

NPN

New Product News



TDEEP

New Deep Hole Drilling Brazed Drills



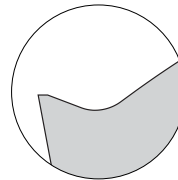
KEY POINT

TaeguTec's deep hole drilling T-DEEP line introduces new brazed BTE drills.

TaeguTec's multi-solution T-DEEP deep hole drilling line now includes BTE brazed drills for longer tool life and excellent machining performance. Featuring a new TTB930 brazed tip as well as a sharp cutting edge design, the new BTE drills are available upon request in a $\text{\O}15.60\text{-}16.70$ mm range.

For further information, please contact the relevant product manager.

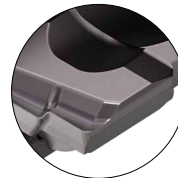
BTE drill features



Positive rake angle design
for low cutting force



New tip grade
for excellent tool life



Reinforced cutting edge
with corner chamfer design



Widened mouth design
for improved chip evacuation

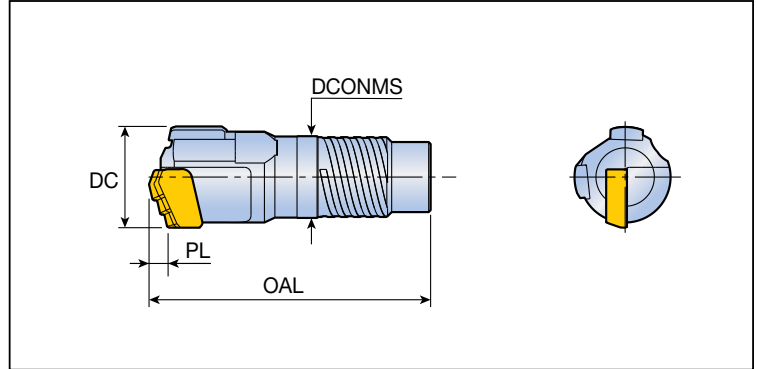
BTE...SE4



Single tube system



- Outer four start thread



Designation	DC	Dimension (mm)			Tube	
		OAL	PL	DCONMS	Part	Diameter (mm)
BTE XXX.XX SE4-14	15.60-16.70	43.4	3.4	12.6	BTSI014	14

Recommended Cutting Conditions

Machining data - BTE

ISO	Material	Condition	Tensile Strength (N/mm ²)	Hardness HB	Material No.	Cutting speed Vc(m/min)	Feed (mm/rev) vs. drill diameter		
							Ø15.60-Ø16.70		
P	Non-alloy steel and cast steel, free cutting steel	<0.25%C	Annealed	420	125	1	80-140	0.10-0.16	
		>=0.25%C	Annealed	650	190	2	80-130	0.10-0.16	
		<0.55%C	Quenched and tempered	850	250	3	80-120	0.10-0.16	
		>=0.55%C	Annealed	750	220	4	70-110	0.10-0.16	
		>=0.55%C	Quenched and tempered	1000	300	5	50-90	0.10-0.12	
	Low alloy steel and cast steel (less than 5% of alloying elements)	Annealed		600	200	6	70-120	0.10-0.16	
				930	275	7	70-110	0.10-0.12	
		Quenched and tempered		1000	300	8	50-90	0.10-0.12	
				1200	350	9	40-70	0.10-0.12	
	High alloy steel, cast steel and tool steel	Annealed		680	200	10	50-90	0.10-0.16	
		Quenched and tempered		1100	325	11	40-80	0.10-0.12	
M	Stainless steel and cast steel	Ferritic / martensitic		680	200	12	40-70	0.04-0.16	
		Martensitic		820	240	13	40-70	0.04-0.16	
		Austenitic		600	180	14	30-70	0.04-0.14	
K	Grey cast iron (GG)	Ferritic / pearlitic			160	15	90-160	0.06-0.16	
		Pearlitic			250	16	80-140	0.06-0.16	
	Cast iron nodular (GGG)	Ferritic			180	17	90-180	0.06-0.16	
		Pearlitic			260	18	80-140	0.06-0.16	
	Malleable cast iron	Ferritic			130	19	90-160	0.06-0.16	
		Pearlitic			230	20	80-140	0.06-0.16	
N	Aluminum-wrought alloy	Not cureable			60	21	90-220	0.08-0.16	
		Cured			100	22	90-220	0.08-0.16	
	Aluminum-cast, alloyed	<=12% Si	Not cureable			75	23	90-220	0.08-0.16
		>12% Si	Cured			90	24	90-220	0.08-0.16
		>12% Si	High temperature			130	25	80-160	0.08-0.16
	Copper alloys	>1% Pb	Free cutting			110	26	90-220	0.08-0.16
			Brass			90	27	90-220	0.08-0.16
	Non-metallic		Electrolitic copper			100	28	90-220	0.08-0.16
			Duroplastics, fiber plastics				29		
		Hard rubber				30			
S	High temp. alloys	Fe based	Annealed			200	31	30-60	0.06-0.14
			Cured			280	32	20-50	0.06-0.14
		Ni or Co based	Annealed			250	33	20-50	0.06-0.14
			Cured			350	34	20-50	0.06-0.14
		Cast			320	35	20-50	0.06-0.14	
	Titanium and Ti alloys			Rm 400			36	20-50	0.06-0.12
			Alpa+bata alloys cured	Rm 1050			37	20-50	0.06-0.12
H	Hardened steel	Hardened				55HRC	38		
		Hardened				60HRC	39		
	Chilled cast iron	Cast				400	40		
	Cast iron nodular (GGG)	Hardened				55HRC	41		

■ Steel ■ Stainless steel ■ Cast iron ■ Nonferrous ■ High temp. alloys ■ Hardened steel