



**DIE & MOLD SERIES**

CATALOG NO. 10016

**HIGH PERFORMANCE DIE & MOLD  
RADIUS & PROFILE MILLING  
APPLICATIONS**

**DIEMASTER**



**DIJET INCORPORATED**  
[www.dijetusa.com](http://www.dijetusa.com)

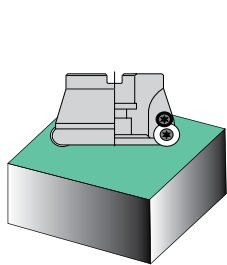
# Diemaster

## High Productivity Radius Tools

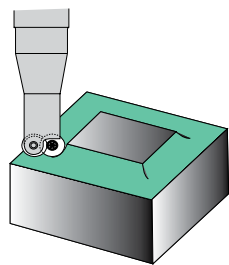
Predominantly for slot milling, ramp milling, pocket milling and copy milling.

DIJET's Diemaster is designed to offer high productivity and security in die making, aerospace and automobile industries. Diemaster can be utilized on conventional, NC, CNC, and copy milling machines. These products are recommended for both shallow and deep forms.

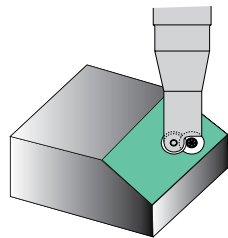
### Versatility of Diemaster



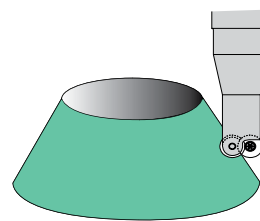
**Face milling**



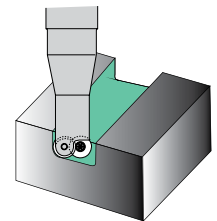
**Peripheral milling**



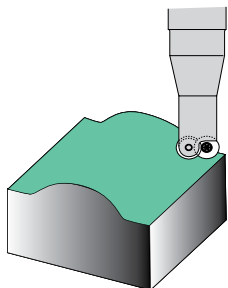
**Ramp milling**



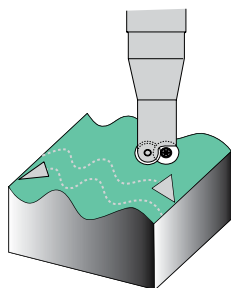
**Contour milling**



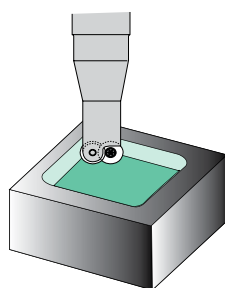
**Slot milling**



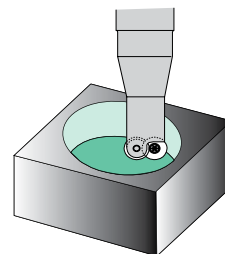
**Profile milling**



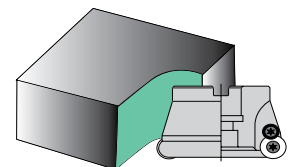
**Copy milling**



**Pocket milling**

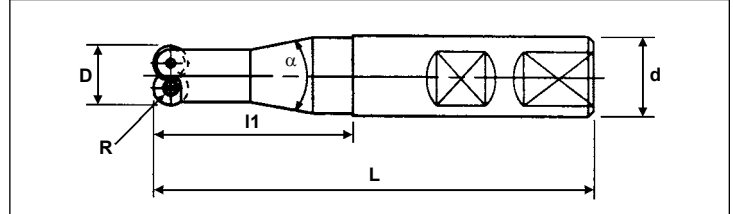


**Helical interpolation**



**Plunge milling**

# Diemaster End Mills



## Specifications

CATALOG NUMBER	DIMENSIONS						PARTS			INSERTS	Q
	D	R	L	L1	d	$\alpha$	Screw	Wrench	Others		
DDM-2500-1.5-S625	.500	.1250	3.46	1.57	.625	19°					
DDM-2500-2.3-S625	.500	.1250	4.25	2.36	.625	7°	CSW-2542	T-07	-	RDHX2507M0T	2
DDM-2500-3.1-S750	.500	.1250	5.12	3.15	.750	9°					
DDM-2625-1.5-S625	.625	.1250	3.46	1.57	.625	-					
DDM-2625-2.3-S625	.625	.1250	4.25	2.36	.625	1°					
DDM-2625-3.1-S750	.625	.1250	5.12	3.15	.750	4°	CSW-2547	T-07	-	RDHX2509M0T	2
DDM-2625-3.9-S750	.625	.1250	5.90	3.93	.750	3°					
DDM-2625-4.7-S100	.625	.1250	6.93	4.72	1.00	6°					
★ DDM-2750-1.5-S750	.750	.1875	3.54	1.57	.750	-					
★ DDM-2750-2.3-S750	.750	.1875	4.33	2.36	.750	3°					
★ DDM-2750-3.1-S100	.750	.1875	5.35	3.15	1.00	9°	CSW-3570	T-15	-	RDHX3712M0T	2
★ DDM-2750-3.9-S100	.750	.1875	6.14	3.93	1.00	6°					
★ DDM-2750-4.7-S100	.750	.1875	6.93	4.72	1.00	5°					
DDM-2100-S1.5-S100-37	1.00	.1875	3.85	1.57	1.00	-					
DDM-2100-S2.3-S100-37	1.00	.1875	4.65	2.36	1.00	-					
DDM-2100-S3.1-S125-37	1.00	.1875	5.45	3.15	1.25	-					
★ DDM-2100-S3.9-S125-37	1.00	.1875	6.25	3.93	1.25	-	CSW-3575	T-15	-	RDHX3712M0T	2
DDM-2100-S4.7-S125-37	1.00	.1875	7.00	4.72	1.25	-					
★ DDM-2100-S5.9-S125-37	1.00	.1875	8.19	5.90	1.25	-					
DDM-2125AR-S3.9-S125-50	1.25	.250	6.62	3.93	1.25	-					
DDM-2125AR-S5.9-S125-50	1.25	.250	8.60	5.90	1.25	-	CSW-3575	T-15	CB3540	RDHX5015MO...	2
DDM-2125AR-S7.5-S125-50	1.25	.250	10.19	7.50	1.25	-					

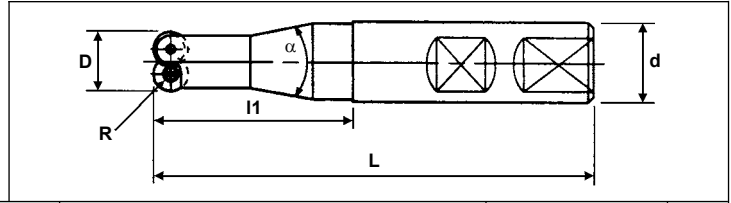
★ Positive Style Available

Note: All cutters are supplied without inserts.

## Inserts

fig. 1	CATALOG NUMBER	DIMENSIONS		FIG.	STOCK							
		A	T		C.B.N.	COATED						
						JBN330	JC5003	JC5015	JC5025	JC5030	JC5040	JC3562
	RDHX2507MOS	.250	.078	1		•						
	RDHX2507MOT	.250	.078	1			•	•		•	•	
	RDHX2509MOS	.250	.094	1		•						
	RDHX2509MOT	.250	.094	1	•		•	•		•		
	RDHX3712MOS	.375	.125	1		•						
	RDHX3712MOT	.375	.125	1	•		•			•	•	
	RDHX5015MOS	.500	.156	1		•						
	RDHX5015MOT	.500	.156	1	•		•			•	•	

## Diemaster End Mills



### Specifications

CATALOG NUMBER	DIMENSIONS						PARTS			INSERTS	Q
	D	R	L	l1	d	$\alpha$	Screw	Wrench	Others		
★ DDM-2100-1.5-S100	1.00	.2500	3.85	1.57	1.00	7°	CSW-3575	T-15	CB3540	RDHX5015MOT	2
★ DDM-2100-2.3-S100	1.00	.2500	4.65	2.36	1.00	4°					
★ DDM-2100-3.1-S125	1.00	.2500	5.45	3.15	1.25	4°					
★ DDM-2100-3.9-S125	1.00	.2500	6.25	3.93	1.25	5°					
★ DDM-2100-4.7-S125	1.00	.2500	7.00	4.72	1.25	3°					
★ DDM-2100-5.9-S125	1.00	.2500	8.19	5.90	1.25	3°					
DDM-2125-2.3-S125	1.25	.3125	4.64	2.36	1.25	6°	CSW-4510	T-20	CW-11	RDHX6218MOT RDMT6218MOT	2
★ DDM-2125-3.1-S125	1.25	.3125	5.43	3.15	1.25	2°					
DDM-2125-3.9-S150	1.25	.3125	6.62	3.93	1.50	7°					
DDM-2125-4.7-S150	1.25	.3125	7.41	4.72	1.50	5°					
DDM-2125-5.9-S150	1.25	.3125	8.60	5.90	1.50	4°					
DDM-2125-6.3-S150	1.25	.3125	8.99	6.30	1.50	3°					
DDM-2125-7.5-S150	1.25	.3125	10.19	7.50	1.50	2°	CSW-4510	T-20	CW-11	RDHX6218MOT RDMT6218MOT	2
DDM-2125-9.5-S150	1.25	.3125	12.19	9.50	1.50	2°					
DDM-2150-2.3-S150	1.50	.3125	5.05	2.36	1.50	8°					
DDM-2150-3.1-S150	1.50	.3125	5.84	3.15	1.50	2°					
DDM-2150-3.9-S200	1.50	.3125	7.43	3.93	2.00	6°					
DDM-2150-5.1-S200	1.50	.3125	8.65	5.15	2.00	4°					
DDM-2150-6.3-S200	1.50	.3125	9.80	6.30	2.00	3°	CSW-4510	T-20	CW-11	RDHX7525MOT RDMT7525MOT	2
DDM-2150-2.3-S150-75	1.50	.3750	5.05	2.36	1.50	8°					
DDM-2150-3.1-S150-75	1.50	.3750	5.84	3.15	1.50	2°					
DDM-2150-3.9-S200-75	1.50	.3750	7.43	3.93	2.00	6°	CSW-4510	T-20	CW-11	RDHX6218MOT RDMT6218MOT	3
DDM-3200-2.5-S200	2.00	.3125	6.00	2.50	2.00	-					
DDM-3200-4.5-S200	2.00	.3125	8.00	4.50	2.00	-					

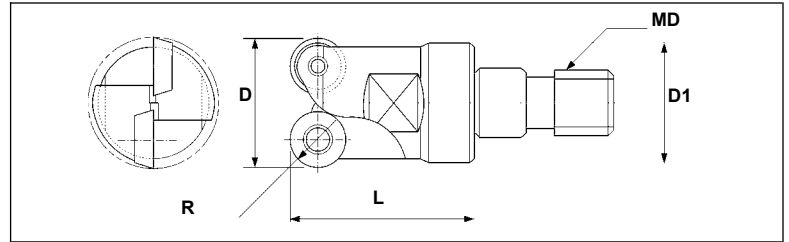
★ Positive Style Available

Note: All cutters are supplied without inserts.

### Inserts

fig. 1	CATALOG NUMBER	DIMENSIONS		FIG.	STOCK							
		A	T		C.B.N.	COATED						
						JBN330	JC5003	JC5015	JC5025	JC5030	JC5040	JC3552
	RDHX5015MOS	.500	.156	1		•						
	RDHX5015MOT	.500	.156	1	•		•			•	•	
	RDHX6218MOS	.625	.187	1		•						
	RDHX6218MOT	.625	.187	1	•		•	•			•	•
	RDHX7525MOS	.750	.236	1		•						
	RDHX7525MOT	.750	.236	1			•			•	•	
	RDMT6218MOT	.625	.187	2				•	•			
	RDMT7525MOT	.750	.236	2				•	•			

## Diemaster Modular Heads



### Specifications

CATALOG NUMBER	DIMENSIONS					HEAD TORQUE lbs.ft	PARTS			INSERT
	D	R	L	D1	MD		Clamp	Screw	Wrench	
MDH-2075AR-M10	.750	.187	1.18	.728	M10	33.9	-	CSW-3570	T-15	RDHX3712MO... (2)
MDH-2100AR-M12	1.00	.250	1.38	.945	M12	59	CB3540	CSW-3575	T-15	RDHX5015MO.. (2)
MDH-2125AR-M16	1.25	.312	1.69	1.14	M16	66.3	CW-11	CSW-4510	A-20	RDHX6218MO.. (2) RDMT6218MOT (2)

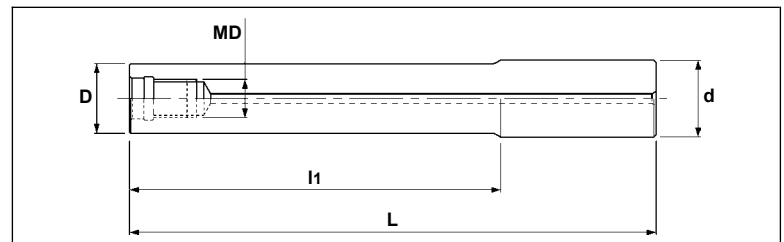
Note: All cutters are supplied without inserts.

### Inserts

FIG. 1 	CATALOG NUMBER	DIMENSIONS		FIG.	COATED GRADES				
		A	T		JC5003	JC5015	JC5025	JC5030	JC5040
FIG. 2 	RDHX3712MOS	.375	.125	1	•				
	RDHX3712MOT	.375	.125	1		•		•	•
	RDHX5015MOS	.500	.156	1	•				
	RDHX5015MOT	.500	.156	1		•		•	•
	RDHX6218MOS	.625	.187	1	•				
	RDHX6218MOT	.625	.187	1		•	•		•
	RDMT6218MOT	.625	.187	2				•	•

## Modular Head Holders

### Carbide Holder with Coolant Hole



### Specifications

CATALOG NUMBER	DIMENSIONS					APPLICABLE HOLDERS
	D	L1	L	d	MD	
MSN-M10-2.0-S075C	.728	2.00	5.00	.750	M10	MDH-2075AR-M10
MSN-M10-4.0-S075C	.728	4.00	7.00	.750	M10	
MSN-M10-6.0-S075C	.728	6.00	9.00	.750	M10	
MSN-M12-2.0-S100C	.945	2.00	5.00	1.00	M12	MDH-2100AR-M12
MSN-M12-4.0-S100C	.945	4.00	7.00	1.00	M12	
MSN-M12-6.0-S100C	.945	6.00	9.00	1.00	M12	
MSN-M12-8.0-S100C	.945	8.00	11.00	1.00	M12	
MSN-M16-2.0-S125C	1.14	2.00	5.00	1.25	M16	MDH-2125AR-M16
MSN-M16-4.0-S125C	1.14	4.00	7.00	1.25	M16	
MSN-M16-6.0-S125C	1.14	6.00	9.00	1.25	M16	
MSN-M16-8.0-S125C	1.14	8.00	11.00	1.25	M16	

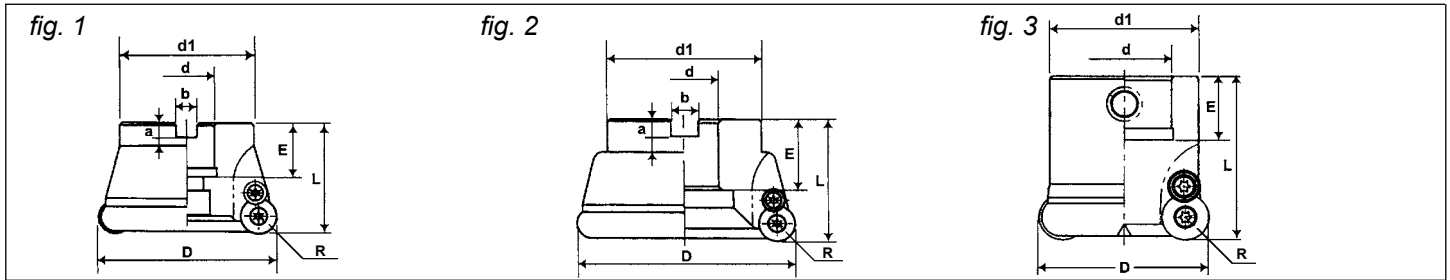
## Diemaster Face Mills



The strength of the round insert enables Dijet Diemaster to achieve high metal removal rates with good insert security.

Entering Angle	: -	A.R. : 0°
		R.R. : 0°
Max. D.O.C.		1/2" insert: .160" 5/8" insert: .200" 3/4" insert: .240"

### Specifications



CATALOG NUMBER	DIMENSIONS								FIG.	INSERT NUMBER	SCREW	CLAMP	WRENCH	Q
	D	R	L	d	d1	a	b	E						
★ DDM-5200-75R-50	2.00	.250	2.00	.750	1.73	.196	.313	.750	1	RDHX5015M0T	CSW-3595	CB-3540	T-15SD	5
★ DDM-4200-75R-62	2.00	.312	2.00	.750	1.73	.196	.313	.750	1	*RDHX6218M0T	CSW-4510	CW-11	T-15SD	4
DDM-3200-75R-62	2.00	.312	2.00	.750	1.73	.196	.313	.750	1	*RDHX6218M0T	CSW-4510	CW-11	T-15SD	3
DDM-6250-100R-50	2.50	.250	2.00	1.00	1.96	.236	.375	.750	1	RDHX5015M0T	CSW-3595	CB-3540	T-15SD	6
DDM-5250-100R-62	2.50	.312	2.00	1.00	1.96	.236	.375	.750	1	*RDHX6218M0T	CSW-4510	CW-11	T-15SD	5
DDM-7300-100R-50	3.00	.250	2.00	1.00	2.28	.236	.375	.750	1	RDHX5015M0T	CSW-3595	CB-3540	T-15SD	7
DDM-6300-100R-62	3.00	.312	2.00	1.00	2.28	.236	.375	.750	1	*RDHX6218M0T	CSW-4510	CW-11	T-15SD	6
★ DDM-5300-100R-75	3.00	.375	2.00	1.00	2.28	.236	.375	.750	1	*RDHX7525M0T	CSW-4510	CW-11	T-15SD	5
DDM-7400-125R-62	4.00	.312	2.25	1.25	2.83	.313	.500	.750	1	*RDHX6218M0T	CSW-4510	CW-11	T-15SD	7
★ DDM-6400-125R-75	4.00	.375	2.25	1.25	2.83	.313	.500	.750	1	*RDHX7525M0T	CSW-4510	CW-11	T-15SD	6
DDM-8500-150R-62	5.00	.312	2.25	1.50	3.34	.393	.625	1.41	2	*RDHX6218M0T	CSW-4510	CW-11	T-15SD	8
DDM-7500-150R-75	5.00	.375	2.25	1.50	3.34	.393	.625	1.41	2	*RDHX7525M0T	CSW-4510	CW-11	T-15SD	7
DDM-9600-150R-62	6.00	.312	2.25	1.50	3.93	.393	.625	1.41	2	*RDHX6218M0T	CSW-4510	CW-11	T-15SD	9
DDM-8600-200R-75	6.00	.375	2.25	2.00	4.72	.433	.750	1.45	2	*RDHX7525M0T	CSW-4510	CW-11	T-15SD	8
DDM-3200-EC-75	2.00	.375	2.25	1.25	-	-	-	-	3	*RDHX7525M0T	CSW-4510, ECS-0030	CW-11	T-15SD, A-316	3
★ DDM-4200-EC	2.00	.312	2.25	1.25	-	-	-	-	3	*RDHX6218M0T	CSW-4510, ECS-0030	CW-11	T-15SD, A-316	4
DDM-4225-EC	2.25	.312	2.25	1.25	-	-	-	-	3	*RDHX6218M0T	CSW-4510, ECS-0030	CW-11	T-15SD, A-316	4
DDM-5250-EC	2.50	.312	2.25	1.25	-	-	-	-	3	*RDHX6218M0T	CSW-4510, ECS-0030	CW-11	T-15SD, A-316	5

★ Positive Style Available

Note: All cutters are supplied without inserts.

### Parts

SCREW	CLAMP BOLT	CLAMP WASHER	WRENCH
CSW-4510	CB3540	CW-11	T-20

### for EC

SCREW	WRENCH
ECS-0030	A-316

\* Can also use chipbreaker style insert. See page 4.

# Diemaster End Mill & Modular Head Style

## Recommended Cutting Conditions for Carbide

WORK MATERIAL	INSERT GRADE	TOOL DIAMETER													
		.500"		.625"		.750"		1.00"		1.25"		1.50"		2.00"	
		MAX D.O.C.													
		.02"		.04"		.08"		.10"		.12"		.14"		.16"	
		N r.p.m.	F inch/min	N r.p.m.	F inch/min	N r.p.m.	F inch/min	N r.p.m.	F inch/min	N r.p.m.	F inch/min	N r.p.m.	F inch/min	N r.p.m.	F inch/min
Low Carbon Steel (HB 125 ~ 180)	JC5030, JC5025 JC5040, JC3552	8,500	175	5,200	110	4,000	110	3,100	85	2,450	70	2,000	55	1,600	45
Carbon Steel (HB 170 ~ 220)	JC5030, JC5025 JC5040, JC3552	7,500	160	4,500	90	3,500	95	2,700	75	2,200	60	1,750	50	1,400	40
Alloy Steel (HB 200 ~ 260)	JC5030, JC5025 JC3562, JC5015, JC5003	5,200	110	3,200	70	2,500	70	2,200	55	1,700	45	1,400	35	1,100	30
Tool & Die Steel (HB 280 ~ 370)	JC5030, JC3552 JC5040, JC5015, JC5003	4,500	90	2,700	55	2,200	60	1,900	50	1,500	40	1,200	30	950	25
Stainless Steel (HB 150 ~ 270)	JC3562, JC5015 JC5003	6,300	130	3,600	75	2,800	70	2,200	55	1,700	45	1,350	35	1,100	30
Gray Cast Iron (HB 200 ~ 250)	JC5025, JC3562 JC5015	6,500	155	3,850	110	3,000	100	2,400	80	1,900	60	1,500	50	1,200	40
Nodular Cast Iron (HB 180 ~ 250)	JC5025, JC3562 JC5015	5,100	120	3,600	100	2,400	80	1,900	65	1,500	50	1,200	40	950	30

Note: Above data is relevant to tools with ratio (Reach/Dia.) of 4xs and below. For tools above 4xs, see Table 3.

## Recommended Cutting Conditions for CBN

WORK MATERIAL	INSERT GRADE	TOOL DIAMETER													
		.500"		.625"		.750"		1.00"		1.25"		1.50"		2.00"	
		MAX D.O.C.													
		.02"		.04"		.08"		.10"		.12"		.14"		.16"	
		N r.p.m.	F inch/min	N r.p.m.	F inch/min	N r.p.m.	F inch/min	N r.p.m.	F inch/min	N r.p.m.	F inch/min	N r.p.m.	F inch/min	N r.p.m.	F inch/min
Carbon Steel (HRC 55 ~ 65)	JBN330	N/A	N/A	2,200	30	1,800	24	1,350	18	1,100	14	900	12	700	14
Carbon Steel (HRC 45 ~ 55)	JBN330	N/A	N/A	3,500	48	2,900	40	2,200	30	1,750	24	1,500	20	1,100	23
Alloy Steel (HB 200 ~ 260)	JBN330	N/A	N/A	6,000	160	5,000	133	3,750	100	3,000	80	2,500	67	1,850	75
Gray Cast Iron (HB 200 ~ 250)	JBN330	N/A	N/A	8,000	216	6,500	180	5,000	135	4,000	108	3,500	90	2,500	101
Nodular Cast Iron (HB 180 ~ 250)	JBN330	N/A	N/A	6,000	160	5,000	133	3,750	100	3,000	80	2,500	67	1,850	75

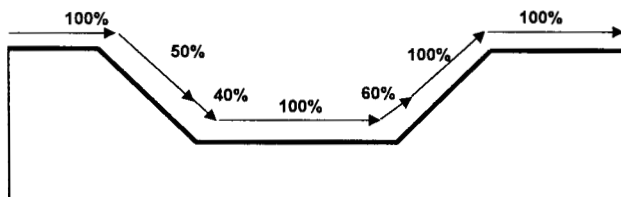
Note: Above data is relevant to tools with ratio (Reach/Dia.) of 4xs and below. For tools above 4xs, see Table 3.

## Additional Cutting Data for Longer Tools

REACH / DIA.	~ 4.0	4.0 ~ 4.5	4.5 ~ 5.3	5.3 ~ 5.7	5.7 ~ 6.2	6.3 ~
rpm %	100	90	80	80	75	70
feed %	100	90	90	80	75	70

Note: The above percentages should be applied for longer tools.

## Reduced Cutting Data for Cutting Pattern



Note: Feed should be reduced when cutting the above pattern.

## Diemaster Face Mill Style

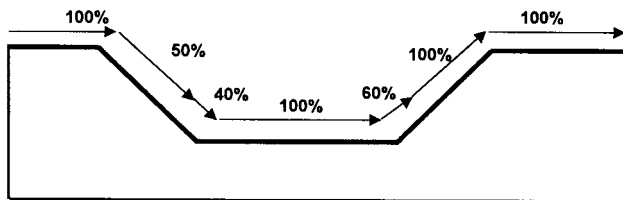
### Recommended Cutting Conditions for Carbide

WORK MATERIAL	INSERT GRADE	TOOL DIAMETER (teeth)													
		2.00" (3 / 4 / 5 teeth)		2.25" (4 teeth)		2.50" (5 / 6 teeth)		3.00" (5 / 6 / 7 teeth)		4.00" (6 / 7 teeth)		5.00" (7 / 8 teeth)		6.00" (8 / 9 teeth)	
		MAX D.O.C.													
		.160"		.200"		.200" / .160"		.240" / .200" / .160"		.240" / .200"		.240" / .200"		.240" / .200"	
N r.p.m.	F inch/min	N r.p.m.	F inch/min	N r.p.m.	F inch/min	N r.p.m.	F inch/min	N r.p.m.	F inch/min	N r.p.m.	F inch/min	N r.p.m.	F inch/min	N r.p.m.	F inch/min
Low Carbon Steel (HB 125 ~ 180)	JC5030, JC5025 JC5040, JC3552	1,400	50/65/85	1,280	60	1,090	63/78	900	57/64/72	720	70/77	570	48/53	450	57/63
Carbon Steel (HB 170 ~ 220)	JC5030, JC5025 JC5040, JC3552	1,250	45/60/75	1,150	55	950	55/67	750	48/53/80	610	60/67	500	43/47	400	50/55
Alloy Steel (HB 200 ~ 260)	JC5030, JC5025 JC5040, JC5003	900	35/45/55	820	40	670	40/47	500	30/35/42	400	43/47	350	30/33	280	35/40
Tool & Die Steel (HRC30 ~ 40)	JC5030, JC5040 JC5003, JC3552	750	27/35/45	680	32	580	35/42	450	27/32/37	350	35/41	300	25/28	200	30/35
Stainless Steel (HB 150 ~ 270)	JC5015, JC3562	1,050	40/50/82	950	45	820	47/57	550	40/48/53	520	51/57	400	32/35	320	43/47
Gray Cast Iron (HB 200 ~ 250)	JC5025, JC5015 JC3562	1,080	50/68/85	980	62	850	50/80	700	55/66/77	560	72/80	450	50/55	360	45/50
Nodular Cast Iron (HB 180 ~ 250)	JC5025, JC5015 JC3562	900	43/57/70	820	52	700	42/67	600	48/57/66	460	60/67	370	40/45	300	40/45

### Recommended Cutting Conditions for CBN

WORK MATERIAL	INSERT GRADE	TOOL DIAMETER (teeth)													
		2.00" (3 / 4 / 5 teeth)		2.25" (4 teeth)		2.50" (5 / 6 teeth)		3.00" (5 / 6 / 7 teeth)		4.00" (6 / 7 teeth)		5.00" (7 / 8 teeth)		6.00" (8 / 9 teeth)	
		MAX D.O.C.													
		.160"		.200"		.200" / .160"		.240" / .200" / .160"		.240" / .200"		.240" / .200"		.240" / .200"	
N r.p.m.	F inch/min	N r.p.m.	F inch/min	N r.p.m.	F inch/min	N r.p.m.	F inch/min	N r.p.m.	F inch/min	N r.p.m.	F inch/min	N r.p.m.	F inch/min	N r.p.m.	F inch/min
Carbon Steel (HRC55 ~ 65)	JBN330	650	14/18/23	600	16	550	18/22	450	16/19/22	350	15/18	270	13/15	225	13/15
Carbon Steel (HRC45 ~ 55)	JBN330	1,075	23/30/38	950	27	860	30/36	720	25/30/35	550	23/26	430	21/24	360	20/23
Tool & Die Steel (~HRC 60)	JBN330	550	6.9/9.2/11.5	500	8.1	450	9.2/11.0	400	7.6/9.2/10.7	300	6.9/8.0	250	6.4/7.3	200	6.1/6.9
Gray Cast Steel (HB200 ~ 250)	JBN330	2,500	100/135/170	2,250	120	2,000	135/162	1,650	113/135/158	1,250	100/119	1,000	95/108	850	90/100
Nodular Cast Iron (HB180 ~ 250)	JBN330	1,875	75/100/125	1,650	90	1,500	100/120	1,250	83/100/117	950	75/87	750	70/80	625	67/75

### Reduced Cutting Data for Cutting Pattern



Note: Feed rate should be reduced when cutting above pattern.

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