



MULTI-MASTER INDEXABLE SOLID CARBIDE LINE

**Testine Intercambiabili con Fori
per la Refrigerazione Interna**

MULTI-MASTER
INDEXABLE SOLID CARBIDE LINE

Caratteristiche

ISCAR introduce nuove testine MULTI-MASTER e 6 nuovi steli, entrambi con fori per la refrigerazione interna

Testine MULTI-MASTER con fori per la refrigerazione interna

ISCAR introduce quattro nuove testine in metallo duro con diametro 12 mm e foro centrale per la refrigerazione interna, con fuoriuscita su ogni tagliente. Questo sistema permette di refrigerare la zona di taglio incrementando la durata dell'utensile.

Le nuove testine sono riconoscibili dalla lettera "I" presente nella descrizione

MM EC120B09R000-3T08I - Testine in metallo duro con 3 eliche a 45° e fori per la refrigerazione interna.

MM EC120E09C5CF-4T08I - Testine in metallo duro con 4 eliche a 38° a passo variabile, con fori per la refrigerazione interna. Per operazioni di sgrossatura e finitura su acciai legati, acciai inox e superleghe.

MM ERS120B09-4T08I - Testine in metallo duro con 4 eliche a 45°, per elevate asportazioni.

MM EB120H09CF-3T08I - Testine intercambiabili con geometria ball nose.



MULTI-MASTER
INDEXABLE SOLID CARBIDE LINE

Steli **MULTI-MASTER**

ISCAR ha inoltre ampliato la gamma degli steli **MULTI-MASTER** minorati MM S-A, introducendo 6 nuovi steli in metallo duro o in acciaio. Tutti i nuovi steli hanno un foro centrale per il passaggio interno del refrigerante ed una connessione filettata T08, per permettere il montaggio delle testine per fresatura con passaggio interno del refrigerante.

**Cliccare per
il filmato**

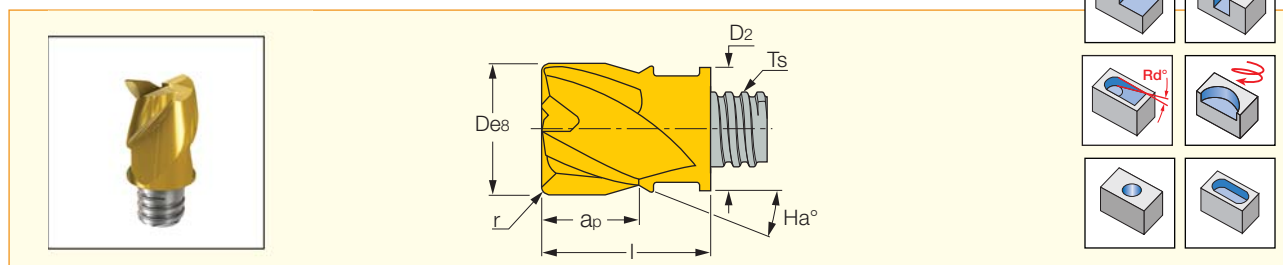
▶ <http://youtu.be/iBajECOSfbo>

Per qualsiasi ulteriore informazione potete contattare l'Ufficio Marketing o consultare la sezione **ToolShop** del sito www.iscaritalia.it, dove sono sempre disponibili in tempo reale tutte le informazioni relative ai prodotti Iscar (quote, dati di taglio, prezzi, disponibilità, ...).

MULTI-MASTER INDEXABLE SOLID CARBIDE LINE

MM EC-3

Testine in metallo duro con 3 eliche a 45°

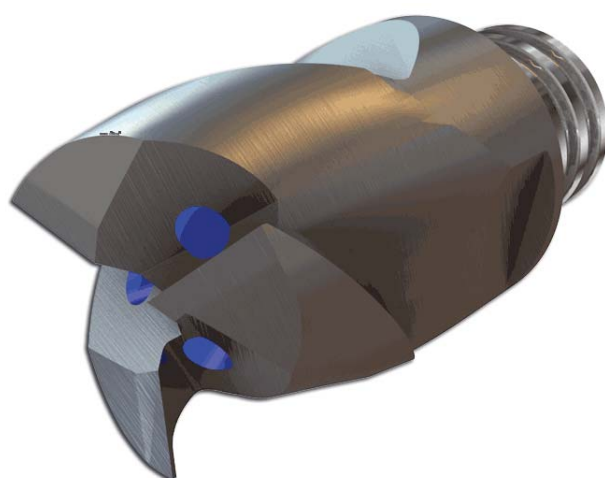


Descrizione	Dimensioni								IC908	Parametri di taglio consigliati
	D	Eliche	ap	r	Ts	D2	l	Ha°		fz (mm/dente)
MM EC080B05R000-3T05	8.00	3	5.00	0.00	T05	7.70	10.00	45.0	●	0.03-0.09
MM EC100B07R000-3T06	10.00	3	7.00	0.00	T06	9.60	13.00	45.0	●	0.03-0.10
MM EC100B12R000-3T06	10.00	3	12.00	0.00	T06	9.60	19.00	45.0	●	0.03-0.10
MM EC120B09R000-3T08⁽¹⁾	12.00	3	9.00	0.00	T08	11.70	16.50	45.0	●	0.04-0.11
MM EC120B09R000-3T08	12.00	3	9.00	0.00	T08	11.70	16.50	45.0	●	0.04-0.11
MM EC.500B37R000-3T08	12.70	3	9.50	0.00	T08	12.40	16.50	45.0	●	0.05-0.10
MM EC.500B37R015-3T08	12.70	3	9.50	0.40	T08	12.40	16.50	45.0	●	0.05-0.10
MM EC.500B37R031-3T08	12.70	3	9.50	0.80	T08	12.40	16.50	45.0	●	0.05-0.10
MM EC.500B37R062-3T08	12.70	3	9.50	1.60	T08	12.40	16.50	45.0	●	0.05-0.10

NEW

• Non lubrificare la connessione filettata.

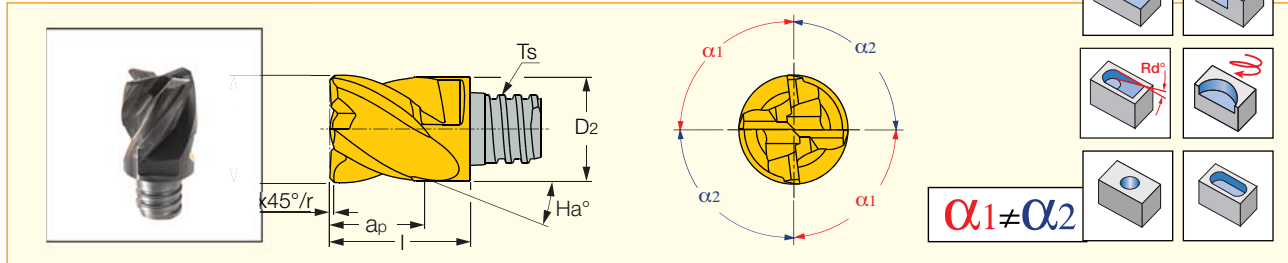
⁽¹⁾ Con fori per il refrigerante direzionati su ogni tagliente



MULTI-MASTER INDEXABLE SOLID CARBIDE LINE

MM EC-CF

Testine in metallo duro con geometria chatterfree per finitura e sgrossatura



Descrizione	Dimensioni									IC908	Parametri di taglio consigliati
	D	Ch	r	Eliche	a _p	T _s	D ₂	I	H _a °		f _z (mm/dente)
MM EC080E05C3CF-4T05	8.00	0.3	-	4	5.00	T05	7.70	10.00	38.0	●	0.03-0.09
MM EC080E05R0CF-4T05	8.00	-	0.00	4	5.00	T05	7.70	10.00	38.0	●	0.03-0.09
MM EC080E05R05CF-4T05	8.00	-	0.50	4	5.00	T05	7.70	10.00	38.0	●	0.03-0.09
MM EC100E07C4CF-4T06	10.00	0.4	-	4	7.00	T06	9.60	13.00	38.0	●	0.03-0.10
MM EC100E07R05CF-4T06	10.00	-	0.50	4	7.00	T06	9.60	13.00	38.0	●	0.03-0.10
MM EC120E09C5CF-4T08	12.00	0.5	-	4	9.00	T08	11.70	16.50	38.0	●	0.04-0.11
MM EC120E09C5CF-4T08 ⁽¹⁾	12.00	0.5	-	4	9.00	T08	11.70	16.50	38.0	●	0.04-0.11
MM EC120E09R05CF-4T08	12.00	-	0.50	4	9.00	T08	11.70	16.50	38.0	●	0.04-0.11
MM EC500E37C20CF-4T08	12.70	0.5	-	4	9.50	T08	12.40	16.50	38.0	●	0.04-0.11
MM EC500E37R0-CF-4T08	12.70	-	-	4	9.50	T08	12.40	16.50	38.0	●	0.04-0.11
MM EC500E37R15CF-4T08	12.70	-	0.39	4	9.50	T08	12.40	16.50	38.0	●	0.04-0.11
MM EC500E37R31CF-4T08	12.70	-	0.78	4	9.50	T08	12.40	16.50	38.0	●	0.04-0.11
MM EC500E37R62CF-4T08	12.70	-	1.56	4	9.50	T08	12.40	16.50	38.0	●	0.04-0.11
MM EC160E12C6CF-4T10	16.00	0.6	-	4	12.00	T10	15.30	20.50	38.0	●	0.05-0.13
MM EC160E12R05CF-4T10	16.00	-	0.50	4	12.00	T10	15.30	20.50	38.0	●	0.05-0.13
MM EC200E15C6CF-4T12	20.00	0.6	-	4	15.00	T12	18.45	25.50	38.0	●	0.05-0.17
MM EC200E15R05CF-4T12	20.00	-	0.50	4	15.00	T12	18.30	25.50	38.0	●	0.05-0.17
MM EC250E22C6CF-4T15	25.00	0.6	-	4	22.00	T15	23.90	37.00	38.0	●	0.06-0.17
MM EC250E28C6CF-12T15	25.00	0.6	-	12	28.00	T15	23.90	43.00	38.0	●	0.06-0.13
MM EC250E28C6CF-4T15	25.00	0.6	-	4	28.00	T15	23.90	43.00	38.0	●	0.06-0.17
MM EC250E22R05CF-4T15	25.00	-	0.50	4	22.00	T15	23.90	37.00	38.0	●	0.06-0.17
MM EC250E22R10CF-4T15	25.00	-	1.00	4	22.00	T15	23.90	37.00	38.0	●	0.06-0.17
MM EC250E22R20CF-4T15	25.00	-	2.00	4	22.00	T15	23.90	37.00	38.0	●	0.06-0.17
MM EC250E22R30CF-4T15	25.00	-	3.00	4	22.00	T15	23.90	37.00	38.0	●	0.06-0.17

• Non lubrificare la connessione filettata.

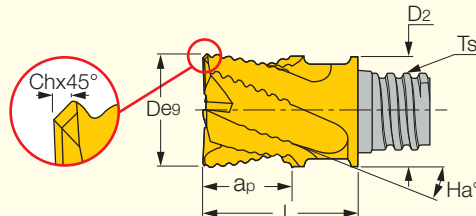
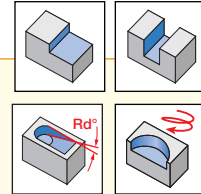
⁽¹⁾ Fori per il refrigerante direzionati su ogni tagliente



MULTI-MASTER INDEXABLE SOLID CARBIDE LINE

MM ERS

Testine in metallo duro per sgrossatura

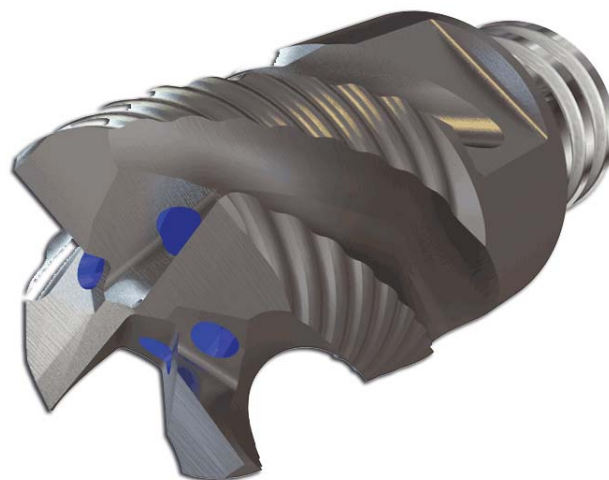


Descrizione	Dimensioni									IC908	Parametri di taglio consigliati
	D	Eliche	a_p	T_s	D_2	I	Ch	H_a°	R_d°		f_z (mm/dente)
MM ERS080B05-4T05	8.00	4	5.00	T05	7.70	10.00	0.25	45.0	90.0	●	0.03-0.08
MM ERS080B09-4T05	8.00	4	9.00	T05	7.70	15.00	0.25	45.0	90.0	●	0.03-0.08
MM ERS100B07-4T06	10.00	4	7.00	T06	9.60	13.00	0.30	45.0	90.0	●	0.03-0.09
MM ERS120B09-4T08	12.00	4	9.00	T08	11.70	16.50	0.35	45.0	90.0	●	0.04-0.10
MM ERS120B09-4T08H ⁽¹⁾	12.00	4	9.00	T08	11.70	16.50	0.35	45.0	90.0	●	0.04-0.10
MM ERS120B09-4T08I ⁽²⁾	12.00	4	9.00	T08	11.70	16.50	0.35	45.0	90.0	●	0.04-0.11
MM ERS120B14-4T08	12.00	4	14.00	T08	11.70	23.00	0.35	45.0	90.0	●	0.04-0.10
MM ERS.500B37-4T08	12.70	4	9.50	T08	12.40	16.50	0.35	45.0	90.0	●	0.04-0.10
MM ERS160B12-5T10	16.00	5	12.00	T10	15.30	20.50	0.40	45.0	7.0	●	0.04-0.10
MM ERS160B12-5T10H ⁽¹⁾	16.00	5	12.00	T10	15.30	20.50	0.40	45.0	7.0	●	0.04-0.10
MM ERS200B15-6T12	20.00	6	15.00	T12	18.30	25.50	0.40	45.0	3.0	●	0.05-0.11
MM ERS250B22-6T15	25.00	6	22.00	T15	23.90	37.00	0.50	45.0	3.0	●	0.05-0.11
MM ERS1.00B86-6T15	25.40	6	22.00	T15	23.90	37.00	0.50	45.0	3.0	●	0.04-0.10

NEW

• Non lubrificare la connessione filettata.

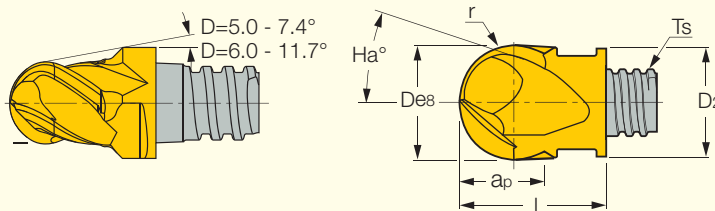
⁽¹⁾ Con foro centrale per il passaggio interno del refrigerante ⁽²⁾ Con fori direzionati su ogni tagliente



MULTI-MASTER INDEXABLE SOLID CARBIDE LINE

MM EB

Testina in metallo duro
con geometria ball nose

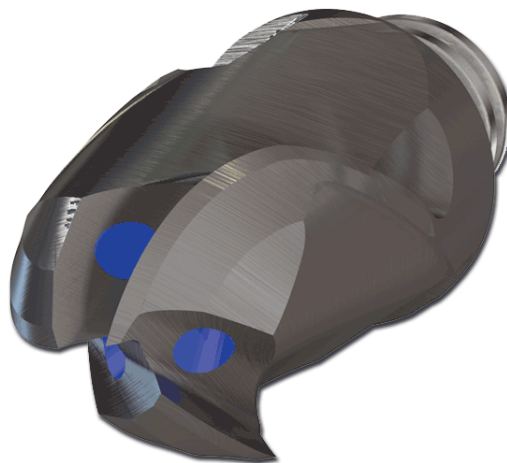


Descrizione	Dimensioni									IC908
	D	Eliche	a _p	r	T _s	D ₂	l	H _a °		
MM EB050E07-4T05	5.00	4	7.00	2.49	T05	8.00	15.00	38.0	●	
MM EB060E05-4T05	6.00	4	5.00	2.99	T05	8.00	10.00	38.0	●	
MM EB080A05-2T05	8.00	2	5.00	3.98	T05	7.70	10.00	30.0	●	
MM EB080A05-4T05	8.00	4	5.00	3.98	T05	7.70	10.00	30.0	●	
MM EB100A07-2T06	10.00	2	7.00	4.98	T06	9.60	13.00	30.0	●	
MM EB100A07-4T06	10.00	4	7.00	4.98	T06	9.60	13.00	30.0	●	
MM EB120A09-2T08	12.00	2	9.00	5.98	T08	11.70	16.50	30.0	●	
MM EB120H09CF-3T08 ⁽¹⁾	12.00	3	9.00	5.98	T08	11.70	16.50	38.0	●	
MM EB120A09-4T08	12.00	4	9.00	5.98	T08	11.70	16.50	30.0	●	
MM EB.500A37-2T08	12.70	2	9.50	6.33	T08	12.40	16.50	30.0	●	
MM EB.500A37-4T08	12.70	4	9.50	6.33	T08	12.40	16.50	30.0	●	
MM EB160A09-2T10	16.00	2	9.00	7.98	T10	15.30	20.50	30.0	●	
MM EB160A12-4T10	16.00	4	12.00	7.98	T10	15.30	20.50	30.0	●	
MM EB200A15-4T12	20.00	4	15.00	9.97	T12	18.30	25.50	30.0	●	
MM EB250A22-4T15	25.00	4	22.00	12.47	T15	23.90	37.00	30.0	●	

NEW

• Non lubrificare la connessione filettata.

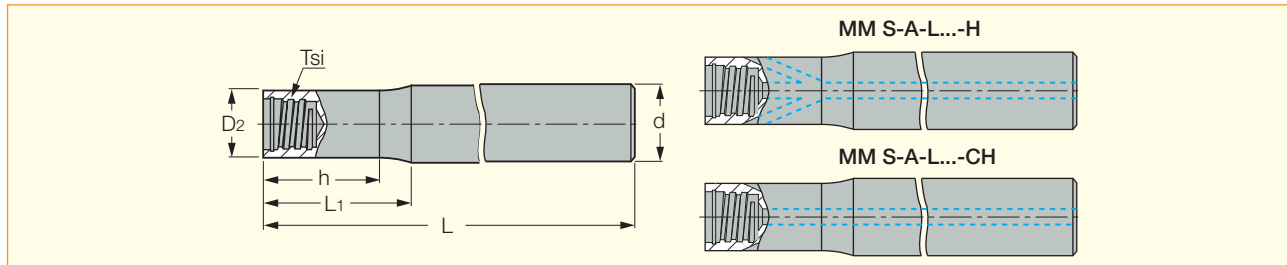
⁽¹⁾ Con fori per il passaggio interno del refrigerante direzionati su ogni tagliente



MULTI-MASTER INDEXABLE SOLID CARBIDE LINE

MM S-A (steli minorati) pag 1/2

Steli cilindrici minorati



Descrizione	Tsi	d	D2	h	L1	L	Stelo ⁽¹⁾	Refrig.	Giri max ⁽²⁾	Kg
MM S-A-L050-C08-T04	T04	8.00	5.80	9.90	14.0	50.00	S	No	60000	0.02
MM S-A-L060-C08-T05	T05	8.00	7.60	12.50	15.0	60.00	S	No	60000	0.02
MM S-A-L070-C08-T05-C	T05	8.00	7.60	18.60	20.0	70.00	C	No	60000	0.04
MM S-A-L070-C08-T05-W	T05	8.00	7.60	18.90	20.0	70.00	W	No	60000	0.06
MM S-A-L090-C08-T05-C	T05	8.00	7.60	38.60	40.0	90.00	C	No	50160	0.06
MM S-A-L090-C08-T05-W	T05	8.00	7.60	38.90	40.0	90.00	W	No	36090	0.07
MM S-A-L110-C08-T05-C	T05	8.00	7.60	57.90	60.0	110.00	C	No	30600	0.07
MM S-A-L110-C08-T05-W	T05	8.00	7.60	58.90	60.0	110.00	W	No	21060	0.09
MM S-A-L070-C10-T06-C	T06	10.00	9.60	18.50	20.0	70.00	C	No	54900	0.01
MM S-A-L070-C10-T06-W-H	T06	10.00	9.60	18.90	20.0	70.00	W	Si	60000	0.08
MM S-A-L075-C10-T06	T06	10.00	9.55	17.40	20.0	75.00	S	No	60000	0.05
MM S-A-L075-C10-T06-H	T06	10.00	9.55	18.80	20.0	75.00	S	Si	53940	0.04
MM S-A-L090-C10-T06-C	T06	10.00	9.60	38.50	40.0	90.00	C	No	55170	0.06
MM S-A-L090-C10-T06-W	T06	10.00	9.55	17.20	20.0	90.00	W	No	41670	0.12
MM S-A-L090-C10-T06-W-H	T06	10.00	9.60	39.00	40.0	90.00	W	Si	40860	0.10
MM S-A-L110-C10-T06-C	T06	10.00	9.60	57.90	60.0	110.00	C	No	34530	0.11
MM S-A-L110-C10-T06-W-H	T06	10.00	9.60	59.00	60.0	110.00	W	Si	24840	0.12
MM S-A-L150-C10-T06-C	T06	10.00	9.60	98.50	100.0	150.00	C	No	16620	0.15
MM S-A-L070-C12-T08-C	T08	12.00	11.50	17.90	20.0	70.00	C	No	60000	0.10
MM S-A-L070-C12-T08-W-H	T08	12.00	11.50	18.70	20.0	70.00	W	Si	60000	0.11
NEW MM S-A-L090/14-C12-T08-CH	T08	12.00	11.50	13.00	14.0	90.00	S	Si	-	0.12
MM S-A-L090-C12-T08	T08	12.00	11.50	13.30	16.0	90.00	S	No	43000	0.10
NEW MM S-A-L070/020C12T08C-CH	T08	12.00	11.50	18.00	20.0	90.00	C	Si	-	0.08
MM S-A-L090-C12-T08-C	T08	12.00	11.50	39.00	40.0	90.00	C	No	43050	0.12
MM S-A-L090-C12-T08-H	T08	12.00	11.50	38.70	40.0	90.00	S	Si	41040	0.08
MM S-A-L090-C12-T08-W-H	T08	12.00	11.50	38.70	40.0	90.00	W	Si	49800	0.15
NEW MM S-A-L090/040C12T08C-CH	T08	12.00	11.50	38.00	40.0	90.00	C	Si	-	0.11
NEW MM S-A-L090/42-C12-T08-CH	T08	12.00	11.50	41.00	42.0	90.00	S	Si	41010	0.07
MM S-A-L110-C12-T08-W	T08	12.00	11.50	17.00	20.0	110.00	W	No	31350	0.09
MM S-A-L110-C12-T08-C	T08	12.00	11.50	57.00	60.0	110.00	C	No	41040	0.16
MM S-A-L110-C12-T08-W-H	T08	12.00	11.50	58.70	60.0	110.00	W	Si	30210	0.18
NEW MM S-A-L110/060C12T08C-CH	T08	12.00	11.50	58.00	60.0	110.00	C	Si	-	0.12
MM S-A-L130-C12-T08-C	T08	12.00	11.50	77.80	80.0	130.00	C	No	27960	0.19
MM S-A-L130-C12-T08-W-H	T08	12.00	11.50	78.70	80.0	130.00	W	Si	20100	0.21
NEW MM S-A-L130/080C12T08C-CH	T08	12.00	11.50	78.00	80.0	130.00	C	Si	-	0.17
MM S-A-L070-C16-T10-W-H	T10	16.00	15.20	18.20	20.0	70.00	W	Si	60000	0.21
MM S-A-L090-C16-T10-C	T10	16.00	15.20	38.00	40.0	90.00	C	No	60000	0.21
MM S-A-L090-C16-T10-W-H	T10	16.00	15.20	38.20	40.0	90.00	W	Si	57510	0.27
MM S-A-L100-C16-T10	T10	16.00	15.20	16.30	20.0	100.00	S	No	39000	0.16
MM S-A-L100-C16-T10-H	T10	16.00	15.20	48.00	50.0	100.00	S	Si	37140	0.13
NEW MM S-A-L100/42-C16-T10-CH	T10	16.00	15.20	40.20	42.0	100.00	S	Si	38040	0.14
MM S-A-L110-C16-T10-C	T10	16.00	15.20	58.00	60.0	110.00	C	No	47010	0.27
MM S-A-L110-C16-T10-W-H	T10	16.00	15.20	58.20	60.0	110.00	W	Si	36030	0.33
MM S-A-L130-C16-T10-C	T10	16.00	15.20	77.40	80.0	130.00	C	No	33510	0.32

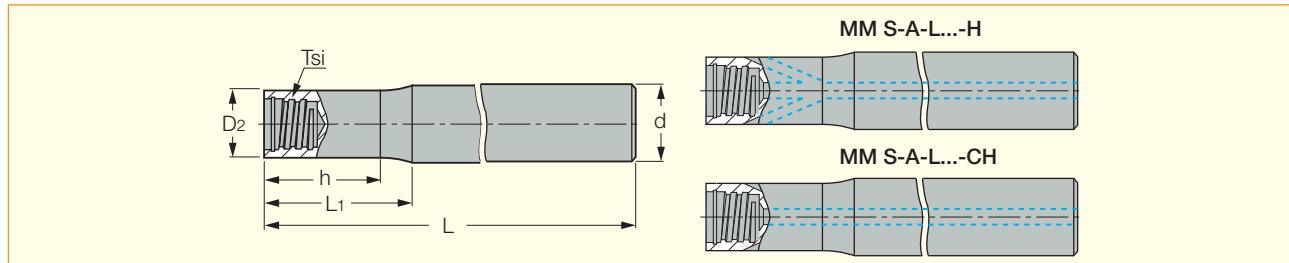
• Non lubrificare la connessione filettata

⁽¹⁾ S-Acciaio, C-Metallo duro, W-Tungsteno ⁽²⁾ Il numero di giri massimo deve essere calcolato. Dividere il numero di giri riportato in tabella per il numero di eliche della testina.

MULTI-MASTER INDEXABLE SOLID CARBIDE LINE

MM S-A (steli minorati) pag 2/2

Steli cilindrici minorati



Descrizione	Tsi	d	D ₂	h	L ₁	L	Stelo ⁽¹⁾	Refrig.	Giri _{max} ⁽²⁾	Kg
MM S-A-L130-C16-T10-W-H	T10	16.00	15.20	78.20	80.0	130.00	W	Si	24450	0.39
MM S-A-L150-C16-T10-C	T10	16.00	15.20	97.40	100.0	150.00	C	No	24660	0.37
MM S-A-L150-C16-T10-W-H	T10	16.00	15.20	98.20	100.0	150.00	W	Si	17610	0.45
MM S-A-L090-C20-T12-C	T12	20.00	18.30	37.00	40.0	90.00	C	No	60000	0.32
MM S-A-L090-C20-T12-W-H	T12	20.00	18.30	36.90	40.0	90.00	W	Si	60000	0.41
MM S-A-L120-C20-T12	T12	20.00	18.30	20.30	25.0	120.00	S	No	36000	0.27
MM S-A-L120-C20-T12-H	T12	20.00	18.30	66.70	70.0	120.00	S	Si	32160	0.25
MM S-A-L130-C20-T12-C	T12	20.00	18.30	77.20	80.0	130.00	C	No	42360	0.47
MM S-A-L130-C20-T12-W-H	T12	20.00	18.30	76.90	80.0	130.00	W	Si	31650	0.59
MM S-A-L170-C20-T12-C	T12	20.00	18.30	97.20	100.0	170.00	C	No	25170	0.63
MM S-A-L200-C20-T12-C	T12	20.00	18.30	116.50	120.0	200.00	C	No	17790	0.76
MM S-A-L200-C20-T12-W-H	T12	20.00	18.30	116.90	120.0	200.00	W	Si	12540	0.92
MM S-A-L120-C25-T15-C	T15	25.00	23.90	57.50	60.0	120.00	C	No	49400	0.64
MM S-A-L120-C25-T15-W-H	T15	25.00	23.90	58.00	60.0	120.00	W	Si	41700	0.89
MM S-A-L135-C25-T15	T15	25.00	23.90	33.00	35.0	135.00	S	No	28290	0.47
MM S-A-L135/35-C25-T15-CH	T15	25.00	23.90	33.00	35.0	135.00	S	Si	28230	0.42
MM S-A-L170-C25-T15-C	T15	25.00	23.90	98.00	100.0	170.00	C	No	27360	0.96
MM S-A-L175-C25-T15	T15	25.00	23.90	62.70	65.0	175.00	S	No	16890	0.10
MM S-A-L250-C25-T15-C	T15	25.00	23.90	148.00	150.0	250.00	C	No	12690	1.45

• Non lubrificare la connessione filettata.

⁽¹⁾ S-Acciai, C-Metallo duro, W-Tungsteno ⁽²⁾ Il numero di giri massimo deve essere calcolato. Dividere il numero di giri riportato in tabella per il numero di eliche della testina.