

RECOMMENDED CUTTING CONDITIONS

DH223, DH224 SERIES

without COOLANT HOLES

RPM = (rev./min.)
FEED = (mm/rev.)

ISO	VDI 3323	Material Description	Vc (m/min)	Parameter	Drill Diameter (mm)		Vc (m/min)	Parameter	Drill Diameter (mm)												
			1.0~2.9		1.0	2.0	3.0~20.0		3.0	4.0	5.0	6.0	8.0	10.0	12.0	14.0	16.0	18.0	20.0		
P	2	Non-alloy steel	70	RPM	22,280	11,140	100	RPM	10,610	7,960	6,370	5,310	3,980	3,180	2,650	2,270	1,990	1,770	1,590		
			FEED	0.03-0.05	0.05-0.07		FEED	0.06-0.12	0.08-0.14	0.14-0.20	0.16-0.22	0.18-0.24	0.19-0.27	0.21-0.29	0.23-0.31	0.25-0.33	0.28-0.38	0.30-0.40			
	3		RPM	22,280	11,140	100	RPM	10,610	7,960	6,370	5,310	3,980	3,180	2,650	2,270	1,990	1,770	1,590			
			FEED	0.03-0.05	0.05-0.07		FEED	0.06-0.12	0.08-0.14	0.14-0.20	0.16-0.22	0.18-0.24	0.19-0.27	0.21-0.29	0.23-0.31	0.25-0.33	0.28-0.38	0.30-0.40			
	4	RPM	22,280	11,140	100	RPM	10,610	7,960	6,370	5,310	3,980	3,180	2,650	2,270	1,990	1,770	1,590				
		FEED	0.03-0.05	0.05-0.07		FEED	0.04-0.10	0.07-0.13	0.10-0.16	0.12-0.18	0.14-0.20	0.15-0.23	0.17-0.25	0.18-0.26	0.19-0.27	0.20-0.30	0.22-0.32				
	5	RPM	19,100	9,550	80	RPM	8,490	6,370	5,090	4,240	3,180	2,550	2,120	1,820	1,590	1,410	1,270				
		FEED	0.03-0.05	0.05-0.07		FEED	0.04-0.10	0.07-0.13	0.10-0.16	0.12-0.18	0.14-0.20	0.15-0.23	0.17-0.25	0.18-0.26	0.19-0.27	0.20-0.30	0.22-0.32				
	6	RPM	22,280	11,140	100	RPM	10,610	7,960	6,370	5,310	3,980	3,180	2,650	2,270	1,990	1,770	1,590				
		FEED	0.03-0.05	0.05-0.07		FEED	0.06-0.12	0.08-0.14	0.14-0.20	0.16-0.22	0.18-0.24	0.19-0.27	0.21-0.29	0.23-0.31	0.25-0.33	0.28-0.38	0.30-0.40				
	7	RPM	19,100	9,550	80	RPM	8,490	6,370	5,090	4,240	3,180	2,550	2,120	1,820	1,590	1,410	1,270				
	FEED	0.03-0.05	0.05-0.07		FEED	0.06-0.12	0.08-0.14	0.14-0.20	0.16-0.22	0.18-0.24	0.19-0.27	0.21-0.29	0.23-0.31	0.25-0.33	0.28-0.38	0.30-0.40					
8	RPM	19,100	9,550	80	RPM	8,490	6,370	5,090	4,240	3,180	2,550	2,120	1,820	1,590	1,410	1,270					
	FEED	0.02-0.04	0.03-0.05		FEED	0.04-0.10	0.07-0.13	0.10-0.16	0.12-0.18	0.14-0.20	0.15-0.23	0.17-0.25	0.18-0.26	0.19-0.27	0.20-0.30	0.22-0.32					
8	RPM	9,550	4,770	40	RPM	4,240	3,180	2,550	2,120	1,590	1,270	1,060	910	800	710	640					
	FEED	0.02-0.04	0.03-0.05		FEED	0.03-0.08	0.05-0.11	0.08-0.14	0.10-0.16	0.12-0.18	0.13-0.19	0.14-0.20	0.15-0.21	0.16-0.22	0.17-0.25	0.18-0.28					
10	RPM	15,920	7,960	70	RPM	7,430	5,570	4,460	3,710	2,790	2,230	1,860	1,590	1,390	1,240	1,110					
	FEED	0.03-0.05	0.05-0.07		FEED	0.04-0.10	0.07-0.13	0.10-0.16	0.12-0.18	0.14-0.20	0.15-0.23	0.17-0.25	0.18-0.26	0.19-0.27	0.20-0.30	0.22-0.32					
11	RPM	9,550	4,770	40	RPM	4,240	3,180	2,550	2,120	1,590	1,270	1,060	910	800	710	640					
	FEED	0.02-0.04	0.03-0.05		FEED	0.03-0.08	0.05-0.11	0.08-0.14	0.10-0.16	0.12-0.18	0.13-0.19	0.14-0.20	0.15-0.21	0.16-0.22	0.17-0.25	0.18-0.28					
M	12	Stainless steel	50	RPM	15,920	7,960	70	RPM	7,430	5,570	4,460	3,710	2,790	2,230	1,860	1,590	1,390	1,240	1,110		
			FEED	0.03-0.05	0.05-0.07		FEED	0.06-0.12	0.08-0.14	0.14-0.20	0.16-0.22	0.18-0.24	0.19-0.27	0.21-0.29	0.23-0.31	0.25-0.33	0.28-0.38	0.30-0.40			
	13	RPM	11,140	5,570	45	RPM	4,770	3,580	2,860	2,390	1,790	1,430	1,190	1,020	900	800	720				
		FEED	0.02-0.04	0.03-0.05		FEED	0.04-0.10	0.07-0.13	0.10-0.16	0.12-0.18	0.14-0.20	0.15-0.23	0.17-0.25	0.18-0.26	0.19-0.27	0.20-0.30	0.22-0.32				
K	15	Grey cast iron	70	RPM	22,280	11,140	100	RPM	10,610	7,960	6,370	5,310	3,980	3,180	2,650	2,270	1,990	1,770	1,590		
			FEED	0.04-0.06	0.04-0.06		FEED	0.08-0.14	0.12-0.18	0.15-0.22	0.20-0.26	0.22-0.28	0.25-0.33	0.27-0.35	0.29-0.37	0.31-0.39	0.32-0.42	0.34-0.44			
	16	RPM	20,690	10,350	80	RPM	8,490	6,370	5,090	4,240	3,180	2,550	2,120	1,820	1,590	1,410	1,270				
		FEED	0.04-0.06	0.04-0.06		FEED	0.06-0.12	0.08-0.14	0.14-0.20	0.16-0.22	0.18-0.24	0.19-0.27	0.21-0.29	0.23-0.31	0.25-0.33	0.28-0.38	0.30-0.40				
	17	Nodular cast iron	70	RPM	22,280	11,140	100	RPM	10,610	7,960	6,370	5,310	3,980	3,180	2,650	2,270	1,990	1,770	1,590		
			FEED	0.04-0.06	0.04-0.06		FEED	0.08-0.14	0.12-0.18	0.15-0.22	0.20-0.26	0.22-0.28	0.25-0.33	0.27-0.35	0.29-0.37	0.31-0.39	0.32-0.42	0.34-0.44			
18	RPM	15,920	7,960	70	RPM	7,430	5,570	4,460	3,710	2,790	2,230	1,860	1,590	1,390	1,240	1,110					
	FEED	0.04-0.06	0.04-0.06		FEED	0.06-0.12	0.08-0.14	0.14-0.20	0.16-0.22	0.18-0.24	0.19-0.27	0.21-0.29	0.23-0.31	0.25-0.33	0.28-0.38	0.30-0.40					
19	Malleable cast iron	60	RPM	19,100	9,550	80	RPM	8,490	6,370	5,090	4,240	3,180	2,550	2,120	1,820	1,590	1,410	1,270			
		FEED	0.04-0.06	0.04-0.06		FEED	0.08-0.14	0.12-0.18	0.15-0.22	0.20-0.26	0.22-0.28	0.25-0.33	0.27-0.35	0.29-0.37	0.31-0.39	0.32-0.42	0.34-0.44				
20	RPM	15,920	7,960	70	RPM	7,430	5,570	4,460	3,710	2,790	2,230	1,860	1,590	1,390	1,240	1,110					
	FEED	0.03-0.05	0.05-0.07		FEED	0.06-0.12	0.08-0.14	0.14-0.20	0.16-0.22	0.18-0.24	0.19-0.27	0.21-0.29	0.23-0.31	0.25-0.33	0.28-0.38	0.30-0.40					
H	38	Hardened steel	20	RPM	6,370	3,180	25	RPM	2,650	1,990	1,590	1,330	990	800	660	570	500	440	400		
				FEED	0.01-0.02	0.01-0.03		FEED	0.01-0.03	0.01-0.04	0.02-0.05	0.03-0.06	0.03-0.06	0.04-0.07	0.04-0.08	0.05-0.09	0.05-0.09	0.05-0.10	0.05-0.10		

SUPER HARDENED
HSS END MILL

COATED CARBIDE END MILL
FOR GENERAL

COATED CARBIDE END MILL
FOR HEAVY CUTTING

COATED CARBIDE END MILL
FOR HARDENED MATERIAL

COATED CARBIDE DRILL
FOR GENERAL