MULTI-1 DRILLS

RECOMMENDED CUTTING CONDITIONS
EMPFOHLENE SCHNEIDPARAMETER

CDRA03, CDRA04 SERIES MULTI-1 DRILLS

VC = M/MIN
RPM = rev./min.
FEED = mm/rev.

ISO	VDI 3323	Material Description	Vc	Parameter	Drill Diameter (mm) 1.0	Vc	Parameter	Drill Diameter (mm) 2.0	3.0	4.0	5.0
P	1	Non-alloy steel	30	RPM	9550	40	RPM	6370	4240	3180	2550
				FEED	0.01~0.03		FEED	0.03~0.06	0.08~0.12	0.09~0.15	0.12~0.18
	2		28	RPM	8910	35	RPM	5570	3710	2790	2230
				FEED	0.01~0.03		FEED	0.03~0.06	0.08~0.12	0.09~0.15	0.12~0.18
	3		28	RPM	8910	35	RPM	5570	3710	2790	2230
				FEED	0.01~0.03		FEED	0.03~0.06	0.08~0.12	0.09~0.15	0.12~0.18
	6	Low alloy steel	28	RPM	8910	35	RPM	5570	3710	2790	2230
				FEED	0.01~0.03		FEED	0.03~0.06	0.08~0.12	0.09~0.15	0.12~0.18
	7		23	RPM	7320	30	RPM	4770	3180	2390	1910
				FEED	0.01~0.03		FEED	0.03~0.05	0.06~0.10	0.07~0.13	0.10~0.16
	8		20	RPM	6370	25	RPM	3980	2650	1990	1590
				FEED	0.01-0.02		FEED	0.02-0.05	0.03-0.07	0.04-0.10	0.06-0.12
	9		15	RPM	4770	20	RPM	3180	2120	1590	1270
				FEED	0.01-0.02		FEED	0.02-0.05	0.03-0.07	0.04-0.10	0.06-0.12
M	12	Stainless steel	15	RPM	4770	20	RPM	3180	2120	1590	1270
				FEED	0.01~0.03		FEED	0.03-0.07	0.05-0.09	0.06-0.12	0.09-0.15
	14		13	RPM	4140	15	RPM	2390	1590	1190	950
				FEED	0.01-0.02		FEED	0.02-0.05	0.03-0.07	0.04-0.10	0.06-0.12
K	15	Grey cast iron	30	RPM	9550	40	RPM	6370	4240	3180	2550
				FEED	0.02~0.04		FEED	0.04~0.10	0.07~0.13	0.09~0.15	0.12~0.18
N	21	Aluminum-wrought alloy	68	RPM	21650	90	RPM	14320	9550	7160	5730
				FEED	0.09~0.13		FEED	0.13~0.17	0.23~0.27	0.27~0.33	0.33~0.39
	22		68	RPM	21650	90	RPM	14320	9550	7160	5730
				FEED	0.09~0.13		FEED	0.13~0.17	0.23~0.27	0.27~0.33	0.33~0.39
	23	Aluminum-cast, alloyed	60	RPM	19100	80	RPM	12730	8490	6370	5090
				FEED	0.09~0.13		FEED	0.13~0.17	0.23~0.27	0.27~0.33	0.33~0.39
	24		55	RPM	17510	70	RPM	11140	7430	5570	4460
				FEED	0.06~0.10		FEED	0.10~0.14	0.15~0.19	0.20~0.26	0.24~0.30
S	36	Titanium Alloys	5	RPM	1590	5	RPM	800	530	400	320
				FEED	0.01~0.02		FEED	0.02~0.05	0.03~0.07	0.04~0.08	0.06~0.12

ISO	VDI 3323	Material Description	Vc	Parameter	Drill Diameter (mm) 6.0	8.0	10.0	12.0	13.0
P	1	Non-alloy steel	40	RPM	2120	1590	1270	1060	980
				FEED	0.14~0.20	0.18~0.24	0.18~0.28	0.20~0.30	0.20~0.30
	2		35	RPM	1860	1390	1110	930	860
				FEED	0.14~0.20	0.18~0.24	0.18~0.28	0.20~0.30	0.20~0.30
	3		35	RPM	1860	1390	1110	930	860
				FEED	0.14~0.20	0.18~0.24	0.18~0.28	0.20~0.30	0.20~0.30
	6	Low alloy steel	35	RPM	1860	1390	1110	930	860
				FEED	0.14~0.20	0.18~0.24	0.18~0.28	0.20~0.30	0.20~0.30
	7		30	RPM	1590	1190	950	800	730
				FEED	0.12~0.18	0.14~0.20	0.14~0.24	0.16~0.26	0.16~0.26
	8		25	RPM	1330	990	800	660	610
				FEED	0.07-0.13	0.10-0.20	0.12-0.22	0.14~0.24	0.14~0.24
	9		20	RPM	1060	800	640	530	490
				FEED	0.07-0.13	0.10-0.20	0.12-0.22	0.14~0.24	0.14~0.24
M	12	Stainless steel	20	RPM	1060	800	640	530	490
				FEED	0.12-0.18	0.18-0.24	0.20-0.30	0.26-0.36	0.26-0.36
	14		15	RPM	800	600	480	400	370
				FEED	0.07-0.13	0.10-0.20	0.12-0.22	0.14~0.24	0.14~0.24
K	15	Grey cast iron	40	RPM	2120	1590	1270	1060	980
				FEED	0.13~0.19	0.18~0.24	0.20~0.30	0.22~0.32	0.22~0.32
N	21	Aluminum-wrought alloy	90	RPM	4770	3580	2860	2390	2200
				FEED	0.40~0.46	0.45~0.51	0.51~0.61	0.63~0.73	0.63~0.73
	22		90	RPM	4770	3580	2860	2390	2200
				FEED	0.40~0.46	0.45~0.51	0.51~0.61	0.63~0.73	0.63~0.73
	23	Aluminum-cast, alloyed	80	RPM	4240	3180	2550	2120	1960
				FEED	0.40~0.46	0.45~0.51	0.51~0.61	0.63~0.73	0.63~0.73
	24		70	RPM	3710	2790	2230	1860	1710
				FEED	0.28~0.34	0.30~0.36	0.34~0.44	0.36~0.46	0.36~0.46
S	36	Titanium Alloys	5	RPM	270	200	160	130	120
				FEED	0.07~0.13	0.09~0.15	0.12~0.22	0.14~0.24	0.14~0.24