

PRODUCT NEWS

PN-E-024

KALIP TEKNİK



Various modular heads can be combined with different carbide shank holders for a wide range of machining applications

MSN Series

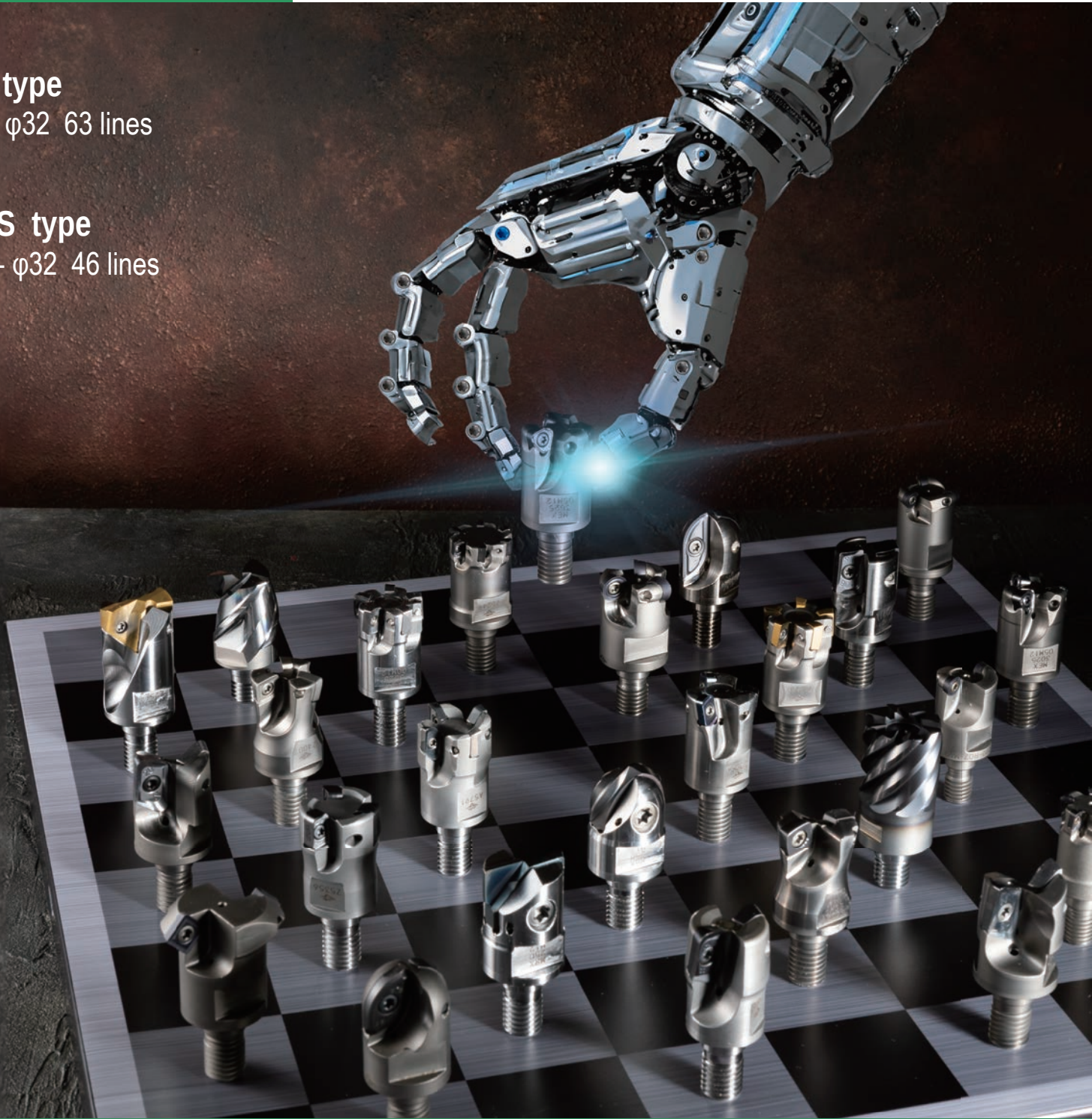
Carbide Modular Head Holder

MSN type

- $\phi 10$ - $\phi 32$ 63 lines

MSN-S type

- $\phi 9.8$ - $\phi 32$ 46 lines

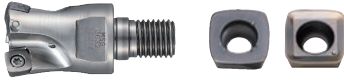
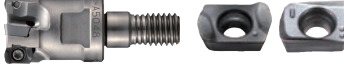
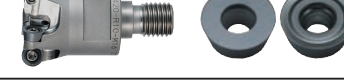


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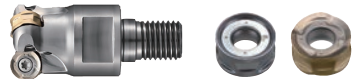
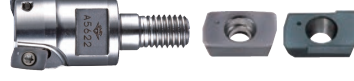
Carbide Modular Head Holder

ISO	Roughing	Semi-Finishing	Finishing	Applications
P M K N S H	★			 Face Milling  Pocket Milling  Copy Milling  Helical Interpolation  Plunge Milling
P M K N S H	★			 Face Milling  Pocket Milling  Copy Milling  Helical Interpolation  Plunge Milling
P M K N S H	★			 Face Milling  Pocket Milling  Copy Milling  Helical Interpolation  Plunge Milling
P M K N S H	★			 Face Milling  Pocket Milling  Copy Milling  Helical Interpolation  Plunge Milling
P M K N S H	★			 Face Milling  Pocket Milling  Copy Milling  Helical Interpolation  Plunge Milling  Slotting
P M K N S H	★	★	★	 Face Milling  Pocket Milling  Copy Milling  Helical Interpolation  Slotting  Shoulder Milling
P M K N S H	★	★	★	 Face Milling  Pocket Milling  Copy Milling  Helical Interpolation  Slotting  Shoulder Milling
P M K N S H	★	★		 Face Milling  Shoulder Milling(radius)  Helical Interpolation  Slotting  Plunge Milling
P M K N S H	★	★		 Face Milling  Shoulder Milling(radius)  Helical Interpolation  Slotting  Plunge Milling
P M K N S H	★	★		 Face Milling  Pocket Milling  Copy Milling  Helical Interpolation  Slotting  Shoulder Milling
P M K N S H		★	★	 Copy Milling  Pocket Milling  Slotting
P M K N S H		★	★	 Face Milling  Pocket Milling  Copy Milling  Helical Interpolation  Shoulder Milling
P M K N S H		★	★	 Up & Down Milling  Up & Down Milling
P M K N S H		★	★	 Face Milling  Copy Milling  Shoulder Milling(radius)
P M K N S H	★	★		 Copy Milling  Slotting  Shoulder Milling(radius)
P M K N S H	★	★		 Copy Milling  Slotting  Shoulder Milling(radius)
P M K N S H	★	★		 Face Milling  Pocket Milling  Copy Milling  Helical Interpolation

Item Code / Shape			Tool dia.														
			M6			M8			M10			M12			M16		
MSG-10 SKS-GII-10			10	11	12	15	16		20	21		25	26		30	32	33
			13	14		17	18		22			27	28		35	40	42
MSG-09 SKS-GII-09			10	11	12	15	16		20	21		25	26		30	32	33
			13	14		17	18		22			27	28		35	40	42
MEX-07 SKS EXTREME			10	11	12	15	16		20	21		25	26		30	32	33
			13	14		17	18		22			27	28		35	40	42
MEX-05 SKS EXTREME			10	11	12	15	16		20	21		25	26		30	32	33
			13	14		17	18		22			27	28		35	40	42
MXG QM MAX GII			10	11	12	15	16		20	21		25	26		30	32	33
			13	14		17	18		22			27	28		35	40	42
MQX QM MAX			10	11	12	15	16		20	21		25	26		30	32	33
			13	14		17	18		22			27	28		35	40	42
MPM QM MILL			10	11	12	15	16		20	21		25	26		30	32	33
			13	14		17	18		22			27	28		35	40	42
MSX-11 EXSAP 11			10	11	12	15	16		20	21		25	26		30	32	33
			13	14		17	18		22			27	28		35	40	42
MSX-17 EXSAP 17			10	11	12	15	16		20	21		25	26		30	32	33
			13	14		17	18		22			27	28		35	40	42
SSV SIC-EVO			10	11	12	15	16		20	21		25	26		30	32	33
			13	14		17	18		22			27	28		35	40	42
MBX MIRROR BALL			10	11	12	15	16		20	21		25	26		30	32	33
			13	14		17	18		22			27	28		35	40	42
MRX MIRROR RADIUS			10	11	12	15	16		20	21		25	26		30	32	33
			13	14		17	18		22			27	28		35	40	42
MPF Back & Forth Cutter			10	11	12	15	16		20	21		25	26		30	32	33
			13	14		17	18		22			27	28		35	40	42
MXF DIEMASTER 5G			10	11	12	15	16		20	21		25	26		30	32	33
			13	14		17	18		22			27	28		35	40	42
MSWX SWING BALL			10	11	12	15	16		20	21		25	26		30	32	33
			13	14		17	18		22			27	28		35	40	42
MSW SWING BALL			10	11	12	15	16		20	21		25	26		30	32	33
			13	14		17	18		22			27	28		35	40	42
SDH SUPER DIEMASTER			10	11	12	15	16		20	21		25	26		30	32	33
			13	14		17	18		22			27	28		35	40	42

Carbide Modular Head Holder

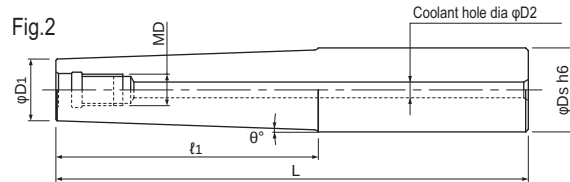
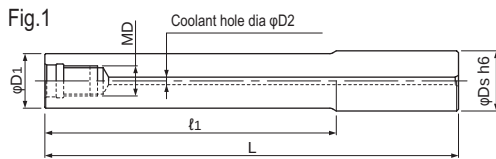
ISO	Roughing	Semi-Finishing	Finishing	Applications
P M K N S H	★			 Face Milling  Pocket Milling  Copy Milling  Helical Interpolation
P M K N S H	★	★		 Shoulder Milling(radius)  Pocket Milling  Copy Milling  Helical Interpolation  Slotting
P M K N S H	★	★		 Shoulder Milling(radius)  Pocket Milling  Copy Milling  Helical Interpolation  Slotting
P M K N S H		★	★	 Face Milling  Pocket Milling  Copy Milling  Helical Interpolation  Plunge Milling
P M K N S H		★	★	 Face Milling  Copy Milling  Shoulder Milling(radius)
P M K N S H		★	★	 Shoulder Milling  Pocket Milling  Slotting  Helical Interpolation  Drilling
P M K N S H		★	★	 Shoulder Milling(radius)  Pocket Milling  Copy Milling  Helical Interpolation
P M K N S H		★	★	 Copy Milling  Pocket Milling
P M K N S H		★	★	 Face Milling  Shoulder Milling
P M K N S H		★	★	 Face Milling  Pocket Milling  Copy Milling  Helical Interpolation  Shoulder Milling(radius)
P M K N S H		★	★	 Copy Milling  Slotting  Shoulder Milling
P M K N S H		★	★	 Copy Milling  Slotting  Shoulder Milling  Side Milling
P M K N S H		★	★	 Face Milling  Pocket Milling  Copy Milling  Helical Interpolation  Shoulder Milling(radius)
P M K N S H		★	★	 Copy Milling  Slotting  Shoulder Milling  Side Milling
P M K N S H	-	-	-	 Spot Facing  Drilling

Item Code / Shape			Tool dia.											
			M6			M8		M10		M12		M16		
MTX EXTREME DIEMASTER			10	11	12	15	16	20	21	25	26	30	32	33
			13	14		17	18	22		27	28	35	40	42
MAL AERO CHIPPER			10	11	12	15	16	20	21	25	26	30	32	33
			13	14		17	18	22		27	28	35	40	42
MAM AERO CHIPPER MINI			10	11	12	15	16	20	21	25	26	30	32	33
			13	14		17	18	22		27	28	35	40	42
MDB BACK DRAFT CUTTER			10	11	12	15	16	20	21	25	26	30	32	33
			13	14		17	18	22		27	28	35	40	42
SMSA S-HEAD			10	11	12	15	16	20	21	25	26	30	32	33
			13	14		17	18	22		27	28	35	40	42
SMAL S-HEAD			10	11	12	15	16	20	21	25	26	30	32	33
			13	14		17	18	22		27	28	35	40	42
SMSR S-HEAD			10	11	12	15	16	20	21	25	26	30	32	33
			13	14		17	18	22		27	28	35	40	42
SMHB S-HEAD			10	11	12	15	16	20	21	25	26	30	32	33
			13	14		17	18	22		27	28	35	40	42
MQT HIGH PRECISION QM MAX			10	11	12	15	16	20	21	25	26	30	32	33
			13	14		17	18	22		27	28	35	40	42
MRX(KRM) MIRROR BARREL			10	11	12	15	16	20	21	25	26	30	32	33
			13	14		17	18	22		27	28	35	40	42
MTP(TNM) MIRROR BARREL			10	11	12	15	16	20	21	25	26	30	32	33
			13	14		17	18	22		27	28	35	40	42
MTP(TPM) MIRROR BARREL			10	11	12	15	16	20	21	25	26	30	32	33
			13	14		17	18	22		27	28	35	40	42
MBX(LRM) MIRROR BARREL			10	11	12	15	16	20	21	25	26	30	32	33
			13	14		17	18	22		27	28	35	40	42
STLP S-HEAD			10	11	12	15	16	20	21	25	26	30	32	33
			13	14		17	18	22		27	28	35	40	42
TLZD INDEXABLE FLAT DRILL			φ14.0 - φ14.5			φ14.6 - φ18.5		φ18.6 - φ23.5		φ24.0 - φ28.5		φ29.0 - φ32.0		

Carbide Modular Head Holder

■MSN type

Through Coolant Hole



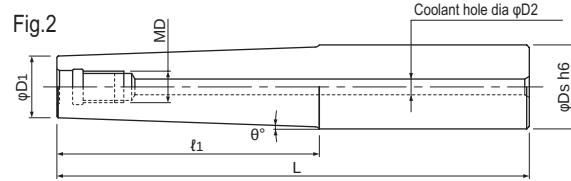
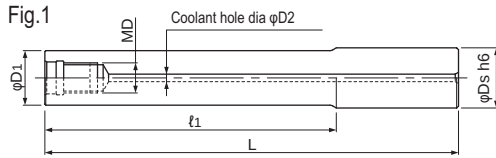
Cat.No.	Stock	Dimensions(mm)							Weight (kg)	Fig.
		ϕDs	l_1	L	$\phi D1$	θ°	MD	$\phi D2$		
MSN-M6-12-S10C	●	10	12	60	9.7	-	M6	3	0.06	1
MSN-M6-30-S 10C	●	10	30	80	9.7	-			0.07	1
MSN-M6-50-S 10C	●	10	50	100	9.7	-			0.09	1
MSN-M6-80-S 10C	●	10	80	130	9.7	-			0.12	1
MSN-M6-120-S 10C	●	10	120	170	9.7	-			0.16	1
MSN-M6-170-S 10C	●	10	170	220	9.7	-			0.20	1
MSN-M6-35T-S12C	○	12	35	92	9.5	1°30'			0.12	2
MSN-M6-57T-S12C	●	12	57	114	9.5	1°			0.14	2
MSN-M6-15-S12C	●	12	15	60	11.5	-			0.08	1
MSN-M6-30-S12C	●	12	30	80	11.5	-			0.11	1
MSN-M6-50-S12C	●	12	50	100	11.5	-			0.13	1
MSN-M6-80-S12C	●	12	80	130	11.5	-			0.18	1
MSN-M6-120-S12C	●	12	120	170	11.5	-			0.23	1
MSN-M6-170-S12C	●	12	170	220	11.5	-			0.30	1
MSN-M6-65T-S16C	●	16	65	125	11.2	1°45'			0.28	2
MSN-M6-15-S16C	●	16	15	60	13.5	-			0.15	1
MSN-M6-30-S16C	●	16	30	80	13.5	-			0.19	1
MSN-M6-50-S16C	○	16	50	100	13.5	-			0.23	1
MSN-M6-80-S16C	●	16	80	130	13.5	-	M8	4	0.28	1
MSN-M8-20-S16C	●	16	20	75	15.5	-			0.17	1
MSN-M8-40-S16C	●	16	40	95	15.5	-			0.22	1
MSN-M8-80-S16C	●	16	80	135	15.5	-			0.32	1
MSN-M8-120-S16C	●	16	120	175	15.5	-			0.42	1
MSN-M8-152-S16C	●	16	152	207	15.5	-			0.51	1
MSN-M8-40T-S20C	○	20	40	100	14.5	3°30'			0.36	2
MSN-M8-77T-S20C	●	20	77	143	14.5	1°45'			0.49	2
MSN-M10-20-S20C	●	20	20	80	19.5	-	M10	4	0.29	1
MSN-M10-40-S20C	●	20	40	100	19.5	-			0.39	1
MSN-M10-70-S20C	●	20	70	130	19.5	-			0.50	1
MSN-M10-90-S20C	●	20	90	150	19.5	-			0.60	1
MSN-M10-140-S20C	●	20	140	200	19.5	-			0.80	1
MSN-M10-160-S20C	●	20	160	220	19.5	-			0.87	1
MSN-M10-210-S20C	●	20	210	270	19.5	-			1.07	1
MSN-M10-40T-S20C	●	20	40	100	18.5	0°43'			0.39	2
MSN-M10-90T-S20C	●	20	90	150	18.5	0°19'			0.58	2
MSN-M10-140T-S20C	●	20	140	200	18.5	0°12'			0.77	2
MSN-M10-85T-S25C	●	25	85	161	18.5	2°			0.90	2

★ only for high feed

★ only for high feed

■MSN type

Through Coolant Hole

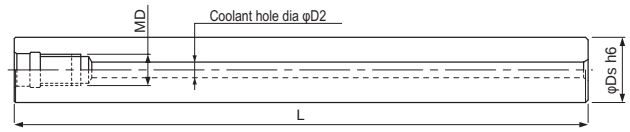


Cat.No.	Stock	Dimensions(mm)							Weight (kg)	Fig.
		φDs	ℓ1	L	φD1	θ°	MD	φD2		
MSN-M12-25-S25C	●	25	25	90	24	—	M12	6	0.53	1
MSN-M12-55-S25C	●	25	55	120	24	—			0.72	1
MSN-M12-70-S25C	●	25	70	135	24	—			0.81	1
MSN-M12-105-S25C	●	25	105	170	24	—			1.03	1
MSN-M12-135-S25C	●	25	135	215	24	—			1.30	1
MSN-M12-155-S25C	●	25	155	220	24	—			1.34	1
MSN-M12-200-S25C	●	25	200	265	24	—			1.58	1
MSN-M12-255-S25C	●	25	255	320	24	—			1.91	1
MSN-M12-100T-S32C	○	32	100	180	23.5	2°	M16	8	1.61	2
MSN-M16-25-S32C	●	32	25	90	29	—			0.85	1
MSN-M16-55-S32C	●	32	55	120	29	—			1.13	1
MSN-M16-77-S32C	●	32	77	157	29	—			1.47	1
MSN-M16-97-S32C	●	32	97	177	29	—			1.64	1
MSN-M16-105-S32C	●	32	105	170	29	—			1.59	1
MSN-M16-127-S32C	●	32	127	207	29	—			1.89	1
MSN-M16-155-S32C	●	32	155	220	29	—			2.04	1
MSN-M16-177-S32C	●	32	177	257	29	—			2.32	1
MSN-M16-195-S32C	●	32	195	260	29	—			2.40	1
MSN-M16-225-S32C	●	32	225	290	29	—			2.57	1
MSN-M16-245-S32C	●	32	245	310	29	—			2.74	1
MSN-M16-295-S32C	●	32	295	360	29	—			3.17	1
MSN-M16-315-S32C	●	32	315	380	29	—			3.34	1
MSN-M16-117T-S32C	○	32	117	197	29	0°38'			1.88	2
MSN-M16-127T-S32C	○	32	127	207	29	0°30'			2.23	2
MSN-M16-177T-S32C	●	32	177	257	29	0°23'			2.78	2
MSN-M16-197T-S32C	○	32	197	277	29	0°23'			3.00	2

Carbide Modular Head Holder

■MSN-S type

Through Coolant Hole



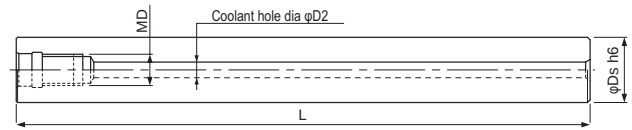
Cat.No.	Stock	Dimensions(mm)				Weight (kg)
		φDs	L	MD	φD2	
MSN-M6-67S-S9.8C	●	9.8	67	M6	3	0.06
MSN-M6-107S-S9.8C	●	9.8	107			0.10
MSN-M6-82S-S10C	●	10	82			0.08
MSN-M6-122S-S10C	●	10	122			0.12
MSN-M6-167S-S10C	●	10	167			0.16
MSN-M6-220S-S10C	●	10	220			0.21
MSN-M6-80S-S11.8C	●	11.8	80			0.11
MSN-M6-120S-S11.8C	●	11.8	120			0.17
MSN-M6-90S-S12C	●	12	90			0.13
MSN-M6-130S-S12C	●	12	130			0.19
MSN-M6-170S-S12C	●	12	170			0.25
MSN-M6-220S-S12C	●	12	220			0.32
MSN-M8-87S-S14C	○	14	87	M8	4	0.16
MSN-M8-137S-S14C	●	14	137			0.26
MSN-M8-97S-S15C	●	15	97			0.21
MSN-M8-147S-S15C	●	15	147			0.33
MSN-M8-197S-S15C	●	15	197			0.44
MSN-M8-217S-S15C	●	15	217			0.49
MSN-M8-107S-S16C	●	16	107			0.27
MSN-M8-157S-S16C	●	16	157			0.40
MSN-M8-220S-S16C	●	16	220			0.57
MSN-M10-130S-S18C	●	18	130	M10	4	0.42
MSN-M10-190S-S18C	●	18	190			0.62
MSN-M10-240S-S18C	●	18	240			0.89
MSN-M10-270S-S18C	●	18	270			0.90
MSN-M10-130S-S20C	●	20	130			0.53
MSN-M10-190S-S20C	●	20	190			0.78
MSN-M10-250S-S20C	●	20	250			1.02
MSN-M10-270S-S20C	●	20	270			1.13

★ only for high feed

★ only for high feed

■MSN-S type

Through Coolant Hole



Cat.No.	Stock	Dimensions(mm)				Weight (kg)
		φDs	L	MD	φD2	
MSN-M12-185S-S23C	●	23	185	M12	6	0.98
MSN-M12-265S-S23C	●	23	265			1.42
MSN-M12-185S-S24C	●	24	185			1.07
MSN-M12-265S-S24C	●	24	265			1.54
MSN-M12-145S-S25C	●	25	145			0.91
MSN-M12-215S-S25C	●	25	215			1.36
MSN-M12-285S-S25C	●	25	285			1.80
MSN-M12-320S-S25C	●	25	320			2.06
MSN-M16-160S-S28C	●	28	160	M16	8	1.22
MSN-M16-230S-S28C	●	28	230			1.77
MSN-M16-310S-S28C	●	28	310			2.41
MSN-M16-380S-S28C	●	28	380			2.97
MSN-M16-157S-S32C	●	32	157			1.61
MSN-M16-217S-S32C	●	32	217			2.22
MSN-M16-287S-S32C	●	32	287			2.94
MSN-M16-357S-S32C	●	32	357			3.66
MSN-M16-380S-S32C	●	32	380			3.98

Carbide Modular Head Holder

■ PROPER MOUNTING OF MODULAR HEADS

1 Cleaning



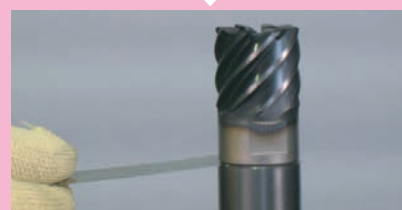
Remove dirt and chips with air from the connecting thread and face of modular head and MSN/MGN shank holder.

2 Initial Tightening



Tighten by hand until the head and the shank holder faces touch.

3 Final Tightening



Tighten slowly with torque control spanner wrench or DIJET DS type spanner wrench and confirm that there is no gap.

- Attention)
1. Final tightening without initial tightening cause connecting thread damage.
 2. Only use DS type spanner wrench when use Solid modular head (SMSA/SMSR/SMAL type)

Attention

1. Only use torque control spanner wrench or DIJET DS type spanner wrench.
In case of choosing torque control spanner wrench, confirm that the wrench size is matched to the dimensions W & C of each modular head.



Torque control spanner



Spanner wrench (DS type)

2. Only apply gentle pressure on wrench.
3. Confirm there is no gap between MSN/MGN shank holder and modular head

■ Steel modular heads

Thread	Tightening torque	Spanner size(W)
M6	8.0N·m	8 [☆] , 10
M8	16N·m	12 [☆]
M10	16N·m	14, 15
M12	20N·m	17, 19
M16	25N·m	22, 26

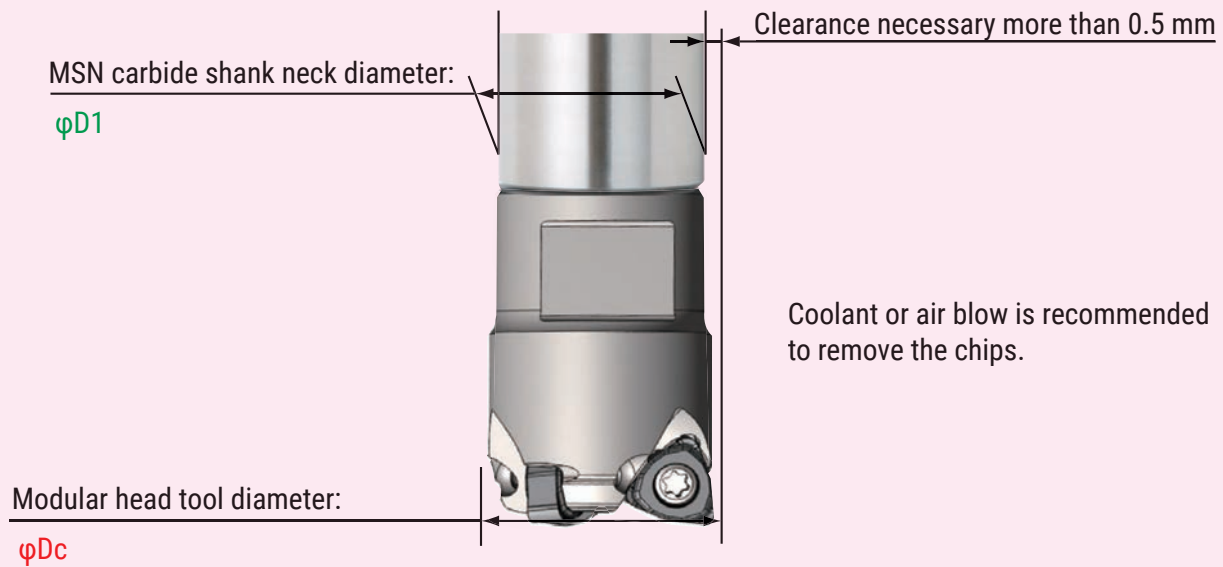
■ Solid modular heads(SMSA/SMSR/SMAL)

Thread	Tightening torque	Spanner size(W)	Cat.No. 
M8	10~11N·m	14	DS-14
M10	10~11N·m	14	DS-14
M10	10~16N·m	17	DS-17
M12	15~20N·m	19, 22	DS-19, DS-22
M16	20~25N·m	27	DS-27

■ SELECTION OF MSN CARBIDE SHANK HOLDER

When using modular head over $\varnothing$ 16mm, please select MSN carbide shank which the diameter ($\varnothing$ D1) is 1 mm or smaller than modular head ($\varnothing$ Dc).

Wrong selection can cause damage to the carbide shank.



Caution for mounting in shrink fit holder.

When you use a carbide shank and a modular head on a shrink fit holder, please shrink fit only the carbide shank without mounting the modular head. Mount the modular head on the shank after shrink fit operation is complete. In case of shrink fit MSN shank + modular head together, it will be difficult to loosen due to heat



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