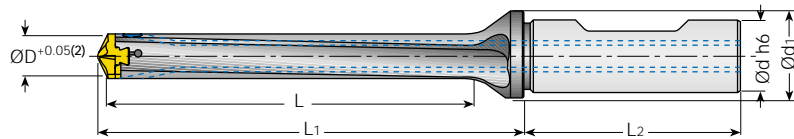


## DCM INDEXABLE HEAD DRILLS

Drilling Depth 8xD

Range Ø10.0 to Ø20.0



## DCM

ØD <sup>(1)</sup> Range	L	Designation	d	d1	L1	L2	Pocket Size	Key	Drilling Heads
10.0-10.9	80	DCM 100-080-16A-8D	16	20	94.0	48	10	K DCM-10	IDI
11.0-11.9	88	DCM 110-088-16A-8D	16	20	103.2	48	11	K DCM-11	
12.0-12.9	96	DCM 120-096-16A-8D	16	20	112.3	48	12	K DCM-12	
13.0-13.9	104	DCM 130-104-16A-8D	16	20	121.5	48	13	K DCM-13	
14.0-14.9	112	DCM 140-112-16A-8D	16	20	131.2	48	14	K DCM-14	
15.0-15.9	120	DCM 150-120-20A-8D	20	25	140.7	50	15	K DCM-15	
16.0-16.9	128	DCM 160-128-20A-8D	20	25	150.0	50	16	K DCM-16	
17.0-17.9	136	DCM 170-136-20A-8D	20	25	158.5	50	17	K DCM-17	
18.0-17.9	144	DCM 180-144-25A-8D	25	32	168.3	56	18	K DCM-18	
19.0-19.9	152	DCM 190-152-256A-8D	25	32	177.3	56	19	K DCM-19	
20.0-20.9	160	DCM 200-160-256A-8D	25	32	182.2	56	20	K DCM-20	

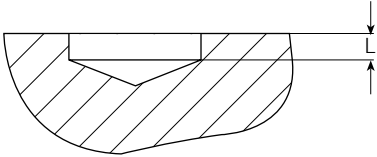
(1) Do not mount smaller drilling heads than specified range for drill body.

(2) Hole tolerance in average conditions; however, it can be higher or lower according to machine and tooling conditions.

For drilling heads, see Hole Making, turnPlus or Millus catalogs.

### Centering Hole Data

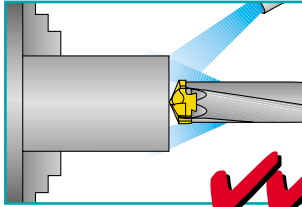
Drill Dia.	Designation	Pre Hole Depth - L	Centerinnng Drill
10	DCM 100-080-16A-8D	5	DCM 100-030-16A-3D
11	DCM 110-088-16A-8D	5	DCM 110-033-16A-3D
12	DCM 120-096-16A-8D	5	DCM 120-036-16A-3D
13	DCM 130-104-16A-8D	5	DCM 130-039-16A-3D
14	DCM 140-112-16A-8D	5	DCM 140-042-16A-3D
15	DCM 150-120-20A-8D	5	DCM 150-045-20A-3D
16	DCM 160-128-20A-8D	5	DCM 160-048-20A-3D
17	DCM 170-136-20A-8D	5	DCM 170-051-20A-3D
18	DCM 180-144-25A-8D	5	DCM 180-054-25A-3D
19	DCM 190-152-25A-8D	5	DCM 190-057-25A-3D
20	DCM 200-160-25A-8D	5	DCM 200-060-25A-3D



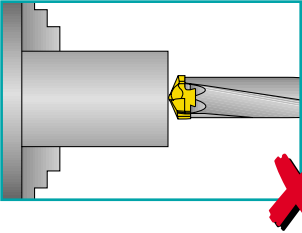
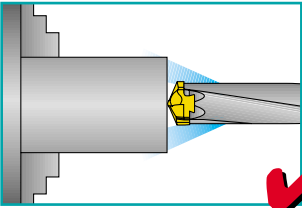
# CHAMDRILL

## User Guide

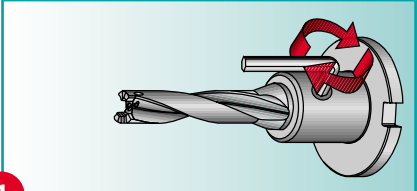
### Coolant



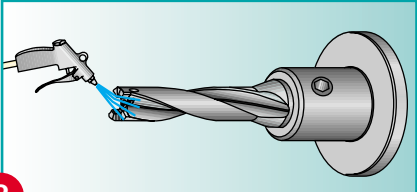
In stationary drill applications both through tool and external coolant supply is recommended.



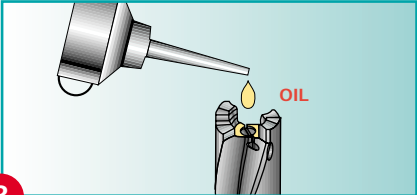
### Drilling Heads Mounting Procedure



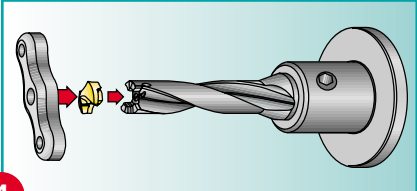
1



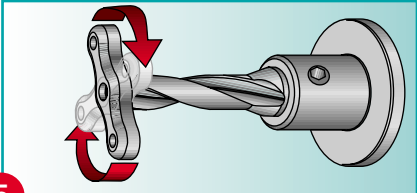
2



3



4



5

## Machining Data

Following is machining data for the DCM drills.

ISO	Material	Condition	Hardness HB	Cutting Speed Vc m/min	Feed vs. Drill Diameter mm/rev						
					D=8-10	D=11-12	D=13-14	D=15-16	D=17-20	D=21-25	
P	Non-alloy steel and cast steel, free cutting steel	<0.25%	Annealed	125	0.12-0.2	0.15-0.25	0.2-0.3	0.25-0.35	0.25-0.45	0.25-0.45	
		>=0.25%	Annealed	190							
		< 0.55%	Quenched and tempered	250							
		>=0.55%	Annealed	220							
	Low alloy steel and cast steel (less than 5% alloying elements)	Quenched and tempered	300	70-90	0.12-0.2	0.15-0.25	0.2-0.3	0.25-0.35	0.3-0.4	0.3-0.45	
		Annealed	200	80-130							
		Quenched and tempered	275	70-110							
			300	60-90							
High alloyed steel, cast steel, and tool steel	Annealed	200	50-80	0.12-0.2	0.12-0.22	0.15-0.25	0.2-0.28	0.25-0.33	0.25-0.35		
	Quenched and tempered	325	40-70								
M	Stainless steel and cast steel	Ferritic/martensitic	200	20-50	0.08-0.14	0.1-0.16	0.12-0.18	0.14-0.2	0.16-0.24	0.15-0.28	
		Martensitic	240	20-50							
		Austenitic	180	20-50							
K	Cast iron nodular (GGG)	Ferritic/pearlitic	180	90-140	0.2-0.3	0.25-0.35	0.3-0.4	0.35-0.45	0.4-0.5	0.4-0.6	
		Pearlitic	260	80-130							
	Grey cast iron (GG)	Ferritic	160	100-180							
		Pearlitic	250	90-160							
	Malleable cast iron	Ferritic	130								
		Pearlitic	230								
N	Aluminum-wrought alloy	Not cureable	60	90-160	0.2-0.35	0.25-0.4	0.3-0.45	0.35-0.5	0.4-0.6	0.4-0.65	
		Cured	100								
	<=12% Si	Not cureable	75								
		Cured	90								
	Aluminum-cast, alloyed	>12% Si	High temperature	130							80-120
		>1% Pb	Free cutting	110							90-160
	Copper alloys	Brass	90								
		Electrolitic copper	100								
Non metallic	Duroplastics, fiber plastics										
	Hard rubber										
S	High temp. alloys Fe based	Annealed	200	30-50	0.05-0.1	0.08-0.13	0.1-0.15	0.12-0.18	0.12-0.2	0.12-0.22	
		Cured	280								
	Super alloys Ni or Co based	Annealed	250	20-40							
		Cured	350								
		Cast	320								
	Titanium Ti alloys			20-50							0.06-0.12
Alpha+beta alloys cured											
H	Hardened steel	Hardened	55 HRC	20-50	0.06-0.12	0.09-0.15	0.12-0.18	0.15-0.2	0.15-0.23	0.15-0.25	
		Hardened	60 HRC								
	Chilled cast iron	Cast	400								
	Cast iron	Hardened	55 HRC								

\* Grades: first choice IC908.

\* For material group number please refer to our general catalog instructions.

\* This table refers to 3/5xD drills ratio usage, for 8xD ratio decrease cutting data by 20%.

\* Chipformer should be selected based on our geometry range recommendations.

\* When using external coolant supply only, reduce cutting speed by 10%.

\* Use internal coolant supply when machining austenitic stainless steel.