



**Carmex**  
*Precision Tools Ltd.*

*x-treme thread cutting™*

**New**

# **AMT** **Solid Carbide Thread Mills** **for Aluminum**



**Inch 2016**



## AMT Solid Carbide Thread Mills for Aluminum Machining

Carmex introduces a new line of solid carbide thread mills for High-speed Aluminum machining.

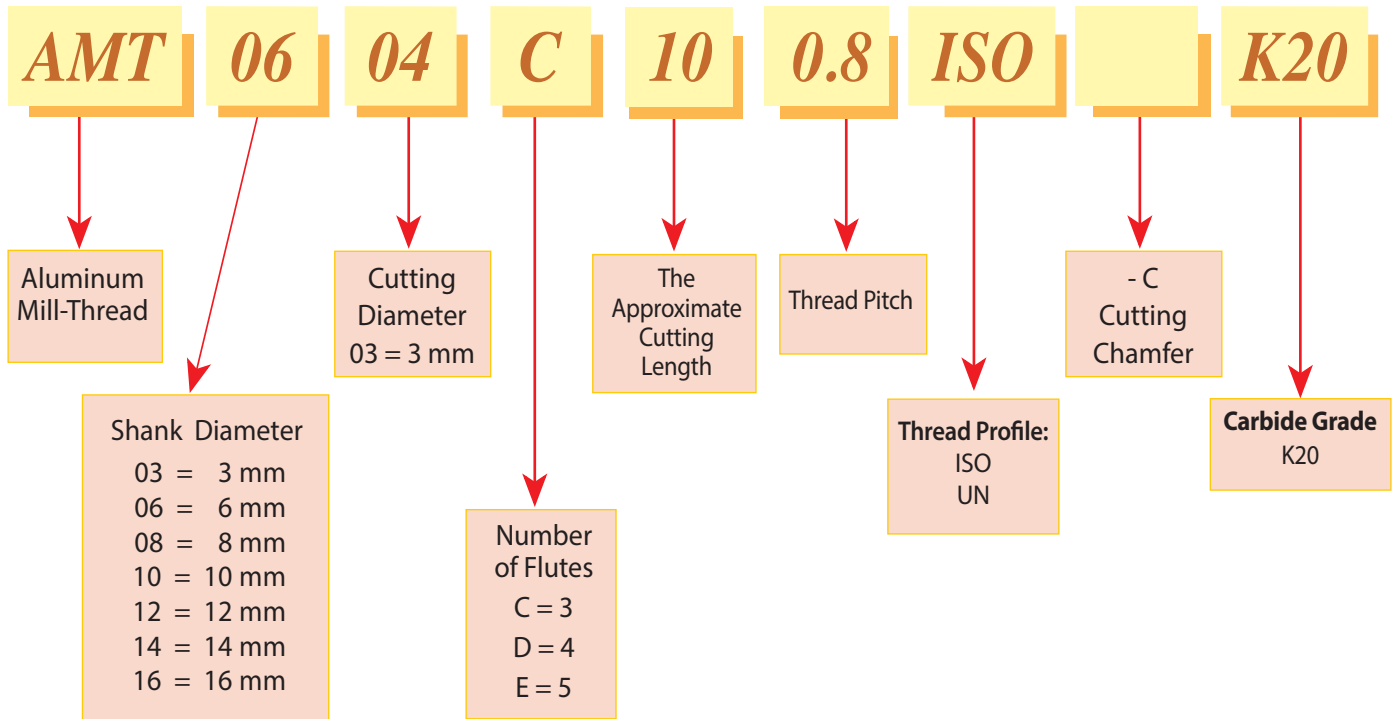
High-speed aluminum machining requires tools that minimize the tendency of Aluminum to stick to the tool cutting edges, provides high surface finish, ensuring efficient chip evacuation and sufficient strength of the cutting edge to absorb the cutting forces.

### Features

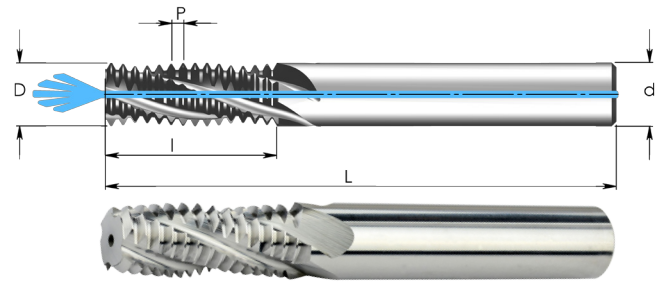
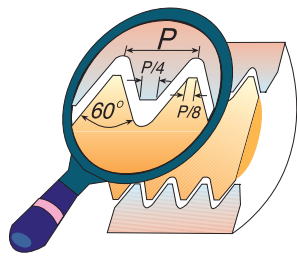
- Optimized carbide grade for Aluminum, cast iron and stainless steels
- Cylindrical shank (Weldon shank- upon request)
- With internal coolant bore
- Uncoated, smooth cutting edge
- High thread surface quality
- Same tool for right hand or left hand internal threads
- Additional items with cutting chamfer

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## Product Identification Ordering Codes



## ISO With internal coolant bore Tools for Internal thread - Metric Shanks



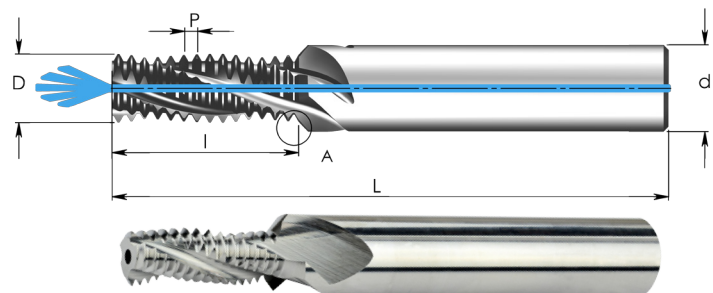
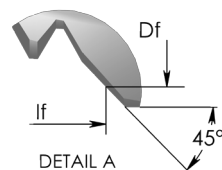
Thread length: 2xD

Grade	P	M	K	N	S	H
K20	○	○	●	●	●	

Pitch mm	M coarse	M fine	Ordering Code	d mm	D	No. of Flutes	I	L
0.5	M3	M4	* AMT 03024C6 0.5 ISO	3	.094	3	.268	1.5
0.5		M5	AMT 06043C10 0.5 ISO	6	.169	3	.425	2.3
0.7	M4		AMT 06031C8 0.7 ISO	6	.122	3	.346	2.3
0.75		M6	AMT 0605C13 0.75 ISO	6	.197	3	.516	2.3
0.8	M5		AMT 0604C10 0.8 ISO	6	.157	3	.425	2.3
1.0	M6		AMT 06048C13 1.0 ISO	6	.189	3	.531	2.3
1.0		M10	AMT 0808D21 1.0 ISO	8	.315	4	.846	2.5
1.25	M8	M10	AMT 08064C16 1.25 ISO	8	.252	3	.665	2.5
1.5	M10		AMT 0808C21 1.5 ISO	8	.315	3	.858	2.5
1.5		M14	AMT 12112D29 1.5 ISO	12	.441	4	1.154	3.3
1.75	M12		AMT 10095D25 1.75 ISO	10	.374	4	1.000	2.9
2.0	M16	M17	AMT14126D35 2.0 ISO	14	.496	4	1.378	3.3

\* Without internal coolant

## ISO With internal coolant bore and cutting Chamfer Tools for Internal thread - Metric Shanks



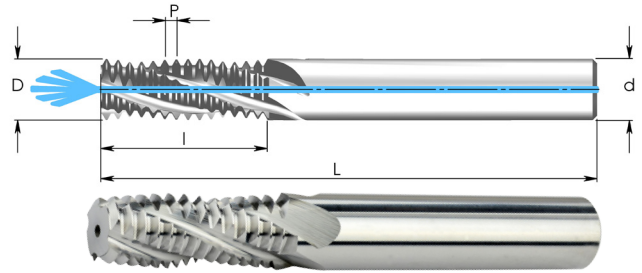
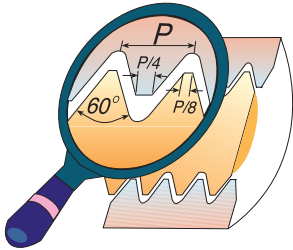
Thread length: 2xD

Grade	P	M	K	N	S	H
K20	○	○	●	●	●	

Pitch mm	M coarse	M fine	Ordering Code	d mm	D	Df	No. of Flutes	I	If	L
0.8	M5		AMT 0604C10 0.8 ISO-C	6	.157	.209	3	.425	.453	2.3
1.0	M6		AMT 08048C13 1.0 ISO-C	8	.189	.252	3	.531	.563	2.5
1.25	M8	M10	AMT 10064C16 1.25 ISO-C	10	.252	.327	3	.665	.705	2.9
1.5	M10		AMT 1208C21 1.5 ISO-C	12	.315	.409	3	.858	.906	3.3

● First choice    ○ Alternative

## UN With internal coolant bore Tools for Internal thread - Metric Shanks

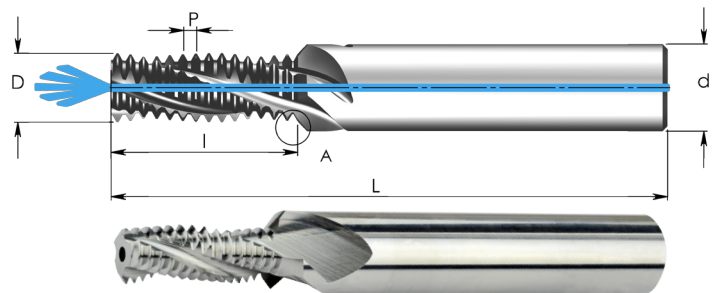
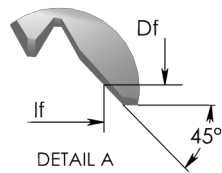


**Thread length: 2xD**

Grade	P	M	K	N	S	H
K20	○	○	●	●	●	

Pitch TPI	UNC	UNF	UNEF	Ordering Code	d mm	D	No. of Flutes	I	L
32	8	10	12	<b>AMT 06032C9 32 UN</b>	6	.126	3	.358	2.3
28		1/4		<b>AMT 06052C14 28 UN</b>	6	.205	3	.551	2.3
24		3/8	9/16-5/8	<b>AMT 0808D20 24 UN</b>	8	.315	4	.811	2.5
20	1/4			<b>AMT 06048C14 20 UN</b>	6	.189	3	.575	2.3
20		7/16		<b>AMT 10092C23 20 UN</b>	10	.362	3	.925	2.9
18	5/16			<b>AMT 0606C17 18 UN</b>	6	.236	3	.693	2.3
18		9/16-5/8	1 1/8 - 1 5/8	<b>AMT 1212D30 18 UN</b>	12	.472	4	1.193	3.3
16	3/8			<b>AMT 08074C21 16 UN</b>	8	.291	3	.843	2.5
16		3/4		<b>AMT 1616E38 16 UN</b>	16	.630	5	1.531	4.1

## UN With internal coolant bore and cutting Chamfer Tools for Internal thread



**Thread length: 2xD**

Grade	P	M	K	N	S	H
K20	○	○	●	●	●	

Pitch TPI	UNC	UNF	UNEF	Ordering Code	d mm	D	Df	No. of Flutes	I	If	L
20	1/4			<b>AMT 08048C14 20 UN-C</b>	8	.189	.268	3	.575	.614	2.5
18	5/16			<b>AMT 1006C17 18 UN-C</b>	10	.236	.331	3	.693	.740	2.9
16	3/8			<b>AMT 12074C21 16 UN-C</b>	12	.291	.394	3	.843	.894	3.3

● First choice    ○ Alternative

## Cutting Data

Carbide grade K20: Uncoated Sub- Micron carbide grade for Aluminum and non- ferrous materials, Stainless Steels and Titanium.

ISO Standard	Materials	Cutting Speed ft/min	Feed inch/tooth Cutting Diameter = D		
			D ≤ .16	.16 < D < .35	D ≥ .35
<b>P</b>	Low & Medium Carbon Steels < 0.55%C	160-460	.0002 - .0012	.0004 - .0020	.0008 - .0039
	High Carbon Steels ≥0.55%C	200-430	.0002 - .0008	.0004 - .0016	.0008 - .0035
	Alloy Steels, Treated Steels				
<b>M</b>	Stainless Steel-Free Cutting	130-390	.0002 - .0008	.0004 - .0016	.0008 - .0035
	Stainless Steel-Austenitic				
	Cast Steels	230-390	.0002 - .0012	.0004 - .0020	.0008 - .0039
<b>K</b>	Cast Iron	160-390	.0002 - .0012	.0004 - .0020	.0008 - .0039
<b>N</b>	Aluminum ≤12%Si, Copper	430-820	.0002 - .0016	.0004 - .0024	.0008 - .0051
	Aluminum >12%Si	260-590	.0002 - .0016	.0004 - .0024	.0008 - .0051
	Synthetics, Duroplastics, Thermoplastics	260-590	.0002 - .0016	.0004 - .0024	.0008 - .0051
<b>S</b>	Nickel Alloys, Titanium Alloys	65-260	.0002 - .0008	.0004 - .0016	.0008 - .0035



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