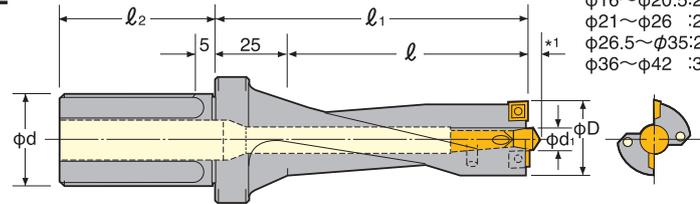


# COMBAT Z DRILL

Cost down can be achieved by improvement of drilling operation.



Dimensions of  $\phi 16 \sim 42$  mm  
COMBAT Z DRILL



\*1 Dimension  
 $\phi 16 \sim \phi 20.5$ : 2.1mm  
 $\phi 21 \sim \phi 26$ : 2.4mm  
 $\phi 26.5 \sim \phi 35$ : 2.8mm  
 $\phi 36 \sim \phi 42$ : 3.4mm

$\phi 16 \sim \phi 38$   
 $L/D=3$  or  $4$

$\phi 16 \sim \phi 35$ mm by every 0.5mm increment,  $\phi 36 \sim \phi 60$ mm by every 1mm increment,  $\phi 60 \sim \phi 80$ mm by every 5mm increment are standard.

Each 0.1mm increment drill is available as an option.

Drill Dia.	3D Series				4D Series				3D, 4D																												
	Code No.			$l$	$l_1$	Code No.			$l$	$l_1$	$\phi d$	$l_2$	Pilot Drill	Insert Tip	Clamp Screw	Tip Clamp Handle																					
	$\phi d - \phi D$	$-l$				$\phi d - \phi D$	$-l$																														
16	ST20-COMZ16	- 50		50	75	ST20-COMZ16	- 65		65	90	20	43	9CMD5 $d_1=\phi 5$	9CMT4 2 pcs	M1840	T-6																					
16.5	-COMZ16.5	- 50				-COMZ16.5	- 65																														
17	-COMZ17	- 50				-COMZ17	- 65																														
17.5	-COMZ17.5	- 50				-COMZ17.5	- 65																														
18	-COMZ18	- 55		55	80	-COMZ18	- 75		75	100					25		53	9CMD6 $d_1=\phi 6$	9CMT6 2 pcs	M1845	T-8																
18.5	-COMZ18.5	- 55				-COMZ18.5	- 75																														
19	-COMZ19	- 55				-COMZ19	- 75																														
19.5	-COMZ19.5	- 60		60	85	-COMZ19.5	- 80		80	105										32		58	9CMD8 $d_1=\phi 8$	9CMT7 2 pcs	M3070	T-10											
20	-COMZ20	- 60				-COMZ20	- 80																														
20.5	-COMZ20.5	- 60				-COMZ20.5	- 80																														
21	ST25-COMZ21	- 60				60	85	ST25-COMZ21																			- 80		80	105	32	58	9CMD10 $d_1=\phi 10$	9CMT9 2 pcs	M4090	T-15	
21.5	-COMZ21.5	- 60		-COMZ21.5	- 80																																
22	-COMZ22	- 65		65	90			-COMZ22	- 85		85	110	32	58		9CMD10 $d_1=\phi 10$											9CMT9 2 pcs	M4090									T-15
22.5	-COMZ22.5	- 65						-COMZ22.5	- 85																												
23	-COMZ23	- 70				-COMZ23	- 90																														
23.5	-COMZ23.5	- 70		70	95	-COMZ23.5	- 90		90	115	32	58																	9CMD10 $d_1=\phi 10$	9CMT9 2 pcs							
24	-COMZ24	- 70				-COMZ24	- 90																														
24.5	-COMZ24.5	- 70				-COMZ24.5	- 90																														
25	-COMZ25	- 75				-COMZ25	-100																														
25.5	-COMZ25.5	- 75		75	100	-COMZ25.5	-100		100	125					32		58	9CMD10 $d_1=\phi 10$	9CMT9 2 pcs	M4090	T-15																
26	-COMZ26	- 75				-COMZ26	-100																														
26.5	ST32-COMZ26.5-80N					ST32-COMZ26.5-110N																															
27	-COMZ27	- 80				-COMZ27	-110																														
27.5	-COMZ27.5	- 80		80	105	-COMZ27.5	-110		110	135												32	58	9CMD10 $d_1=\phi 10$	9CMT9 2 pcs	M4090					T-15						
28	-COMZ28	- 80				-COMZ28	-110																														
28.5	-COMZ28.5	- 90				-COMZ28.5	-120																														
29	-COMZ29	- 90				-COMZ29	-120																														
29.5	-COMZ29.5	- 90		90	115	-COMZ29.5	-120		120	145	32	58	9CMD10 $d_1=\phi 10$	9CMT9 2 pcs		M4090											T-15										
30	-COMZ30	- 90				-COMZ30	-120																														
30.5	-COMZ30.5	- 90				-COMZ30.5	-120																														
31	-COMZ31	- 90				-COMZ31	-120																														
31.5	-COMZ31.5	- 90		90	115	-COMZ31.5	-120		120	145					32		58	9CMD10 $d_1=\phi 10$	9CMT9 2 pcs	M4090	T-15																
32	-COMZ32	- 90				-COMZ32	-120																														
32.5	-COMZ32.5	- 90				-COMZ32.5	-120																														
33	-COMZ33	- 90				-COMZ33	-120																														
33.5	-COMZ33.5	- 90		100	125	-COMZ33.5	-120		125	125												32	58	9CMD10 $d_1=\phi 10$	9CMT9 2 pcs	M4090		T-15									
34	-COMZ34	- 90				-COMZ34	-120																														
34.5	-COMZ34.5	- 90				-COMZ34.5	-120																														
35	-COMZ35	- 90				-COMZ35	-120																														
36	-COMZ36	-100		100	125	-COMZ36	-140		125	125	32	58	9CMD10 $d_1=\phi 10$	9CMT9 2 pcs		M4090											T-15										
37	-COMZ37	-100				-COMZ37	-140																														
38	-COMZ38	-100				-COMZ38	-140																														

★2 off Pilot Drill, one set of Insert and Insert Clamp Handle are supplied as standard.

★Please refer P.106 for Centre Through Side Lock Holder, P.108 for Flange Through Side Lock Holder and P.111 for Oil Hole Holder for COMBAT Z Drill at M/C use.

REAMER-DRILL