

DRILLING

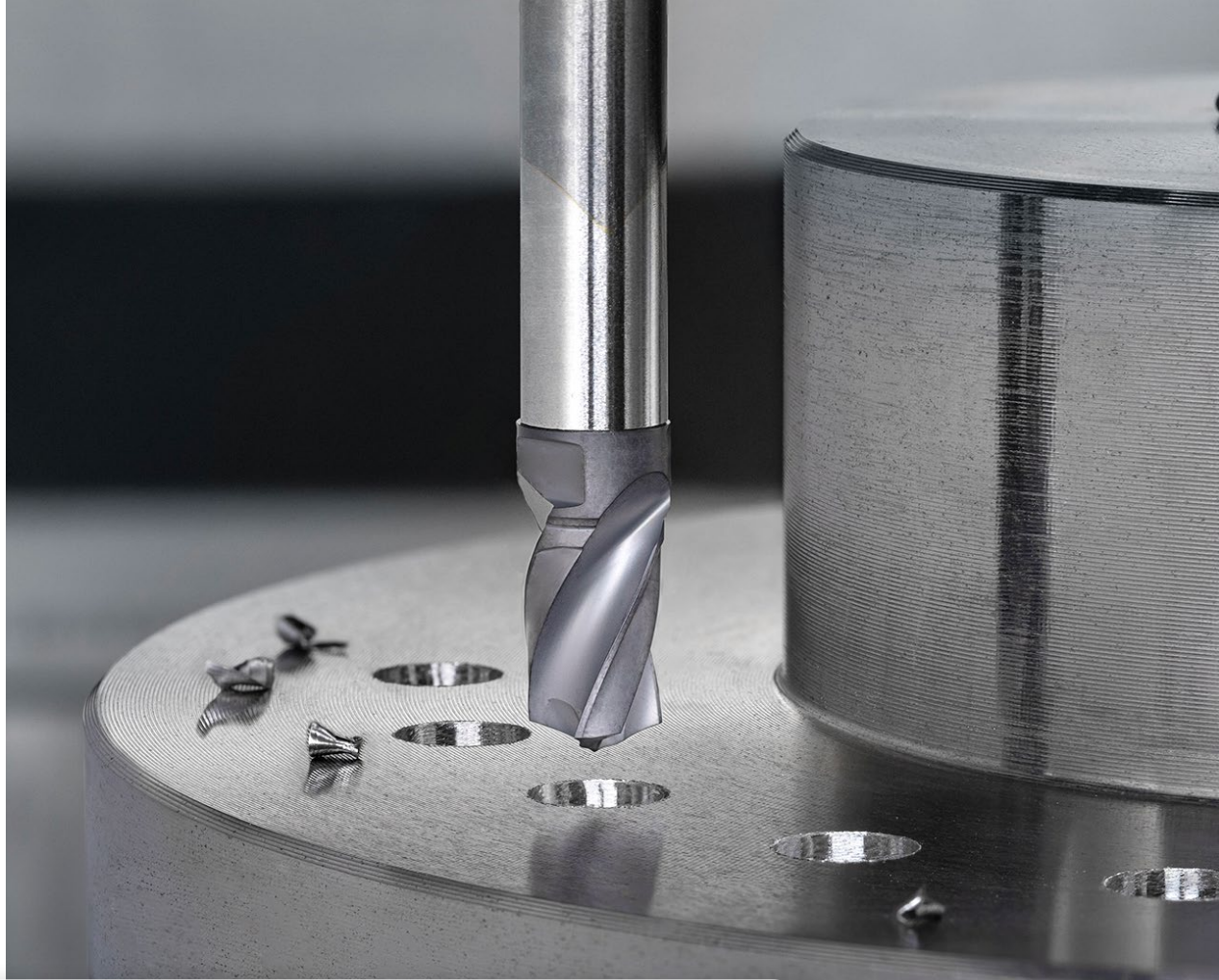
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JUNE 2024

METRIC/IMPERIAL

NPA

New Product Announcement



Wide Variety of
Shanks and Adaptors



No
Setup Time



High
Productivity



MULTI-MASTER
INDEXABLE HEADS

Three-Flute Drilling Heads



Wide Variety of
Shanks and Adaptors



No
Setup Time



High Productivity
Inserts

NPA

New Product Announcement

MULTI-MASTER INDEXABLE HEADS

Highlights

A Remarkable Addition to the MULTI-MASTER Family with Exchangeable Three Flute Solid Carbide Drilling Heads

ISCAR is Introducing new drilling heads with 3 flutes for shallow deep drilling applications. These heads seamlessly combine the highly efficient three-flute LOGIQ-3-CHAM drill design with the exceptional robustness of the MULTI-MASTER concept. This advantageous combination results in a new effective tool for shallow drilling applications especially when machining materials that require short chips.

The heads are mounted on MULTI-MASTER tools. A wide variety of MULTI-MASTER shanks, adaptors, extensions, and reducers enable customizing tool configurations depending on specific applications. This substantially diminishes the need for special tools. For high assembly rigidity, mounting the heads in tungsten carbide shanks is recommended.

Head Features

- 3 flutes for high productivity.
- Depth of cut up to 1XD.
- Nominal diameter range 8-16 mm.
- The heads are made of multipurpose PVD coated carbide grade IC908.
- Head designation: MM SPD-...3T...

[Click for Short Video](#)

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New Product Announcement

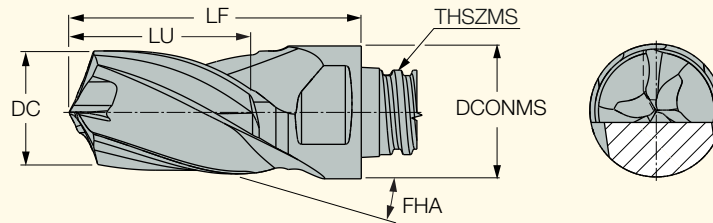
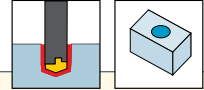
MULTI-MASTER

INDEXABLE HEADS

MM SPD-3T

Three-Flute Exchangeable Solid Carbide Drilling Heads

<https://www.iscar.com/eCatalog/Family.aspx?fnum=5148&mapp=ML&GFSTYP=M&srch=1>



M E T R I C

Designation	Dimensions						IC908
	DC	LU	LF	THSZMS	DCONMS	FHA	
MM SPD080-08-3T06	8.00	12.10	22.00	T06	10.00	15.0	●
MM SPD085-09-3T06	8.50	12.20	22.00	T06	10.00	15.0	●
MM SPD090-09-3T06	9.00	12.30	22.00	T06	10.00	15.0	●
MM SPD0925-10-3T06	9.25	13.80	22.00	T06	10.00	15.0	●
MM SPD095-10-3T06	9.50	13.90	22.00	T06	10.00	15.0	●
MM SPD100-10-3T08	10.00	15.00	27.00	T08	12.00	15.0	●
MM SPD105-11-3T08	10.50	15.00	27.00	T08	12.00	15.0	●
MM SPD1075-11-3T08	10.75	15.10	27.00	T08	12.00	15.0	●
MM SPD110-11-3T08	11.00	15.10	27.00	T08	12.00	15.0	●
MM SPD1125-12-3T08	11.25	16.20	27.00	T08	12.00	15.0	●
MM SPD115-12-3T08	11.50	16.20	27.00	T08	12.00	15.0	●
MM SPD120-12-3T08	12.00	16.60	27.00	T08	12.70	15.0	●
MM SPD125-13-3T08	12.50	16.60	27.00	T08	12.70	15.0	●
MM SPD1275-13-3T10	12.75	20.00	33.50	T10	16.00	15.0	●
MM SPD130-13-3T10	13.00	20.00	33.50	T10	16.00	15.0	●
MM SPD140-14-3T10	14.00	19.70	33.50	T10	16.00	15.0	●
MM SPD145-15-3T10	14.50	20.80	33.50	T10	16.00	15.0	●
MM SPD150-15-3T10	15.00	20.40	33.50	T10	16.00	15.0	●
MM SPD1525-16-3T10	15.25	20.50	33.50	T10	16.00	15.0	●
MM SPD155-16-3T10	15.50	20.50	33.50	T10	16.00	15.0	●
MM SPD160-16-3T12	16.00	25.10	41.00	T12	18.43	15.0	●

• Do not apply lubricant to the threaded connection.

NPA

New Product Announcement

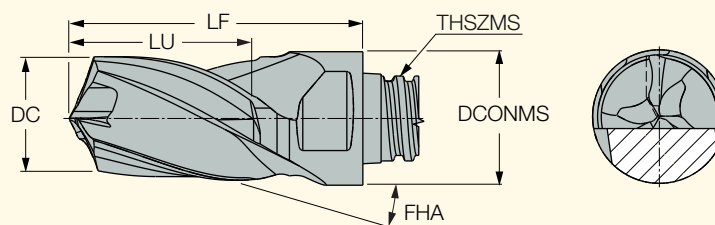
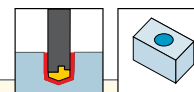
MULTI-MASTER

INDEXABLE HEADS

MM SPD-3T

Three-Flute Exchangeable Solid Carbide Drilling Heads

<https://www.iscar.com/eCatalog/Family.aspx?fnum=5148&mapp=ML&GFSTYP=I&srch=1>



I N C H

Dimensions

Designation	DC	LU	LF	THSZMS	DCONMS	FHA	IC908
MM SPD315-31-3T06	.315	.4764	.866	T06	.394	15.0	●
MM SPD335-35-3T06	.335	.4803	.866	T06	.394	15.0	●
MM SPD354-35-3T06	.354	.4843	.866	T06	.394	15.0	●
MM SPD364-39-3T06	.364	.5433	.866	T06	.394	15.0	●
MM SPD374-39-3T06	.374	.5472	.866	T06	.394	15.0	●
MM SPD394-39-3T08	.394	.5906	1.063	T08	.472	15.0	●
MM SPD413-43-3T08	.413	.5906	1.063	T08	.472	15.0	●
MM SPD423-43-3T08	.423	.5945	1.063	T08	.472	15.0	●
MM SPD432-43-3T08	.433	.5945	1.063	T08	.472	15.0	●
MM SPD443-47-3T08	.443	.6378	1.063	T08	.472	15.0	●
MM SPD453-47-3T08	.453	.6378	1.063	T08	.472	15.0	●
MM SPD470-47-3T08	.472	.6535	1.063	T08	.500	15.0	●
MM SPD492-51-3T08	.492	.6535	1.063	T08	.500	15.0	●
MM SPD502-51-3T10	.502	.7874	1.319	T10	.630	15.0	●
MM SPD512-51-3T10	.512	.7874	1.319	T10	.630	15.0	●
MM SPD551-55-3T10	.551	.7756	1.319	T10	.630	15.0	●
MM SPD571-59-3T10	.571	.8189	1.319	T10	.630	15.0	●
MM SPD590-59-3T10	.591	.8032	1.319	T10	.630	15.0	●
MM SPD600-63-3T10	.600	.8071	1.319	T10	.630	15.0	●
MM SPD610-63-3T10	.610	.8071	1.319	T10	.630	15.0	●
MM SPD630-63-3T12	.630	.9882	1.614	T12	.726	15.0	●

- Do not apply lubricant to the threaded connection.

MULTI-MASTER

INDEXABLE HEADS

MM SPD...3T...IC908

M E T R I C											
ISO	Material Group No.	Material	Condition	Tensile Strength, [N/mm ²]	Hardness, HB	Cutting Speed, V _c m/min	D=8.0-9.9	D=10.0-11.9	D=12.0-13.9	D=14.0-16.0	
							Feed, f _r mm/rev				
P	1	non-alloy steel and cast steel, free cutting steel	<0.25% C	annealed	420	125	80-110-140	0.18-0.27-0.33	0.24-0.32-0.42	0.30-0.39-0.45	0.36-0.45-0.51
	2		≥0.25% C	annealed	650	190					
	3		<0.55% C	quenched and tempered	850	250					
	4		≥0.55% C	annealed	750	220					
	5	low alloy and cast steel (less than 5% of alloying elements)	quenched and tempered	1000	300	60-70-90	0.18-0.27-0.38	0.21-0.32-0.42	0.33-0.39-0.42	0.36-0.42-0.48	
	6		annealed	600	200	80-100-120					
	7		quenched and tempered	930	275	70-90-110					
	8			1000	300	50-70-90					
	9			1200	350	40-55-90					
	10	high alloyed steel, cast steel and tool steel	annealed	680	200	50-70-90	0.18-0.24-0.30	0.18-0.27-0.33	0.27-0.33-0.36	0.30-0.36-0.39	
	11		quenched and tempered	1100	325	40-60-80					
	12	stainless steel and cast steel	ferritic / martensitic	680	200	40-55-70	0.18-0.24-0.30	0.18-0.24-0.32	0.21-0.30-0.36	0.27-0.33-0.42	
	13		martensitic	820	340						
K	15	gray cast iron (GG)	ferritic / pearlitic		180	80-120-160	0.24-0.33-0.45	0.30-0.42-54	0.40-0.60-0.78	0.45-0.66-0.84	
	16		pearlitic / martensitic		250	80-110-120					
	17	nodular cast iron (GGG)	ferritic		160	90-135-160					
	18		pearlitic		250	80-110-120					
	19	malleable cast iron	ferritic		130	90-125-140					
	20		pearlitic		230	80-110-120					

■ steel
■ cast iron

MULTI-MASTER INDEXABLE HEADS

MM SPD...3T...IC908

I N C H							
ISO	Material Group No.	Material	Condition	Tensile Strength, ksi	Hardness, HB	Cutting Speed, V _c SFM	
P	1	non-alloy steel and cast steel, free cutting steel	<0.25% C	annealed	61	125	262- 361 -459
	2		≥0.25% C	annealed	94	190	
	3		<0.55% C	quenched and tempered	123	250	262- 328 -394
	4		≥0.55% C	annealed	109	220	
	5	low alloy and cast steel (less than 5% of alloying elements)		quenched and tempered	145	300	197- 230 -295
	6			annealed	87	200	262- 328 -394
	7			quenched and tempered	135	275	230- 295 -361
	8				145	300	164- 230 -295
	9				174	350	131- 197 -262
	10	high alloyed steel, cast steel and tool steel		annealed	99	200	131- 180 -230
	11			quenched and tempered	160	325	131- 197 -262
	12	stainless steel and cast steel		ferritic / martensitic	99	200	131- 180 -230
	13			martensitic	119	340	
K	15	gray cast iron (GG)		ferritic / pearlitic		180	262- 394 -525
	16			pearlitic / martensitic		250	262- 361 -394
	17	nodular cast iron (GGG)		ferritic		160	295- 443 -525
	18			pearlitic		250	262- 361 -394
	19	malleable cast iron		ferritic		130	295- 410 -459
	20			pearlitic		230	262- 361 -394

I N C H					
ISO	Material Group No.	D=.314-.389	D=.393-.468	D=.472-.547	D=.551-.629
		Feed, f, IPR			
P	1	.071- .106 -.013	.0095- .0126 -.0165	.0118- .0154 -.0177	.0142- .0177 -.0201
	2				
	3				
	4				
	5				
	6				
	7	.071- .0106 -.0150	.0083- .0126 -.0165	.0130- .0154 -.0165	.0142- .0165 -.0189
	8				
	9				
	10				
	11				
	12				
	13				
K	15	.0095- .0130 -.0177	.0118- .0165 -.0213	.0158- .0236 -.0307	.0177- .0260 -.0331
	16				
	17				
	18				
	19				
	20				

■ steel
■ cast iron