DGN506, DGN508 SERIES with COOLANT HOLES

Vc = m/min
RPM = rev./min.
FEED = mm/rev.

ISO	VDI 3323	Material Description	Vc	Parameter	Drill Diameter (mm) 1.0	2.0	Vc	Parameter	Drill Diameter (mm) 3.0	4.0	5.0	6.0
P	2	Non-alloy steel	95	RPM FEED	30,240 0.03-0.05	15,120 0.05-0.07	130	RPM FEED	13,790 0.06-0.12	10,350 0.08-0.14	8,280 0.14-0.20	6,900 0.16-0.22
	3		95	RPM FEED	30,240 0.03-0.05	15,120 0.05-0.07	130	RPM FEED	13,790 0.06-0.12	10,350 0.08-0.14	8,280 0.14-0.20	6,900 0.16-0.22
	4		95	RPM FEED	30,240 0.03-0.05	15,120 0.05-0.07	130	RPM FEED	13,790 0.04-0.10	10,350 0.07-0.13	8,280 0.10-0.16	6,900 0.12-0.18
	5		85	RPM FEED	27,060 0.03-0.05	13,530 0.05-0.07	110	RPM FEED	11,670 0.04-0.10	8,750 0.07-0.13	7,000 0.10-0.16	5,840 0.12-0.18
	6	Low alloy steel	95	RPM FEED	30,240 0.03-0.05	15,120 0.05-0.07	130	RPM FEED	13,790 0.06-0.12	10,350 0.08-0.14	8,280 0.14-0.20	6,900 0.16-0.22
	7		85	RPM FEED	27,060 0.03-0.05	13,530 0.05-0.07	110	RPM FEED	11,670 0.06-0.12	8,750 0.08-0.14	7,000 0.10-0.20	5,840 0.12-0.24
	8		95	RPM FEED	30,240 0.02-0.04	15,120 0.03-0.05	110	RPM FEED	11,670 0.04-0.10	8,750 0.07-0.13	7,000 0.10-0.16	5,840 0.12-0.18
	9		50	RPM FEED	15,920 0.02-0.04	7,960 0.03-0.05	60	RPM FEED	6,370 0.03-0.08	4,770 0.05-0.11	3,820 0.08-0.14	3,180 0.10-0.16
	10	High alloyed steel, and tool steel	70	RPM FEED	22,280 0.03-0.05	11,140 0.05-0.07	90	RPM FEED	9,550 0.04-0.10	7,160 0.07-0.13	5,730 0.10-0.16	4,770 0.12-0.18
	11		45	RPM FEED	14,320 0.02-0.04	7,160 0.03-0.05	50	RPM FEED	5,310 0.03-0.08	3,980 0.05-0.11	3,180 0.08-0.14	2,650 0.10-0.16
M	12	Stainless steel	75	RPM FEED	23,870 0.03-0.05	11,940 0.05-0.07	95	RPM FEED	10,080 0.06-0.12	7,560 0.08-0.14	6,050 0.14-0.20	5,040 0.16-0.22
	13		55	RPM FEED	17,510 0.02-0.04	8,750 0.03-0.05	65	RPM FEED	6,900 0.04-0.10	5,170 0.07-0.13	4,140 0.10-0.16	3,450 0.12-0.18
K	15	Grey cast iron	95	RPM FEED	30,240 0.04-0.06	15,120 0.04-0.06	130	RPM FEED	13,790 0.08-0.14	10,350 0.12-0.18	8,280 0.18-0.24	6,900 0.14-0.26
	16		90	RPM FEED	28,650 0.04-0.06	14,320 0.04-0.06	115	RPM FEED	12,200 0.06-0.12	9,150 0.08-0.14	7,320 0.14-0.20	6,100 0.16-0.22
	17	Nodular cast iron	110	RPM FEED	35,010 0.04-0.06	17,510 0.04-0.06	145	RPM FEED	15,380 0.08-0.14	11,540 0.12-0.18	9,230 0.18-0.24	7,690 0.14-0.26
	18		75	RPM FEED	23,870 0.04-0.06	11,940 0.04-0.06	95	RPM FEED	10,080 0.06-0.12	7,560 0.08-0.14	6,050 0.14-0.20	5,040 0.16-0.22
	19	Malleable cast iron	85	RPM FEED	27,060 0.04-0.06	13,530 0.04-0.06	110	RPM FEED	11,670 0.08-0.14	8,750 0.12-0.18	7,000 0.18-0.24	5,840 0.14-0.26
	20		75	RPM FEED	23,870 0.03-0.05	11,940 0.05-0.07	95	RPM FEED	10,080 0.06-0.12	7,560 0.08-0.14	6,050 0.14-0.20	5,040 0.16-0.22

ISO	VDI 3323	Material Description	Vc	Parameter	Drill Diameter (mm) 8.0	10.0	12.0	14.0	16.0	18.0	20.0
P	2	Non-alloy steel	130	RPM FEED	5,170 0.18-0.24	4,140 0.22-0.28	3,450 0.20-0.30	2,960 0.22-0.32	2,590 0.24-0.34	2,300 0.28-0.38	2,070 0.30-0.40
	3		130	RPM FEED	5,170 0.18-0.24	4,140 0.22-0.28	3,450 0.20-0.30	2,960 0.22-0.32	2,590 0.24-0.34	2,300 0.28-0.38	2,070 0.30-0.40
	4		130	RPM FEED	5,170 0.14-0.20	4,140 0.18-0.24	3,450 0.14-0.24	2,960 0.16-0.26	2,590 0.18-0.28	2,300 0.20-0.30	2,070 0.22-0.32
	5		110	RPM FEED	4,380 0.14-0.20	3,500 0.18-0.24	2,920 0.14-0.24	2,500 0.16-0.26	2,190 0.18-0.28	1,950 0.20-0.30	1,750 0.22-0.32
	6	Low alloy steel	130	RPM FEED	5,170 0.18-0.24	4,140 0.22-0.28	3,450 0.20-0.30	2,960 0.22-0.32	2,590 0.24-0.34	2,300 0.28-0.38	2,070 0.30-0.40
	7		110	RPM FEED	4,380 0.16-0.28	3,500 0.20-0.30	2,920 0.21-0.30	2,500 0.22-0.35	2,190 0.25-0.36	1,950 0.28-0.38	1,750 0.30-0.40
	8		110	RPM FEED	4,380 0.14-0.20	3,500 0.18-0.24	2,920 0.14-0.24	2,500 0.16-0.26	2,190 0.18-0.28	1,950 0.20-0.30	1,750 0.22-0.32
	9		60	RPM FEED	2,390 0.12-0.18	1,910 0.14-0.20	1,590 0.12-0.22	1,360 0.13-0.23	1,190 0.14-0.24	1,060 0.16-0.26	950 0.18-0.28
	10	High alloyed steel, and tool steel	90	RPM FEED	3,580 0.14-0.20	2,860 0.18-0.24	2,390 0.14-0.24	2,050 0.16-0.26	1,790 0.18-0.28	1,590 0.20-0.30	1,430 0.22-0.32
	11		50	RPM FEED	1,990 0.12-0.18	1,590 0.14-0.20	1,330 0.12-0.22	1,140 0.13-0.23	990 0.14-0.24	880 0.16-0.26	800 0.18-0.28
M	12	Stainless steel	95	RPM FEED	3,780 0.18-0.24	3,020 0.22-0.28	2,520 0.20-0.30	2,160 0.22-0.32	1,890 0.24-0.34	1,680 0.28-0.38	1,510 0.30-0.40
	13		65	RPM FEED	2,590 0.14-0.20	2,070 0.18-0.24	1,720 0.14-0.24	1,480 0.16-0.26	1,290 0.18-0.28	1,150 0.20-0.30	1,030 0.22-0.32
K	15	Grey cast iron	130	RPM FEED	5,170 0.16-0.28	4,140 0.24-0.34	3,450 0.26-0.36	2,960 0.28-0.38	2,590 0.30-0.40	2,300 0.32-0.42	2,070 0.34-0.44
	16		115	RPM FEED	4,580 0.18-0.24	3,660 0.22-0.28	3,050 0.20-0.30	2,610 0.22-0.32	2,290 0.24-0.34	2,030 0.28-0.38	1,830 0.30-0.40
	17	Nodular cast iron	145	RPM FEED	5,770 0.16-0.28	4,620 0.24-0.34	3,850 0.26-0.36	3,300 0.28-0.38	2,880 0.30-0.40	2,560 0.32-0.42	2,310 0.34-0.44
	18		95	RPM FEED	3,780 0.18-0.24	3,020 0.22-0.28	2,520 0.20-0.30	2,160 0.22-0.32	1,890 0.24-0.34	1,680 0.28-0.38	1,510 0.30-0.40
	19	Malleable cast iron	110	RPM FEED	4,380 0.16-0.28	3,500 0.24-0.34	2,920 0.26-0.36	2,500 0.28-0.38	2,190 0.30-0.40	1,950 0.32-0.42	1,750 0.34-0.44
	20		95	RPM FEED	3,780 0.18-0.24	3,020 0.22-0.28	2,520 0.20-0.30	2,160 0.22-0.32	1,890 0.24-0.34	1,680 0.28-0.38	1,510 0.30-0.40

▶ Recommend to reduce the feed rate as following
Feed 100% : DGN506(3×D), DGN508(5×D)