

TOPCUT PLUS INDEXABLE INSERT DRILLS

WIDIA

TOP CUT PLUS DRILLS utilizing four cutting edges per insert

The Widia Top Cut Plus product line stands for increased performance and cost-efficiency. These proven drills feature inserts with four cutting edges that guarantee increased productivity and maximum production safety across the full range of applications. These superior tools are available in Inch diameters from .437" to 1.375" and in Metric diameters from 11 mm to 60 mm. There is a choice of three lengths to suit every need, from the highly rigid Top Cut Plus 2 x D to the Top Cut Plus 3 x D and the Top Cut Plus 4 x D for deep holes.

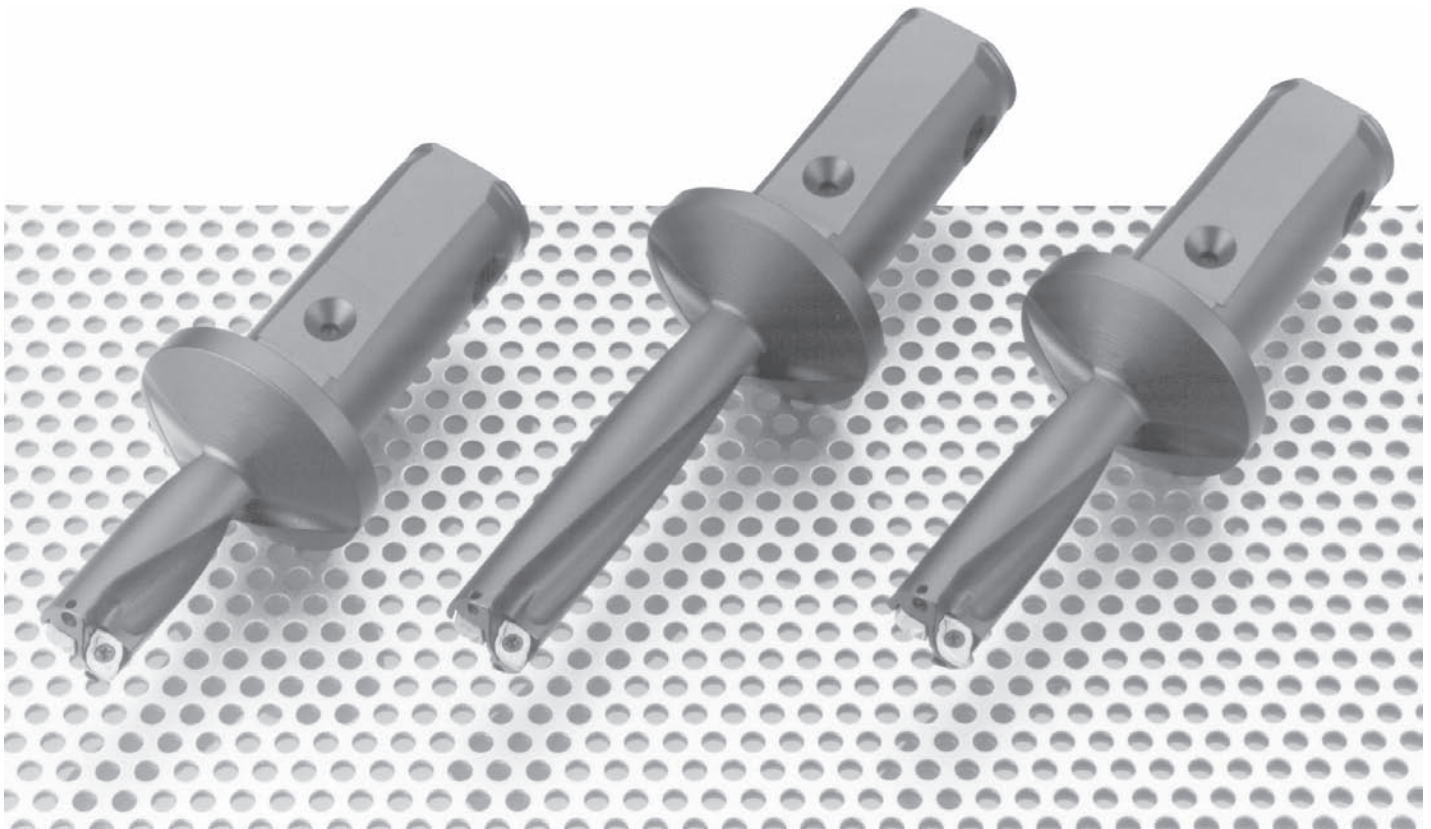
The Tool:

- designed for maximum system stiffness
- with rigid shank for both Inch & Metric Drills
- solid connection with drillholder thanks to conical-tipped clamping screw
- separate coolant passages guarantee stable drilling performance
- even better chip removal thanks to optimized chip spaces

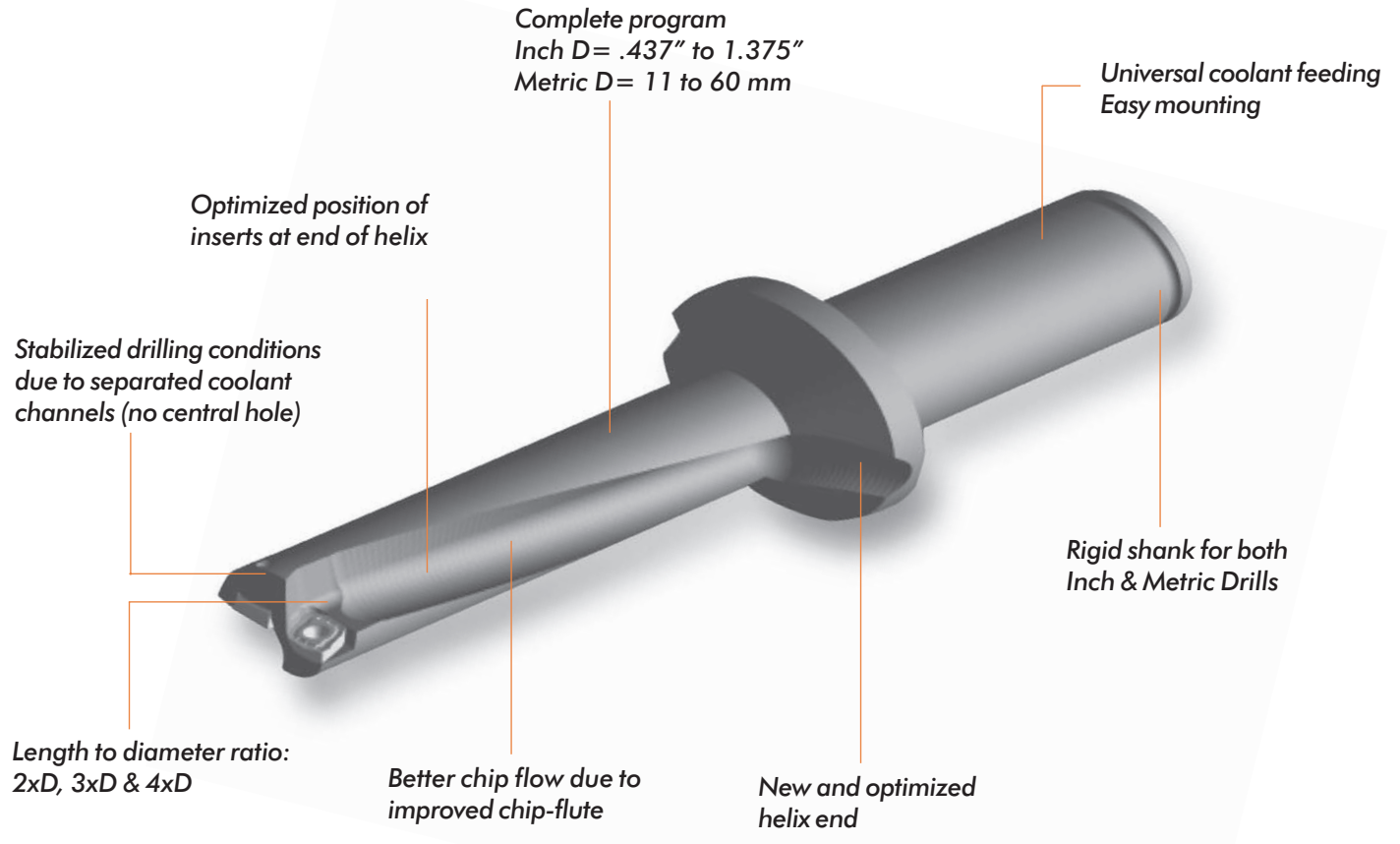
The Insert:

- four effective cutting edges thanks to complete separation of internal and external cutting edges
- basic circular shape guarantees maximum rigidity
- special flank geometry on centre and external cutting edge provides a sturdy cutting wedge and ensures favourable wear performance
- can also be used for simple turning operations

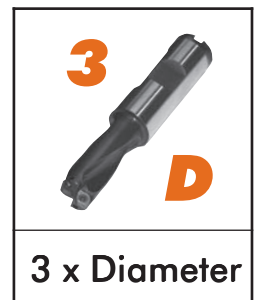
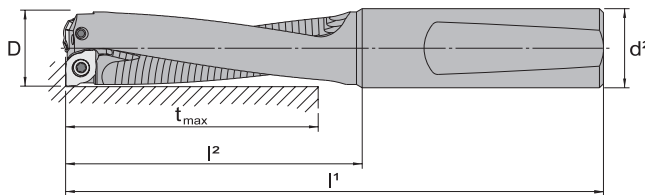
TOP CUT PLUS:
cost effective drilling
with four cutting edges.



TOPCUT PLUS INDEXABLE INSERT DRILLS



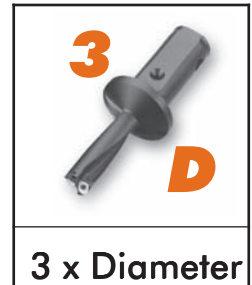
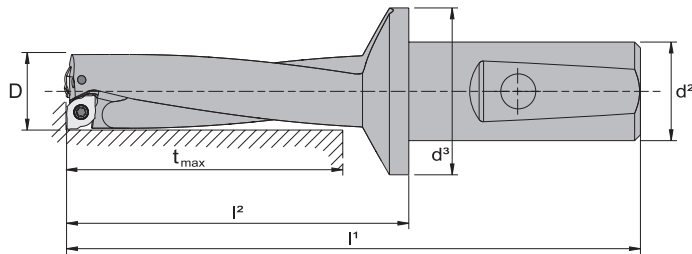
Designed for Maximum Tool Rigidity



DESIGNATION	DIMENSIONS						INSERT (see page 54)	SPARE PARTS	
	D	D mm	d ²	l ¹	l ²	t _{max}		Insert Lock Screw	Torx Wrench
TCPR-0437R3	.437	11.11	.625	3.60	1.69	1.32	XOMT-04T103	214.60.118	214.60.100
TCPR-0500R3	.500	12.70	.625	3.84	1.93	1.50			
TCPR-0562R3	.562	14.28	.625	4.07	2.17	1.69			
TCPR-0625R3	.625	15.87	.625	4.35	2.44	1.88	XOMT-050204	214.60.125	214.75.490

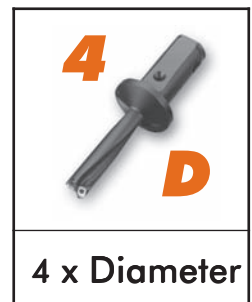
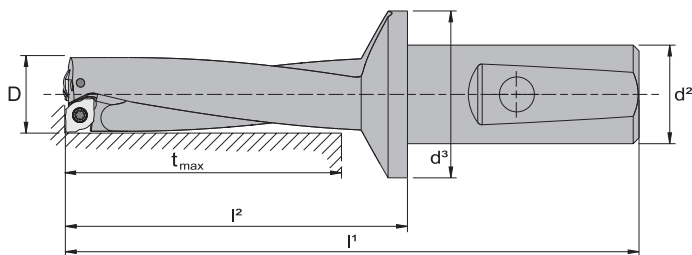
* All dimensions are inch unless indicated

TOPCUT PLUS INDEXABLE INSERT DRILLS



DESIGNATION	DIMENSIONS							INSERT (see page 54)	SPARE PARTS	
	D	D mm	d ²	d ³	l ¹	l ²	t _{max}		Insert Lock Screw	Torx Wrench
TCP-0562R3	.562	14.28	1.000	1.63	4.52	2.17	1.70	XOMT-04T103	214.60.118	214.60.100
TCP-0625R3	.625	15.87	1.000	1.63	4.79	2.44	1.90	XOMT-050204	214.60.125	214.75.490
TCP-0687R3	.687	17.46	1.000	1.63	5.03	2.68	2.10			
TCP-0750R3	.750	19.05	1.000	1.63	5.30	2.95	2.25	XOMT-070304	214.80.800	214.80.866
TCP-0812R3	.812	20.63	1.000	1.63	5.42	3.07	2.45			
TCP-0875R3	.875	22.22	1.000	1.63	5.66	3.31	2.65			
TCP-0937R3	.937	23.81	1.000	1.63	5.78	3.43	2.85	XOMT-09T306	214.80.672	214.80.866
TCP-1000R3	1.000	25.40	1.250	1.88	6.07	3.62	3.00			
TCP-1062R3	1.062	26.98	1.250	1.88	6.19	3.74	3.19			
TCP-1125R3	1.125	28.57	1.250	1.88	6.43	3.98	3.38			
TCP-1187R3	1.187	30.16	1.250	1.88	6.66	4.21	3.56			
TCP-1250R3	1.250	31.75	1.250	1.88	6.78	4.33	3.75			
TCP-1312R3	1.312	33.33	1.250	1.88	6.98	4.53	3.94			
TCP-1375R3	1.375	34.92	1.250	1.88	7.10	4.65	4.13			

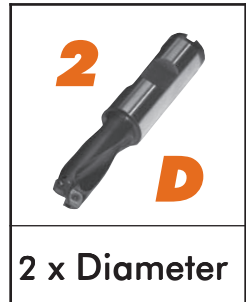
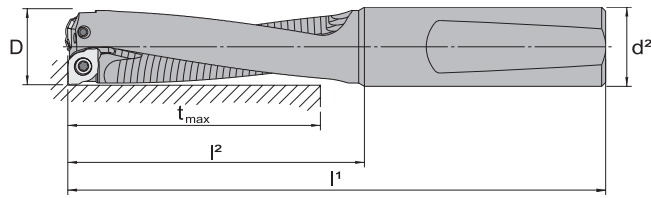
* All dimensions are inch unless indicated



DESIGNATION	DIMENSIONS							INSERT (see page 54)	SPARE PARTS	
	D	D mm	d ²	d ³	l ¹	l ²	t _{max}		Insert Lock Screw	Torx Wrench
TCP-0625R4	.625	15.87	1.000	1.63	5.46	3.11	2.50	XOMT-050204	214.60.125	214.75.490
TCP-0750R4	.750	19.05	1.000	1.63	6.09	3.74	3.00	XOMT-070304	214.80.800	214.80.866
TCP-0875R4	.875	22.22	1.000	1.63	6.56	4.21	3.50			
TCP-1000R4	1.000	25.40	1.250	1.88	7.14	4.69	4.00	XOMT-09T306	214.80.672	214.80.866
TCP-1125R4	1.125	28.57	1.250	1.88	7.61	5.16	4.50			
TCP-1250R4	1.250	31.75	1.250	1.88	8.08	5.63	5.00			
TCP-1375R4	1.375	34.92	1.250	1.88	8.55	6.10	5.50			

* All dimensions are inch unless indicated

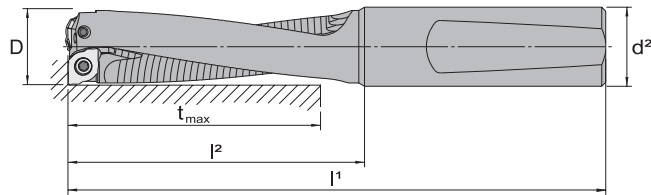
TOPCUT PLUS INDEXABLE INSERT DRILLS



2 x Diameter

DESIGNATION	DIMENSIONS						INSERT (see page 54)	SPARE PARTS	
	D _{mm}	D	d _{mm} ²	l ¹	l ²	t _{max}		Insert Lock Screw	Torx Wrench
TCPR-11R2	11.0	.433	12	2.99	1.22	.86	XOMT-04T103	214.60.118	214.60.100
TCPR-11.5R2	11.5	.452	12	3.07	1.30	.90			
TCPR-12R2	12.0	.472	12	3.11	1.34	.94			
TCPR-12.5R2	12.5	.492	16	3.27	1.38	.98			
TCPR-13R2	13.0	.511	16	3.35	1.46	1.02			
TCPR-13.5R2	13.5	.531	16	3.39	1.50	1.06			
TCPR-14R2	14.0	.551	16	3.47	1.60	1.10			

* All dimensions are inch unless indicated



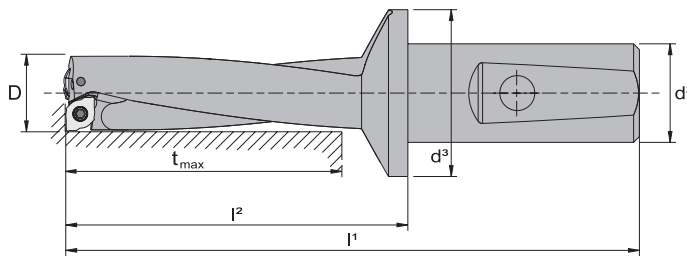
3 x Diameter

DESIGNATION	DIMENSIONS						INSERT (see page 54)	SPARE PARTS	
	D _{mm}	D	d _{mm} ²	l ¹	l ²	t _{max}		Insert Lock Screw	Torx Wrench
TCPR-11R3	11.0	.433	12	3.46	1.69	1.29	XOMT-04T103	214.60.118	214.60.100
TCPR-11.5R3	11.5	.452	12	3.54	1.77	1.37			
TCPR-12R3	12.0	.472	12	3.62	1.85	1.41			
TCPR-12.5R3	12.5	.492	16	3.82	1.93	1.49			
TCPR-13R3	13.0	.511	16	3.90	2.01	1.53			
TCPR-13.5R3	13.5	.531	16	3.98	2.09	1.61			
TCPR-14R3	14.0	.551	16	4.06	2.17	1.65			

* All dimensions are inch unless indicated

TOPCUT PLUS INDEXABLE INSERT DRILLS

TCP METRIC

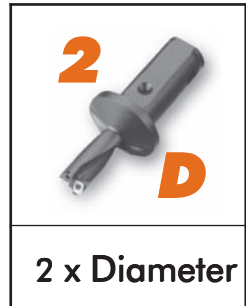
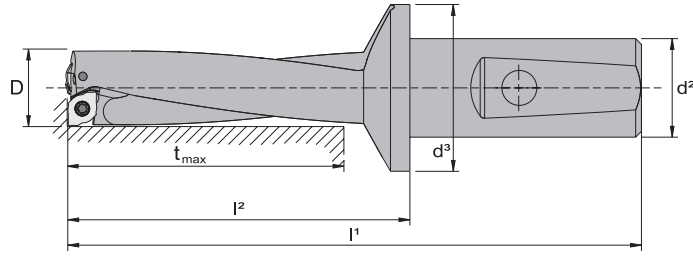


2 x Diameter

DESIGNATION	DIMENSIONS							INSERT (see page 54)	SPARE PARTS	
	D _{mm}	D	d _{mm} ²	d ³	l ¹	l ²	t _{max}		Insert Lock Screw	Torx Wrench
TCP-14.5R2	14.5	.570	25	1.69	3.98	1.77	1.14	XOMT-050204	214.60.125	214.75.490
TCP-15R2	15.0	.590	25	1.69	4.02	1.81	1.18			
TCP-16R2	16.0	.629	25	1.69	4.10	1.89	1.25			
TCP-17R2	17.0	.669	25	1.69	4.17	1.97	1.33			
TCP-17.5R2	17.5	.688	25	1.69	4.21	2.01	1.37			
TCP-18R2	18.0	.708	25	1.69	4.25	2.05	1.41			
TCP-19R2	19.0	.748	25	1.69	4.33	2.13	1.49	XOMT-070304	214.80.800	214.80.866
TCP-20R2	20.0	.787	25	1.69	4.41	2.21	1.57			
TCP-21R2	21.0	.826	25	1.69	4.49	2.28	1.65			
TCP-22R2	22.0	.866	25	1.69	4.57	2.36	1.73			
TCP-23R2	23.0	.905	25	1.69	4.65	2.44	1.81			
TCP-24R2	24.0	.944	25	1.69	4.72	2.52	1.88			
TCP-25R2	25.0	.984	32	1.88	4.92	2.56	1.96	XOMT-09T306	214.80.672	214.80.866
TCP-26R2	26.0	1.023	32	1.88	5.00	2.64	2.04			
TCP-27R2	27.0	1.062	32	1.88	5.08	2.72	2.12			
TCP-28R2	28.0	1.102	32	1.88	5.12	2.76	2.20			
TCP-29R2	29.0	1.141	32	1.88	5.20	2.84	2.28			
TCP-30R2	30.0	1.181	32	1.88	5.28	2.91	2.36			
TCP-31R2	31.0	1.220	32	1.88	5.39	2.99	2.44			
TCP-32R2	32.0	1.259	32	1.88	5.43	3.07	2.51			
TCP-33R2	33.0	1.299	32	1.88	5.51	3.15	2.59			
TCP-34R2	34.0	1.338	32	1.88	5.59	3.23	2.67			

* All dimensions are inch unless indicated

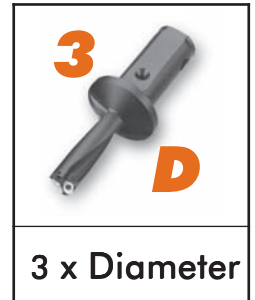
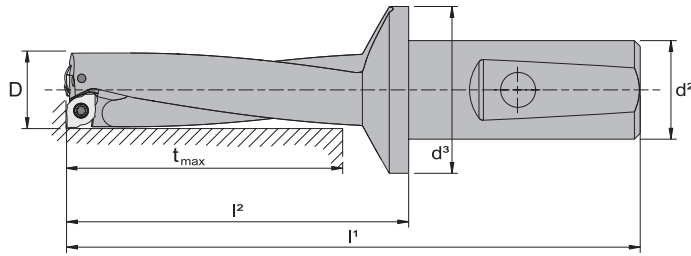
TOPCUT PLUS INDEXABLE INSERT DRILLS



DESIGNATION	DIMENSIONS							INSERT (see page 54)	SPARE PARTS	
	D _{mm}	D	d _{mm} ²	d ³	l ¹	l ²	t _{max}		Insert Lock Screw	Torx Wrench
TCP-35R2	35.0	1.377	40	2.28	6.37	3.62	2.75	XOMT-12T308	214.80.558	214.80.824
TCP-36R2	36.0	1.417	40	2.28	6.45	3.70	2.83			
TCP-37R2	37.0	1.456	40	2.28	6.57	3.81	2.91			
TCP-38R2	38.0	1.496	40	2.28	6.65	3.89	2.99			
TCP-39R2	39.0	1.535	40	2.28	6.73	3.97	3.07			
TCP-40R2	40.0	1.574	40	2.28	6.81	4.05	3.14			
TCP-41R2	41.0	1.614	40	2.28	6.92	4.17	3.22			
TCP-42R2	42.0	1.653	40	2.28	7.00	4.25	3.30			
TCP-43R2	43.0	1.692	40	2.28	7.08	4.33	3.38			
TCP-44R2	44.0	1.732	40	2.28	7.20	4.44	3.46			
TCP-45R2	45.0	1.771	40	2.28	7.28	4.52	3.54			
TCP-46R2	46.0	1.811	40	2.28	7.36	4.60	3.62			
TCP-47R2	47.0	1.850	40	2.28	7.48	4.72	3.70			
TCP-48R2	48.0	1.889	40	2.28	7.55	4.80	3.77			
TCP-49R2	49.0	1.929	40	2.28	7.67	4.92	3.85			
TCP-50R2	50.0	1.968	40	2.28	7.79	5.03	3.93			
TCP-51R2	51.0	2.007	40	2.28	7.87	5.11	4.01			
TCP-52R2	52.0	2.047	40	2.28	7.99	5.23	4.09			
TCP-53R2	53.0	2.086	40	2.28	8.11	5.35	4.17			
TCP-54R2	54.0	2.125	40	2.28	8.22	5.47	4.25			
TCP-55R2	55.0	2.165	40	2.28	8.34	5.59	4.33			
TCP-56R2	56.0	2.204	40	2.28	8.46	5.70	4.40			
TCP-57R2	57.0	2.244	40	2.28	8.58	5.82	4.48			
TCP-58R2	58.0	2.283	40	2.28	8.70	5.94	4.56			
TCP-59R2	59.0	2.322	40	2.28	8.81	6.06	4.64			
TCP-60R2	60.0	2.362	40	2.28	8.93	6.18	4.72			

* All dimensions are inch unless indicated

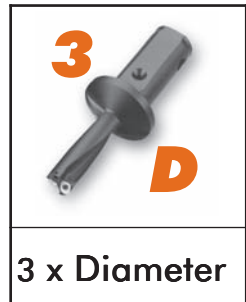
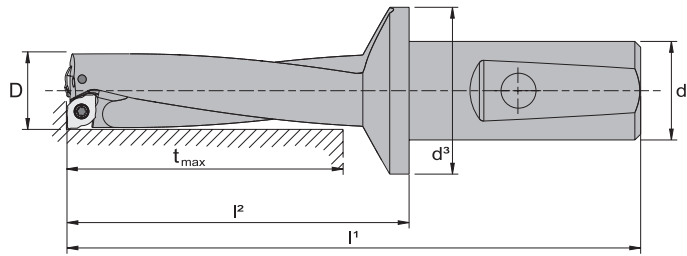
TOPCUT PLUS INDEXABLE INSERT DRILLS



DESIGNATION	DIMENSIONS							INSERT (see page 54)	SPARE PARTS	
	D _{mm}	D	d _{mm} ²	d ³	l ¹	l ²	t _{max}		Insert Lock Screw	Torx Wrench
TCP-14.5R3	14.5	.570	25	1.69	4.61	2.40	1.73	XOMT-050204	214.60.125	214.75.490
TCP-15R3	15.0	.590	25	1.69	4.65	2.44	1.77			
TCP-16R3	16.0	.629	25	1.69	4.76	2.56	1.88			
TCP-17R3	17.0	.669	25	1.69	4.88	2.68	2.00			
TCP-17.5R3	17.5	.688	25	1.69	4.96	2.76	2.08			
TCP-18R3	18.0	.708	25	1.69	5.00	2.80	2.12			
TCP-19R3	19.0	.748	25	1.69	5.16	2.95	2.24	XOMT-070304	214.80.800	214.80.866
TCP-20R3	20.0	.787	25	1.69	5.28	3.07	2.36			
TCP-21R3	21.0	.826	25	1.69	5.39	3.19	2.48			
TCP-22R3	22.0	.866	25	1.69	5.51	3.31	2.59			
TCP-23R3	23.0	.905	25	1.69	5.63	3.43	2.71			
TCP-24R3	24.0	.944	25	1.69	5.71	3.50	2.83			
TCP-25R3	25.0	.984	32	1.88	5.98	3.62	2.95	XOMT-09T306	214.80.672	214.80.866
TCP-26R3	26.0	1.023	32	1.88	6.10	3.74	3.07			
TCP-27R3	27.0	1.062	32	1.88	6.22	3.86	3.18			
TCP-28R3	28.0	1.102	32	1.88	6.34	3.98	3.30			
TCP-29R3	29.0	1.141	32	1.88	6.46	4.10	3.42			
TCP-30R3	30.0	1.181	32	1.88	6.58	4.21	3.54			
TCP-31R3	31.0	1.220	32	1.88	6.69	4.33	3.66			
TCP-32R3	32.0	1.259	32	1.88	6.77	4.41	3.77			
TCP-33R3	33.0	1.299	32	1.88	6.89	4.53	3.89			
TCP-34R3	34.0	1.338	32	1.88	7.01	4.65	4.01			

* All dimensions are inch unless indicated

TOPCUT PLUS INDEXABLE INSERT DRILLS



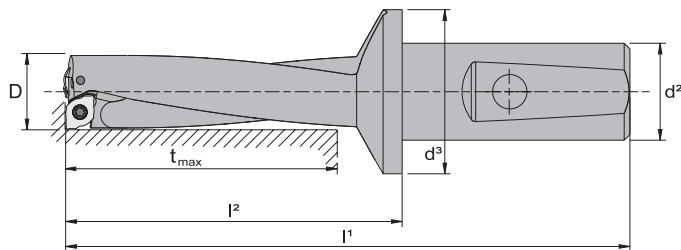
3 x Diameter

DESIGNATION	DIMENSIONS							INSERT (see page 54)	SPARE PARTS	
	D _{mm}	D	d ² _{mm}	d ³	l ¹	l ²	t _{max}		Insert Lock Screw	Torx Wrench
TCP-35R3	35.0	1.377	40	2.28	7.83	5.07	4.13	XOMT-12T308	214.80.558	214.80.824
TCP-36R3	36.0	1.417	40	2.28	7.99	5.23	4.25			
TCP-37R3	37.0	1.456	40	2.28	8.11	5.35	4.37			
TCP-38R3	38.0	1.496	40	2.28	8.22	5.47	4.48			
TCP-39R3	39.0	1.535	40	2.28	8.34	5.59	4.60			
TCP-40R3	40.0	1.574	40	2.28	8.50	5.74	4.72			
TCP-41R3	41.0	1.614	40	2.28	8.62	5.86	4.84			
TCP-42R3	42.0	1.653	40	2.28	8.74	5.98	4.96			
TCP-43R3	43.0	1.692	40	2.28	8.89	6.14	5.07			
TCP-44R3	44.0	1.732	40	2.28	9.01	6.25	5.19			
TCP-45R3	45.0	1.771	40	2.28	9.17	6.41	5.31			
TCP-46R3	46.0	1.811	40	2.28	9.29	6.53	5.43			
TCP-47R3	47.0	1.850	40	2.28	9.44	6.69	5.55			
TCP-48R3	48.0	1.889	40	2.28	9.56	6.81	5.66			
TCP-49R3	49.0	1.929	40	2.28	9.72	6.96	5.78			
TCP-50R3	50.0	1.968	40	2.28	9.88	7.12	5.90			
TCP-51R3	51.0	2.007	40	2.28	10.00	7.24	6.02			
TCP-52R3	52.0	2.047	40	2.28	10.15	7.40	6.14			
TCP-53R3	53.0	2.086	40	2.28	10.31	7.55	6.25			
TCP-54R3	54.0	2.125	40	2.28	10.47	7.71	6.37			
TCP-55R3	55.0	2.165	40	2.28	10.62	7.87	6.49			
TCP-56R3	56.0	2.204	40	2.28	10.78	8.03	6.61			
TCP-57R3	57.0	2.244	40	2.28	10.94	8.18	6.73			
TCP-58R3	58.0	2.283	40	2.28	11.10	8.34	6.85			
TCP-59R3	59.0	2.322	40	2.28	11.25	8.50	6.96			
TCP-60R3	60.0	2.362	40	2.28	11.45	8.70	7.12			

* All dimensions are inch unless indicated

TOPCUT PLUS INDEXABLE INSERT DRILLS

TCP METRIC



4 x Diameter

DESIGNATION	DIMENSIONS							INSERT (see page 54)	SPARE PARTS	
	D _{mm}	D	d _{mm} ²	d ³	l ¹	l ²	t _{max}		Insert Lock Screw	Torx Wrench
TCP-14.5R4	14.5	.570	25	1.69	5.24	3.03	2.28	XOMT-050204	214.60.125	214.75.490
TCP-15R4	15.0	.590	25	1.69	5.31	3.11	2.36			
TCP-16R4	16.0	.629	25	1.69	5.47	3.27	2.51			
TCP-17R4	17.0	.669	25	1.69	5.63	3.43	2.67			
TCP-17.5R4	17.5	.688	25	1.69	5.71	3.50	2.75			
TCP-18R4	18.0	.708	25	1.69	5.79	3.58	2.83			
TCP-19R4	19.0	.748	25	1.69	5.95	3.74	2.99	XOMT-070304	214.80.800	214.80.866
TCP-20R4	20.0	.787	25	1.69	6.10	3.90	3.14			
TCP-21R4	21.0	.826	25	1.69	6.26	4.06	3.30			
TCP-22R4	22.0	.866	25	1.69	6.42	4.21	3.46			
TCP-23R4	23.0	.905	25	1.69	6.58	4.37	3.62			
TCP-24R4	24.0	.944	25	1.69	6.73	4.53	3.77			
TCP-25R4	25.0	.984	32	1.88	7.05	4.69	3.93	XOMT-09T306	214.80.672	214.80.866
TCP-26R4	26.0	1.023	32	1.88	7.21	4.84	4.09			
TCP-27R4	27.0	1.062	32	1.88	7.36	5.00	4.25			
TCP-28R4	28.0	1.102	32	1.88	7.52	5.16	4.40			
TCP-29R4	29.0	1.141	32	1.88	7.68	5.32	4.56			
TCP-30R4	30.0	1.181	32	1.88	7.84	5.47	4.72			
TCP-31R4	31.0	1.220	32	1.88	7.99	5.63	4.88			
TCP-32R4	32.0	1.259	32	1.88	8.15	5.79	5.03			
TCP-33R4	33.0	1.299	32	1.88	8.31	5.95	5.19			
TCP-34R4	34.0	1.338	32	1.88	8.47	6.10	5.35			

* All dimensions are inch unless indicated

