772	29-29.9	LD2900087N6R01	3.43	5.74	8.90	1.250 Univ	1.77	29	Yes
1.1811-1.2165	30-30.9	LD3000090N6R01	3.54	5.89	9.04	1.250 Univ	1.77	30	Yes
1.2205-1.2559	31-31.9	LD3100093N6R01	3.66	6.03	9.18	1.250 Univ	1.77	31	Yes
1.2598-1.2953	32-32.9	LD3200096N6R01	3.78	6.38	9.53	1.250 Univ	2.17	32	Yes
1.2992-1.3346	33-33.9	LD3300099N6R01	3.90	6.52	9.67	1.250 Univ	2.17	33	Yes
1.3386-1.3740	34-34.9	LD3400102N6R01	4.02	6.65	9.80	1.250 Univ	2.17	34	Yes
1.3780-1.4134	35-35.9	LD3500105N6R01	4.13	6.81	9.96	1.250 Univ	2.17	35	Yes
1.4173-1.4528	36-36.9	LD3600108N6R01	4.25	6.94	10.10	1.250 Univ	2.17	36	Yes
1.4567-1.4921	37-37.9	LD3700111N6R01	4.30	7.08	10.23	1.250 Univ	2.17	37	Yes
1.4961-1.5315	38-38.9	LD3800114N6R01	4.49	7.24	10.39	1.250 Univ	2.17	38	Yes
1.5354-1.5709	39-39.9	LD3900117N6R01	4.61	7.38	10.53	1.250 Univ	2.17	39	Yes
1.5748-1.6496	40-41.9	LD4000120N6R01	4.72	7.52	10.67	1.250 Univ	2.17	40-41	Yes

\*Do not mount a smaller drill point than the one listed with the tool.

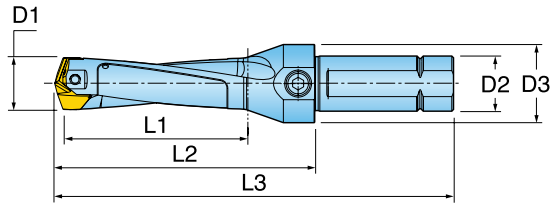


HARDWARE					
	Coolant Fitting	Lock Screw	Driver Handle	Screw Driver Blade	
LD2600078N6R01	PF-0013	TS50230D3	SW6-T	DS-T206B	
LD2700081N6R01	PF-0013	TS50230D3	SW6-T	DS-T206B	
LD2800084N6R01	PF-0013	TS50250D35	SW6-T	DS-T256B	
LD2900087N6R01	PF-0013	TS50250D35	SW6-T	DS-T256B	
LD3000090N6R01	PF-0013	TS60265D4	SW6-T	DS-T256B	
LD3100093N6R01	PF-0013	TS60265D4	SW6-T	DS-T256B	
LD3200096N6R01	PF-0013	TS60285D42	SW6-T	DS-T256B	
LD3300099N6R01	PF-0013	TS60285D42	SW6-T	DS-T256B	
LD3400102N6R01	PF-0013	TS60285D42	SW6-T	DS-T256B	
LD3500105N6R01	PF-0013	TS60320D5	SW6-T	DS-T256B	
LD3600108N6R01	PF-0013	TS60320D5	SW6-T	DS-T256B	
LD3700111N6R01	PF-0013	TS60320D5	SW6-T	DS-T256B	
LD3800114N6R01	PF-0013	TS80340D6	SW6-T	DS-T256B	
LD3900117N6R01	PF-0013	TS80340D6	SW6-T	DS-T256B	
LD4000120N6R01	PF-0013	TS80340D6	SW6-T	DS-T256B	



# SPADE TWIST™ SERIES LD UNIV EXT LGTH INCH SHK 5:1



REPLACEABLE TIPPED DRILL BODIES



D1 Nom. Dia. inch	D1 Nom. Dia. mm	Body Number	L1 DOC	L2 Ext.	L3 Overall	D2 Shank Size/Style	D3 Flange Dia.	Pocket Size	Coolant Thru Point
1.0236-1.0590	26-26.9	LD2600130N6R01	5.12	7.36	10.51	1.250 Univ	1.77	26	Yes
1.0430-1.0984	27-27.9	LD2700135N6R01	5.32	7.58	10.73	1.250 Univ	1.77	27	Yes
1.1024-1.1378	28-28.9	LD2800140N6R01	5.51	7.81	10.96	1.250 Univ	1.77	28	Yes
1.1417-1.1772	29-29.9	LD2900145N6R01	5.71	8.03	11.18	1.250 Univ	1.77	29	Yes
1.1811-1.2165	30-30.9	LD3000150N6R01	5.91	8.26	11.41	1.250 Univ	1.77	30	Yes
1.2205-1.2559	31-31.9	LD3100155N6R01	6.10	8.47	11.62	1.250 Univ	1.77	31	Yes
1.2598-1.2953	32-32.9	LD3200160N6R01	6.20	8.90	12.05	1.250 Univ	2.17	32	Yes
1.2992-1.3346	33-33.9	LD3300165N6R01	6.50	9.11	12.26	1.250 Univ	2.17	33	Yes
1.3386-1.3740	34-34.9	LD3400170N6R01	6.70	9.33	12.48	1.250 Univ	2.17	34	Yes
1.3780-1.4134	35-35.9	LD3500175N6R01	6.89	9.56	12.71	1.250 Univ	2.17	35	Yes
1.4173-1.4528	36-36.9	LD3600180N6R01	7.09	9.78	12.93	1.250 Univ	2.17	36	Yes
1.4567-1.4921	37-37.9	LD3700185N6R01	7.28	10.00	13.15	1.250 Univ	2.17	37	Yes
1.4961-1.5315	38-38.9	LD3800190N6R01	7.48	10.23	13.38	1.250 Univ	2.17	38	Yes
1.5354-1.5709	39-39.9	LD3900195N6R01	7.68	10.45	13.60	1.250 Univ	2.17	39	Yes
1.5748-1.6496	40-41.9	LD4000200N6R01	7.88	10.67	13.82	1.250 Univ	2.17	40-41	Yes

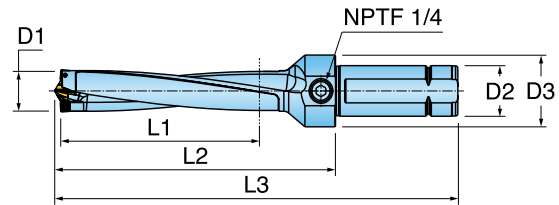
\*Do not mount a smaller drill point than the one listed with the tool.



HARDWARE					
	Coolant Fitting	Lock Screw	Driver Handle	Screw Driver Blade	
LD2600130N6R01	PF-0013	TS50230D3	SW6-T	DS-T206B	
LD2700135N6R01	PF-0013	TS50230D3	SW6-T	DS-T206B	
LD2800140N6R01	PF-0013	TS50250D35	SW6-T	DS-T256B	
LD2900145N6R01	PF-0013	TS50250D35	SW6-T	DS-T256B	
LD3000150N6R01	PF-0013	TS60265D4	SW6-T	DS-T256B	
LD3100155N6R01	PF-0013	TS60265D4	SW6-T	DS-T256B	
LD3200160N6R01	PF-0013	TS60285D42	SW6-T	DS-T256B	
LD3300165N6R01	PF-0013	TS60285D42	SW6-T	DS-T256B	
LD3400170N6R01	PF-0013	TS60285D42	SW6-T	DS-T256B	
LD3500175N6R01	PF-0013	TS60320D5	SW6-T	DS-T256B	
LD3600180N6R01	PF-0013	TS60320D5	SW6-T	DS-T256B	
LD3700185N6R01	PF-0013	TS60320D5	SW6-T	DS-T256B	
LD3800190N6R01	PF-0013	TS80340D6	SW6-T	DS-T256B	
LD3900195N6R01	PF-0013	TS80340D6	SW6-T	DS-T256B	
LD4000200N6R01	PF-0013	TS80340D6	SW6-T	DS-T256B	







### COMBINATION REPLACEABLE TIP & INDEXABLE INSERT DRILL



Part Number	D1 Nom. Dia. inch	D1 Nom. Dia. mm	L1 Drilling Length	L2 Ext. frm Holder	L3 Overall Length	D2 Shank Style/Size	D3 Flange Diameter	L4 Shank Length	Insert Series	Tip Series
CD2600130N6R01	1.024	26.0mm	5.12	7.23	10.38	1.250 Univ	1.772	3.16	SPGX06_	TPA15_-C
CD2620131N6R01	1.032	26.2mm	5.16	7.23	10.38	1.250 Univ	1.772	3.16	SPGX06_	TPA15_-C
CD2700135N6R01	1.063	27.0mm	5.32	7.47	10.62	1.250 Univ	1.772	3.16	SPGX06_	TPA16_-C
CD2780139N6R01	1.095	27.8mm	5.47	7.47	10.62	1.250 Univ	1.772	3.16	SPGX06_	TPA16_-C
CD2800140N6R01	1.102	28.0mm	5.51	7.71	10.86	1.250 Univ	1.772	3.16	SPGX06_	TPA17_-C
CD2860143N6R01	1.126	28.6mm	5.63	7.71	10.86	1.250 Univ	1.772	3.16	SPGX06_	TPA17_-C
CD2900145N6R01	1.142	29.0mm	5.71	7.88	11.03	1.250 Univ	2.165	3.16	SPGX07_	TPA15_-C
CD2940147N6R01	1.158	29.4mm	5.79	7.88	11.03	1.250 Univ	2.165	3.16	SPGX07_	TPA15_-C
CD3000150N6R01	1.181	30.0mm	5.91	8.12	11.27	1.250 Univ	2.165	3.16	SPGX07_	TPA16_-C
CD3020151N6R01	1.189	30.2mm	5.95	8.12	11.27	1.250 Univ	2.165	3.16	SPGX07_	TPA16_-C
CD3100155N6R01	1.221	31.0mm	6.10	8.36	11.51	1.250 Univ	2.165	3.16	SPGX07_	TPA17_-C
CD3180159N6R01	1.252	31.8mm	6.26	8.36	11.51	1.250 Univ	2.165	3.16	SPGX07_	TPA17_-C
CD3200160N6R01	1.260	32.0mm	6.30	8.60	11.75	1.250 Univ	2.165	3.16	SPGX07_	TPA18_-C
CD3250163N6R01	1.280	32.5mm	6.42	8.60	11.75	1.250 Univ	2.165	3.16	SPGX07_	TPA18_-C
CD3300165N6R01	1.299	33.0mm	6.50	7.93	10.61	1.250 Univ	2.165	3.16	SPGX09_	TPA15_-C
CD3330167N6R01	1.311	33.3mm	6.58	8.87	12.02	1.250 Univ	2.165	3.16	SPGX09_	TPA15_-C
CD3400170N6R01	1.339	34.0mm	6.69	9.11	12.26	1.250 Univ	2.165	3.16	SPGX09_	TPA16_-C
CD3410171N6R01	1.343	34.1mm	6.73	9.11	12.26	1.250 Univ	2.165	3.16	SPGX09_	TPA16_-C
CD3490175N6R01	1.374	34.9mm	6.89	9.11	12.26	1.250 Univ	2.165	3.16	SPGX09_	TPA16_-C
CD3500175N6R01	1.378	35.0mm	6.89	9.35	12.50	1.250 Univ	2.165	3.16	SPGX09_	TPA17_-C
CD3570179N6R01	1.406	35.7mm	7.05	9.35	12.50	1.250 Univ	2.165	3.16	SPGX09_	TPA17_-C
CD3600180N6R01	1.417	36.0mm	7.09	9.59	12.74	1.250 Univ	2.165	3.16	SPGX09_	TPA18_-C
CD3650182N6R01	1.437	36.5mm	7.17	9.59	12.74	1.250 Univ	2.165	3.16	SPGX09_	TPA18_-C
CD3700185N6R01	1.457	37.0mm	7.28	9.76	12.91	1.250 Univ	2.165	3.16	SPGX11_	TPA16_-C
CD3730186N6R01	1.469	37.3mm	7.32	9.76	12.91	1.250 Univ	2.165	3.16	SPGX11_	TPA16_-C
CD3800190N6R01	1.496	38.0mm	7.48	10.00	13.15	1.250 Univ	2.165	3.16	SPGX11_	TPA17_-C
CD3810191N6R01	1.500	38.1mm	7.52	10.00	13.15	1.250 Univ	2.165	3.16	SPGX11_	TPA17_-C
CD3890194N6R01	1.532	38.9mm	7.64	10.00	13.15	1.250 Univ	2.165	3.16	SPGX11_	TPA17_-C
CD3900195N6R01	1.535	39.0mm	7.68	10.24	13.39	1.250 Univ	2.165	3.16	SPGX11_	TPA18_-C
CD3970198N6R01	1.563	39.7mm	7.80	10.24	13.39	1.250 Univ	2.165	3.16	SPGX11_	TPA18_-C
CD4000200N6R01	1.575	40.0mm	7.87	10.47	13.62	1.250 Univ	2.165	3.16	SPGX11_	TPA19_-C
CD4050202N6R01	1.595	40.5mm	7.95	10.47	13.62	1.250 Univ	2.165	3.16	SPGX11_	TPA19_-C
CD4100205N6R01	1.614	41.0mm	8.07	10.71	13.86	1.250 Univ	2.165	3.16	SPGX11_	TPA20_-C
CD4130206N6R01	1.626	41.3mm	8.11	10.71	13.86	1.250 Univ	2.165	3.16	SPGX11_	TPA20_-C
CD4200210N6R01	1.654	42.0mm	8.27	10.95	14.10	1.250 Univ	2.165	3.16	SPGX11_	TPA21_-C
CD4280214N6R01	1.685	42.8mm	8.43	10.95	14.10	1.250 Univ	2.165	3.16	SPGX11_	TPA21_-C
CD4300215N7R01	1.693	43.0mm	8.47	11.19	14.34	1.500 Univ	2.362	3.16	SPGX11_	TPA22_-C
CD4370218N7R01	1.720	43.7mm	8.58	11.19	14.34	1.500 Univ	2.362	3.16	SPGX11_	TPA22_-C
CD4400220N7R01	1.732	44.0mm	8.66	11.43	14.58	1.500 Univ	2.362	3.16	SPGX11_	TPA23_-C
CD4450222N7R01	1.752	44.5mm	8.74	11.43	14.58	1.500 Univ	2.362	3.16	SPGX11_	TPA23_-C
CD4500225N7R01	1.772	45.0mm	8.86	11.67	14.82	1.500 Univ	2.362	3.16	SPGX11_	TPA24_-C
CD4520226N7R01	1.780	45.2mm	8.90	11.67	14.82	1.500 Univ	2.362	3.16	SPGX11_	TPA24_-C

Do not mount a smaller drill point than the one listed with the tool. Standard Gold-Twist tips do not fit in the Gold Twin. Gold-Twin use a modified standard Gold-Twist tip, designation R01-C.

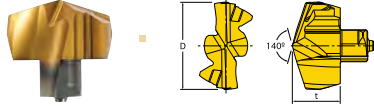


HARDWARE				
	Insert Screw	Coolant Fitting	Locking Key	Torx Driver
CD2600130N6R01	TS22052I/HG	PF-0013	KTD15.0-15.9-C	DS-T07S
CD2620131N6R01	TS22052I/HG	PF-0013	KTD15.0-15.9-C	DS-T07S
CD2700135N6R01	TS22052I/HG	PF-0013	KTD16.0-16.9-C	DS-T07S
CD2780139N6R01	TS22052I/HG	PF-0013	KTD16.0-16.9-C	DS-T07S
CD2800140N6R01	TS22052I/HG	PF-0013	KTD17.0-17.9-C	DS-T07S
CD2860143N6R01	TS22052I/HG	PF-0013	KTD17.0-17.9-C	DS-T07S
CD2900145N6R01	TS25064I	PF-0013	KTD15.0-15.9-C	TD8
CD2940147N6R01	TS25064I	PF-0013	KTD15.0-15.9-C	TD8
CD3000150N6R01	TS25064I	PF-0013	KTD16.0-16.9-C	TD8
CD3020151N6R01	TS25064I	PF-0013	KTD16.0-16.9-C	TD8
CD3100155N6R01	TS25064I	PF-0013	KTD17.0-17.9-C	TD8
CD3180159N6R01	TS25064I	PF-0013	KTD17.0-17.9-C	TD8
CD3200160N6R01	TS25064I	PF-0013	KTD18.0-18.9-C	TD8
CD3250163N6R01	TS25064I	PF-0013	KTD18.0-18.9-C	TD8
CD3300165N6R01	SM35-088-60	PF-0013	KTD15.0-15.9-C	TD10
CD3330167N6R01	SM35-088-60	PF-0013	KTD15.0-15.9-C	TD10
CD3400170N6R01	SM35-088-60	PF-0013	KTD16.0-16.9-C	TD10
CD3410171N6R01	SM35-088-60	PF-0013	KTD16.0-16.9-C	TD10
CD3490175N6R01	SM35-088-60	PF-0013	KTD16.0-16.9-C	TD10
CD3500175N6R01	SM35-088-60	PF-0013	KTD17.0-17.9-C	TD10
CD3570179N6R01	SM35-088-60	PF-0013	KTD17.0-17.9-C	TD10
CD3600180N6R01	SM35-088-60	PF-0013	KTD18.0-18.9-C	TD10
CD3650182N6R01	SM35-088-60	PF-0013	KTD18.0-18.9-C	TD10
CD3700185N6R01	SM40-093-20	PF-0013	KTD16.0-16.9-C	TD15
CD3730186N6R01	SM40-093-20	PF-0013	KTD16.0-16.9-C	TD15
CD3800190N6R01	SM40-093-20	PF-0013	KTD17.0-17.9-C	TD15
CD3810191N6R01	SM40-093-20	PF-0013	KTD17.0-17.9-C	TD15
CD3890194N6R01	SM40-093-20	PF-0013	KTD17.0-17.9-C	TD15
CD3900195N6R01	SM40-093-20	PF-0013	KTD18.0-18.9-C	TD15
CD3970198N6R01	SM40-093-20	PF-0013	KTD18.0-18.9-C	TD15
CD4000200N6R01	SM40-093-20	PF-0013	KTD19.0-19.9-C	TD15
CD4050202N6R01	SM40-093-20	PF-0013	KTD19.0-19.9-C	TD15
CD4100205N6R01	SM40-093-20	PF-0013	KTD20.0-20.9-C	TD15
CD4130206N6R01	SM40-093-20	PF-0013	KTD20.0-20.9-C	TD15
CD4200210N6R01	SM40-093-20	PF-0013	KTD21.0-21.9-C	TD15
CD4280214N6R01	SM40-093-20	PF-0013	KTD21.0-21.9-C	TD15
CD4300215N7R01	SM40-093-20	PF-0015	KTD22.0-22.9-C	TD15
CD4370218N7R01	SM40-093-20	PF-0015	KTD22.0-22.9-C	TD15
CD4400220N7R01	SM40-093-20	PF-0015	KTD23.0-23.9-C	TD15
CD4450222N7R01	SM40-093-20	PF-0015	KTD23.0-23.9-C	TD15
CD4500225N7R01	SM40-093-20	PF-0015	KTD24.0-24.9-C	TD15
CD4520226N7R01	SM40-093-20	PF-0015	KTD24.0-24.9-C	TD15



# GOLD-TWIN SERIES TPA -C TIPS

## TPA-C Replaceable Tip for Gold-Twin

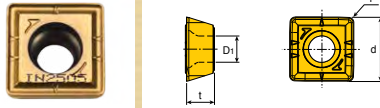


Part Number	D Diameter (mm)	D Diameter (in)	t Length	Pocket Size	Grades	IN2505
TPA1590R01-C	15.9mm	0.626	0.344	15		
TPA1690R01-C	16.9mm	0.665	0.366	16		
TPA1790R01-C	17.9mm	0.705	0.390	17		
TPA1890R01-C	18.9mm	0.744	0.413	18		
TPA1990R01-C	19.9mm	0.784	0.433	19		
TPA2090R01-C	20.9mm	0.823	0.344	20		
TPA2190R01-C	21.9mm	0.862	0.366	21		
TPA2290R01-C	22.9mm	0.902	0.390	22		
TPA2390R01-C	23.9mm	0.941	0.413	23		
TPA2490R01-C	24.9mm	0.980	0.433	24		

Modified -C Tip is NOT interchangeable with the Standard Gold-Twist Tip.

# GOLD-TWIN SERIES SPGX...WG



## SPGX...WG Peripheral Inserts for Gold-Twin



Part Number	D Diameter (mm)	D Diameter (in)	T Thickness	R Radius	Pocket Size	Grades	IN2505
SPGX060204WG	6.0mm	.239"	.094"	.016"	6		
SPGX07T308WG	8.0mm	.316"	.156"	.031"	7		
SPGX090408WG	10.0mm	.390"	.169"	.031"	9		
SPGX110408WG	11.6mm	.457"	.190"	.031"	11		

● = P   ● = M   ● = K   ● = N   ● = S   ○ = H

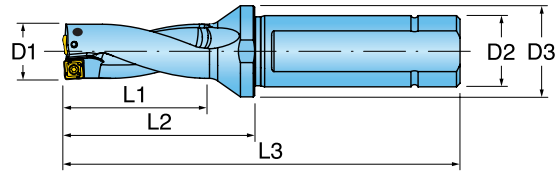


HARDWARE	 Screw	 Torx Key	Torque Spec (in.lbs.)
SPGX060204WG	TS22052I/HG (M2.2X5.2MM)	HZ5.0004	7-11
SPGX07T308WG	TS25064I (M2.5X6.4MM)	TD 8	10-15
SPGX090408WG	SM35-088-60 (M3.5X8.75MM)	TD 10	25-30
SPGX110408WG	SE02-82 (M4X9.3MM)	TD 15	30-35



# QUADOTWIST™ SERIES QR INDEXABLE DRILL INCH 2:1

SQUARE INSERT INDEXABLE DRILLS - UNIVERSAL EXT. LENGTH SHANK - INCH






Part Number	D1 Nom. Dia. inch	D1 Nom. Dia. mm	L1 Drilling Length	L2 Ext. frm Holder	L3 Overall Length	D2 Shank Style/Size	Num of Inserts	D3 Flange Diameter	L4 Shank Length	Insert Series
QR0143029N5R02	0.563	14.3mm	1.10	2.13	4.33	1.000 Univ	2	1.26	3.16	SOMT05_
QR0150030N5R02	0.591	15.0mm	1.19	2.24	5.39	1.000 Univ	2	1.26	3.16	SOMT05_
QR0159032N5R02	0.626	15.9mm	1.25	2.36	5.51	1.000 Univ	2	1.26	3.16	SOMT05_
QR0167033N5R02	0.658	16.7mm	1.31	2.44	5.59	1.000 Univ	2	1.26	3.16	SOMT06_
QR0175035N5R02	0.689	17.5mm	1.38	2.56	5.71	1.000 Univ	2	1.26	3.16	SOMT06_
QR0183037N5R02	0.721	18.3mm	1.44	2.56	5.71	1.000 Univ	2	1.26	3.16	SOMT06_
QR0191038N5R02	0.750	19.1mm	1.50	2.64	5.79	1.000 Univ	2	1.26	3.16	SOMT06_
QR0198040N5R02	0.780	19.8mm	1.56	2.80	5.94	1.000 Univ	2	1.26	3.16	SOMT07_
QR0206041N5R02	0.811	20.6mm	1.63	2.87	6.02	1.000 Univ	2	1.26	3.16	SOMT07_
QR0214042N5R02	0.843	21.4mm	1.69	2.95	6.10	1.000 Univ	2	1.26	3.16	SOMT07_
QR0222044N5R02	0.874	22.2mm	1.75	2.95	6.10	1.000 Univ	2	1.26	3.16	SOMT07_
QR0230046N6R02	0.906	23.0mm	1.81	3.19	6.34	1.250 Univ	2	1.77	3.16	SOMT08_
QR0238048N6R02	0.937	23.8mm	1.88	3.31	6.46	1.250 Univ	2	1.77	3.16	SOMT08_
QR0246049N6R02	0.969	24.6mm	1.94	3.43	6.57	1.250 Univ	2	1.77	3.16	SOMT08_
QR0250050N6R02	0.984	25.0mm	1.97	3.43	6.58	1.250 Univ	2	1.77	3.16	SOMT08_
QR0254051N6R02	1.000	25.4mm	2.00	3.50	6.65	1.250 Univ	2	1.77	3.16	SOMT08_
QR0262052N6R02	1.031	26.2mm	2.06	3.50	6.65	1.250 Univ	2	1.77	3.16	SOMT08_
QR0270054N6R02	1.063	27.0mm	2.13	3.58	6.73	1.250 Univ	2	1.77	3.16	SOMT09_
QR0278056N6R02	1.094	27.8mm	2.19	3.70	6.85	1.250 Univ	2	1.77	3.16	SOMT09_
QR0286057N6R02	1.125	28.6mm	2.25	3.78	6.93	1.250 Univ	2	1.77	3.16	SOMT09_
QR0294059N6R02	1.156	29.4mm	2.31	3.98	7.13	1.250 Univ	2	2.17	3.16	SOMT09_
QR0302060N6R02	1.187	30.2mm	2.37	3.98	7.13	1.250 Univ	2	2.17	3.16	SOMT09_
QR0310062N6R02	1.219	31.0mm	2.44	4.09	7.24	1.250 Univ	2	2.17	3.16	SOMT09_
QR0318063N6R02	1.250	31.8mm	2.50	4.17	7.32	1.250 Univ	2	2.17	3.16	SOMT11_
QR0325065N6R02	1.281	32.5mm	2.56	4.29	7.44	1.250 Univ	2	2.17	3.16	SOMT11_
QR0333067N6R02	1.312	33.3mm	2.62	4.29	7.44	1.250 Univ	2	2.17	3.16	SOMT11_
QR0341068N6R02	1.343	34.1mm	2.69	4.37	7.52	1.250 Univ	2	2.17	3.16	SOMT11_
QR0349070N6R02	1.375	34.9mm	2.75	4.49	7.64	1.250 Univ	2	2.17	3.16	SOMT11_
QR0357071N6R02	1.406	35.7mm	2.81	4.61	7.76	1.250 Univ	2	2.17	3.16	SOMT11_
QR0365073N6R02	1.437	36.5mm	2.87	4.72	7.87	1.250 Univ	2	2.17	3.16	SOMT13_
QR0373075N6R02	1.468	37.3mm	2.94	4.72	7.87	1.250 Univ	2	2.17	3.16	SOMT13_
QR0381076N6R02	1.500	38.1mm	3.00	4.84	7.99	1.250 Univ	2	2.17	3.16	SOMT13_
QR0389078N6R02	1.531	38.9mm	3.06	4.92	8.07	1.250 Univ	2	2.17	3.16	SOMT13_
QR0397079N6R02	1.562	39.7mm	3.12	5.04	8.19	1.250 Univ	2	2.36	3.16	SOMT13_
QR0405081N6R02	1.594	40.5mm	3.12	5.16	8.31	1.250 Univ	2	2.36	3.16	SOMT13_
QR0413083N6R02	1.625	41.3mm	3.25	5.16	8.31	1.250 Univ	2	2.36	3.16	SOMT13_
QR0428086N6R02	1.687	42.8mm	3.37	5.35	8.50	1.250 Univ	2	2.36	3.16	SOMT13_
QR0437087N7R02	1.719	43.7mm	3.44	5.43	8.58	1.500 Univ	2	2.36	3.16	SOMT15_
QR0445089N7R02	1.750	44.5mm	3.50	5.59	8.74	1.500 Univ	2	2.36	3.16	SOMT15_
QR0452090N7R02	1.781	45.2mm	3.56	5.59	8.74	1.500 Univ	2	2.36	3.16	SOMT15_
QR0460092N7R02	1.813	46.0mm	3.63	5.71	8.86	1.500 Univ	2	2.36	3.16	SOMT15_
QR0476095N7R02	1.875	47.6mm	3.75	5.91	9.06	1.500 Univ	2	2.36	3.16	SOMT15_
QR0492098N7R02	1.937	49.2mm	3.87	5.98	9.13	1.500 Univ	2	2.36	3.16	SOMT15_
QR0500100N7R02	1.969	50.0mm	3.94	6.10	9.25	1.500 Univ	2	2.36	3.16	SOMT15_
QR0508102N7R02	2.000	50.8mm	4.00	6.22	9.37	1.500 Univ	2	2.36	3.16	SOMT15_

For Lathe Use: Order Coolant Plug Separately - For 1.00" Shank, use PF-0012, For 1.25" Shank, use PF-0013, and For 1.50" Shank, use PF-0015.

# FINE GOLD

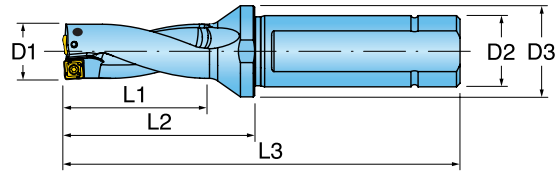


HARDWARE			
	Insert Screw	Driver	Coolant Fitting
QR0143029N5R02	SM20-043-00	DS-TP06S-NEU	PF-0012
QR0150030N5R02	SM20-043-00	DS-TP06S-NEU	PF-0012
QR0159032N5R02	SM20-043-00	DS-TP06S-NEU	PF-0012
QR0167033N5R02	TS22052I/HG-P	DS-TP07S	PF-0012
QR0175035N5R02	TS22052I/HG-P	DS-TP07S	PF-0012
QR0183037N5R02	TS22052I/HG-P	DS-TP07S	PF-0012
QR0191038N5R02	TS22052I/HG-P	DS-TP07S	PF-0012
QR0198040N5R02	TS22052I/HG-P	DS-TP07S	PF-0012
QR0206041N5R02	TS22052I/HG-P	DS-TP07S	PF-0012
QR0214042N5R02	TS22052I/HG-P	DS-TP07S	PF-0012
QR0222044N5R02	TS22052I/HG-P	DS-TP07S	PF-0012
QR0230046N6R02	SM25-065-70	DS-T07S	PF-0013
QR0238048N6R02	SM25-065-70	DS-T07S	PF-0013
QR0246049N6R02	SM25-065-70	DS-T07S	PF-0013
QR0250050N6R02	SM25-065-70	DS-T07S	PF-0013
QR0254051N6R02	SM25-065-70	DS-T07S	PF-0013
QR0262052N6R02	SM25-065-70	DS-T07S	PF-0013
QR0270054N6R02	SM35-088-60	TD10	PF-0013
QR0278056N6R02	SM35-088-60	TD10	PF-0013
QR0286057N6R02	SM35-088-60	TD10	PF-0013
QR0294059N6R02	SM35-088-60	TD10	PF-0013
QR0302060N6R02	SM35-088-60	TD10	PF-0013
QR0310062N6R02	SM35-088-60	TD10	PF-0013
QR0318063N6R02	SM35-088-60	TD10	PF-0013
QR0325065N6R02	SM35-088-60	TD10	PF-0013
QR0333067N6R02	SM35-088-60	TD10	PF-0013
QR0341068N6R02	SM35-088-60	TD10	PF-0013
QR0349070N6R02	SM35-088-60	TD10	PF-0013
QR0357071N6R02	SM35-088-60	TD10	PF-0013
QR0365073N6R02	SM40-093-20	TD15	PF-0013
QR0373075N6R02	SM40-093-20	TD15	PF-0013
QR0381076N6R02	SM40-093-20	TD15	PF-0013
QR0389078N6R02	SM40-093-20	TD15	PF-0013
QR0397079N6R02	SM40-093-20	TD15	PF-0013
QR0405081N6R02	SM40-093-20	TD15	PF-0013
QR0413083N6R02	SM40-093-20	TD15	PF-0013
QR0428086N6R02	SM40-093-20	TD15	PF-0013
QR0437087N7R02	SM50-113-20	DS-T20T	PF-0015
QR0445089N7R02	SM50-113-20	DS-T20T	PF-0015
QR0452090N7R02	SM50-113-20	DS-T20T	PF-0015
QR0460092N7R02	SM50-113-20	DS-T20T	PF-0015
QR0476095N7R02	SM50-113-20	DS-T20T	PF-0015
QR0492098N7R02	SM50-113-20	DS-T20T	PF-0015
QR0500100N7R02	SM50-113-20	DS-T20T	PF-0015
QR0508102N7R02	SM50-113-20	DS-T20T	PF-0015



# QUADOTWIST™ SERIES QR INDEXABLE DRILL INCH 3:1

SQUARE INSERT INDEXABLE DRILLS - UNIVERSAL EXT. LENGTH SHANK - INCH






Part Number	D1 Nom. Dia. inch	D1 Nom. Dia. mm	L1 Drilling Length	L2 Ext. frm Holder	L3 Overall Length	D2 Shank Style/Size	Num of Inserts	D3 Flange Dia.	L4 Shank Length	Insert Series	Chamfer Ring
QR0143043N5R02	0.563	14.3mm	1.69	2.68	5.83	1.000 Univ	2	1.26	3.16	SOMT05_	CB140R02
QR0150045N5R02	0.591	15.0mm	1.78	2.83	5.98	1.000 Univ	2	1.26	3.16	SOMT05_	CB150R02
QR0159048N5R02	0.626	15.9mm	1.87	2.99	6.14	1.000 Univ	2	1.26	3.16	SOMT05_	CB160R02
QR0167050N5R02	0.658	16.7mm	1.97	3.11	6.26	1.000 Univ	2	1.26	3.16	SOMT06_	CB170R02
QR0175053N5R02	0.689	17.5mm	2.06	3.27	6.42	1.000 Univ	2	1.26	3.16	SOMT06_	CB180R02
QR0183055N5R02	0.721	18.3mm	2.16	3.27	6.42	1.000 Univ	2	1.26	3.16	SOMT06_	CB180R02
QR0191057N5R02	0.750	19.1mm	2.25	3.39	6.54	1.000 Univ	2	1.26	3.16	SOMT06_	CB190R02
QR0198059N5R02	0.780	19.8mm	2.34	3.58	6.73	1.000 Univ	2	1.26	3.16	SOMT07_	CB200R02
QR0206062N5R02	0.811	20.6mm	2.44	3.70	6.85	1.000 Univ	2	1.26	3.16	SOMT07_	CB210R02
QR0214064N5R02	0.843	21.4mm	2.53	3.82	6.97	1.000 Univ	2	1.26	3.16	SOMT07_	CB210R02
QR0222067N5R02	0.874	22.2mm	2.63	3.82	6.97	1.000 Univ	2	1.26	3.16	SOMT07_	CB220R02
QR0230069N6R02	0.906	23.0mm	2.72	4.09	7.24	1.250 Univ	2	1.77	3.16	SOMT08_	CB230R02
QR0238071N6R02	0.937	23.8mm	2.81	4.25	7.40	1.250 Univ	2	1.77	3.16	SOMT08_	CB240R02
QR0246074N6R02	0.969	24.6mm	2.91	4.41	7.56	1.250 Univ	2	1.77	3.16	SOMT08_	CB250R02
QR0250075N6R02	0.984	25.0mm	2.95	4.41	7.56	1.250 Univ	2	1.77	3.16	SOMT08_	CB250R02
QR0254076N6R02	1.000	25.4mm	3.00	4.53	7.68	1.250 Univ	2	1.77	3.16	SOMT08_	CB250R02
QR0262079N6R02	1.031	26.2mm	3.09	4.53	7.68	1.250 Univ	2	1.77	3.16	SOMT08_	NA
QR0270081N6R02	1.063	27.0mm	3.19	4.65	7.80	1.250 Univ	2	1.77	3.16	SOMT09_	NA
QR0278083N6R02	1.094	27.8mm	3.28	4.80	7.95	1.250 Univ	2	1.77	3.16	SOMT09_	NA
QR0286086N6R02	1.125	28.6mm	3.38	4.92	8.07	1.250 Univ	2	1.77	3.16	SOMT09_	NA
QR0294088N6R02	1.156	29.4mm	3.47	5.16	8.30	1.250 Univ	2	2.17	3.16	SOMT09_	NA
QR0302090N6R02	1.187	30.2mm	3.56	5.16	8.30	1.250 Univ	2	2.17	3.16	SOMT09_	NA
QR0310093N6R02	1.219	31.0mm	3.66	5.31	8.46	1.250 Univ	2	2.17	3.16	SOMT09_	NA
QR0318095N6R02	1.250	31.8mm	3.75	5.43	8.58	1.250 Univ	2	2.17	3.16	SOMT11_	NA
QR0325098N6R02	1.281	32.5mm	3.84	5.59	8.74	1.250 Univ	2	2.17	3.16	SOMT11_	NA
QR0333100N6R02	1.312	33.3mm	3.94	5.59	8.74	1.250 Univ	2	2.17	3.16	SOMT11_	NA
QR0341102N6R02	1.343	34.1mm	4.03	5.71	8.86	1.250 Univ	2	2.17	3.16	SOMT11_	NA
QR0349105N6R02	1.375	34.9mm	4.13	5.87	9.02	1.250 Univ	2	2.17	3.16	SOMT11_	NA
QR0357107N6R02	1.406	35.7mm	4.22	6.02	9.17	1.250 Univ	2	2.17	3.16	SOMT11_	NA
QR0365110N6R02	1.437	36.5mm	4.31	6.18	9.33	1.250 Univ	2	2.17	3.16	SOMT13_	NA
QR0373112N6R02	1.468	37.3mm	4.41	6.18	9.33	1.250 Univ	2	2.17	3.16	SOMT13_	NA
QR0381114N6R02	1.500	38.1mm	4.50	6.34	9.49	1.250 Univ	2	2.17	3.16	SOMT13_	NA
QR0389117N6R02	1.531	38.9mm	4.59	6.46	9.61	1.250 Univ	2	2.17	3.16	SOMT13_	NA
QR0397119N6R02	1.562	39.7mm	4.69	6.61	9.76	1.250 Univ	2	2.36	3.16	SOMT13_	NA
QR0405122N6R02	1.594	40.5mm	4.69	6.77	9.92	1.250 Univ	2	2.36	3.16	SOMT13_	NA
QR0413124N6R02	1.625	41.3mm	4.87	6.77	9.92	1.250 Univ	2	2.36	3.16	SOMT13_	NA
QR0428128N6R02	1.687	42.8mm	5.06	7.05	10.20	1.250 Univ	2	2.36	3.16	SOMT13_	NA
QR0437131N7R02	1.719	43.7mm	5.16	7.17	10.31	1.500 Univ	2	2.36	3.16	SOMT15_	NA
QR0445134N7R02	1.750	44.5mm	5.25	7.36	10.51	1.500 Univ	2	2.36	3.16	SOMT15_	NA
QR0452136N7R02	1.781	45.2mm	5.34	7.36	10.51	1.500 Univ	2	2.36	3.16	SOMT15_	NA
QR0460138N7R02	1.813	46.0mm	5.44	7.52	10.67	1.500 Univ	2	2.36	3.16	SOMT15_	NA
QR0476143N7R02	1.875	47.6mm	5.63	7.80	10.94	1.500 Univ	2	2.36	3.16	SOMT15_	NA
QR0492148N7R02	1.937	49.2mm	5.81	7.91	11.06	1.500 Univ	2	2.36	3.16	SOMT15_	NA
QR0500150N7R02	1.969	50.0mm	5.91	8.07	11.22	1.500 Univ	2	2.36	3.16	SOMT15_	NA
QR0508152N7R02	2.000	50.8mm	6.00	8.23	11.38	1.500 Univ	2	2.36	3.16	SOMT15_	NA

For Lathe Use: Order Coolant Plug Separately - For 1.00" Shank, use PF-0012, For 1.25" Shank, use PF-0013, and For 1.50" Shank, use PF-0015.

# FINE GOLD

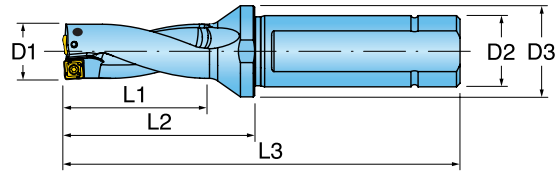


HARDWARE			
	Insert Screw	Driver	Coolant Fitting
QR0143043N5R02	SM20-043-00	DS-TP06S-NEU	PF-0012
QR0150045N5R02	SM20-043-00	DS-TP06S-NEU	PF-0012
QR0159048N5R02	SM20-043-00	DS-TP06S-NEU	PF-0012
QR0167050N5R02	TS22052I/HG-P	DS-TP07S	PF-0012
QR0175053N5R02	TS22052I/HG-P	DS-TP07S	PF-0012
QR0183055N5R02	TS22052I/HG-P	DS-TP07S	PF-0012
QR0191057N5R02	TS22052I/HG-P	DS-TP07S	PF-0012
QR0198059N5R02	TS22052I/HG-P	DS-TP07S	PF-0012
QR0206062N5R02	TS22052I/HG-P	DS-TP07S	PF-0012
QR0214064N5R02	TS22052I/HG-P	DS-TP07S	PF-0012
QR0222067N5R02	TS22052I/HG-P	DS-TP07S	PF-0012
QR0230069N6R02	SM25-065-70	DS-T07S	PF-0013
QR0238071N6R02	SM25-065-70	DS-T07S	PF-0013
QR0246074N6R02	SM25-065-70	DS-T07S	PF-0013
QR0250075N6R02	SM25-065-70	DS-T07S	PF-0013
QR0254076N6R02	SM25-065-70	DS-T07S	PF-0013
QR0262079N6R02	SM25-065-70	DS-T07S	PF-0013
QR0270081N6R02	SM35-088-60	TD10	PF-0013
QR0278083N6R02	SM35-088-60	TD10	PF-0013
QR0286086N6R02	SM35-088-60	TD10	PF-0013
QR0294088N6R02	SM35-088-60	TD10	PF-0013
QR0302090N6R02	SM35-088-60	TD10	PF-0013
QR0310093N6R02	SM35-088-60	TD10	PF-0013
QR0318095N6R02	SM35-088-60	TD10	PF-0013
QR0325098N6R02	SM35-088-60	TD10	PF-0013
QR0333100N6R02	SM35-088-60	TD10	PF-0013
QR0341102N6R02	SM35-088-60	TD10	PF-0013
QR0349105N6R02	SM35-088-60	TD10	PF-0013
QR0357107N6R02	SM35-088-60	TD10	PF-0013
QR0365110N6R02	SM40-093-20	TD15	PF-0013
QR0373112N6R02	SM40-093-20	TD15	PF-0013
QR0381114N6R02	SM40-093-20	TD15	PF-0013
QR0389117N6R02	SM40-093-20	TD15	PF-0013
QR0397119N6R02	SM40-093-20	TD15	PF-0013
QR0405122N6R02	SM40-093-20	TD15	PF-0013
QR0413124N6R02	SM40-093-20	TD15	PF-0013
QR0428128N6R02	SM40-093-20	TD15	PF-0013
QR0437131N7R02	SM50-113-20	DS-T20T	PF-0015
QR0445134N7R02	SM50-113-20	DS-T20T	PF-0015
QR0452136N7R02	SM50-113-20	DS-T20T	PF-0015
QR0460138N7R02	SM50-113-20	DS-T20T	PF-0015
QR0476143N7R02	SM50-113-20	DS-T20T	PF-0015
QR0492148N7R02	SM50-113-20	DS-T20T	PF-0015
QR0500150N7R02	SM50-113-20	DS-T20T	PF-0015
QR0508152N7R02	SM50-113-20	DS-T20T	PF-0015



# QUADOTWIST™ SERIES QR INDEXABLE DRILL INCH 4:1




SQUARE INSERT INDEXABLE DRILLS - UNIVERSAL EXT. LENGTH SHANK - INCH



Part Number	D1 Nom. Dia. inch	D1 Nom. Dia. mm	L1 Drilling Length	L2 Ext. frm Holder	L3 Overall Length	D2 Shank Style/Size	Num of Inserts	D3 Flange Dia.	L4 Shank Length	Insert Series	Chamfer Ring
QR0143057N5R02	0.563	14.3mm	2.25	3.23	6.38	1.000 Univ	2	1.26	3.16	SOMT05_	CB140R02
QR0150060N5R02	0.591	15.0mm	2.37	3.43	6.57	1.000 Univ	2	1.26	3.16	SOMT05_	CB150R02
QR0159064N5R02	0.626	15.9mm	2.50	3.62	6.77	1.000 Univ	2	1.26	3.16	SOMT05_	CB160R02
QR0167067N5R02	0.658	16.7mm	2.63	3.78	6.93	1.000 Univ	2	1.26	3.16	SOMT06_	CB170R02
QR0175070N5R02	0.689	17.5mm	2.75	3.98	7.13	1.000 Univ	2	1.26	3.16	SOMT06_	CB180R02
QR0183073N5R02	0.721	18.3mm	2.87	3.98	7.13	1.000 Univ	2	1.26	3.16	SOMT06_	CB180R02
QR0191076N5R02	0.750	19.1mm	3.00	4.13	7.28	1.000 Univ	2	1.26	3.16	SOMT06_	CB190R02
QR0198079N5R02	0.780	19.8mm	3.13	4.37	7.52	1.000 Univ	2	1.26	3.16	SOMT07_	CB200R02
QR0206082N5R02	0.811	20.6mm	3.25	4.53	7.68	1.000 Univ	2	1.26	3.16	SOMT07_	CB210R02
QR0214086N5R02	0.843	21.4mm	3.37	4.69	7.83	1.000 Univ	2	1.26	3.16	SOMT07_	CB210R02
QR0222089N5R02	0.874	22.2mm	3.50	4.69	7.83	1.000 Univ	2	1.26	3.16	SOMT07_	CB220R02
QR0230092N6R02	0.906	23.0mm	3.62	5.00	8.15	1.250 Univ	2	1.77	3.16	SOMT08_	CB230R02
QR0238095N6R02	0.937	23.8mm	3.75	5.20	8.35	1.250 Univ	2	1.77	3.16	SOMT08_	CB240R02
QR0246098N6R02	0.969	24.6mm	3.87	5.39	8.54	1.250 Univ	2	1.77	3.16	SOMT08_	CB250R02
QR0250100N6R02	0.984	25.0mm	3.94	5.39	8.54	1.250 Univ	2	1.77	3.16	SOMT08_	CB250R02
QR0254102N6R02	1.000	25.4mm	4.00	5.55	8.70	1.250 Univ	2	1.77	3.16	SOMT08_	CB250R02
QR0262105N6R02	1.031	26.2mm	4.13	5.55	8.70	1.250 Univ	2	1.77	3.16	SOMT08_	NA
QR0270108N6R02	1.063	27.0mm	4.25	5.71	8.86	1.250 Univ	2	1.77	3.16	SOMT09_	NA
QR0278111N6R02	1.094	27.8mm	4.38	5.91	9.06	1.250 Univ	2	1.77	3.16	SOMT09_	NA
QR0286114N6R02	1.125	28.6mm	4.50	6.06	9.21	1.250 Univ	2	1.77	3.16	SOMT09_	NA
QR0294118N6R02	1.156	29.4mm	4.62	6.34	9.49	1.250 Univ	2	2.17	3.16	SOMT09_	NA
QR0302120N6R02	1.187	30.2mm	4.75	6.34	9.49	1.250 Univ	2	2.17	3.16	SOMT09_	NA
QR0310124N6R02	1.219	31.0mm	4.87	6.54	9.69	1.250 Univ	2	2.17	3.16	SOMT09_	NA
QR0318127N6R02	1.250	31.8mm	5.00	6.69	9.84	1.250 Univ	2	2.17	3.16	SOMT11_	NA
QR0325130N6R02	1.281	32.5mm	5.13	6.89	10.04	1.250 Univ	2	2.17	3.16	SOMT11_	NA
QR0333133N6R02	1.312	33.3mm	5.25	6.89	10.04	1.250 Univ	2	2.17	3.16	SOMT11_	NA
QR0341136N6R02	1.343	34.1mm	5.37	7.05	10.20	1.250 Univ	2	2.17	3.16	SOMT11_	NA
QR0349140N6R02	1.375	34.9mm	5.50	7.24	10.39	1.250 Univ	2	2.17	3.16	SOMT11_	NA
QR0357143N6R02	1.406	35.7mm	5.62	7.44	10.59	1.250 Univ	2	2.17	3.16	SOMT11_	NA
QR0365146N6R02	1.437	36.5mm	5.75	7.64	10.79	1.250 Univ	2	2.17	3.16	SOMT13_	NA
QR0373149N6R02	1.468	37.3mm	5.87	7.64	10.79	1.250 Univ	2	2.17	3.16	SOMT13_	NA
QR0381152N6R02	1.500	38.1mm	6.00	7.83	10.98	1.250 Univ	2	2.17	3.16	SOMT13_	NA
QR0389156N6R02	1.531	38.9mm	6.13	7.99	11.14	1.250 Univ	2	2.17	3.16	SOMT13_	NA
QR0397159N6R02	1.562	39.7mm	6.25	8.19	11.34	1.250 Univ	2	2.36	3.16	SOMT13_	NA
QR0405162N6R02	1.594	40.5mm	6.25	8.39	11.54	1.250 Univ	2	2.36	3.16	SOMT13_	NA
QR0413165N6R02	1.625	41.3mm	6.50	8.39	11.54	1.250 Univ	2	2.36	3.16	SOMT13_	NA
QR0428171N6R02	1.687	42.8mm	6.75	8.74	11.89	1.250 Univ	2	2.36	3.16	SOMT13_	NA
QR0437175N7R02	1.719	43.7mm	6.87	8.90	12.05	1.500 Univ	2	2.36	3.16	SOMT15_	NA
QR0445178N7R02	1.750	44.5mm	7.00	9.13	12.28	1.500 Univ	2	2.36	3.16	SOMT15_	NA
QR0452181N7R02	1.781	45.2mm	7.13	9.13	12.28	1.500 Univ	2	2.36	3.16	SOMT15_	NA
QR0460184N7R02	1.813	46.0mm	7.25	9.33	12.48	1.500 Univ	2	2.36	3.16	SOMT15_	NA
QR0476190N7R02	1.875	47.6mm	7.50	9.69	12.83	1.500 Univ	2	2.36	3.16	SOMT15_	NA
QR0492197N7R02	1.937	49.2mm	7.75	9.84	12.99	1.500 Univ	2	2.36	3.16	SOMT15_	NA
QR0500200N7R02	1.969	50.0mm	7.87	10.04	13.19	1.500 Univ	2	2.36	3.16	SOMT15_	NA
QR0508203N7R02	2.000	50.8mm	8.00	10.24	13.39	1.500 Univ	2	2.36	3.16	SOMT15_	NA

For Lathe Use: Order Coolant Plug Separately - For 1.00" Shank, use PF-0012, For 1.25" Shank, use PF-0013, and For 1.50" Shank, use PF-0015.

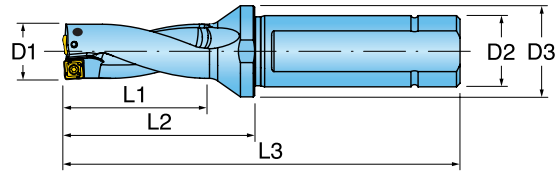


HARDWARE			
	Insert Screw	Driver	Coolant Fitting
QR0143057N5R02	SM20-043-00	DS-TP06S-NEU	PF-0012
QR0150060N5R02	SM20-043-00	DS-TP06S-NEU	PF-0012
QR0159064N5R02	SM20-043-00	DS-TP06S-NEU	PF-0012
QR0167067N5R02	TS22052I/HG-P	DS-TP07S	PF-0012
QR0175070N5R02	TS22052I/HG-P	DS-TP07S	PF-0012
QR0183073N5R02	TS22052I/HG-P	DS-TP07S	PF-0012
QR0191076N5R02	TS22052I/HG-P	DS-TP07S	PF-0012
QR0198079N5R02	TS22052I/HG-P	DS-TP07S	PF-0012
QR0206082N5R02	TS22052I/HG-P	DS-TP07S	PF-0012
QR0214086N5R02	TS22052I/HG-P	DS-TP07S	PF-0012
QR0222089N5R02	TS22052I/HG-P	DS-TP07S	PF-0012
QR0230092N6R02	SM25-065-70	DS-T07S	PF-0013
QR0238095N6R02	SM25-065-70	DS-T07S	PF-0013
QR0246098N6R02	SM25-065-70	DS-T07S	PF-0013
QR0250100N6R02	SM25-065-70	DS-T07S	PF-0013
QR0254102N6R02	SM25-065-70	DS-T07S	PF-0013
QR0262105N6R02	SM25-065-70	DS-T07S	PF-0013
QR0270108N6R02	SM35-088-60	TD10	PF-0013
QR0278111N6R02	SM35-088-60	TD10	PF-0013
QR0286114N6R02	SM35-088-60	TD10	PF-0013
QR0294118N6R02	SM35-088-60	TD10	PF-0013
QR0302120N6R02	SM35-088-60	TD10	PF-0013
QR0310124N6R02	SM35-088-60	TD10	PF-0013
QR0318127N6R02	SM35-088-60	TD10	PF-0013
QR0325130N6R02	SM35-088-60	TD10	PF-0013
QR0333133N6R02	SM35-088-60	TD10	PF-0013
QR0341136N6R02	SM35-088-60	TD10	PF-0013
QR0349140N6R02	SM35-088-60	TD10	PF-0013
QR0357143N6R02	SM35-088-60	TD10	PF-0013
QR0365146N6R02	SM40-093-20	TD15	PF-0013
QR0373149N6R02	SM40-093-20	TD15	PF-0013
QR0381152N6R02	SM40-093-20	TD15	PF-0013
QR0389156N6R02	SM40-093-20	TD15	PF-0013
QR0397159N6R02	SM40-093-20	TD15	PF-0013
QR0405162N6R02	SM40-093-20	TD15	PF-0013
QR0413165N6R02	SM40-093-20	TD15	PF-0013
QR0428171N6R02	SM40-093-20	TD15	PF-0013
QR0437175N7R02	SM50-113-20	DS-T20T	PF-0015
QR0445178N7R02	SM50-113-20	DS-T20T	PF-0015
QR0452181N7R02	SM50-113-20	DS-T20T	PF-0015
QR0460184N7R02	SM50-113-20	DS-T20T	PF-0015
QR0476190N7R02	SM50-113-20	DS-T20T	PF-0015
QR0492197N7R02	SM50-113-20	DS-T20T	PF-0015
QR0500200N7R02	SM50-113-20	DS-T20T	PF-0015
QR0508203N7R02	SM50-113-20	DS-T20T	PF-0015



# QUADOTWIST™ SERIES QR INDEXABLE DRILL INCH 5:1




SQUARE INSERT INDEXABLE DRILLS - UNIVERSAL EXT. LENGTH SHANK - INCH



Part Number	D1 Nom. Dia. inch	D1 Nom. Dia. mm	L1 Drilling Length	L2 Ext. frm Holder	L3 Overall Length	D2 Shank Style/Size	Num of Inserts	D3 Flange Dia.	L4 Shank Length	Insert Series	Chamfer Ring
QR0143072N5R02	0.563	14.3mm	2.81	3.78	6.94	1.000 Univ	2	1.26	3.16	SOMT05_	CB140R02
QR0150075N5R02	0.591	15.0mm	2.96	4.02	7.17	1.000 Univ	2	1.26	3.16	SOMT05_	CB150R02
QR0159080N5R02	0.626	15.9mm	3.13	4.25	7.40	1.000 Univ	2	1.26	3.16	SOMT05_	CB160R02
QR0167084N5R02	0.658	16.7mm	3.29	4.45	7.60	1.000 Univ	2	1.26	3.16	SOMT06_	CB170R02
QR0175088N5R02	0.689	17.5mm	3.44	4.69	7.84	1.000 Univ	2	1.26	3.16	SOMT06_	CB180R02
QR0183092N5R02	0.721	18.3mm	3.59	4.69	7.84	1.000 Univ	2	1.26	3.16	SOMT06_	CB180R02
QR0191095N5R02	0.750	19.1mm	3.75	4.88	8.03	1.000 Univ	2	1.26	3.16	SOMT06_	CB190R02
QR0198099N5R02	0.780	19.8mm	3.91	5.16	8.31	1.000 Univ	2	1.26	3.16	SOMT07_	CB200R02
QR0206103N5R02	0.811	20.6mm	4.07	5.35	8.50	1.000 Univ	2	1.26	3.16	SOMT07_	CB210R02
QR0214107N5R02	0.843	21.4mm	4.22	5.55	8.70	1.000 Univ	2	1.26	3.16	SOMT07_	CB210R02
QR0222111N5R02	0.874	22.2mm	4.38	5.55	8.70	1.000 Univ	2	1.26	3.16	SOMT07_	CB220R02
QR0230115N6R02	0.906	23.0mm	4.53	5.91	9.06	1.250 Univ	2	1.77	3.16	SOMT08_	CB230R02
QR0238119N6R02	0.937	23.8mm	4.69	6.14	9.29	1.250 Univ	2	1.77	3.16	SOMT08_	CB240R02
QR0246123N6R02	0.969	24.6mm	4.85	6.38	9.53	1.250 Univ	2	1.77	3.16	SOMT08_	CB250R02
QR0250125N6R02	0.984	25.0mm	4.85	6.38	9.53	1.250 Univ	2	1.77	3.16	SOMT08_	CB250R02
QR0254127N6R02	1.000	25.4mm	5.00	6.57	9.72	1.250 Univ	2	1.77	3.16	SOMT08_	CB250R02
QR0262131N6R02	1.031	26.2mm	5.16	6.57	9.72	1.250 Univ	2	1.77	3.16	SOMT08_	NA
QR0270135N6R02	1.063	27.0mm	5.31	6.77	9.92	1.250 Univ	2	1.77	3.16	SOMT09_	NA
QR0278139N6R02	1.094	27.8mm	5.47	7.01	10.15	1.250 Univ	2	1.77	3.16	SOMT09_	NA
QR0286143N6R02	1.125	28.6mm	5.63	7.20	10.34	1.250 Univ	2	1.77	3.16	SOMT09_	NA
QR0294147N6R02	1.156	29.4mm	5.78	7.52	10.64	1.250 Univ	2	2.17	3.16	SOMT09_	NA
QR0302151N6R02	1.187	30.2mm	5.94	7.52	10.68	1.250 Univ	2	2.17	3.16	SOMT09_	NA
QR0310155N6R02	1.219	31.0mm	6.09	7.76	10.90	1.250 Univ	2	2.17	3.16	SOMT09_	NA
QR0318159N6R02	1.250	31.8mm	6.25	7.95	11.09	1.250 Univ	2	2.17	3.16	SOMT11_	NA
QR0325163N6R02	1.281	32.5mm	6.41	8.19	11.32	1.250 Univ	2	2.17	3.16	SOMT11_	NA
QR0333167N6R02	1.312	33.3mm	6.56	8.19	11.35	1.250 Univ	2	2.17	3.16	SOMT11_	NA
QR0341171N6R02	1.343	34.1mm	6.72	8.39	11.54	1.250 Univ	2	2.17	3.16	SOMT11_	NA
QR0349175N6R02	1.375	34.9mm	6.88	8.62	11.77	1.250 Univ	2	2.17	3.16	SOMT11_	NA
QR0357179N6R02	1.406	35.7mm	7.03	8.86	12.00	1.250 Univ	2	2.17	3.16	SOMT11_	NA
QR0365182N6R02	1.437	36.5mm	7.19	9.09	12.24	1.250 Univ	2	2.17	3.16	SOMT13_	NA
QR0373186N6R02	1.468	37.3mm	7.34	9.09	12.24	1.250 Univ	2	2.17	3.16	SOMT13_	NA
QR0381191N6R02	1.500	38.1mm	7.50	9.33	12.26	1.250 Univ	2	2.17	3.16	SOMT13_	NA
QR0389194N6R02	1.531	38.9mm	7.66	9.53	12.67	1.250 Univ	2	2.17	3.16	SOMT13_	NA
QR0397198N6R02	1.562	39.7mm	7.81	9.76	12.91	1.250 Univ	2	2.36	3.16	SOMT13_	NA
QR0405202N6R02	1.594	40.5mm	7.81	10.00	13.15	1.250 Univ	2	2.36	3.16	SOMT13_	NA
QR0413206N6R02	1.625	41.3mm	8.13	10.00	13.15	1.250 Univ	2	2.36	3.16	SOMT13_	NA
QR0428214N6R02	1.687	42.8mm	8.59	10.24	13.07	1.250 Univ	2	2.36	3.16	SOMT13_	NA
QR0437218N7R02	1.719	43.7mm	8.59	10.24	13.07	1.500 Univ	2	2.36	3.16	SOMT15_	NA
QR0445222N7R02	1.750	44.5mm	8.75	10.24	13.39	1.500 Univ	2	2.36	3.16	SOMT15_	NA
QR0452226N7R02	1.781	45.2mm	8.91	10.43	13.58	1.500 Univ	2	2.36	3.16	SOMT15_	NA
QR0460230N7R02	1.813	46.0mm	9.06	10.63	13.78	1.500 Univ	2	2.36	3.16	SOMT15_	NA
QR0476238N7R02	1.875	47.6mm	7.50	11.02	14.17	1.500 Univ	2	2.36	3.16	SOMT15_	NA
QR0492246N7R02	1.937	49.2mm	9.69	11.22	14.37	1.500 Univ	2	2.36	3.16	SOMT15_	NA
QR0500250N7R02	1.969	50.0mm	9.84	11.42	14.57	1.500 Univ	2	2.36	3.16	SOMT15_	NA
QR0508254N7R02	2.000	50.8mm	10.00	11.61	14.76	1.500 Univ	2	2.36	3.16	SOMT15_	NA

For Lathe Use: Order Coolant Plug Separately - For 1.00" Shank, use PF-0012, For 1.25" Shank, use PF-0013, and For 1.50" Shank, use PF-0015.

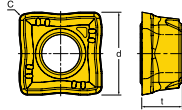


HARDWARE			
	Insert Screw	Driver	Coolant Fitting
QR0143072N5R02	SM20-043-00	DS-TP06S-NEU	PF-0012
QR0150075N5R02	SM20-043-00	DS-TP06S-NEU	PF-0012
QR0159080N5R02	SM20-043-00	DS-TP06S-NEU	PF-0012
QR0167084N5R02	TS22052I/HG-P	DS-TP07S	PF-0012
QR0175088N5R02	TS22052I/HG-P	DS-TP07S	PF-0012
QR0183092N5R02	TS22052I/HG-P	DS-TP07S	PF-0012
QR0191095N5R02	TS22052I/HG-P	DS-TP07S	PF-0012
QR0198099N5R02	TS22052I/HG-P	DS-TP07S	PF-0012
QR0206103N5R02	TS22052I/HG-P	DS-TP07S	PF-0012
QR0214107N5R02	TS22052I/HG-P	DS-TP07S	PF-0012
QR0222111N5R02	TS22052I/HG-P	DS-TP07S	PF-0012
QR0230115N6R02	SM25-065-70	DS-T07S	PF-0013
QR0238119N6R02	SM25-065-70	DS-T07S	PF-0013
QR0246123N6R02	SM25-065-70	DS-T07S	PF-0013
QR0250125N6R02	SM25-065-70	DS-T07S	PF-0013
QR0254127N6R02	SM25-065-70	DS-T07S	PF-0013
QR0262131N6R02	SM25-065-70	DS-T07S	PF-0013
QR0270135N6R02	SM35-088-60	TD10	PF-0013
QR0278139N6R02	SM35-088-60	TD10	PF-0013
QR0286143N6R02	SM35-088-60	TD10	PF-0013
QR0294147N6R02	SM35-088-60	TD10	PF-0013
QR0302151N6R02	SM35-088-60	TD10	PF-0013
QR0310155N6R02	SM35-088-60	TD10	PF-0013
QR0318159N6R02	SM35-088-60	TD10	PF-0013
QR0325163N6R02	SM35-088-60	TD10	PF-0013
QR0333167N6R02	SM35-088-60	TD10	PF-0013
QR0341171N6R02	SM35-088-60	TD10	PF-0013
QR0349175N6R02	SM35-088-60	TD10	PF-0013
QR0357179N6R02	SM35-088-60	TD10	PF-0013
QR0365182N6R02	SM40-093-20	TD15	PF-0013
QR0373186N6R02	SM40-093-20	TD15	PF-0013
QR0381191N6R02	SM40-093-20	TD15	PF-0013
QR0389194N6R02	SM40-093-20	TD15	PF-0013
QR0397198N6R02	SM40-093-20	TD15	PF-0013
QR0405202N6R02	SM40-093-20	TD15	PF-0013
QR0413206N6R02	SM40-093-20	TD15	PF-0013
QR0428214N6R02	SM40-093-20	TD15	PF-0013
QR0437218N7R02	SM50-113-20	DS-T20T	PF-0015
QR0445222N7R02	SM50-113-20	DS-T20T	PF-0015
QR0452226N7R02	SM50-113-20	DS-T20T	PF-0015
QR0460230N7R02	SM50-113-20	DS-T20T	PF-0015
QR0476238N7R02	SM50-113-20	DS-T20T	PF-0015
QR0492246N7R02	SM50-113-20	DS-T20T	PF-0015
QR0500250N7R02	SM50-113-20	DS-T20T	PF-0015
QR0508254N7R02	SM50-113-20	DS-T20T	PF-0015

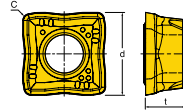
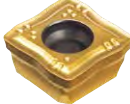


# QUADOTWIST™ SERIES SOMT-NG

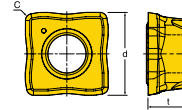
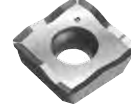
## Series SOMT-NG



## Series SOMT-SK



## Series SOMT-HP



Part Number	d	t	C Corner	Grades				
				IN10K	IN1030	IN2505	IN2510	IN6505*
SOMT050204NG	0.193	0.094	0.016 Full Radius					●
SOMT060204NG	0.224	0.094	0.016 Full Radius					●
SOMT070306NG	0.268	0.110	0.024 Full Radius					●
SOMT08T306NG	0.311	0.156	0.024 Full Radius					●
SOMT09T308NG	0.362	0.156	0.031 Full Radius					●
SOMT11T308NG	0.433	0.156	0.031 Full Radius					●
SOMT130408NG	0.504	0.173	0.031 Full Radius					●
SOMT150510NG	0.590	0.189	0.039 Full Radius					●
SOMT050204SK	0.193	0.094	0.016 Full Radius		●	●		●
SOMT060204SK	0.224	0.094	0.016 Full Radius		●	●		●
SOMT070306SK	0.268	0.110	0.024 Full Radius		●	●		●
SOMT08T306SK	0.311	0.156	0.024 Full Radius		●	●		●
SOMT09T308SK	0.362	0.156	0.031 Full Radius		●	●		●
SOMT11T308SK	0.433	0.156	0.031 Full Radius		●	●		●
SOMT130408SK	0.504	0.173	0.031 Full Radius		●	●		●
SOMT150510SK	0.590	0.189	0.039 Full Radius		●	●		●
SOMT050204HP	0.193	0.094	0.016 Full Radius	●				
SOMT060204HP	0.224	0.094	0.016 Full Radius	●				
SOMT070306HP	0.268	0.110	0.024 Full Radius	●				
SOMT08T306HP	0.311	0.156	0.024 Full Radius	●				
SOMT09T308HP	0.362	0.156	0.031 Full Radius	●				
SOMT11T308HP	0.433	0.156	0.031 Full Radius	●				
SOMT130408HP	0.504	0.173	0.031 Full Radius	●				
SOMT150510HP	0.590	0.189	0.039 Full Radius	●				

\* Grade IN6505 is only for use in the outer (peripheral) insert station.

asdf

Placeholder

● = P ○ = M ● = K ● = N ● = S ○ = H







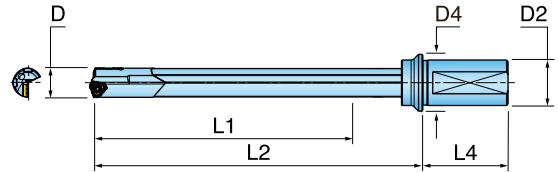
## Features & Benefits:

- Indexable, 3-Edge Insert for Deep Hole Drilling
- Excellent Hole Accuracy (IT10) and Surface Finish
- Very High Feed
- Wide range of applications
- Extremely long life (3 corner insert)
- No Diameter setting necessary
- No Regrinding

**DEEPTRIO<sup>MC</sup>**

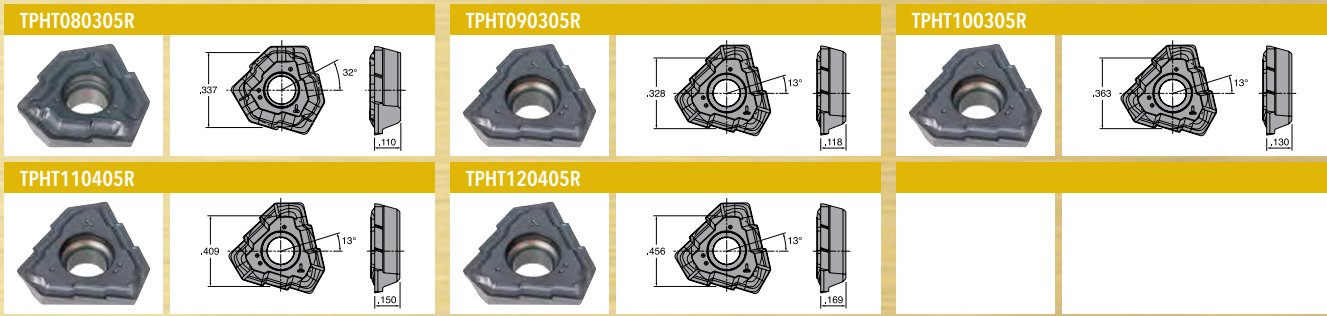
## SERIES DEEP TRIO MC

DEEP TRIO MC INDEXABLE DEEP DRILL



Part Number	D Diameter (inch)	D Diameter (mm)	L1 DOC	L2 Ext Length	L4 Shank Length	D2 Shank Style/Size	D4 Flange Dia
GT17450175N5R01	0.687	17.5mm	7.09	9.25	2.21	1.000 Univ	1.26
GT17450262N5R01	0.687	17.5mm	10.63	12.80	2.21	1.000 Univ	1.26
GT17450436N5R01	0.687	17.5mm	17.72	19.88	2.21	1.000 Univ	1.26
GT18240182N5R01	0.718	18.2mm	7.48	9.65	2.21	1.000 Univ	1.26
GT18240274N5R01	0.718	18.2mm	11.22	13.39	2.21	1.000 Univ	1.26
GT18240456N5R01	0.718	18.2mm	18.70	20.87	2.21	1.000 Univ	1.26
GT18640186N5R01	0.734	18.6mm	7.48	9.65	2.21	1.000 Univ	1.26
GT18640280N5R01	0.734	18.6mm	11.22	13.39	2.21	1.000 Univ	1.26
GT18640466N5R01	0.734	18.6mm	18.70	20.87	2.21	1.000 Univ	1.26
GT19050191N5R01	0.750	19.1mm	7.87	10.04	2.21	1.000 Univ	1.26
GT19050286N5R01	0.750	19.1mm	11.81	13.98	2.21	1.000 Univ	1.26
GT19050476N5R01	0.750	19.1mm	19.69	21.85	2.21	1.000 Univ	1.26
GT20620206N6R01	0.812	20.6mm	8.27	10.43	2.36	1.250 Univ	1.77
GT20620309N6R01	0.812	20.6mm	12.40	14.57	2.36	1.250 Univ	1.77
GT20620516N6R01	0.812	20.6mm	20.67	22.84	2.36	1.250 Univ	1.77
GT22230222N6R01	0.875	22.2mm	8.66	10.83	2.36	1.250 Univ	1.77
GT22230333N6R01	0.875	22.2mm	13.58	16.54	2.36	1.250 Univ	1.77
GT22230556N6R01	0.875	22.2mm	22.64	25.59	2.36	1.250 Univ	1.77
GT23800238N6R01	0.937	23.8mm	9.84	12.80	2.36	1.250 Univ	1.77
GT23800357N6R01	0.937	23.8mm	14.76	17.72	2.36	1.250 Univ	1.77
GT23800595N6R01	0.937	23.8mm	24.61	27.56	2.36	1.250 Univ	1.77
GT25400254N6R01	1.000	25.4mm	11.35	13.73	2.36	1.250 Univ	1.77
GT25400381N6R01	1.000	25.4mm	15.35	18.31	2.36	1.250 Univ	1.77
GT25400635N6R01	1.000	25.4mm	27.56	28.54	2.36	1.250 Univ	1.77





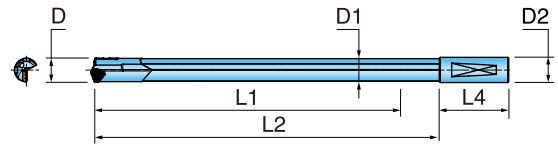
Part Number	Application	Grades	IN2005
TPHT080305R	Multi-Purpose - 0.020" R		
TPHT090305R	Multi-Purpose - 0.020" R		
TPHT100305R	Multi-Purpose - 0.020" R		
TPHT110405R	Multi-Purpose - 0.020" R		
TPHT120405R	Multi-Purpose - 0.020" R		

HARDWARE			
	Insert Screw	Guide Pad Screw	Guide Pad
GT17450175N5R01	SR14-560/S	SR34-508	PAD-G006-075CD-SB
GT17450262N5R01	SR14-560/S	SR34-508	PAD-G006-075CD-SB
GT17450436N5R01	SR14-560/S	SR34-508	PAD-G006-075CD-SB
GT18240182N5R01	SR14-560/S	SR34-508	PAD-G006-085CD-SB
GT18240274N5R01	SR14-560/S	SR34-508	PAD-G006-085CD-SB
GT18240456N5R01	SR14-560/S	SR34-508	PAD-G006-085CD-SB
GT18640186N5R01	SR14-560/S	SR34-508	PAD-G006-085CD-SB
GT18640280N5R01	SR14-560/S	SR34-508	PAD-G006-085CD-SB
GT18640466N5R01	SR14-560/S	SR34-508	PAD-G006-085CD-SB
GT19050191N5R01	SR14-560/S	SR34-508	PAD-G006-085CD-SB
GT19050286N5R01	SR14-560/S	SR34-508	PAD-G006-085CD-SB
GT19050476N5R01	SR14-560/S	SR34-508	PAD-G006-085CD-SB
GT20620206N6R01	SR34-506	SR34-508	PAD-G006-085CD-SB
GT20620309N6R01	SR34-506	SR34-508	PAD-G006-085CD-SB
GT20620516N6R01	SR34-506	SR34-508	PAD-G006-085CD-SB
GT22230222N6R01	SR14-571/S	SR34-508	PAD-G006-100CD-SB
GT22230333N6R01	SR14-571/S	SR34-508	PAD-G006-100CD-SB
GT22230556N6R01	SR14-571/S	SR34-508	PAD-G006-100CD-SB
GT23800238N6R01	SR14-571/S	SR34-508	PAD-G006-100CD-SB
GT23800357N6R01	SR14-571/S	SR34-508	PAD-G006-100CD-SB
GT23800595N6R01	SR14-571/S	SR34-508	PAD-G006-100CD-SB
GT25400254N6R01	SR14-506	SR34-508	PAD-G006CD-SB
GT25400381N6R01	SR14-506	SR34-508	PAD-G006CD-SB
GT25400635N6R01	SR14-506	SR34-508	PAD-G006CD-SB

● = P   ● = M   ● = K   ● = N   ● = S   ○ = H

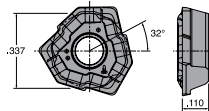


### DEEP TRIO GD INDEXABLE GUN DRILL

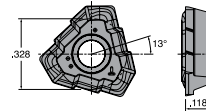
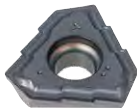


Part Number	D Diameter (inch)	D Diameter (mm)	L1 DOC (mm)	L2 Ext Length	D2 Shank Style/Size	L4 Shank Length
GT-1600-0800-58-R01	0.630	16.0mm	28.34	29.29	1.000 Universal	2.21
GT-1745-1500-58-R01	0.687	17.5mm	55.81	56.79	1.000 Universal	2.21
GT-1824-1500-58-R01	0.718	18.2mm	55.81	56.73	1.000 Universal	2.21
GT-1864-1500-58-R01	0.734	18.6mm	55.81	55.73	1.000 Universal	2.21
GT-1905-1500-58-R01	0.750	19.1mm	55.69	55.73	1.000 Universal	2.21
GT-2062-1500-59-R01	0.812	20.6mm	55.46	55.73	1.250 Universal	2.36
GT-2223-1500-59-R01	0.875	22.2mm	55.34	55.73	1.250 Universal	2.36
GT-2380-1500-59-R01	0.937	23.8mm	55.30	55.73	1.250 Universal	2.36
GT-2540-1500-59-R01	1.000	25.4mm	55.18	55.73	1.250 Universal	2.36

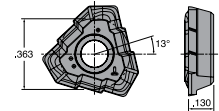
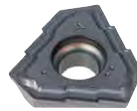
#### TPHT080305R



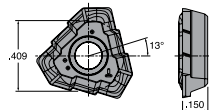
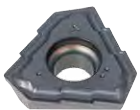
#### TPHT090305R



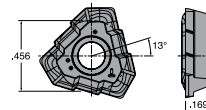
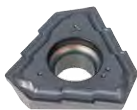
#### TPHT100305R



#### TPHT110405R



#### TPHT120405R



Part Number	Application	Grades	IN2005
TPHT080305R	Multi-Purpose - 0.020" R		
TPHT090305R	Multi-Purpose - 0.020" R		
TPHT100305R	Multi-Purpose - 0.020" R		
TPHT110405R	Multi-Purpose - 0.020" R		
TPHT120405R	Multi-Purpose - 0.020" R		

### HARDWARE



Insert Screw



Guide Pad Screw



Guide Pad

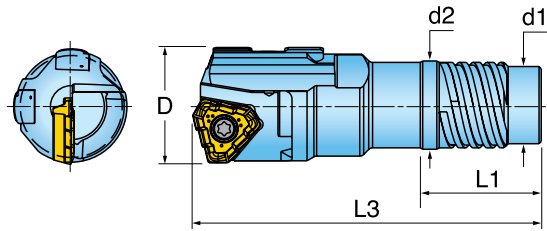
GT-1600-0800-58-R01	SR14-560/S	SR34-508	PAD-G006-075CD-SB
GT-1745-1500-58-R01	SR14-560/S	SR34-508	PAD-G006-075CD-SB
GT-1824-1500-58-R01	SR14-560/S	SR34-508	PAD-G006-085CD-SB
GT-1864-1500-58-R01	SR14-560/S	SR34-508	PAD-G006-085CD-SB
GT-1905-1500-58-R01	SR14-560/S	SR34-508	PAD-G006-085CD-SB
GT-2062-1500-59-R01	SR34-506	SR34-508	PAD-G006-085CD-SB
GT-2223-1500-59-R01	SR14-571/S	SR34-508	PAD-G006-100CD-SB
GT-2380-1500-59-R01	SR14-571/S	SR34-508	PAD-G006-100CD-SB
GT-2540-1500-59-R01	SR14-506	SR34-508	PAD-G006CD-SB

● = P   ● = M   ● = K   ● = N   ● = S   ○ = H



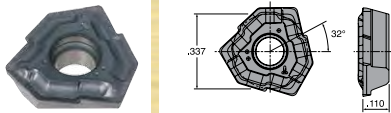
# DEEP TRIO BTA™ SERIES DEEP TRIO BTA - SE4

## DEEP TRIO BTA INDEXABLE DRILL HEAD

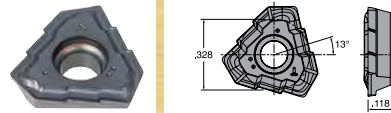


Part Number	D Diameter (inch)	D Diameter (mm)	L3 Overall Length	L1 Thread Length	d1 Pilot Dia	d2 Pilot Dia 2	Tube	Tube Dia
TBTA-DT.630SE4-14	0.630	16.0mm	2.17	0.79	0.43	0.50	BTSI014	0.55
TBTA-DT.687SE4-15	0.687	17.5mm	2.17	0.79	0.47	0.54	BTSI015	0.59
TBTA-DT.718SE4-16	0.718	18.2mm	2.21	0.85	0.49	0.57	BTSI016	0.63
TBTA-DT.734SE4-16	0.734	18.6mm	2.21	0.85	0.49	0.57	BTSI016	0.63
TBTA-DT.750SE4-17	0.750	19.1mm	2.32	0.85	0.53	0.61	BTSI017	0.67
TBTA-DT.812SE4-18	0.812	20.6mm	2.36	0.85	0.55	0.63	BTSI018	0.71
TBTA-DT.813SE4-18	0.813	20.7mm	2.36	0.85	0.55	0.63	BTSI018	0.71
TBTA-DT.875SE4-20	0.875	22.2mm	2.58	0.85	0.63	0.71	BTSI020	0.79
TBTA-DT.937SE4-20	0.937	23.8mm	2.58	0.85	0.63	0.71	BTSI020	0.79
TBTA-DT1.000SE4-22	1.000	25.4mm	2.58	0.85	0.59	0.77	BTSI022	0.87

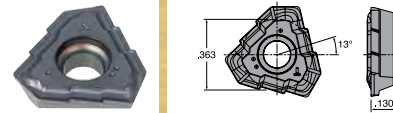
### TPHT080305R



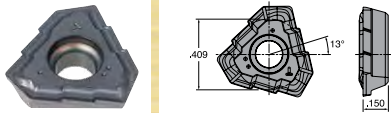
### TPHT090305R



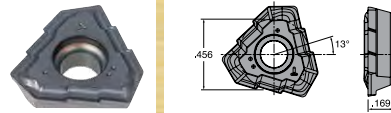
### TPHT100305R



### TPHT110405R



### TPHT120405R



Part Number	Application	Grades	IN2005
TPHT080305R	Multi-Purpose - 0.020" R		
TPHT090305R	Multi-Purpose - 0.020" R		
TPHT100305R	Multi-Purpose - 0.020" R		
TPHT110405R	Multi-Purpose - 0.020" R		
TPHT120405R	Multi-Purpose - 0.020" R		

## HARDWARE



Insert Screw



Guide Pad Screw



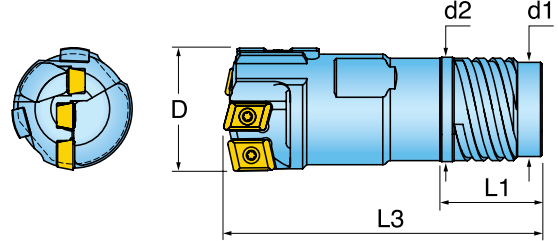
Guide Pad

TBTA-DT.630SE4-14	SR14-560/S	SR34-508	PAD-G006-075CD-SB
TBTA-DT.687SE4-15	SR14-560/S	SR34-508	PAD-G006-075CD-SB
TBTA-DT.718SE4-16	SR14-560/S	SR34-508	PAD-G006-085CD-SB
TBTA-DT.734SE4-16	SR14-560/S	SR34-508	PAD-G006-085CD-SB
TBTA-DT.750SE4-17	SR14-560/S	SR34-508	PAD-G006-085CD-SB
TBTA-DT.812SE4-18	SR34-506	SR34-508	PAD-G006-085CD-SB
TBTA-DT.813SE4-18	SR34-506	SR34-508	PAD-G006-085CD-SB
TBTA-DT.875SE4-20	SR14-571/S	SR34-508	PAD-G006-100CD-SB
TBTA-DT.937SE4-20	SR14-571/S	SR34-508	PAD-G006-100CD-SB
TBTA-DT1.000SE4-22	SR14-506	SR34-508	PAD-G006CD-SB

● = P   ● = M   ● = K   ● = N   ● = S   ○ = H



BTA INDEXABLE



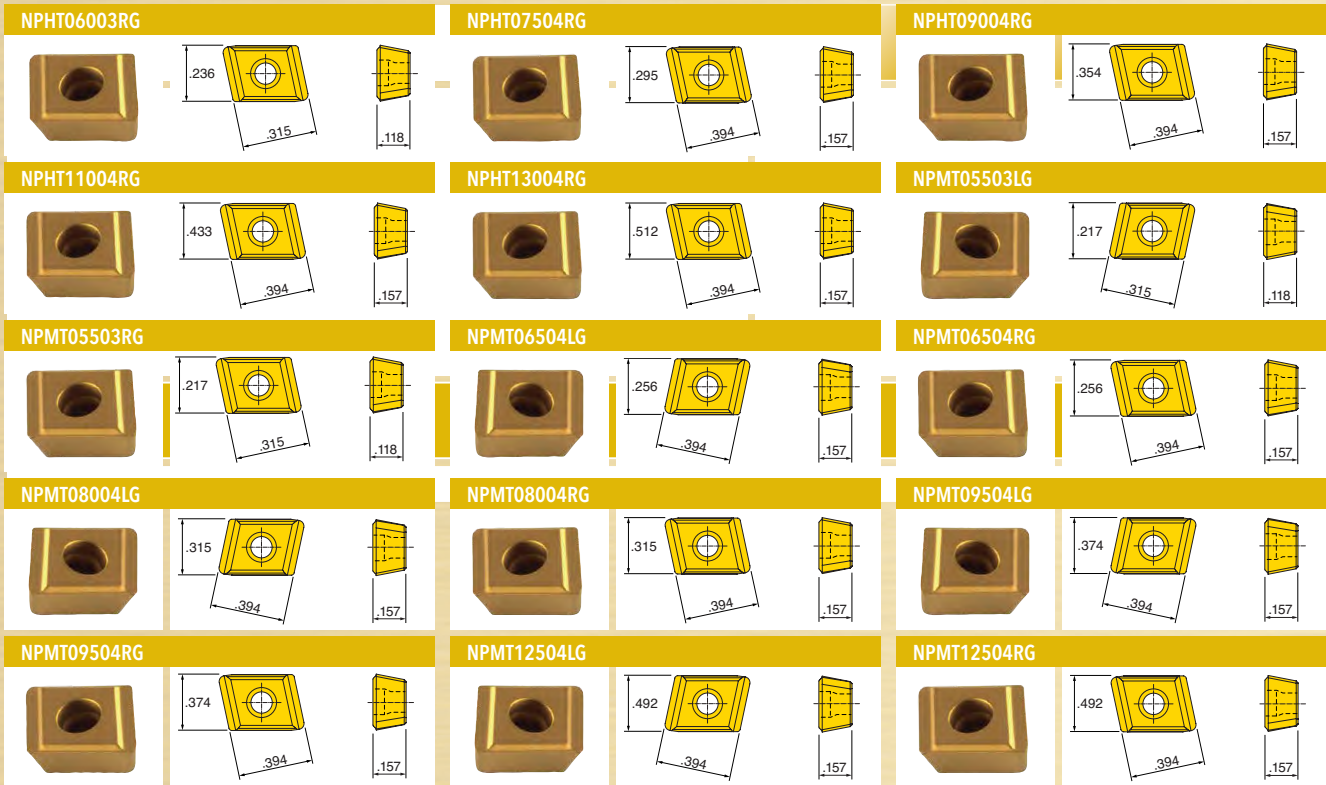
Part Number	D Diameter (inch)	D Diameter (mm)	L3 Overall Length	L1 Thread Length	d1 Pilot Dia	d2 Pilot Dia 2	Tube	Tube Dia
TBTA-H.984SE4-22	0.984	25.0mm	2.76	0.85	0.69	0.77	BTSI022	0.87
TBTA-H1.000SE4-22	1.000	25.4mm	2.76	0.85	0.69	0.77	BTSI022	0.87
TBTA-H1.024SE4-22	1.024	26.0mm	2.76	0.85	0.69	0.77	BTSI022	0.87
TBTA-H1.062SE4-24	1.062	27.0mm	2.76	0.85	0.75	0.83	BTSI024	0.95
TBTA-H1.102SE4-24	1.102	28.0mm	2.76	0.85	0.75	0.83	BTSI024	0.95
TBTA-H1.114SE4-24	1.114	28.3mm	2.76	0.85	0.75	0.83	BTSI024	0.95
TBTA-H1.125SE4-24	1.125	28.6mm	2.76	0.85	0.75	0.83	BTSI024	0.95
TBTA-H1.156SE4-26	1.156	29.4mm	2.95	0.96	0.83	0.93	BTSI026	1.02
TBTA-H1.187SE4-26	1.187	30.2mm	2.95	0.96	0.83	0.93	BTSI026	1.02
TBTA-H1.193SE4-26	1.193	30.3mm	2.95	0.96	0.83	0.93	BTSI026	1.02
TBTA-H1.218SE4-26	1.218	30.9mm	2.95	0.96	0.83	0.93	BTSI026	1.02
TBTA-H1.235SE4-28	1.235	31.4mm	2.95	0.96	0.91	1.00	BTSI028	1.10
TBTA-H1.245SE4-28	1.245	31.6mm	2.95	0.96	0.91	1.00	BTSI028	1.10
TBTA-H1.250SE4-28	1.250	31.8mm	2.95	0.96	0.91	1.00	BTSI028	1.10
TBTA-H1.260SE4-28	1.260	32.0mm	2.95	0.96	0.91	1.00	BTSI028	1.10
TBTA-H1.299SE4-28	1.299	33.0mm	2.95	0.96	0.91	1.00	BTSI028	1.10
TBTA-H1.312SE4-30	1.312	33.3mm	3.15	0.96	1.00	1.10	BTSI030	1.18
TBTA-H1.375SE4-30	1.375	34.9mm	3.15	0.96	1.00	1.10	BTSI030	1.18
TBTA-H1.378SE4-30	1.378	35.0mm	3.15	0.96	1.00	1.10	BTSI030	1.18
TBTA-H1.417SE4-30	1.417	36.0mm	3.15	0.96	1.00	1.10	BTSI030	1.18
TBTA-H1.437SE4-33	1.437	36.5mm	3.54	1.20	1.06	1.18	BTSI033	1.30
TBTA-H1.496SE4-33	1.496	38.0mm	3.54	1.20	1.06	1.18	BTSI033	1.30
TBTA-H1.500SE4-33	1.500	38.1mm	3.54	1.20	1.06	1.18	BTSI033	1.30
TBTA-H1.562SE4-36	1.562	39.7mm	3.74	1.20	1.18	1.30	BTSI036	1.42
TBTA-H1.575SE4-36	1.575	40.0mm	3.74	1.20	1.18	1.30	BTSI036	1.42
TBTA-H1.594SE4-36	1.594	40.5mm	3.74	1.20	1.18	1.30	BTSI036	1.42
TBTA-H1.625SE4-36	1.625	41.3mm	3.74	1.20	1.18	1.30	BTSI036	1.42
TBTA-H1.687SE4-36	1.687	42.9mm	3.74	1.20	1.18	1.30	BTSI036	1.42
TBTA-H1.725SE4-39	1.725	43.8mm	3.94	1.20	1.30	1.42	BTSI039	1.54
TBTA-H1.732SE4-39	1.732	44.0mm	3.94	1.20	1.30	1.42	BTSI039	1.54
TBTA-H1.750SE4-39	1.750	44.5mm	3.94	1.20	1.30	1.42	BTSI039	1.54
TBTA-H1.812SE4-39	1.812	46.0mm	3.94	1.20	1.30	1.42	BTSI039	1.54
TBTA-H1.875SE4-43	1.875	47.6mm	3.94	1.20	1.42	1.54	BTSI043	1.69
TBTA-H1.890SE4-43	1.890	48.0mm	3.94	1.20	1.42	1.54	BTSI043	1.69
TBTA-H1.905SE4-43	1.905	48.4mm	3.94	1.20	1.42	1.54	BTSI043	1.69
TBTA-H1.929SE4-43	1.929	49.0mm	3.94	1.20	1.42	1.54	BTSI043	1.69
TBTA-H1.937SE4-43	1.937	49.2mm	3.94	1.20	1.42	1.54	BTSI043	1.69
TBTA-H1.940SE4-43	1.940	49.3mm	3.94	1.20	1.42	1.54	BTSI043	1.69






Part Number	D Diameter (inch)	D Diameter (mm)	L Overall Length	L1 Thread Length	d1 Pilot Dia	d2 Pilot Dia 2	Tube	Tube Dia
TBTA-H1.945SE4-43	1.945	49.4mm	3.94	1.20	1.42	1.54	BTSI043	1.69
TBTA-H1.949SE4-43	1.949	49.5mm	3.94	1.20	1.42	1.54	BTSI043	1.69
TBTA-H1.965SE4-43	1.965	49.9mm	3.94	1.20	1.42	1.54	BTSI043	1.69
TBTA-H1.969SE4-43	1.969	50.0mm	3.94	1.20	1.42	1.54	BTSI043	1.69
TBTA-H1.985SE4-43	1.985	50.4mm	3.94	1.20	1.42	1.54	BTSI043	1.69
TBTA-H2.000SE4-43	2.000	50.8mm	3.94	1.20	1.42	1.54	BTSI043	1.69
TBTA-H2.062SE4-47	2.062	52.4mm	4.33	1.36	1.56	1.69	BTSI047	1.85
TBTA-H2.125SE4-47	2.125	54.0mm	4.33	1.36	1.56	1.69	BTSI047	1.85
TBTA-H2.126SE4-47	2.126	54.0mm	4.33	1.36	1.56	1.69	BTSI047	1.85
TBTA-H2.187SE4-47	2.187	55.6mm	4.33	1.36	1.56	1.69	BTSI047	1.85
TBTA-H2.250SE4-51	2.250	57.2mm	4.53	1.36	1.71	1.85	BTSI051	2.01
TBTA-H2.283SE4-51	2.283	58.0mm	4.53	1.36	1.71	1.85	BTSI051	2.01
TBTA-H2.312SE4-51	2.312	58.7mm	4.53	1.36	1.71	1.85	BTSI051	2.01
TBTA-H2.335SE4-51	2.335	59.3mm	4.53	1.36	1.71	1.85	BTSI051	2.01
TBTA-H2.350SE4-51	2.350	59.7mm	4.53	1.36	1.71	1.85	BTSI051	2.01
TBTA-H2.362SE4-51	2.362	60.0mm	4.53	1.36	1.71	1.85	BTSI051	2.01
TBTA-H2.375SE4-51	2.375	60.3mm	4.53	1.36	1.71	1.85	BTSI051	2.01
TBTA-H2.380SE4-51	2.380	60.5mm	4.53	1.36	1.71	1.85	BTSI051	2.01
TBTA-H2.405SE4-56A	2.405	61.1mm	4.53	1.36	1.87	2.01	BTSI056A	2.21
TBTA-H2.437SE4-56A	2.437	61.9mm	4.53	1.36	1.87	2.01	BTSI056A	2.21
TBTA-H2.441SE4-56A	2.441	62.0mm	4.53	1.36	1.87	2.01	BTSI056A	2.21
TBTA-H2.500SE4-56A	2.500	63.5mm	4.53	1.36	1.87	2.01	BTSI056A	2.21
TBTA-H2.559SE4-56A	2.559	65.0mm	4.53	1.36	1.87	2.01	BTSI056A	2.21



# BTA DRILL SERIES NPHT, NPMT INSERTS






Part Number	Application	Station	Grades		
			IN1510	IN2005	IN6542
NPHT06003RG	Multi-Purpose	Outer	●	●	
NPMT05503LG	Multi-Purpose	Center	●	●	
NPMT05503RG	Multi-Purpose	Inner	●	●	
NPMT06504LG	Multi-Purpose	Center	●	●	●
NPHT07504RG	Multi-Purpose	Outer	●	●	
NPMT06504RG	Multi-Purpose	Inner	●	●	●
NPMT08004LG	Multi-Purpose	Center	●	●	●
NPHT09004RG	Multi-Purpose	Outer	●	●	
NPMT08004RG	Multi-Purpose	Inner	●	●	●
NPMT09504LG	Multi-Purpose	Center	●	●	●
NPHT11004RG	Multi-Purpose	Outer	●	●	
NPMT09504RG	Multi-Purpose	Inner	●	●	●
NPMT12504LG	Multi-Purpose	Center	●	●	●
NPHT13004RG	Multi-Purpose	Outer	●	●	
NPMT12504RG	Multi-Purpose	Inner	●	●	●

HARDWARE			
	Insert Screw	Guide Pad Screw	Guide Pad
TBTA-H.984SE4-22	CSTB2.2	CSTB2.2S	PAD-G006CD-SB
TBTA-H1.000SE4-22	CSTB2.2	CSTB2.2S	PAD-G006CD-SB
TBTA-H1.024SE4-22	CSTB2.2	CSTB2.2S	PAD-G006CD-SB
TBTA-H1.062SE4-24	CSTB2.2	CSTB2.2S	PAD-G006CD-SB
TBTA-H1.102SE4-24	CSTB2.2	CSTB2.2S	PAD-G006CD-SB
TBTA-H1.114SE4-24	CSTB2.2	CSTB2.2S	PAD-G006CD-SB
TBTA-H1.125SE4-24	CSTB2.2	CSTB2.2S	PAD-G006CD-SB

● = P ○ = M ● = K ● = N ● = S ○ = H



HARDWARE			
	Insert Screw	Guide Pad Screw	Guide Pad
TBTA-H1.156SE4-26	CSTB2.2	CSTB2.2S	PAD-GO06CD-SB
TBTA-H1.187SE4-26	CSTB2.5	CSTB3S	PAD-GO07CD-SB
TBTA-H1.193SE4-26	CSTB2.5	CSTB3S	PAD-GO07CD-SB
TBTA-H1.218SE4-26	CSTB2.5	CSTB3S	PAD-GO07CD-SB
TBTA-H1.235SE4-28	CSTB2.5	CSTB3S	PAD-GO07CD-SB
TBTA-H1.245SE4-28	CSTB2.5	CSTB3S	PAD-GO07CD-SB
TBTA-H1.250SE4-28	CSTB2.5	CSTB3S	PAD-GO07CD-SB
TBTA-H1.260SE4-28	CSTB2.5	CSTB3S	PAD-GO07CD-SB
TBTA-H1.299SE4-28	CSTB2.5	CSTB3S	PAD-GO07CD-SB
TBTA-H1.312SE4-30	CSTB2.5	CSTB3S	PAD-GO07CD-SB
TBTA-H1.375SE4-30	CSTB2.5	CSTB3S	PAD-GO07CD-SB
TBTA-H1.378SE4-30	CSTB2.5	CSTB3S	PAD-GO07CD-SB
TBTA-H1.417SE4-30	CSTB2.5	CSTB3S	PAD-GO07CD-SB
TBTA-H1.437SE4-33	CSTB2.5	CSTB3S	PAD-GO07CD-SB
TBTA-H1.496SE4-33	CSTB2.5	CSTB3S	PAD-GO07CD-SB
TBTA-H1.500SE4-33	CSTB2.5	CSTB3S	PAD-GO07CD-SB
TBTA-H1.562SE4-36	CSTB2.5	CSTB3S	PAD-GO08CD-SB-FB
TBTA-H1.575SE4-36	CSTB2.5	CSTB3S	PAD-GO08CD-SB-FB
TBTA-H1.594SE4-36	CSTB2.5	CSTB3S	PAD-GO08CD-SB-FB
TBTA-H1.625SE4-36	CSTB2.5	CSTB3S	PAD-GO08CD-SB-FB
TBTA-H1.687SE4-36	CSTB2.5	CSTB3S	PAD-GO08CD-SB-FB
TBTA-H1.725SE4-39	CSTB2.5	CSTB3S	PAD-GO08CD-SB-FB
TBTA-H1.732SE4-39	CSTB2.5	CSTB3S	PAD-GO08CD-SB-FB
TBTA-H1.750SE4-39	CSTB2.5	CSTB3S	PAD-GO08CD-SB-FB
TBTA-H1.812SE4-39	CSTB2.5	CSTB3.5	PAD-GO10CD-SB
TBTA-H1.875SE4-43	CSTB2.5	CSTB3.5	PAD-GO10CD-SB
TBTA-H1.890SE4-43	CSTB2.5	CSTB3.5	PAD-GO10CD-SB
TBTA-H1.905SE4-43	CSTB2.5	CSTB3.5	PAD-GO10CD-SB
TBTA-H1.929SE4-43	CSTB2.5	CSTB3.5	PAD-GO10CD-SB
TBTA-H1.937SE4-43	CSTB2.5	CSTB3.5	PAD-GO10CD-SB
TBTA-H1.940SE4-43	CSTB2.5	CSTB3.5	PAD-GO10CD-SB
TBTA-H1.945SE4-43	CSTB2.5	CSTB3.5	PAD-GO10CD-SB
TBTA-H1.949SE4-43	CSTB2.5	CSTB3.5	PAD-GO10CD-SB
TBTA-H1.965SE4-43	CSTB2.5	CSTB3.5	PAD-GO10CD-SB
TBTA-H1.969SE4-43	CSTB2.5	CSTB3.5	PAD-GO10CD-SB
TBTA-H1.985SE4-43	CSTB2.5	CSTB3.5	PAD-GO10CD-SB
TBTA-H2.000SE4-43	CSTB2.5	CSTB3.5	PAD-GO10CD-SB
TBTA-H2.062SE4-47	CSTB2.5	CSTB3.5	PAD-GO10CD-SB
TBTA-H2.125SE4-47	CSTB2.5	CSTB3.5	PAD-GO10CD-SB
TBTA-H2.126SE4-47	CSTB2.5	CSTB3.5	PAD-GO10CD-SB
TBTA-H2.187SE4-47	CSTB2.5	CSTB3.5	PAD-GO10CD-SB
TBTA-H2.250SE4-51	CSTB2.5	CSTB3.5	PAD-GO12CD-SB
TBTA-H2.283SE4-51	CSTB2.5	CSTB3.5	PAD-GO12CD-SB
TBTA-H2.312SE4-51	CSTB2.5	CSTB3.5	PAD-GO12CD-SB
TBTA-H2.335SE4-51	CSTB2.5	CSTB3.5	PAD-GO12CD-SB
TBTA-H2.350SE4-51	CSTB2.5	CSTB3.5	PAD-GO12CD-SB
TBTA-H2.362SE4-51	CSTB2.5	CSTB3.5	PAD-GO12CD-SB
TBTA-H2.375SE4-51	CSTB2.5	CSTB3.5	PAD-GO12CD-SB
TBTA-H2.380SE4-51	CSTB2.5	CSTB3.5	PAD-GO12CD-SB
TBTA-H2.405SE4-56A	CSTB2.5	CSTB3.5	PAD-GO12CD-SB
TBTA-H2.437SE4-56A	CSTB2.5	CSTB3.5	PAD-GO12CD-SB
TBTA-H2.441SE4-56A	CSTB2.5	CSTB3.5	PAD-GO12CD-SB
TBTA-H2.500SE4-56A	CSTB2.5	CSTB3.5	PAD-GO12CD-SB
TBTA-H2.559SE4-56A	CSTB2.5	CSTB3.5	PAD-GO12CD-SB



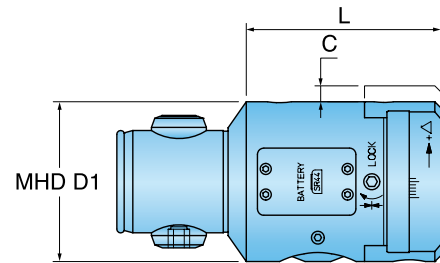
# D'ANDREA Digital Fine Boring Heads

## Features & Benefits:

- Zero backlash compensation
- Single button operation for functions 'On', 'Reset', and to change between inch and metric
- Display resolution .0001" (.002mm)
- Energy saving function. Display switches off automatically after 30 seconds and stores last display value
- Internal coolant thru
- High level of resistance to dust and water rated at IP67

## D'ANDREA SERIES TRE

### DIGITAL DISPLAY FINE BORING HEAD



Item Description 1	Item Description 2	Bore Dia Range	MHD D1	L	C	Cartridge Type	Accepts SFTP Cart	Accepts SFCC Cart	Weight (lb)
TRE50	455200500500	.098" - 4.330"	50	2.401	0.197	SF.. 50	Yes	Yes	2.425
TRE63	455200630630	.236" - 4.921"	63	2.736	0.197	SF.. 50	Yes	Yes	4.850
TRE80	455200800800	.236" - 7.874"	80	3.327	0.197	SF.. 50	Yes	Yes	8.600







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