



SKS

High Feed Diemaster



- Extremely High Cutting Feed**
Positive axial rake (+8 deg.) reduces cutting pressure. Double clamping system provides more tool rigidity.
- Increased Productivity, Lower Tool Cost**
Chip removal rate is 3 times more when compared to general face mill. Insert geometry provides longer tool life.
- High Performance on Various Work Materials**
Seven insert grades to choose from. Insert geometry includes flat top style or positive style with chipbreaker.



SKS - High Feed Diemaster

METRIC

END MILL SKS Type



Fig. 1

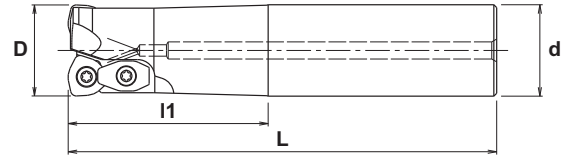
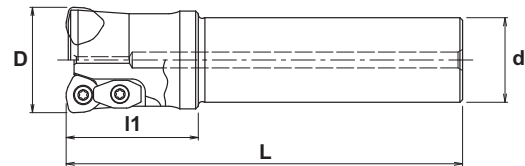


Fig. 2



Specifications

CATALOG NUMBER	STK	DIMENSIONS					FIG.	INSERT	Q	PARTS		
		D	L	I1	d	a				Screw	Wrench	Clamp
SKS-2016-20-S15	•	16	110	20	15	-	1	WOMW04T215ZER WOMT04T215ZER	2	TSW-2556H	A-08SD	-
SKS-2016-50-S16	•	16	110	50	16	-	1					
SKS-2016-20L-S15	•	16	150	20	15	-	1					
SKS-2016-70-S16	•	16	150	70	16	-	1					
SKS-2017-20-S16	•	17	110	20	16	-	1					
SKS-2017-20L-S16	•	17	150	20	16	-	1					
SKS-2020-50-S20	•	20	130	50	20	-	1	WDMW050316ZTR WDHW050316ZTR WDMT050316ZER	2	DSW-306H	A-10	-
SKS-2020-100-S20	•	20	180	100	20	-	1					
SKS-2020-130-S20	•	20	250	130	20	-	1					
SKS-2021-50-S20	•	21	130	50	20	-	1	WDMW050316ZTR WDHW050316ZTR WDMT050316ZER	2	DSW-306H	A-10	-
SKS-2021-50L-S20	•	21	180	50	20	-	1					
SKS-2021-50E-S20	•	21	250	50	20	-	1					
SKS-2022-30L-S20	•	22	180	30	20	-	2	WDMW050316ZTR WDHW050316ZTR WDMT050316ZER	2	DSW-306H	A-10	-
SKS-2022-30E-S20	•	22	250	30	20	-	2					
SKS-2025-60-S25	•	25	140	60	25	-	1					
SKS-2025-120-S25	•	25	200	120	25	-	1					
SKS-2025-180-S25	•	25	300	180	25	-	1					
SKS-2026-60-S25	•	26	140	60	25	-	2	WDMW06T320ZTR WDHW06T320ZTR WDMT06T320ZER	2	CSW-408H	A-15	DCM-18
SKS-2026-60L-S25	•	26	200	60	25	-	2					
SKS-2026-60E-S25	•	26	300	60	25	-	2					
SKS-2028-40L-S25	•	28	200	40	25	-	2	WDMW06T320ZTR WDHW06T320ZTR WDMT06T320ZER	2	CSW-408H	A-15	DCM-18
SKS-2028-40E-S25	•	28	300	40	25	-	2					
SKS-2030-40L-S28	•	30	200	40	28	-	2					
SKS-2030-40E-S28	•	30	300	40	28	-	2					
SKS-2030-70-S32	•	30	150	70	32	-	1					
SKS-2030-120-S32	•	30	200	120	32	-	1					
SKS-2030-180-S32	•	30	300	180	32	-	1					
SKS-2032-70-S32	•	32	150	70	32	-	1	WDMW080520ZTR WDHW080520ZTR WDMT080520ZER	2	DSW-4510H	A-20	DCM-17
SKS-3032-70-S32	•	32	150	70	32	-	1					
SKS-2032-120-S32	•	32	200	120	32	-	1					
SKS-3032-120-S32	•	32	200	120	32	-	1					
SKS-2032-180-S32	•	32	300	180	32	-	1					
SKS-3032-180-S32	•	32	300	180	32	-	1					
SKS-3032-180-S32	•	32	300	180	32	-	1					

Note: All cutters are supplied without inserts.

**METRIC**

SKS - High Feed Diemaster

END MILL SKS Type



Fig. 1

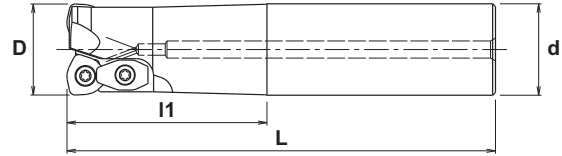
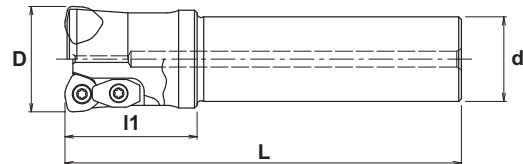


Fig. 2



Specifications

CATALOG NUMBER	STK	DIMENSIONS					FIG.	INSERT	Q	PARTS		
		D	L	l1	d	α				Screw	Wrench	Clamp
SKS-2033-70-S32	•	33	150	70	32	-	1	WDMW080520ZTR WDHW080520ZTR WDMT080520ZER	2	DSW-4510H	A-20	DCM-17
SKS-2033-70L-S32	•	33	200	70	32	-	1					
SKS-2033-70E-S32	•	33	300	70	32	-	1					
SKS-3033-70-S32	•	33	150	70	32	-	1	WDMW06T320ZTR WDHW06T320ZTR WDMT06T320ZER	3	CSW-408H	A-15	DCM-18
SKS-3033-70L-S32	•	33	200	70	32	-	1					
SKS-3033-70E-S32	•	33	300	70	32	-	1					
SKS-2035-50L-S32	•	35	200	50	32	-	2	WDMW080520ZTR WDHW080520ZTR WDMT080520ZER	2	DSW-4510H	A-20SD	DCM-17
SKS-2035-50E-S32	•	35	300	50	32	-	2					
SKS-3040-50-S32	•	40	150	50	32	-	2	WDMW080520ZTR WDHW080520ZTR WDMT080520ZER	3	DSW-4510H	A-20SD	DCM-17
SKS-3040-50L-S32	•	40	250	50	32	-	2					
SKS-3040-50E-S32	•	40	300	50	32	-	2					
SKS-3040-50-S42	•	40	150	50	42	-	1		3			
SKS-3040-130-S42	•	40	250	130	42	-	1					
SKS-3040-180-S42	•	40	300	180	42	-	1					
SKS-3044-50-S42	•	44	150	50	42	-	2	WDMW080520ZTR WDHW080520ZTR WDMT080520ZER	3	DSW-4510H	A-20SD	DCM-17
SKS-3044-130-S42	•	44	250	130	42	-	2					
SKS-3044-180-S42	•	44	300	180	42	-	2					
SKS-3050-50-S32	•	50	150	50	32	-	2	WDMW080520ZTR WDHW080520ZTR WDMT080520ZER	3	DSW-4510H	A-20SD	DCM-17
SKS-3050-50-S42	•	50	150	50	42	-	2					
SKS-3050-50L-S42	•	50	250	50	42	-	2					
SKS-3050-50E-S42	•	50	300	50	42	-	2					
SKS-3050-50-S42-10	•	50	150	50	42	-	2	WDMW10X620ZTR WDMT10X620ZER	3	DSW-4512H	A-20SD	DCM-17
SKS-3050-50L-S42-10	•	50	250	50	42	-	2					
SKS-3050-50E-S42-10	•	50	300	50	42	-	2					

Note: All cutters are supplied without inserts.



SKS - High Feed Diemaster

METRIC

FACE MILL
SKS Type

G-Body

Entering Angle	A.R. : +8°
	R.R. : -2°
Max. D.O.C.	1.5



Fig. 1

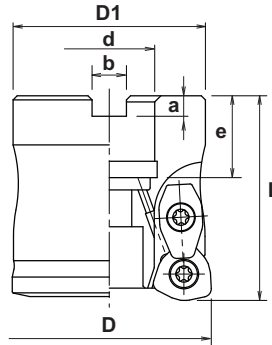
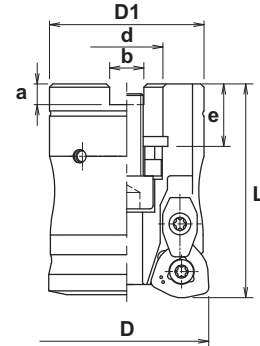


Fig. 2



Specifications

CATALOG NUMBER	STK	DIMENSIONS								FIG.	INSERT	Q	PARTS			
		D	L	d	D1	a	b	e	Screw				Wrench	Clamp	Weight (kg)	
SKS-3050R-10	■	50	65	22.225	47	5	8.4	19	2	WDMW10X620ZTR	3	DSW4512H	A-20	DCM-17	0.7	
SKS-3050R-10-22	●	50	65	22	47	6.3	10.4	19	2	WDMT10X620ZER	3				0.7	
SKS-3040R-06-16	●	40	45	16	37	5.6	8.4	18	1	WDMW06T320ZTR WDHW06T320ZTR WDMT06T320ZER	3	CSW-408H	A-15T	DCM-18	0.3	
SKS-3050R-08	■	50	50	22.225	47	5	8.4	20	1	WDMW080520ZTR WDHW080520ZTR WDMT080520ZER	3	DSW-4510H	A-20	DCM-17	0.4	
SKS-3050R-08-22	●	50	50	22	47	6.3	10.4	20	1		3				0.4	
SKS-4050R-08	■	50	50	22.225	47	5	8.4	20	1		4				0.4	
SKS-4050R-08-22	●	50	50	22	47	6.3	10.4	20	1		4				0.4	
SKS-5050R-06	■	50	50	22.225	47	5	8.4	20	1	WDMW06T320ZTR WDHW06T320ZTR WDMT06T320ZER	5	CSW-408H	A-15T	DCM-18	0.4	
SKS-5050R-06-22	●	50	50	22	47	6.3	10.4	20	1		5				0.4	
SKS-3052R-08-22*	●	52	50	22	47	6.3	10.4	20	1	WDMW080520ZTR WDHW080520ZTR WDMT080520ZER	3	DSW-4510H	A-20	DCM-17	0.4	
SKS-4052R-08-22	●	52	50	22	47	6.3	10.4	20	1		4				0.4	
SKS-5052R-06-22	●	52	50	22	47	6.3	10.4	20	1	WDMW06T320ZTR WDHW06T320ZTR WDMT06T320ZER	5	CSW-408H	A-15T	DCM-18	0.6	
SKS-3063R-08*	■	63	50	22.225	60	5	8.4	20	1	WDMW080520ZTR WDHW080520ZTR WDMT080520ZER	3	DSW-4510H	A-20	DCM-17	0.7	
SKS-3063R-08-22*	●	63	50	22	60	6.3	10.4	20	1		3				0.7	
SKS-3063R-08-27*	●	63	50	27	60	7	12.4	22	1		3				0.7	
SKS-4063R-08	■	63	50	22.225	60	5	8.4	20	1		4				0.7	
SKS-4063R-08-22	●	63	50	22	60	6.3	10.4	20	1		4				0.7	
SKS-4063R-08-27	●	63	50	27	60	7	12.4	22	1		4				0.7	
SKS-4063R-10	■	63	50	22.225	60	5	8.4	20	1		WDMW10X620ZTR WDMT10X620ZER				4	DSW-4512H
SKS-4063R-10-22	●	63	50	22	60	6.3	10.4	20	1	4		0.5				
SKS-4063R-10-27	●	63	50	27	60	7	12.4	22	1	4		0.5				
SKS-5063R-08	■	63	50	22.225	47	5	8.4	20	1	WDMW080520ZTR WDHW080520ZTR WDMT080520ZER	5	DSW-4510H	A-20	DCM-17	0.7	
SKS-5063R-08-22	●	63	50	22	60	6.3	10.4	20	1		5				0.7	
SKS-5063R-08-27	●	63	50	27	60	7	12.4	22	1		5				0.7	

* Not G-Body

Note: All cutters are supplied without inserts.



METRIC

SKS - High Feed Diemaster

FACE MILL
SKS Type



Entering Angle	A.R. : +8°
	R.R. : -2°
Max. D.O.C.	1.5



Fig. 1 (with coolant holes)

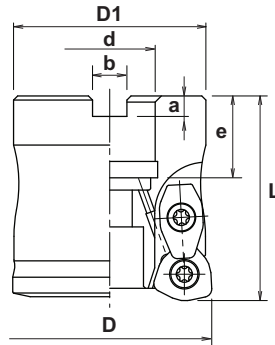
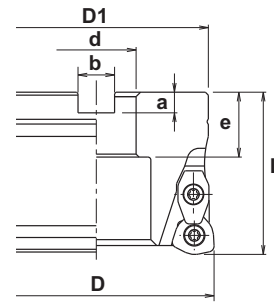


Fig. 2 (without coolant holes)



Specifications

CATALOG NUMBER	STK	DIMENSIONS							FIG.	INSERT	Q	PARTS			
		D	L	d	D1	a	b	e				Screw	Wrench	Clamp	Weight (kg)
SKS-4066R-08-27	•	66	50	27	61	7	12.4	22	1	WDMW080520ZTR WDHW080520ZTR WDMT080520ZER	4	DSW-4510H	A-20	DCM-17	0.7
SKS-5066R-08-27	•	66	50	27	60	7	12.4	22	1		5				
SKS-5080R-08	■	80	70	31.75	76	8	12.7	32	1	WDMW080520ZTR WDHW080520ZTR WDMT080520ZER	5	DSW-4510H	A-20	DCM-17	1.6
SKS-5080R-08-27	•	80	55	27	76	7	12.4	22	2		5				
SKS-5080R-10	■	80	70	31.75	76	8	12.7	32	1	WDMW10X620ZTR WDMT10X620ZER	5	DSW-4512H	A-20	DCM-17	1.4
SKS-5080R-10-27	•	80	55	27	76	7	12.4	22	2		5				
SKS-6080R-08-27	•	80	55	27	76	7	12.4	22	2	WDMW080520ZTR WDHW080520ZTR WDMT080520ZER	6	DSW-4510H	A-20	DCM-17	1.2
SKS-6100R-08	■	100	70	31.75	96	8	12.7	32	1	WDMW080520ZTR WDHW080520ZTR WDMT080520ZER	6	DSW-4510H	A-20	DCM-17	1.9
SKS-6100R-08-32	•	100	55	32	96	8	14.4	32	2		6				
SKS-6100R-10	■	100	70	31.75	96	8	12.7	32	1	WDMW10X620ZTR WDMT10X620ZER	6	DSW-4512H	A-20	DCM-17	1.7
SKS-6100R-10-32	•	100	55	32	96	8	14.4	32	2		6				
SKS-6125R-10	■	125	63	38.1	100	10	15.9	40	2	WDMW10X620ZTR WDMT10X620ZER	6	DSW-4512H	A-20	DCM-17	3.1
SKS-6125R-10-40	•	125	55	40	85	9	16.4	35	2		6				
SKS-7160R-10	•	160	63	50.8	100	11	19	43	2	WDMW10X620ZTR WDMT10X620ZER	7	DSW-4512H	A-20	DCM-17	4.6
SKS-7160R-10-40	■	160	55	40	120	9	16.4	35	2		7				

Note: All cutters are supplied without inserts.



SKS - High Feed Diemaster

METRIC

FACE MILL

SKS-RS Type with carbide shim



Fig. 1 (with coolant holes)

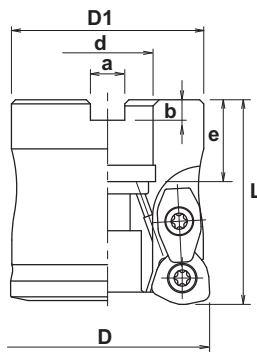
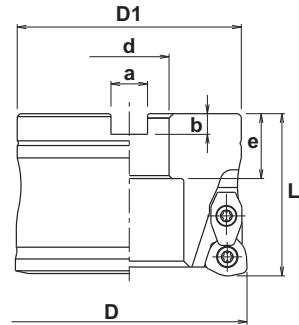






Fig. 2 (without coolant holes)



Specifications

CATALOG NUMBER	STK	DIMENSIONS							FIG.	INSERT	Q	PARTS			
		D	L	d	D1	a	b	e				Screw	Wrench	Clamp	Weight (kg)
SKS-4063RS-10	■	63	50	22.225	60	8.4	5	20	1	WDMW10X620ZTR WDMT10X620ZER	4	DSW4515H	A-20	DCM-17	0.5
SKS-4063RS-10-22	●	63	50	22	60	10.4	6.3	20	1		4				0.5
SKS-4080RS-10	■	80	70	31.75	76	12.7	8	32	1		4				1.4
SKS-4080RS-10-27	●	80	55	27	76	12.4	7	22	2		4				1.4
SKS-5100RS-10	■	100	70	31.75	96	12.7	8	32	1		5				1.7
SKS-5100RS-10-32	●	100	55	32	96	14.4	8	32	2		5				1.7
SKS-5125RS-10	■	125	63	38.1	100	15.9	10	40	2		5				3.1
SKS-5125RS-10-40	●	125	55	40	85	16.4	9	35	2		5				3.1
SKS-6160RS-10	■	160	63	50.80	100	19	11	43	2		6				4.6
SKS-6160RS-10-40	●	160	55	40	120	16.4	9	35	2		6				4.6

Note: All cutters are supplied without inserts.

	CARBIDE SHIM	CARBIDE SHIM SCREW	CARBIDE SHIM SCREW WRENCH
			
	SM-WD10	SSW-745	LW-045



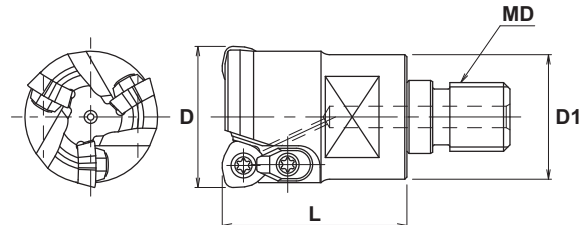
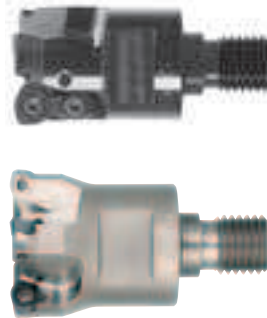
METRIC

High Feed Diemaster

MODULAR HEADS

MSH Type

G-Body



Specifications

CATALOG NUMBER	STK	DIMENSIONS				HEAD TORQUE Nm	INSERT	Q	PARTS		
		D	L	D1	MD				Screw	Wrench	Clamp
MSH-2016-M8	•	16	23	15	M8	16	WO**04T215Z*R	2	TSW-2556H	A-08SD	-
MSH-2017-M8	•	17	23	15	M8	16	WO**04T215Z*R	2	TSW-2556H	A-08SD	-
MSH-2020-M10	•	20	30	19	M10	16	WD**050316Z*R	2	DSW-306H	A-10	-
MSH-2021-M10	•	21	30	19	M10	16	WD**050316Z*R	2	DSW-306H	A-10	-
MSH-2022-M10	•	22	30	19	M10	16	WD**050316Z*R	2	DSW-306H	A-10	-
MSH-2025-M12	•	25	35	23.6	M12	20	WD**06T320Z*R	2	CSW-408H	A-15	DCM-18
MSH-2026-M12	•	26	35	23.6	M12	20	WD**06T320Z*R	2	CSW-408H	A-15	DCM-18
MSH-2028-M12*	•	28	35	23.6	M12	20	WD**06T320Z*R	2	CSW-408H	A-15	DCM-18
MSH-2030-M16*	•	30	43	29	M16	25	WD**06T320Z*R	2	CSW-408H	A-15	DCM-18
MSH-2032-M16	•	32	43	29	M16	25	WD**080520Z*R	2	DSW-4510H	A-20SD	DCM-17
MSH-3032-M16	•	32	43	29	M16	25	WD**06T320Z*R	3	CSW-408H	A-15	DCM-18
MSH-2033-M16*	•	33	43	29	M16	25	WD**080520Z*R	2	DSW-4510H	A-20SD	DCM-17
MSH-3033-M16	•	33	43	29	M16	25	WD**06T320Z*R	3	CSW-408H	A-15	DCM-18
MSH-2035-M16	•	35	43	29	M16	25	WD**080520Z*R	2	DSW-4510H	A-20SD	DCM-17
MSH-3035-M16	•	35	43	29	M16	25	WD**06T320Z*R	3	CSW-408H	A-15	DCM-18

* Not G-Body

Note: All cutters are supplied without inserts.

Specifications - Fine Pitch

CATALOG NUMBER	STK	DIMENSIONS				HEAD TORQUE Nm	INSERT	Q	PARTS		
		D	L	D1	MD				Screw	Wrench	Clamp
MSH-3020-M10	•	20	30	19	M10	16	WO**04T215Z*R	3	TSW-2556H	A-08SD	-
MSH-3021-M10	•	21	30	19	M10	16	WO**04T215Z*R	3	TSW-2556H	A-08SD	-
MSH-3022-M10	•	22	30	20	M10	16	WO**04T215Z*R	3	TSW-2556H	A-08SD	-
MSH-3025-M12	•	25	35	23.6	M12	20	WD**050316Z*R	3	DSW-306H	A-10	-
MSH-3026-M12	•	26	35	23.6	M12	20	WD**050316Z*R	3	DSW-306H	A-10	-
MSH-3028-M12	•	28	35	23.6	M12	20	WD**050316Z*R	3	DSW-306H	A-10	-
MSH-3030-M16	•	30	43	29	M16	25	WD**050316Z*R	3	DSW-306H	A-10	-
MSH-4032-M16	•	32	43	29	M16	25	WD**050316Z*R	4	DSW-306H	A-10	-
MSH-5040-M16	•	40	43	32	M16	25	WD**050316Z*R	5	DSW-306H	A-10	-

Note: All cutters are supplied without inserts.

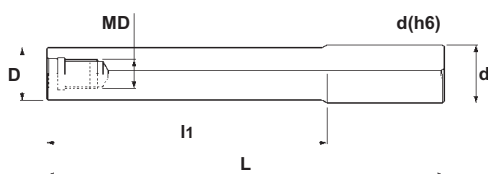
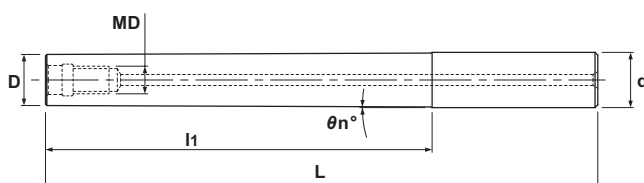


High Feed Diemaster

METRIC

MODULAR HEAD HOLDER

(carbide with coolant hole)
MSN Type

Fig. 1

Fig. 2


Specifications

CATALOG NUMBER	STK	DIMENSIONS						FIG.	APPLICABLE HOLDERS
		D	l1	L	d	θn°	MD		
MSN-M8-20-S16C	•	15.5	20	75	16	-	M8	1	MSH-2016-M8, MSH-2017-M8
MSN-M8-40-S16C	•	15.5	40	95	16	-	M8	1	
MSN-M8-80-S16C	•	15.5	80	135	16	-	M8	1	
MSN-M8-120-S16C	•	15.5	120	175	16	-	M8	1	
MSN-M10-20-S20C	•	19.5	20	80	20	-	M10	1	MSH-2020-M10, MSH-3020-M10 MSH-2021-M10, MSH-3021-M10 MSH-2022-M10, MSH-3022-M10
MSN-M10-40-S20C	•	19.5	40	100	20	-	M10	1	
MSN-M10-40T-S20C	•	19.5	40	100	20	0°29'	M10	2	
MSN-M10-70-S20C	•	19.5	70	130	20	-	M10	1	
MSN-M10-90-S20C	•	19.5	90	150	20	-	M10	1	
MSN-M10-90T-S20C	•	19.5	90	150	20	0°17'	M10	2	
MSN-M10-140-S20C	•	19.5	140	200	20	-	M10	1	
MSN-M10-140T-S20C	•	19.5	140	200	20	0°12'	M10	2	
MSN-M12-25-S25C	•	24	25	90	25	-	M12	1	MSH-2025-M12, MSH-3025-M12 MSH-2026-M12, MSH-3026-M12 MSH-2028-M12, MSH-3028-M12
MSN-M12-55-S25C	•	24	55	120	25	-	M12	1	
MSN-M12-105-S25C	•	24	105	170	25	-	M12	1	
MSN-M12-155-S25C	•	24	155	220	25	-	M12	1	
MSN-M16-25-S32C	•	29	25	90	32	-	M16	1	MSH-2030-M16, MSH-3030-M16 MSH-2032-M16, MSH-3032-M16 MSH-4032-M16, MSH-2033-M16 MSH-3033-M16, MSH-2035-M16 MSH-3035-M16, MSH-5040-M16
MSN-M16-55-S32C	•	29	55	120	32	-	M16	1	
MSN-M16-105-S32C	•	29	105	170	32	-	M16	1	
MSN-M16-155-S32C	•	29	155	220	32	-	M16	1	
MSN-M16-195-S32C	•	29	195	260	32	-	M16	1	
MSN-M16-225-S32C	•	29	225	290	32	-	M16	1	
MSN-M16-245-S32C	•	29	245	310	32	-	M16	1	
MSN-M16-295-S32C	■	29	295	360	32	-	M16	1	

Note: See pages A-175 thru A-177 for weights and coolant hole sizes.



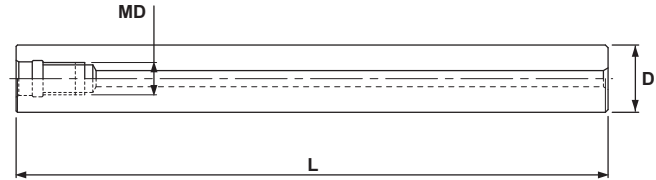
METRIC

High Feed Diemaster

MODULAR HEAD HOLDER

(carbide with coolant hole)

MSN Type - Straight



Specifications

CATALOG NUMBER	STK	DIMENSIONS			APPLICABLE HOLDERS
		D	L	MD	
MSN-M8-97S-S15C	•	15	97	M8	MSH-2016-M8, MSH-2017-M8
MSN-M8-147S-S15C	•	15	147	M8	
MSN-M8-107S-S16C	•	16	107	M8	
MSN-M8-157S-S16C	•	16	157	M8	
MSN-M10-130S-S18C	•	18	130	M10	MSH-2020-M10, MSH-3020-M10 MSH-2021-M10, MSH-3021-M10 MSH-2022-M10, MSH-3022-M10
MSN-M10-190S-S18C	•	18	190	M10	
MSN-M10-130S-S20C	•	20	130	M10	
MSN-M10-190S-S20C	•	20	190	M10	
MSN-M10-250S-S20C	•	20	250	M10	MSH-2025-M12, MSH-3025-M12 MSH-2026-M12, MSH-3026-M12 MSH-2028-M12, MSH-3028-M12
MSN-M12-185S-S23C	•	23	185	M12	
MSN-M12-265S-S23C	•	23	265	M12	
MSN-M12-145S-S25C	•	25	145	M12	
MSN-M12-215S-S25C	•	25	215	M12	
MSN-M12-285S-S25C	•	25	285	M12	
MSN-M16-160S-S28C	•	28	160	M16	MSH-2030-M16, MSH-3030-M16 MSH-2032-M16, MSH-3032-M16 MSH-4032-M16, MSH-2033-M16 MSH-3033-M16, MSH-2035-M16 MSH-3035-M16, MSH-5040-M16
MSN-M16-230S-S28C	•	28	230	M16	
MSN-M16-310S-S28C	•	28	310	M16	
MSN-M16-157S-S32C	•	32	157	M16	
MSN-M16-217S-S32C	•	32	217	M16	
MSN-M16-287S-S32C	•	32	287	M16	
MSN-M16-357S-S32C	•	32	357	M16	

Note: See pages A-175 thru A-177 for weights and coolant hole sizes.

NOTES ON MOUNTING HEADS:

Clean the contact surface of head and carbide holder. After tightening, confirm that there is no gap between head and holder.

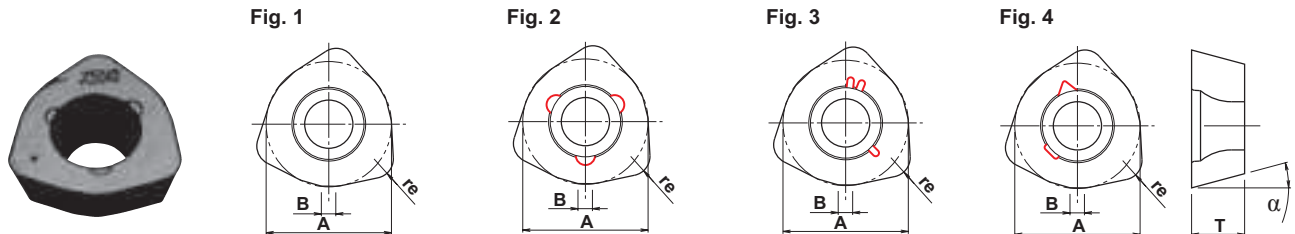
See Page A-177 for **G-Body** steel holder



High Feed Diemaster

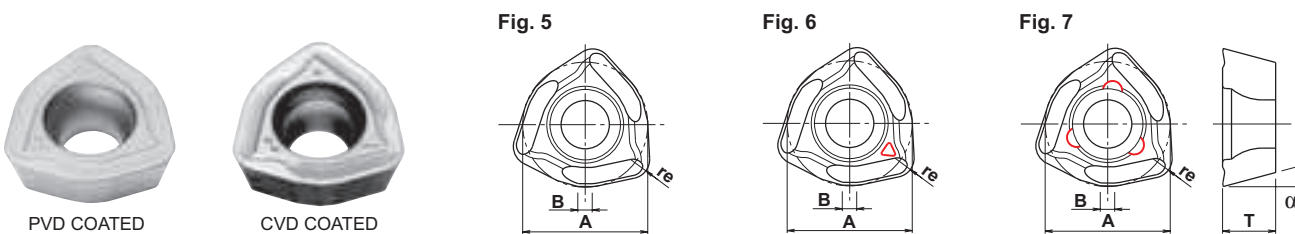
METRIC

SKS INSERTS without chipbreaker



CATALOG NUMBER	TOLERANCE	DIMENSIONS					PVD COATED				
		A	B	T	re	α	JC8015	JC8050	JC5015	JC5040	JC5118
WOMW04T215ZER	M	6.5	0.8	2.8	1.5	13°	• (Fig. 1)	• (Fig. 1)		• (Fig. 2)	• (Fig. 1)
WDMW050316ZTR	M	8	1.0	3.2	1.6	15°	• (Fig. 1)	• (Fig. 1)		• (Fig. 2)	• (Fig. 1)
WDMW06T320ZTR	M	10	1.2	3.97	2.0	15°	• (Fig. 1)	• (Fig. 1)		• (Fig. 2)	• (Fig. 1)
WDMW080520ZTR	M	13	1.5	5.5	2.0	15°	• (Fig. 3)	• (Fig. 3)		• (Fig. 4)	• (Fig. 3)
WDMW10X620ZTR	M	16	2.0	6	2.0	15°	• (Fig. 1)	• (Fig. 1)		• (Fig. 2)	• (Fig. 1)
WDHW050316ZTR	H	8	1.0	3.2	1.6	15°			• (Fig. 1)	• (Fig. 2)	
WDHW06T320ZTR	H	10	1.2	3.97	2.0	15°			• (Fig. 1)	• (Fig. 2)	
WDHW080520ZTR	H	13	1.5	5.5	2.0	15°			• (Fig. 1)	• (Fig. 2)	

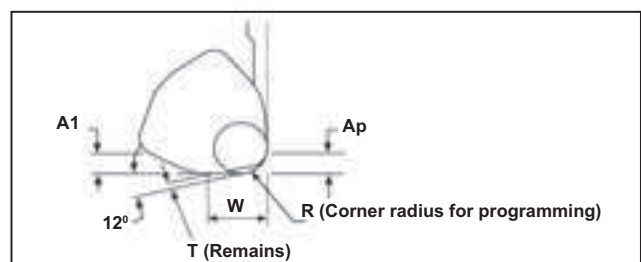
SKS INSERTS with chipbreaker



CATALOG NUMBER	TOLERANCE	DIMENSIONS					PVD COATED			CVD COATED	
		A	B	T	re	α	JC8015	JC8050	JC5118	JC600	JC730U
WOMT04T215ZER	M	6.5	0.8	2.8	1.5	13°	• (Fig. 5)	• (Fig. 7)	• (Fig. 5)		
WDMT050316ZER	M	8	1.0	3.2	1.6	15°	• (Fig. 5)	• (Fig. 6)	• (Fig. 5)		
WDMT06T320ZER	M	10	1.2	3.97	2.0	15°	• (Fig. 5)	• (Fig. 6)	• (Fig. 5)		
WDMT080520ZER	M	13	1.5	5.5	2.0	15°	• (Fig. 5)	• (Fig. 6)	• (Fig. 5)	• (Fig. 5)	• (Fig. 6)
WDMT10X620ZTR	M	16	2.0	6	2.0	15°	• (Fig. 5)	• (Fig. 6)	• (Fig. 5)	• (Fig. 5)	• (Fig. 6)

Definition of Corner Shape for Programming

INSERT SIZE	W	Ap	T	A1	R
04	2.7	0.8	0.29	0.8	1.5
05	3.6	1.25	0.35	1.2	2.0
06	4.5	1.5	0.44	1.5	2.5
08	6	2.0	0.63	2.0	3.0
10	7.4	2.5	0.91	2.5	3.0

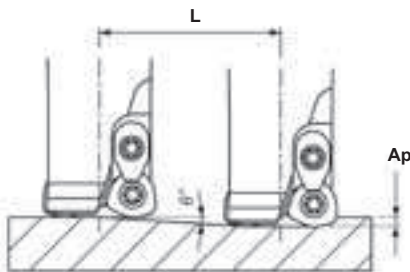


**METRIC**

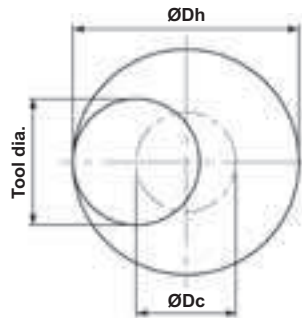
High Feed Diemaster

Recommended Data For Profile Milling with SKS

- Ramping



- Helical interpolation



- Calculation of tool pass dia.

$$\text{Tool pass dia. } \varnothing D_c = \text{Bore dia. } \varnothing D_h - \text{Tool Dia. } I$$

- Down cutting is recommended, so tool pass rotation should be counterclockwise.
- Depth of cut per one circuit should not exceed max. depth of cut A_p .
- In case of ramping and helical interpolation, apply 70% or less feed (F) from standard cutting condition table.
- In case of drilling, apply 50% or less Z axis feed (F) from standard cutting condition table.
- Long consecutive chips may result in case of drilling, confirm safe operating conditions.

CATALOG NUMBER	TOOL DIA. (mm)	EFFECTIVE CUTTING DIA. (mm)	MAX. DEPTH OF CUT: A_p (mm)	RAMPING		HELICAL INTERPOLATION		MAX. DRILLING DEPTH: Z (mm)
				MAX. ANGLE	TOTAL CUTTING LENGTH AT MAX. A_p : L (mm)	MIN BORE DIA.: D_h (mm)	MAX BORE DIA.: D_h (mm)	
SKS-2016	16	10.5	0.8	2° 30'	20.6	25	29	0.3
SKS-2017	17	11.5	0.8	2°	25.7	27	31	0.3
SKS-2020	20	12.7	1.2	3°	22.9	30	37	0.5
SKS-2021	21	13.7	1.2	2° 30'	27.5	32	39	0.5
SKS-2022	22	14.7	1.2	2°	34.4	34	41	0.5
SKS-2025	25	15.9	1.5	4°	21.5	33	46	1
SKS-2026	26	16.9	1.5	3° 30'	24.5	35	48	1
SKS-2028	28	18.9	1.5	3°	28.6	39	52	1
SKS-2030	30	20.9	1.5	2° 30'	34.4	43	56	1
SKS-2032	32	20	2	4°	28.6	41	60	1.5
SKS-3032	32	22.8	1.5	2° 15'	38.1	47	60	1
SKS-2033	33	21	2	3° 30'	32.7	43	62	1.5
SKS-3033	33	23.8	1.5	2° 06'	40.9	49	62	1
SKS-2035	35	23	2	3°	38.2	47	66	1.5
SKS-3040	40	28	2	2° 48'	40.9	57	76	1.5
SKS-3040-06	40	30.8	1.5	1° 36'	53.7	63	76	1
SKS-3044	44	32	2	2° 30'	45.8	65	84	1.5
SKS-3050-*-10	50	35.1	2.3	2° 18'	57.3	71	96	1.8
SKS-*050	50	38	2	2°	57.3	77	96	1.5
SKS-5050-06	50	40.8	1.5	1° 09'	59.8	83	96	1
SKS-*052	52	40	2	2°	57.3	81	100	1.5
SKS-5052-06	52	42.8	1.5	1° 06'	62.5	87	100	1
SKS-*063	63	51	2	1° 30'	76.4	103	122	1.5
SKS-*063-10	63	48	2.3	2° 24'	48.8	97	122	1.8
SKS-*066	66	54	2	1° 24'	81.8	109	128	1.5
SKS-*080	80	68	2	1° 12'	95.5	137	156	1.5
SKS-*080-10	80	65	2.3	2°	65.9	131	156	1.8
SKS-*100	100	88	2	1°	114.6	177	196	1.5
SKS-*100-10	100	85	2.3	1° 30'	87.8	171	196	1.8
SKS-*125-10	125	110	2.3	1° 12'	109.8	221	246	1.8
SKS-*160-10	160	145	2.3	0° 54'	146.4	291	316	1.8

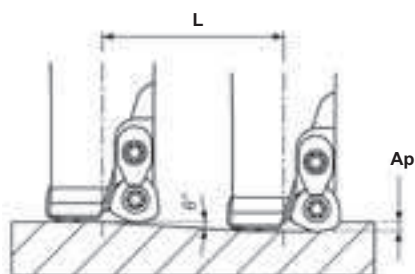


High Feed Diemaster

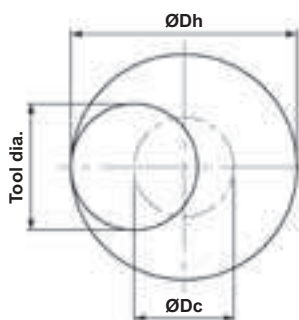
METRIC

Recommended Data For Profile Milling with MSH & MSN

- Ramping



- Helical interpolation



- Calculation of tool pass dia.

$$\text{Tool pass dia. } \varnothing D_c = \text{Bore dia. } \varnothing D_h - \text{Tool Dia. } I$$

- Down cutting is recommended, so tool pass rotation should be counterclockwise.
- Depth of cut per one circuit should not exceed max. depth of cut A_p .
- In case of ramping and helical interpolation, apply 70% or less feed (F) from standard cutting condition table.
- In case of drilling, apply 50% or less Z axis feed (F) from standard cutting condition table.
- Long consecutive chips may result in case of drilling, confirm safe operating conditions.

CATALOG NUMBER	TOOL DIA. (mm)	EFFECTIVE CUTTING DIA. (mm)	MAX. DEPTH OF CUT (mm)	RAMPING		HELICAL INTERPOLATION		MAX. DRILLING DEPTH: Z (mm)
				MAX. ANGLE	TOTAL CUTTING LENGTH AT MAX. A_p : L (mm)	MIN BORE DIA.: D_h (mm)	MAX BORE DIA.: D_h (mm)	
MSH-2016	16	10.5	0.8	2° 30'	20.6	25	29	0.3
MSH-2017	17	11.5	0.8	2°	25.7	27	31	0.3
MSH-2020	20	12.7	1.2	3°	22.9	30	37	0.5
MSH-3020	20	14.5	0.8	3°	22.9	30	37	0.3
MSH-2021	21	13.7	1.2	2° 30'	27.5	32	39	0.5
MSH-3021	21	15.5	0.8	2° 30'	27.5	32	39	0.3
MSH-2022	22	14.7	1.2	2°	34.4	34	41	0.5
MSH-3022	22	16.5	0.8	2°	34.4	34	41	0.3
MSH-2025	25	15.9	1.5	4°	21.5	33	46	1
MSH-3025	25	17.7	1.2	2°	34.4	40	47	0.5
MSH-2026	26	16.9	1.5	3° 30'	24.5	35	48	1
MSH-3026	26	18.7	1.2	1° 54'	36.2	42	49	0.5
MSH-2028	28	18.9	1.5	3°	28.6	39	52	1
MSH-3028	28	20.7	1.2	1° 42'	40.4	46	53	0.5
MSH-2030	30	20.9	1.5	2° 30'	34.4	43	56	1
MSH-3030	30	22.7	1.2	1° 30'	45.8	50	57	0.5
MSH-2032	32	20	2	4°	28.6	41	60	1.5
MSH-3032	32	22.8	1.5	2° 15'	38.1	47	60	1
MSH-4032	32	24.7	1.2	1° 18'	52.9	54	61	0.5
MSH-2033	33	21	2	3° 30'	32.7	43	62	1.5
MSH-3033	33	23.8	1.5	2° 06'	40.9	49	62	1
MSH-2035	35	23	2	3°	38.2	47	66	1.5
MSH-3035	35	25.8	1.5	2°	43	53	66	1
MSH-5040	40	32.7	1.2	1°	68.7	70	77	0.5

**METRIC**

High Feed Diemaster

Recommended Cutting Data for End Mill Type

Work Materials	Insert Grade	Tool Diameter (mm)															
		16 / 17				20 / 21 / 22				25 / 26 / 28				30 / 32 / 33 / 35			
		No. of Teeth 2				No. of Teeth 2				No. of Teeth 2				No. of Teeth 2			
		L1 (mm)	Ap (mm)	N (min ⁻¹)	F (mm/min)	L1 (mm)	Ap (mm)	N (min ⁻¹)	F (mm/min)	L1 (mm)	Ap (mm)	N (min ⁻¹)	F (mm/min)	L1 (mm)	Ap (mm)	N (min ⁻¹)	F (mm/min)
Carbon Steel (S50C, S55C) Below 250HB	JC5040 JC8050 (JC730U)	30	0.6	3,580	3,580	70	0.7	2,850	4,600	70	0.7	2,300	4,600	70	0.8	1,800	3,600
		70	0.5	2,980	2,380	120	0.5	2,400	3,800	120	0.5	1,900	3,800	120	0.6	1,000	3,000
		100	0.4	2,580	1,550	190	0.3	1,250	1,500	220	0.3	1,000	1,600	220	0.4	500	2,000
Mold Steel (1.2311, P20) 30-43HRC	JC5118	30	0.6	3,580	3,580	70	0.7	2,850	4,600	70	0.7	2,300	4,600	70	0.8	1,800	3,600
		70	0.5	2,980	2,380	120	0.5	2,400	3,800	120	0.5	1,900	3,800	120	0.6	1,000	3,000
		100	0.4	2,580	1,550	190	0.3	1,250	1,500	220	0.3	1,000	1,600	220	0.3	500	2,000
Die Steel (1.2344, 1.2379) Below 255HB	JC5040 JC8050	30	0.6	3,580	3,580	70	0.7	2,850	4,600	70	0.7	2,300	4,600	70	0.8	1,800	3,600
		70	0.5	2,980	2,380	120	0.5	2,400	3,800	120	0.5	1,900	3,800	120	0.6	1,000	3,000
		100	0.4	2,580	1,550	190	0.3	1,250	1,500	220	0.3	1,000	1,600	220	0.3	500	2,000
Stainless Steel (SUS304) Below 250HB	JC5118 JC8050	30	0.5	2,980	2,980	70	0.7	2,400	3,840	70	0.7	1,900	3,800	70	0.8	1,500	3,600
		70	0.3	2,980	2,380	120	0.5	2,400	3,840	120	0.5	1,900	3,800	120	0.6	1,250	3,000
		100	0.3	2,580	1,550	190	0.3	1,250	1,500	220	0.3	1,000	1,600	220	0.3	600	1,800
Hardened Die Steel (SKD61, SKD11) 40-50HRC	JC5118 JC8015	30	0.3	2,380	2,380	70	0.5	1,100	1,100	70	0.6	1,000	1,400	70	0.8	800	1,300
		70	0.2	2,380	1,900	120	0.3	1,100	1,100	120	0.4	1,000	1,200	120	0.6	700	1,100
		100	-	-	-	190	-	-	-	220	-	-	-	220	0.3	500	800
Gray & Nodular Cast Iron (FC, FC) Below 300HB	JC5118 JC8015 (JC600)	30	0.7	3,580	3,580	70	0.8	1,900	3,000	70	1.0	1,650	3,300	70	1.2	1,300	3,900
		70	0.6	2,980	2,380	120	0.6	1,750	2,800	120	0.8	1,400	2,800	120	1.0	1,100	3,300
		100	0.5	2,580	1,550	190	0.4	1,400	2,200	220	0.5	1,150	2,300	220	0.6	900	2,200

L: Overhung length, AP: Depth of cut, N: Spindle speed, F: Feed speed

Work Materials	Insert Grade	Tool Diameter (mm)															
		32 / 33				40 (w/32mm shank)				40 / 44 (w/42mm shank)				50			
		No. of Teeth 3				No. of Teeth 3				No. of Teeth 3				No. of Teeth 3			
		L1 (mm)	Ap (mm)	N (min ⁻¹)	F (mm/min)	L1 (mm)	Ap (mm)	N (min ⁻¹)	F (mm/min)	L1 (mm)	Ap (mm)	N (min ⁻¹)	F (mm/min)	L1 (mm)	Ap (mm)	N (min ⁻¹)	F (mm/min)
Carbon Steel (S50C, S55C) Below 250HB	JC5040 JC8050 (JC730U)	70	0.7	1,800	4,300	70	0.8	1,400	4,300	70	1.0	1,400	5,100	70	1.0	1,150	4,100
		120	0.5	1,500	3,600	170	0.6	1,000	3,700	170	0.8	1,200	4,300	170	0.8	950	3,400
		220	0.3	900	2,160	220	0.4	800	2,900	220	0.6	1,200	4,300	220	0.6	950	3,400
Mold Steel (1.2311, P20) 30-43HRC	JC5118	70	0.7	1,800	4,300	70	0.8	1,400	4,300	70	1.0	1,400	5,100	70	1.0	1,150	4,100
		120	0.5	1,500	3,600	170	0.6	1,000	3,700	170	0.8	1,200	4,300	170	0.8	950	3,400
		220	0.3	900	2,160	220	0.4	800	2,900	220	0.6	1,200	4,300	220	0.6	950	3,400
Die Steel (1.2344, 1.2379) Below 255HB	JC5040 JC8050	70	0.7	1,800	4,300	70	0.8	1,400	4,300	70	1.0	1,400	5,100	70	1.0	1,150	4,100
		120	0.5	1,500	3,600	170	0.6	1,000	3,700	170	0.8	1,200	4,300	170	0.8	950	3,400
		220	0.3	900	2,160	220	0.4	800	2,900	220	0.6	1,200	4,300	220	0.6	950	3,400
Stainless Steel (SUS304) Below 250HB	JC5118 JC8050	70	0.7	1,500	4,000	70	0.8	1,200	3,600	70	1.0	1,200	4,300	70	1.0	1,000	3,600
		120	0.5	1,250	3,400	170	0.6	1,000	3,000	170	0.8	1,200	3,600	170	0.8	950	3,400
		220	0.3	600	1,800	220	0.4	800	2,900	220	0.6	1,000	3,000	220	0.6	830	3,000
Hardened Die Steel (SKD61, SKD11) 40-50HRC	JC5118 JC8015	70	0.6	800	1,680	70	0.8	640	1,500	70	0.8	640	1,900	70	0.8	500	1,500
		120	0.4	700	1,260	170	0.6	480	1,100	170	0.6	480	1,400	170	0.6	380	1,100
		220	0.2	500	900	220	0.4	480	1,100	220	0.5	480	1,400	220	0.5	380	1,100
Gray & Nodular Cast Iron (FC, FC) Below 300HB	JC5118 JC8015 (JC600)	70	1.0	1,300	4,300	70	1.2	1,000	4,600	70	1.5	1,000	550	70	1.5	830	4,500
		120	0.8	1,100	3,600	170	1.0	720	3,200	170	1.2	720	3,900	170	1.2	570	3,100
		220	0.5	900	2,500	220	0.6	720	3,200	220	0.8	720	4,300	220	0.8	570	3,400

L: Overhung length, AP: Depth of cut, N: Spindle speed, F: Feed speed

- NOTE:**
1. Speeds and Feeds should be adjusted according to the machine and work rigidity.
 2. If chattering occurs, reduce the DOC or RPM by 30% and keep the feed per tooth the same.
 3. In case of full slotting, it is recommended to reduce the RPM and IPM to 70% of the above.
 4. Ramping up to 3 degrees is recommended.



High Feed Diemaster

METRIC

Recommended Cutting Data for MSH - with Carbide Holder

Work Materials	Insert Grade	Tool Diameter (mm)											
		16 / 17				20 / 21 / 22				20 / 21 / 22			
		No. of Teeth 2				No. of Teeth 2				No. of Teeth 3			
		L (mm)	Ap (mm)	N (min ⁻¹)	Vf (mm/min)	L (mm)	Ap (mm)	N (min ⁻¹)	Vf (mm/min)	L (mm)	Ap (mm)	N (min ⁻¹)	Vf (mm/min)
Carbon Steel (C50, C55) Below 250HB	JC5040 JC8050 (JC730U)	70	0.4	3,580	6,440	70	0.6	2,850	5,700	70	0.5	2,850	7,700
		120	0.3	3,180	5,090	120	0.5	2,600	5,200	120	0.4	2,600	7,000
		160	0.2	2,980	4,760	190	0.3	2,400	4,800	190	0.3	2,400	6,500
Mold Steel (1.2311, P20) 30-43HRC	JC5118	70	0.4	3,180	5,720	70	0.5	2,850	5,700	70	0.5	2,850	7,700
		120	0.3	3,180	5,090	120	0.4	2,600	5,200	120	0.4	2,600	7,000
		160	0.2	2,980	4,760	190	0.3	2,400	4,800	190	0.3	2,400	6,500
Die Steel (1.2344, 1.2379) Below 255HB	JC5040 JC8050	70	0.4	3,180	5,720	70	0.5	2,850	5,700	70	0.5	2,850	7,700
		120	0.3	3,180	5,090	120	0.4	2,600	5,200	120	0.4	2,600	7,000
		160	0.2	2,980	4,760	190	0.3	2,400	4,800	190	0.3	2,400	6,500
Stainless Steel Below 250HB	JC5118 JC8050	70	0.3	3,180	5,720	70	0.5	2,500	5,000	70	0.5	2,500	6,800
		120	0.3	2,980	4,760	120	0.4	2,400	4,800	120	0.4	2,400	6,500
		160	0.2	2,980	4,760	190	0.3	2,400	4,800	190	0.3	2,400	6,500
Hardened Die Steel (1.2344, 1.2379) 40-50HRC	JC5118 JC8015	70	0.2	2,380	2,610	70	0.4	1,300	1,600	70	0.3	1,300	2,300
		120	0.2	2,380	2,380	120	0.3	1,200	1,400	120	0.3	1,200	2,000
		160	-	-	-	190	-	-	-	190	-	-	-
Gray & Nodular Cast Iron (GG, GGG) Below 300HB	JC5118 JC8015 (JC600)	70	0.5	2,980	6,550	70	0.6	2,400	5,800	70	0.6	2,400	8,000
		120	0.3	2,980	5,960	120	0.5	2,400	5,300	120	0.5	2,400	7,200
		160	0.4	2,500	5,000	190	0.4	2,000	4,800	190	0.4	2,000	6,000

L: Overhung length, AP: Depth of cut, N: Spindle speed, Vf: Speed feed

Work Materials	Insert Grade	Tool Diameter (mm)											
		25 / 26 / 28				25 / 26 / 27				30			
		No. of Teeth 2				No. of Teeth 3				No. of Teeth 2			
		L (mm)	Ap (mm)	N (min ⁻¹)	Vf (mm/min)	L (mm)	Ap (mm)	N (min ⁻¹)	Vf (mm/min)	L (mm)	Ap (mm)	N (min ⁻¹)	Vf (mm/min)
Carbon Steel (C50, C55) Below 250HB	JC5040 JC8050 (JC730U)	90	0.7	2,300	5,500	90	0.6	2,300	6,900	100	0.7	1,900	4,600
		140	0.5	2,300	5,100	140	0.5	2,300	6,900	150	0.5	1,900	4,300
		210	0.3	1,900	3,800	210	0.3	1,900	5,700	210	0.3	1,600	3,900
Mold Steel (1.2311, P20) 30-43HRC	JC5118	90	0.7	2,300	5,500	90	0.6	2,300	6,900	100	0.7	1,900	4,600
		140	0.5	2,300	5,100	140	0.5	2,300	6,900	150	0.5	1,900	4,300
		210	0.3	1,900	3,800	210	0.3	1,900	5,700	210	0.3	1,600	3,900
Die Steel (1.2344, 1.2379) Below 255HB	JC5040 JC8050	90	0.7	2,300	5,500	90	0.6	2,300	6,900	100	0.7	1,900	4,600
		140	0.5	2,300	5,100	140	0.5	2,300	6,900	150	0.5	1,900	4,300
		210	0.3	1,900	3,800	210	0.3	1,900	5,700	210	0.3	1,600	3,900
Stainless Steel Below 250HB	JC5118 JC8050	90	0.7	2,000	4,400	90	0.6	2,000	6,000	100	0.7	1,700	3,800
		140	0.5	2,000	4,000	140	0.5	2,000	6,000	150	0.5	1,700	3,500
		210	0.3	1,900	3,800	210	0.3	1,900	5,700	210	0.3	1,600	3,000
Hardened Die Steel (1.2344, 1.2379) 40-50HRC	JC5118 JC8015	90	0.6	1,100	1,500	90	0.5	1,100	2,000	100	0.6	850	1,600
		140	0.4	1,000	1,400	140	0.3	1,000	1,800	150	0.4	750	1,400
		210	-	-	-	210	-	-	-	210	0.2	650	1,200
Gray & Nodular Cast Iron (GG, GGG) Below 300HB	JC5118 JC8015 (JC600)	90	1.0	1,900	4,500	90	0.8	1,900	6,900	100	1.0	1,600	4,200
		140	0.8	1,900	4,300	140	0.6	1,900	6,300	150	0.8	1,600	3,900
		210	0.5	1,600	3,800	210	0.5	1,600	5,300	210	0.5	1,350	3,000

L: Overhung length, AP: Depth of cut, N: Spindle speed, Vf: Feed speed

- NOTE:**
1. Speeds and Feeds should be adjusted according to the machine and work rigidity.
 2. If chattering occurs, reduce the depth of cut AP or Spindle speed and keep feed per tooth the same.
 3. If machine does not have enough power, reduce the depth of cut Ap or Spindle speed and Feed speed.
 4. Use air thru.
 5. In case of 50-55HRC, reduce 30% above Ap, N and F. (In the case of hardened die steel)

**METRIC**

High Feed Diemaster

Recommended Cutting Data for MSH - with Carbide Holder

Work Materials	Insert Grade	Tool Diameter (mm)											
		30				32 / 33 / 35				32 / 33 / 35			
		No. of Teeth 3				No. of Teeth 2				No. of Teeth 3			
		L (mm)	Ap (mm)	N (min ⁻¹)	Vf (mm/min)	L (mm)	Ap (mm)	N (min ⁻¹)	Vf (mm/min)	L (mm)	Ap (mm)	N (min ⁻¹)	Vf (mm/min)
Carbon Steel (C50, C55) Below 250HB	JC5040 JC8050 (JC730U)	100	0.6	2,000	6,000	100	0.8	1,800	4,600	100	0.7	1,800	6,000
		150	0.5	1,900	5,700	150	0.6	1,800	4,300	150	0.5	1,800	5,400
		210	0.3	1,600	4,800	210	0.4	1,500	3,900	210	0.3	1,500	4,500
Mold Steel (1.2311, P20) 30-43HRC	JC5118	100	0.6	2,000	6,000	100	0.8	1,800	4,600	100	0.7	1,800	6,000
		150	0.5	1,900	5,700	150	0.6	1,800	4,300	150	0.5	1,800	5,400
		210	0.3	1,600	4,800	210	0.4	1,500	3,900	210	0.3	1,500	4,500
Die Steel (1.2344, 1.2379) Below 255HB	JC5040 JC8050	100	0.6	2,000	6,000	100	0.8	1,800	4,600	100	0.7	1,800	6,000
		150	0.5	1,900	5,700	150	0.6	1,800	4,300	150	0.5	1,800	5,400
		210	0.3	1,600	4,800	210	0.4	1,500	3,900	210	0.3	1,500	4,500
Stainless Steel Below 250HB	JC5118 JC8050	100	0.6	1,800	5,400	100	0.8	1,600	3,800	100	0.7	1,600	5,200
		150	0.5	1,700	5,100	150	0.6	1,600	3,500	150	0.5	1,600	4,800
		210	0.3	1,600	4,800	210	0.4	1,500	3,000	210	0.3	1,500	4,500
Hardened Die Steel (1.2344, 1.2379) 40-50HRC	JC5118 JC8015	100	0.5	850	1,550	100	0.8	800	1,600	100	0.6	800	2,200
		150	0.4	750	1,350	150	0.6	700	1,400	150	0.4	700	1,900
		210	0.2	650	1,200	210	0.3	600	1,200	210	0.2	600	1,500
Gray & Nodular Cast Iron (GG, GGG) Below 300HB	JC5118 JC8015 (JC600)	100	0.8	1,600	5,800	100	1.2	1,500	4,200	100	1.0	1,500	5,200
		150	0.6	1,600	5,300	150	1.0	1,500	3,900	150	0.8	1,500	5,000
		210	0.5	1,350	4,500	210	0.6	1,250	3,000	210	0.5	1,250	4,000

L: Overhung length, AP: Depth of cut, N: Spindle speed, Vf: Speed feed

Work Materials	Insert Grade	Tool Diameter (mm)							
		32				40			
		No. of Teeth 4				No. of Teeth 5			
		L (mm)	Ap (mm)	N (min ⁻¹)	Vf (mm/min)	L (mm)	Ap (mm)	N (min ⁻¹)	Vf (mm/min)
Carbon Steel (C50, C55) Below 250HB	JC5040 JC8050 (JC730U)	100	0.6	1,900	7,600	100	0.6	1,500	7,500
		150	0.5	1,800	7,200	150	0.5	1,400	7,000
		210	0.3	1,500	6,000	210	0.3	1,200	6,000
Mold Steel (1.2311, P20) 30-43HRC	JC5118	100	0.6	1,900	7,600	100	0.6	1,500	7,500
		150	0.5	1,800	7,200	150	0.5	1,400	7,000
		210	0.3	1,500	6,000	210	0.3	1,200	6,000
Die Steel (1.2344, 1.2379) Below 255HB	JC5040 JC8050	100	0.6	1,900	7,600	100	0.6	1,500	7,500
		150	0.5	1,800	7,200	150	0.5	1,400	7,000
		210	0.3	1,500	6,000	210	0.3	1,200	6,000
Stainless Steel Below 250HB	JC5118 JC8050	100	0.6	1,700	6,800	100	0.6	1,350	6,800
		150	0.5	1,600	6,400	150	0.5	1,300	6,500
		210	0.3	1,500	6,000	210	0.3	1,200	6,000
Hardened Die Steel (1.2344, 1.2379) 40-50HRC	JC5118 JC8015	100	0.5	800	1,900	100	0.5	640	1,900
		150	0.4	700	1,700	150	0.4	560	1,700
		210	0.2	600	1,500	210	0.2	480	1,450
Gray & Nodular Cast Iron (GG, GGG) Below 300HB	JC5118 JC8015 (JC600)	100	0.8	1,500	7,200	100	0.8	1,200	7,200
		150	0.6	1,500	6,600	150	0.6	1,200	6,600
		210	0.5	1,250	5,500	210	0.5	1,000	5,500

L: Overhung length, AP: Depth of cut, N: Spindle speed, Vf: Feed speed

- NOTE:**
- Speeds and Feeds should be adjusted according to the machine and work rigidity.
 - If chattering occurs, reduce the depth of cut AP or Spindle speed and keep feed per tooth the same.
 - If machine does not have enough power, reduce the depth of cut Ap or Spindle speed and Feed speed.
 - Use air thru.
 - In case of 50-55HRC, reduce 30% above Ap, N and F. (In the case of hardened die steel)



High Feed Diemaster

METRIC

SKS Recommended Cutting Data for Face Mill Style

Work Materials	Insert Grade	Overhung Length (mm)	Tool Diameter (mm)								
			40			50, (52)					
			No. of Teeth 3N			No. of Teeth 3N			No. of Teeth 4N		
Ap (mm)	N (min ⁻¹)	Vf (mm/min)	Ap (mm)	N (min ⁻¹)	Vf (mm/min)	Ap (mm)	N (min ⁻¹)	Vf (mm/min)	Ap (mm)	N (min ⁻¹)	Vf (mm/min)
Carbon Steel (C50, C55) Below 250HB	JC5040 JC8050 (JC730U)	150	0.8	1,200	3,600	1.2	830	3,730	1.2	830	4,970
		200	0.6	800	3,000	1.0	700	3,150	1.0	700	4,200
		250	0.4	600	2,700	1.0	570	2,570	1.0	570	3,420
		300	-	-	-	0.6	570	3,420	0.6	570	3,990
		350	-	-	-	0.4	570	3,420	0.4	570	3,990
		400	-	-	-	-	-	-	-	-	-
Mold Steel (1.2311, P20) 30-43HRC	JC5118	150	0.8	1,200	3,600	1.2	830	3,730	1.2	830	4,980
		200	0.6	800	3,000	1.0	700	3,150	1.0	700	4,200
		250	0.3	600	2,700	0.8	570	2,570	0.8	570	3,420
		300	-	-	-	0.5	570	2,900	0.5	570	3,420
		350	-	-	-	0.3	570	2,900	0.3	570	3,420
		400	-	-	-	-	-	-	-	-	-
Die Steel (1.2344, 1.2379) Below 255HB	JC5040 JC8050	150	0.8	1,200	3,600	1.2	830	3,730	1.2	830	4,980
		200	0.6	800	3,000	1.0	700	3,150	1.0	700	4,200
		250	0.3	600	2,700	0.8	570	2,570	0.8	570	3,420
		300	-	-	-	0.5	570	2,900	0.5	570	3,420
		350	-	-	-	0.3	570	2,900	0.3	570	3,420
		400	-	-	-	-	-	-	-	-	-
Hardened Die Steel (1.2344, 1.2379) 40-50HRC	JC5118 JC8015	100	0.8	640	1,500	1.0	570	1,720	1.0	570	2,280
		150	0.6	500	1,200	0.8	450	1,340	0.8	450	1,800
		200	0.3	400	960	0.6	380	1,150	0.6	380	1,520
		250	-	-	-	0.4	380	920	0.4	380	1,220
		300	-	-	-	-	-	-	-	-	-
Gray & Nodular Cast Iron (GG, GGG) Below 300HB	JC5118 JC8015 (JC600)	150	1.2	1,000	4,500	1.5	830	4,480	1.5	830	5,980
		200	0.8	800	3,600	1.2	700	3,780	1.2	700	5,040
		250	0.5	600	2,700	1.2	570	3,080	1.2	570	4,100
		300	-	-	-	0.8	570	3,420	0.8	570	4,560
		350	-	-	-	0.6	570	3,420	0.6	570	4,560
		400	-	-	-	-	-	-	-	-	-
Stainless Steel Below 250HB	JC5118 JC8050	150	0.8	1,200	3,600	1.2	950	3,730	1.2	950	4,980
		200	0.6	800	3,000	1.0	800	3,150	1.0	800	4,200
		250	0.3	600	2,250	0.8	570	2,250	0.8	570	3,000
		300	-	-	-	0.5	570	2,250	0.5	570	3,000
		350	-	-	-	0.3	570	2,250	0.3	570	3,000
		400	-	-	-	-	-	-	-	-	-

AP: Depth of cut, N: Spindle speed, Vf: Feed speed

- NOTE:**
- Speeds and Feeds should be adjusted according to the machine and work rigidity.
 - If chattering occurs, reduce the depth of cut AP or Spindle speed and keep feed per tooth the same.
 - If machine does not have enough power, reduce the depth of cut Ap or Spindle speed and Feed speed.
 - Use air thru.
 - In case of 50-55HRC, reduce 30% above Ap, N and F. (In the case of hardened die steel)
 - In case of over 250mm overhung length and severe interrupted cutting, use 10 type cutter.

**METRIC**

High Feed Diemaster

SKS Recommended Cutting Data for Face Mill Style

Work Materials	Insert Grade	Overhung Length (mm)	Tool Diameter (mm)								
			50, (52)			63			63, (66)		
			No. of Teeth 5			No. of Teeth 3N			No. of Teeth 4N		
			Ap (mm)	N (min ⁻¹)	Vf (mm/min)	Ap (mm)	N (min ⁻¹)	Vf (mm/min)	Ap (mm)	N (min ⁻¹)	Vf (mm/min)
Carbon Steel (C50, C55) Below 250HB	JC5040 JC8050 (JC730U)	150	0.8	1,200	3,600	1.2	760	4,050	1.2	760	5,400
		200	0.6	800	3,000	1.2	680	3,060	1.2	680	4,090
		250	0.4	600	2,700	1.0	600	2,700	1.0	600	3,600
		300	-	-	-	1.0	460	2,050	1.0	460	2,730
		350	-	-	-	0.8	460	2,390	0.8	460	3,190
		400	-	-	-	0.4	460	2,730	0.4	460	3,640
Mold Steel (1.2311, P20) 30-43HRC	JC5118	150	0.8	1,200	3,600	1.2	760	3,420	1.2	760	4,560
		200	0.6	800	3,000	1.2	680	3,060	1.2	680	4,080
		250	0.3	600	2,700	1.0	600	2,700	1.0	600	3,600
		300	-	-	-	0.8	460	2,050	0.8	460	2,730
		350	-	-	-	0.6	460	2,390	0.6	460	3,090
		400	-	-	-	0.4	460	2,390	0.4	460	3,090
Die Steel (1.2344, 1.2379) Below 255HB	JC5040 JC8050	150	0.8	1,200	3,600	1.2	760	3,420	1.2	760	4,560
		200	0.6	800	3,000	1.2	680	3,060	1.2	680	4,080
		250	0.3	600	2,700	1.0	600	2,700	1.0	600	3,600
		300	-	-	-	0.8	460	2,050	0.8	460	2,730
		350	-	-	-	0.6	460	2,390	0.6	460	3,090
		400	-	-	-	0.4	460	2,390	0.4	460	3,090
Hardened Die Steel (1.2344, 1.2379) 40-50HRC	JC5118 JC8015	100	0.8	640	1,500	1.0	450	1,350	1.0	450	1,800
		150	0.6	500	1,200	1.0	380	1,140	1.0	380	1,520
		200	0.3	400	960	0.8	380	1,140	0.8	380	1,520
		250	-	-	-	0.7	300	900	0.7	300	1,200
		300	-	-	-	0.5	300	720	0.5	300	960
Gray & Nodular Cast Iron (GG, GGG) Below 300HB	JC5118 JC8015 (JC600)	150	1.2	1,000	4,500	1.5	910	4,910	1.5	910	6,550
		200	0.8	800	3,600	1.5	680	3,670	1.5	680	4,900
		250	0.5	600	2,700	1.5	600	3,150	1.5	600	4,200
		300	-	-	-	1.2	460	2,480	1.2	460	3,310
		350	-	-	-	1.0	460	2,760	1.0	460	3,680
		400	-	-	-	0.6	460	2,760	0.6	460	3,680
Stainless Steel Below 250HB	JC5118 JC8050	150	0.8	1,200	3,600	1.2	760	3,000	1.2	760	4,000
		200	0.6	800	3,000	1.2	680	2,670	1.2	680	3,560
		250	0.3	600	2,250	1.0	600	2,350	1.0	600	3,130
		300	-	-	-	0.8	460	1,800	0.8	460	2,400
		350	-	-	-	0.6	460	1,800	0.6	460	2,400
		400	-	-	-	0.4	460	1,800	0.4	460	2,400

AP: Depth of cut, N: Spindle speed, Vf: Feed speed

NOTE: 1. Speeds and Feeds should be adjusted according to the machine and work rigidity.

2. If chattering occurs, reduce the depth of cut AP or Spindle speed and keep feed per tooth the same.

3. If machine does not have enough power, reduce the depth of cut Ap or Spindle speed and Feed speed.

4. Use air thru.

5. In case of 50-55HRC, reduce 30% above Ap, N and F. (In the case of hardened die steel)

6. In case of over 250mm overhung length and severe interrupted cutting, use 10 type cutter.



High Feed Diemaster

METRIC

SKS Recommended Cutting Data for Face Mill Style

Work Materials	Insert Grade	Overhung Length (mm)	Tool Diameter (mm)								
			63, (66)			80			80		
			No. of Teeth 5			No. of Teeth 5N			No. of Teeth 6		
			Ap (mm)	N (min ⁻¹)	Vf (mm/min)	Ap (mm)	N (min ⁻¹)	Vf (mm/min)	Ap (mm)	N (min ⁻¹)	Vf (mm/min)
Carbon Steel (C50, C55) Below 250HB	JC5040 JC8050 (JC730U)	150	1.0	830	7,000	1.2	720	5,400	1.0	720	6,900
		200	1.0	830	6,200	1.2	600	4,500	1.0	720	6,400
		250	0.8	830	6,200	1.2	520	3,900	0.8	720	6,400
		300	0.6	610	4,560	1.0	440	3,300	0.6	480	4,270
		350	0.5	610	4,560	1.0	360	2,700	0.5	480	4,270
		400	0.3	610	4,560	0.6	360	2,700	0.3	480	4,270
Mold Steel (1.2311, P20) 30-43HRC	JC5118	150	1.0	830	6,200	1.2	600	4,500	1.0	720	6,400
		200	1.0	830	6,200	1.2	520	3,900	1.0	720	6,400
		250	0.8	830	6,200	1.2	440	3,300	0.8	720	6,400
		300	0.6	610	4,460	1.0	360	2,700	0.6	480	4,270
		350	0.5	610	4,560	0.8	360	2,700	0.5	480	4,270
		400	0.3	610	4,560	0.6	360	2,700	0.3	480	4,270
Die Steel (1.2344, 1.2379) Below 255HB	JC5040 JC8050	150	1.0	830	6,200	1.2	600	4,500	1.0	720	6,900
		200	1.0	830	6,200	1.2	520	3,900	1.0	720	6,400
		250	0.8	830	6,200	1.2	440	3,300	0.8	720	6,400
		300	0.6	610	4,560	1.0	360	2,700	0.6	480	4,270
		350	0.5	610	4,560	0.8	360	2,700	0.5	480	4,270
		400	0.3	610	4,560	0.6	360	2,700	0.3	480	4,270
Hardened Die Steel (1.2344, 1.2379) 40-50HRC	JC5118 JC8015	100	0.8	480	2,400	1.0	360	1,800	0.8	380	2,280
		150	0.8	400	2,000	1.0	360	1,800	0.8	380	1,900
		200	0.6	400	2,000	1.0	300	1,500	0.7	380	1,900
		250	0.5	320	1,600	0.9	240	1,200	0.6	250	1,500
		300	0.4	320	1,280	0.7	240	960	0.5	250	1,200
Gray & Nodular Cast Iron (GG, GGG) Below 300HB	JC5118 JC8015 (JC600)	150	1.2	910	8,200	1.5	720	6,480	1.2	720	8,000
		200	1.2	910	7,500	1.5	600	5,400	1.2	720	7,130
		250	1.2	660	5,450	1.5	520	4,680	1.2	520	5,150
		300	1.0	600	4,950	1.5	440	3,960	1.2	470	4,650
		350	0.8	600	4,950	1.2	360	4,320	1.0	470	4,650
		400	0.5	600	4,950	0.8	360	4,320	0.6	470	4,650
Stainless Steel Below 250HB	JC5118 JC8050	150	1.0	830	5,440	1.2	600	3,900	1.0	720	5,550
		200	1.0	830	5,440	1.2	520	3,380	1.0	720	5,550
		250	0.8	830	5,440	1.2	440	2,860	0.8	720	5,550
		300	0.6	610	4,000	1.0	360	2,340	0.6	480	3,700
		350	0.5	610	4,000	0.8	360	2,340	0.5	480	3,700
		400	0.3	610	4,000	0.6	360	2,340	0.3	480	3,700

AP: Depth of cut, N: Spindle speed, Vf: Feed speed

- NOTE:**
- Speeds and Feeds should be adjusted according to the machine and work rigidity.
 - If chattering occurs, reduce the depth of cut AP or Spindle speed and keep feed per tooth the same.
 - If machine does not have enough power, reduce the depth of cut Ap or Spindle speed and Feed speed.
 - Use air thru.
 - In case of 50-55HRC, reduce 30% above Ap, N and F. (In the case of hardened die steel)
 - In case of over 250mm overhung length and severe interrupted cutting, use 10 type cutter.

**METRIC**

High Feed Diemaster

SKS Recommended Cutting Data for Indexable Face Mill Style

Work Materials	Insert Grade	Overhung Length (mm)	Tool Diameter (mm)								
			100			125			160		
			No. of Teeth 6N			No. of Teeth 6N			No. of Teeth 7N		
			Ap (mm)	N (min ⁻¹)	Vf (mm/min)	Ap (mm)	N (min ⁻¹)	Vf (mm/min)	Ap (mm)	N (min ⁻¹)	Vf (mm/min)
Carbon Steel (C50, C55) Below 250HB	JC5040 JC8050 (JC730U)	150	1.2	570	5,130	1.5	460	4,140	1.5	360	3,780
		200	1.2	480	4,320	1.5	460	4,140	1.5	360	3,780
		250	1.2	420	3,730	1.5	400	3,600	1.5	360	3,780
		300	1.0	350	3,150	1.5	380	3,420	1.5	320	3,360
		350	1.0	290	2,610	1.2	380	3,420	1.5	300	3,150
		400	0.6	290	2,610	1.0	380	3,420	1.2	300	3,150
Mold Steel (1.2311, P20) 30-43HRC	JC5118	150	1.2	480	4,320	1.5	400	3,000	1.5	320	2,800
		200	1.2	420	3,780	1.5	400	3,000	1.5	320	2,800
		250	1.2	350	3,150	1.5	380	2,850	1.5	320	2,800
		300	1.0	290	2,610	1.2	350	2,630	1.5	280	2,450
		350	0.8	290	2,610	1.0	350	2,630	1.2	280	2,450
		400	0.6	290	2,610	0.8	350	2,630	1.0	280	2,450
Die Steel (1.2344, 1.2379) Below 255HB	JC5040 JC8050	150	1.2	480	4,320	1.5	400	3,000	1.5	320	2,800
		200	1.2	420	3,780	1.5	400	3,000	1.5	320	2,800
		250	1.2	350	3,150	1.5	380	2,850	1.5	320	2,800
		300	1.0	290	2,610	1.2	350	2,630	1.5	280	2,450
		350	0.8	290	2,610	1.0	350	2,630	1.2	280	2,450
		400	0.6	290	2,610	0.8	350	2,630	1.0	280	2,450
Hardened Die Steel (1.2344, 1.2379) 40-50HRC	JC5118 JC8015	100	1.0	290	1,740	1.0	230	1,380	1.0	180	1,260
		150	1.0	290	1,740	1.0	230	1,380	1.0	180	1,260
		200	1.0	240	1,440	1.0	230	1,380	1.0	180	1,260
		250	0.9	190	1,140	1.0	190	1,140	1.0	150	1,050
		300	0.7	190	910	0.8	190	1,140	0.8	150	1,050
Gray & Nodular Cast Iron (GG, GGG) Below 300HB	JC5118 JC8015 (JC600)	150	1.5	570	6,160	1.8	420	4,500	1.8	330	4,160
		200	1.5	480	5,180	1.8	420	4,500	1.8	330	4,160
		250	1.5	420	4,480	1.8	380	4,100	1.8	330	4,160
		300	1.5	350	3,780	1.5	380	4,100	1.8	300	3,780
		350	1.2	290	4,180	1.2	350	3,780	1.5	300	3,780
		400	0.8	290	4,180	1.0	350	3,780	1.2	270	3,400
Stainless Steel Below 250HB	JC5118 JC8050	150	1.2	480	3,750	1.5	380	2,850	1.5	300	2,630
		200	1.2	420	3,280	1.5	380	2,850	1.5	300	2,630
		250	1.2	350	2,730	1.5	350	2,630	1.5	300	2,630
		300	1.0	290	2,270	1.2	320	2,400	1.5	270	2,360
		350	0.8	290	2,270	1.0	320	2,400	1.2	270	2,360
		400	0.6	290	2,270	0.8	320	2,400	1.0	270	2,360

AP: Depth of cut, N: Spindle speed, Vf: Feed speed

NOTE: 1. Speeds and Feeds should be adjusted according to the machine and work rigidity.

2. If chattering occurs, reduce the depth of cut AP or Spindle speed and keep feed per tooth the same.

3. If machine does not have enough power, reduce the depth of cut Ap or Spindle speed and Feed speed.

4. Use air thru.

5. In case of 50-55HRC, reduce 30% above Ap, N and F. (In the case of hardened die steel)

6. In case of over 250mm overhung length and severe interrupted cutting, use 10 type cutter.



High Feed Diemaster

METRIC

SKS Recommended Cutting Data for SKS-RS Face Mill Style

Work Materials	Insert Grade	Overhung Length (mm)	Tool Diameter (mm)								
			63			80			100		
			No. of Teeth 4			No. of Teeth 4			No. of Teeth 5		
			Ap (mm)	N (min ⁻¹)	Vf (mm/min)	Ap (mm)	N (min ⁻¹)	Vf (mm/min)	Ap (mm)	N (min ⁻¹)	Vf (mm/min)
Carbon Steel (S50C, S55C) Below 250HB	JC5040 JC8050 (JC730U)	150	1.2	760	5,400	1.2	720	4,320	1.2	570	4,275
		200	1.2	680	4,090	1.2	600	3,600	1.2	480	3,600
		250	1.0	600	3,600	1.2	520	3,120	1.2	420	3,108
		300	1.0	460	2,730	1.0	440	2,640	1.0	350	2,625
		350	0.8	460	3,190	1.0	360	2,160	1.0	290	2,175
		400	0.4	460	3,640	0.6	360	2,160	0.6	290	2,175
Mold Steel (1.2311, P20) 30-43HRC	JC5118	150	1.2	760	4,560	1.2	600	3,600	1.2	480	3,600
		200	1.2	680	4,080	1.2	520	3,120	1.2	420	3,150
		250	1.0	600	3,600	1.2	440	2,640	1.2	350	2,625
		300	0.8	460	2,730	1.0	360	2,160	1.0	290	2,175
		350	0.6	460	3,090	0.8	360	2,160	0.8	290	2,175
		400	0.4	460	3,090	0.6	360	2,160	0.6	290	2,175
Die Steel (1.2344, 1.2379) Below 255HB	JC5040 JC8050	150	1.2	760	4,560	1.2	600	3,600	1.2	480	3,600
		200	1.2	680	4,080	1.2	520	3,120	1.2	420	3,150
		250	1.0	600	3,600	1.2	440	2,640	1.2	350	2,625
		300	0.8	460	2,730	1.0	360	2,160	1.0	290	2,175
		350	0.6	460	3,090	0.8	360	2,160	0.8	290	2,175
		400	0.4	460	3,090	0.6	360	2,160	0.6	290	2,175
Hardened Die Steel (1.2344, 1.2379) 40-50HRC	JC5118 JC8015	100	1.0	450	1,800	1.0	360	1,440	1.0	290	1,450
		150	1.0	380	1,520	1.0	360	1,440	1.0	290	1,450
		200	0.8	380	1,520	1.0	300	1,200	1.0	240	1,200
		250	0.7	300	1,200	0.9	240	960	0.9	190	950
		300	0.5	300	960	0.7	240	768	0.7	190	758
Gray & Nodular Cast Iron (GG, GGG) Below 300HB	JC5118 JC8015 (JC600)	150	1.5	910	6,550	1.5	720	5,184	1.5	570	5,133
		200	1.5	680	4,900	1.5	600	4,320	1.5	480	4,317
		250	1.5	600	4,200	1.5	520	3,744	1.5	420	3,733
		300	1.2	460	3,310	1.5	440	3,168	1.5	350	3,150
		350	1.0	460	3,680	1.2	360	3,456	1.2	290	3,483
		400	0.6	460	3,680	0.8	360	3,456	0.9	290	3,483
Stainless Steel Below 250HB	JC5118 JC8050	150	1.2	760	4,000	1.2	600	3,120	1.2	480	3,125
		200	1.2	680	3,560	1.2	520	2,704	1.2	420	2,733
		250	1.0	600	3,130	1.2	440	2,288	1.2	350	2,275
		300	0.8	460	2,400	1.0	360	1,872	1.0	290	1,892
		350	0.6	460	2,400	0.8	360	1,872	0.8	290	1,892
		400	0.4	460	2,400	0.6	360	1,872	0.6	290	1,892

L: Extended Reach, AP: Depth of cut, N: Spindle speed, Vf: Feed speed

NOTE: 1. Speeds and Feeds should be adjusted according to the machine and work rigidity.

2. If chattering occurs, reduce the DOC or RPM by 30% and keep the feed per tooth the same.

3. In case of full slotting, it is recommended to reduce the RPM and IPM to 70% of the above.

4. Ramping up to 3 degrees is recommended.

**METRIC**

High Feed Diemaster

SKS Recommended Cutting Data for SKS-RS Face Mill Style

Work Materials	Insert Grade	Overhung Length (mm)	Tool Diameter (mm)					
			125			160		
			No. of Teeth 5			No. of Teeth 6		
			Ap (mm)	N (min ⁻¹)	Vf (mm/min)	Ap (mm)	N (min ⁻¹)	Vf (mm/min)
Carbon Steel (S50C, S55C) Below 250HB	JC5040 JC8050 (JC730U)	150	1.5	460	3,450	1.5	360	3,240
		200	1.5	460	3,450	1.5	360	3,240
		250	1.5	400	3,000	1.5	360	3,240
		300	1.5	380	2,850	1.5	320	3,360
		350	1.2	380	2,850	1.5	300	2,700
		400	1.0	380	2,850	1.2	300	2,700
Mold Steel (1.2311, P20) 30-43HRC	JC5118	150	1.5	400	2,500	1.5	320	2,400
		200	1.5	400	2,500	1.5	320	2,400
		250	1.5	380	2,375	1.5	320	2,400
		300	1.2	350	2,192	1.5	280	2,100
		350	1.0	350	2,192	1.2	280	2,100
		400	0.8	350	2,192	1.0	280	2,100
Die Steel (1.2344, 1.2379) Below 255HB	JC5040 JC8050	150	1.5	400	2,500	1.5	320	2,400
		200	1.5	400	2,500	1.5	320	2,400
		250	1.5	380	2,375	1.5	320	2,400
		300	1.2	350	2,192	1.5	280	2,100
		350	1.0	350	2,192	1.2	280	2,100
		400	0.8	350	2,192	1.0	280	2,100
Hardened Die Steel (1.2344, 1.2379) 40-50HRC	JC5118 JC8015	100	1.0	230	1,150	1.0	180	1,080
		150	1.0	230	1,150	1.0	180	1,080
		200	1.0	230	1,150	1.0	180	1,080
		250	1.0	190	950	1.0	150	900
		300	0.8	190	950	0.8	150	900
Gray & Nodular Cast Iron (GG, GGG) Below 300HB	JC5118 JC8015 (JC600)	150	1.8	420	3,750	1.8	330	3,566
		200	1.8	420	3,750	1.8	330	3,566
		250	1.8	380	3,417	1.8	330	3,566
		300	1.5	380	3,417	1.8	300	3,240
		350	1.2	350	3,150	1.5	300	3,240
		400	1.0	350	3,150	1.2	270	2,914
Stainless Steel Below 250HB	JC5118 JC8050	150	1.5	380	2,375	1.5	300	2,254
		200	1.5	380	2,375	1.5	300	2,254
		250	1.5	350	2,192	1.5	300	2,254
		300	1.2	320	2,000	1.5	270	2,023
		350	1.0	320	2,000	1.2	270	2,023
		400	0.8	320	2,000	1.0	270	2,023

L: Extended Reach, AP: Depth of cut, N: Spindle speed, Vf: Feed speed

- NOTE:**
1. Speeds and Feeds should be adjusted according to the machine and work rigidity.
 2. If chattering occurs, reduce the DOC or RPM by 30% and keep the feed per tooth the same.
 3. In case of full slotting, it is recommended to reduce the RPM and IPM to 70% of the above.
 4. Ramping up to 3 degrees is recommended.

