



MASTER CATALOG **2018**

VOLUME TWO | **ROTATING TOOLS**



HOLEMAKING | TAPPING | SOLID END MILLING | INDEXABLE MILLING

RMS™ Multi-Flute Reaming Tools

RMS™ multi-flute reaming tools achieve the highest metal removal rates in 5–14mm (.197-.551") diameters. All standard reamers are ground to an ISO H7 tolerance class hole to address common applications. Specific coatings and lead configurations enable high-speed machining of steel, stainless steel, cast iron, and non-ferrous materials at accelerated speeds.

Primary Application

Use standard SIF™ steerable hydraulic chucks or SIF adapters for easy compensation of radial runout and angular inaccuracies of the spindle to achieve the highest possible hole straightness and surface quality.

Features and Benefits

Higher Productivity and Profitability

- Longer tool life with increased hole and surface quality due to lapped ground leads.
- Highest metal removal rates at higher speeds and feeds due to reaming-specific grades and substrates.
- Improved straightness and cylindrical form compared to competitive tools, and reduced vibration due to unequal flutes.
- All RMS reamers have internal coolant capability.



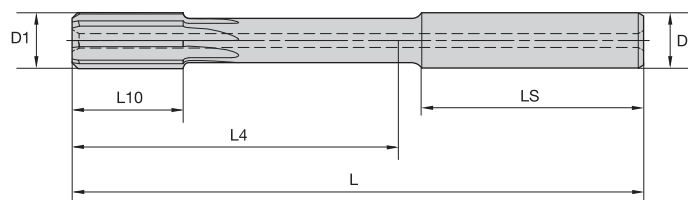
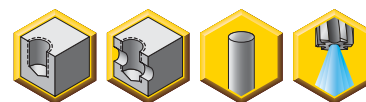
RMS™ multi-flute reaming tools achieve highest metal removal rates from 5–14mm (.197–.551").

Customization

- Diameters 1,40–14,15mm (.055–.557") available with and without internal coolant in 0,001mm (.00004") steps.
- Intermediate diameters of standard program available as simple specials with short delivery time.
- Solid cermet reaming tools and tooling for heat-resistant materials are available on request.

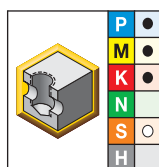
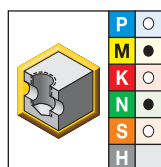


- For hole tolerance H7.
- Intermediate sizes ground to achieve IT7 hole tolerance class available.
- Starting with Ø .393" (10mm) in IT6 hole tolerance available.



RMS • Blind Hole Solid Carbide Reamer with Internal Coolant

Hole Finishing



- first choice
- alternate choice

		D1		D		L		L4		L10		LS		Z
		mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	
K605	KC6305													
RMS05000H7SF	RMS05000H7SF	5,00	.197	6,00	.236	74,0	2.913	32,0	1.260	12,0	.472	36,0	1.417	4
RMS05500H7SF *	RMS05500H7SF	5,50	.217	6,00	.236	74,0	2.913	32,0	1.260	12,0	.472	36,0	1.417	4
RMS06000H7SF	RMS06000H7SF	6,00	.236	6,00	.236	74,0	2.913	32,0	1.260	12,0	.472	36,0	1.417	4
RMS06500H7SF	RMS06500H7SF	6,50	.256	8,00	.315	91,0	3.583	49,0	1.930	16,0	.630	36,0	1.417	4
RMS07000H7SF	RMS07000H7SF	7,00	.276	8,00	.315	91,0	3.583	49,0	1.930	16,0	.630	36,0	1.417	4
RMS08000H7SF	RMS08000H7SF	8,00	.315	8,00	.315	91,0	3.583	49,0	1.930	16,0	.630	36,0	1.417	6
RMS09000H7SF	RMS09000H7SF	9,00	.354	10,00	.394	103,0	4.055	57,0	2.240	20,0	.787	40,0	1.575	6
RMS10000H7SF	RMS10000H7SF	10,00	.394	10,00	.394	103,0	4.055	57,0	2.240	20,0	.787	40,0	1.575	6
RMS11000H7SF	RMS11000H7SF	11,00	.433	12,00	.472	118,0	4.646	67,0	2.640	24,0	.945	45,0	1.772	6
RMS12000H7SF	RMS12000H7SF	12,00	.472	12,00	.472	118,0	4.646	67,0	2.640	24,0	.945	45,0	1.772	6
RMS13000H7SF	RMS13000H7SF	13,00	.512	14,00	.551	132,0	5.197	81,0	3.190	28,0	1.102	45,0	1.772	6
RMS14000H7SF	RMS14000H7SF	14,00	.551	14,00	.551	132,0	5.197	81,0	3.190	28,0	1.102	45,0	1.772	6

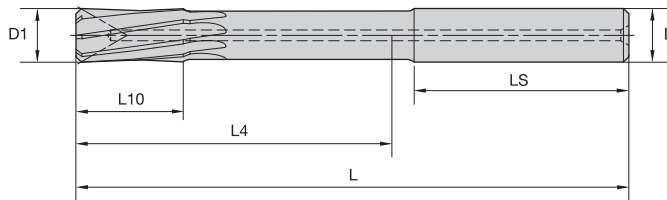
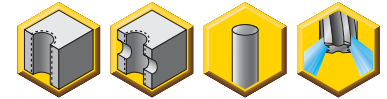
NOTE: *Made-to-order standard item. Standard pricing, manufacturing lead time, and minimum order quantity applies.

Dimensions for Engineered-Solution Reamers

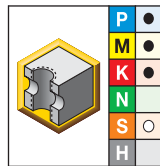
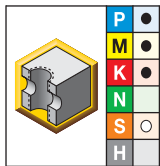
D1 min		D1 max		D		L		L4		L10		LS		Z
mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	
14,000	0.5512	15,999	0.6299	16	0.630	147,4	5.80	92,4	3.64	7,5	0.30	49	1.93	6
16,000	0.6299	17,999	0.7086	20	0.787	159,4	6.28	102,4	4.03	7,5	0.30	51	2.01	6
18,000	0.7087	20,000	0.7874	20	0.787	173,4	6.83	116,4	4.58	7,5	0.30	51	2.01	6
20,001	0.7874	22,499	0.8858	20	0.787	202,4	7.97	145,4	5.72	7,5	0.30	51	2.01	6
22,500	0.8858	24,999	0.9842	20	0.787	212,4	8.36	155,4	6.12	7,5	0.30	51	2.01	6
25,000	0.9843	27,499	1.0826	25	0.984	232,4	9.15	169,4	6.67	7,5	0.30	57	2.24	8
27,500	1.0827	29,999	1.1811	25	0.984	242,4	9.54	179,4	7.06	7,5	0.30	57	2.24	8
30,000	1.1811	32,499	1.2795	25	0.984	272,4	10.72	209,4	8.24	7,5	0.30	57	2.24	8
32,500	1.2795	34,999	1.3779	32	1.260	272,4	10.72	205,4	8.09	7,5	0.30	61	2.40	8
35,000	1.3780	37,499	1.4763	32	1.260	272,4	10.72	205,4	8.09	7,5	0.30	61	2.40	8
37,500	1.4764	39,999	1.5748	32	1.260	272,4	10.72	205,4	8.09	7,5	0.30	61	2.40	8
40,000	1.5748	42,500	1.6732	32	1.260	272,4	10.72	205,4	8.09	7,5	0.30	61	2.40	8

NOTE: The above dimensions are used when ordering engineered-solution reamers on this page unless otherwise specified.

- For hole tolerance H7.
- Intermediate sizes ground to achieve IT7 hole tolerance class available.
- Starting with Ø .393" (10mm) in IT6 hole tolerance available.



■ RMS • Through Hole Solid Carbide Reamer with Internal Coolant



- first choice
- alternate choice

		D1		D		L		L4		L10		LS		Z
		mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	
K605	KC6305													
RMS05000H7HF	RMS05000H7HF	5,00	.197	6,00	.236	74,0	2.913	32,0	1.260	12,0	.472	36,0	1.417	4
RMS05500H7HF	RMS05500H7HF	5,50	.217	6,00	.236	74,0	2.913	32,0	1.260	12,0	.472	36,0	1.417	4
RMS06000H7HF	RMS06000H7HF	6,00	.236	6,00	.236	74,0	2.913	32,0	1.260	12,0	.472	36,0	1.417	4
RMS06500H7HF	RMS06500H7HF	6,50	.256	8,00	.315	91,0	3.583	49,0	1.930	16,0	.630	36,0	1.417	4
RMS07000H7HF	RMS07000H7HF	7,00	.276	8,00	.315	91,0	3.583	49,0	1.930	16,0	.630	36,0	1.417	4
RMS08000H7HF	RMS08000H7HF	8,00	.315	8,00	.315	91,0	3.583	49,0	1.930	16,0	.630	36,0	1.417	6
RMS09000H7HF *	RMS09000H7HF	9,00	.354	10,00	.394	103,0	4.055	57,0	2.240	20,0	.787	40,0	1.575	6
RMS10000H7HF	RMS10000H7HF	10,00	.394	10,00	.394	103,0	4.055	57,0	2.240	20,0	.787	40,0	1.575	6
RMS11000H7HF	RMS11000H7HF	11,00	.433	12,00	.472	118,0	4.646	67,0	2.640	24,0	.945	45,0	1.772	6
RMS12000H7HF	RMS12000H7HF	12,00	.472	12,00	.472	118,0	4.646	67,0	2.640	24,0	.945	45,0	1.772	6
RMS13000H7HF	RMS13000H7HF	13,00	.512	14,00	.551	132,0	5.197	81,0	3.190	28,0	1.102	45,0	1.772	6
RMS14000H7HF	RMS14000H7HF	14,00	.551	14,00	.551	132,0	5.197	81,0	3.190	28,0	1.102	45,0	1.772	6

NOTE: *Made-to-order standard item. Standard pricing, manufacturing lead time, and minimum order quantity applies.

Dimensions for Engineered-Solution Reamers

D1 min		D1 max		D		L		L4		L10		LS		Z
mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	
14,000	0.5512	15,999	0.6299	16	0.630	147,4	5.80	92,4	3.64	7,5	0.30	49	1.93	6
16,000	0.6299	17,999	0.7086	20	0.787	159,4	6.28	102,4	4.03	7,5	0.30	51	2.01	6
18,000	0.7087	20,000	0.7874	20	0.787	173,4	6.83	116,4	4.58	7,5	0.30	51	2.01	6
20,001	0.7874	22,499	0.8858	20	0.787	202,4	7.97	145,4	5.72	7,5	0.30	51	2.01	6
22,500	0.8858	24,999	0.9842	20	0.787	212,4	8.36	155,4	6.12	7,5	0.30	51	2.01	6
25,000	0.9843	27,499	1.0826	25	0.984	232,4	9.15	169,4	6.67	7,5	0.30	57	2.24	8
27,500	1.0827	29,999	1.1811	25	0.984	242,4	9.54	179,4	7.06	7,5	0.30	57	2.24	8
30,000	1.1811	32,499	1.2795	25	0.984	272,4	10.72	209,4	8.24	7,5	0.30	57	2.24	8
32,500	1.2795	34,999	1.3779	32	1.260	272,4	10.72	205,4	8.09	7,5	0.30	61	2.40	8
35,000	1.3780	37,499	1.4763	32	1.260	272,4	10.72	205,4	8.09	7,5	0.30	61	2.40	8
37,500	1.4764	39,999	1.5748	32	1.260	272,4	10.72	205,4	8.09	7,5	0.30	61	2.40	8
40,000	1.5748	42,500	1.6732	32	1.260	272,4	10.72	205,4	8.09	7,5	0.30	61	2.40	8

NOTE: The above dimensions are used when ordering engineered-solution reamers on this page unless otherwise specified.

 RMS™ • Metric

Material Group		 			 										
		straight flute			helical flute										
		K605			KC6305			Metric							
		Cutting Speed — vc							Recommended Feed Rate per Tooth						
		Range — m/min							Tool Diameter (mm)	4,16–7,15mm		7,16–9,59mm		9,60–14,00mm	
		min	Starting Value	max	min	Starting Value	max	Feed/Tooth	min	max	min	max	min	max	
P	1	40	60	70	90	120	155	mm/z	0,05	0,10	0,05	0,12	0,05	0,15	
	2	40	60	70	90	120	155	mm/z	0,05	0,10	0,05	0,12	0,05	0,15	
	3	35	50	60	75	100	130	mm/z	0,05	0,10	0,05	0,12	0,05	0,15	
	4	25	40	45	60	80	105	mm/z	0,05	0,10	0,05	0,12	0,05	0,15	
	5	15	20	25	30	40	55	mm/z	0,04	0,08	0,04	0,10	0,04	0,12	
	6	15	20	25	30	40	55	mm/z	0,04	0,08	0,04	0,10	0,04	0,12	
M	1	8	10	15	15	20	28	mm/z	0,04	0,08	0,04	0,09	0,04	0,10	
	2	8	10	15	15	20	28	mm/z	0,04	0,08	0,04	0,09	0,04	0,10	
	3	8	10	15	15	20	28	mm/z	0,04	0,08	0,04	0,09	0,04	0,10	
K	1	35	50	60	75	100	130	mm/z	0,05	0,16	0,05	0,18	0,05	0,20	
	2	25	40	50	60	90	110	mm/z	0,05	0,14	0,05	0,16	0,05	0,18	
	3	20	30	45	60	80	105	mm/z	0,05	0,12	0,05	0,14	0,05	0,16	
N	1	110	150	195	–	–	–	mm/z	0,06	0,16	0,06	0,18	0,06	0,20	
	2	110	150	195	–	–	–	mm/z	0,06	0,16	0,06	0,18	0,06	0,20	
	3	110	150	195	–	–	–	mm/z	0,06	0,16	0,06	0,18	0,06	0,20	
	4	110	150	195	–	–	–	mm/z	0,06	0,16	0,06	0,18	0,06	0,20	
	5	105	140	180	–	–	–	mm/z	0,06	0,16	0,06	0,18	0,06	0,20	
S	1	8	10	15	15	20	28	mm/z	0,04	0,08	0,04	0,10	0,04	0,12	
	2	8	10	15	15	20	28	mm/z	0,04	0,08	0,04	0,10	0,04	0,12	
	3	15	20	30	20	30	40	mm/z	0,05	0,10	0,05	0,12	0,05	0,15	
	4	15	20	30	20	30	40	mm/z	0,05	0,10	0,05	0,12	0,05	0,15	

Hole Finishing

■ RMS™ • Inch

Material Group		 			 									
		straight flute			helical flute									
		K605			KC6305			Inch						
		Cutting Speed – vc			Cutting Speed – vc			Recommended Feed Rate per Tooth						
		Range – SFM			Range – SFM			Tool Diameter (inch)	.164–.281"		.282–.378"		.378–.551"	
		min	Starting Value	max	min	Starting Value	max	Feed/ Tooth	min	max	min	max	min	max
P	1	131	197	230	295	394	508	inch/z	.002	.004	.002	.005	.002	.006
	2	131	197	230	295	394	508	inch/z	.002	.004	.002	.005	.002	.006
	3	115	164	197	246	328	426	inch/z	.002	.004	.002	.005	.002	.006
	4	82	131	148	197	262	344	inch/z	.002	.004	.002	.005	.002	.006
	5	49	66	82	98	131	180	inch/z	.002	.003	.002	.004	.002	.005
	6	49	66	82	98	131	180	inch/z	.002	.003	.002	.004	.002	.005
M	1	26	33	49	49	66	92	inch/z	.002	.003	.002	.004	.002	.004
	2	26	33	49	49	66	92	inch/z	.002	.003	.002	.004	.002	.004
	3	26	33	49	49	66	92	inch/z	.002	.003	.002	.004	.002	.004
K	1	115	164	197	246	328	426	inch/z	.002	.006	.002	.007	.002	.008
	2	82	131	164	197	295	361	inch/z	.002	.006	.002	.006	.002	.007
	3	66	98	148	197	262	344	inch/z	.002	.005	.002	.006	.002	.006
N	1	361	492	640	–	–	–	inch/z	.002	.006	.002	.007	.002	.008
	2	361	492	640	–	–	–	inch/z	.002	.006	.002	.007	.002	.008
	3	361	492	640	–	–	–	inch/z	.002	.006	.002	.007	.002	.008
	4	361	492	640	–	–	–	inch/z	.002	.006	.002	.007	.002	.008
	5	344	459	590	–	–	–	inch/z	.002	.006	.002	.007	.002	.008
S	1	26	33	49	49	66	92	inch/z	.002	.003	.002	.004	.002	.005
	2	26	33	49	50	66	92	inch/z	.002	.003	.002	.004	.002	.005
	3	49	66	98	66	98	131	inch/z	.002	.004	.002	.005	.002	.006
	4	49	66	98	66	98	131	inch/z	.002	.004	.002	.005	.002	.006

