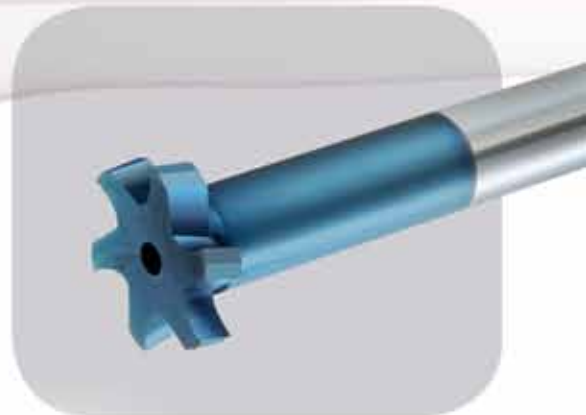
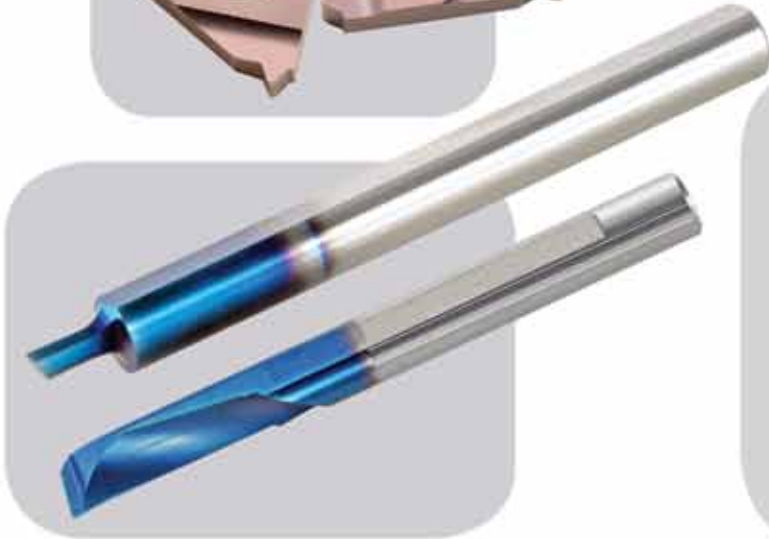


# NEWS 2014-15



 **Carmex**  
Precision Tools Ltd.  
*x-treme thread cutting™*



## Company Profile

**Carmex Precision Tools Ltd. is a leading manufacturer of high quality cutting tools. The company was founded in 1988 in Maalot, located in the beautiful North West region of Israel.**

### Product Lines

Carmex specializes in the production of threading tools for turning and milling. Our product lines include Thread Turning inserts and toolholders, Mill-Thread inserts and toolholders, Mill-Thread Solid Carbide and Spiral Mill-Thread. In addition to threading, we produce Grooving tools, Mini Chamfer mills and the Tiny Tools line of small boring bars for threading, turning and grooving of small parts. The company's different product lines are recognized worldwide for their advanced technology, reliable full range lines that offer accurate geometry, excellent cutting performance and extended tool life. Our products and service we provide live up to the highest standards and outperform them. Carmex also produces special tools in accordance with the customer's requirements.

### Quality Assurance

In addition to our unyielding strive for high quality, speedy service and reliability, Carmex is certified by ISO 9001:2008, ISO 13485:2003, ISO 14001:2004, OHSAS 18001 and CE. Most of our customers' requirements are supplied immediately from our readily available wide range of inventory as well as from our agents and distributor's stocks around the world. In August 2008 Carmex completed its transfer to the new, state-of-the-art modern building. In addition to the construction we invested in advanced machinery and equipment as part of our strategy to keep our position in the first line of high technology.

### Carmex Branches

In addition to its distributor's chain, Carmex has three independent sales branches. Each of them keeps Carmex's wide range of stock and employs talented, service oriented managers, engineers, technicians and administrators willing to fulfill the customers' needs.

**C.P.T. GmbH, Stuttgart Germany serving Europe.**

**Carmex Precision Tools LLC, Wisconsin USA, serving North America and Mexico.**

**Carmex Italia Srl, Modena Italy.**

## HBA – Takes on the toughest materials

### Carmex introduces HBA, a new extra-fine sub-micron grade with high toughness for optimized performance.

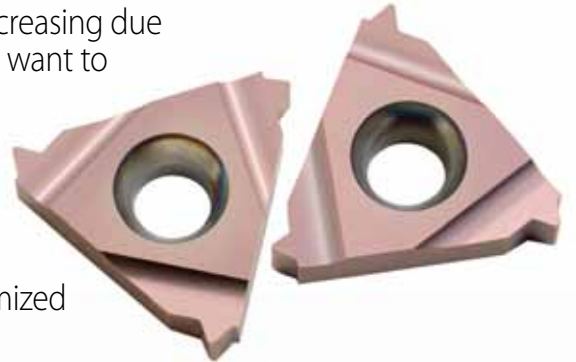
Threading of fully hardened and toughened materials is increasing due to manufacturers who need to avoid thread distortion and want to reduce the manufacturing time. Thread turning inserts for machining materials harder than 40 HRC require an optimized combination of carbide substrate, coating type and edge conditions.

To meet this market need, Carmex is introducing HBA, a new extra -fine high-strength sub-micron grade for optimized performance on:

- Hardened Steels and Cast Iron up to 62 HRC.
- Titanium Alloys and Super Alloys (Hastelloy, Inconel and Nickel base alloys).

#### Advantages:

- High wear and heat resistance
- Excellent edge stability
- Unique coating structure

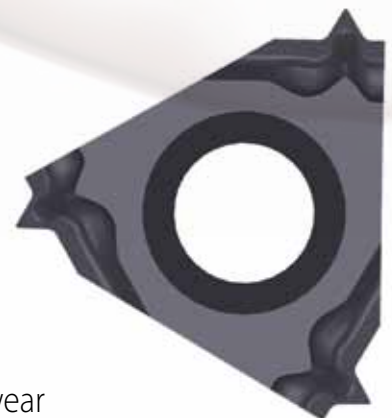


## Size 11mm Type B inserts

### Precision ground thread form with sintered Chip-Breaker

Carmex expands the Type B line by offering a new size 11mm internal thread turning inserts, including a wide range of thread profiles and pitches.

- Ensures accurate and high quality threads.
- Reduces cutting forces.
- Improved chip control and chip flow, for high surface finish.
- Excellent for internal threads.
- BMA Sub-Micrograin grade (K20-K30, P20-P40), provides high wear and heat resistance.



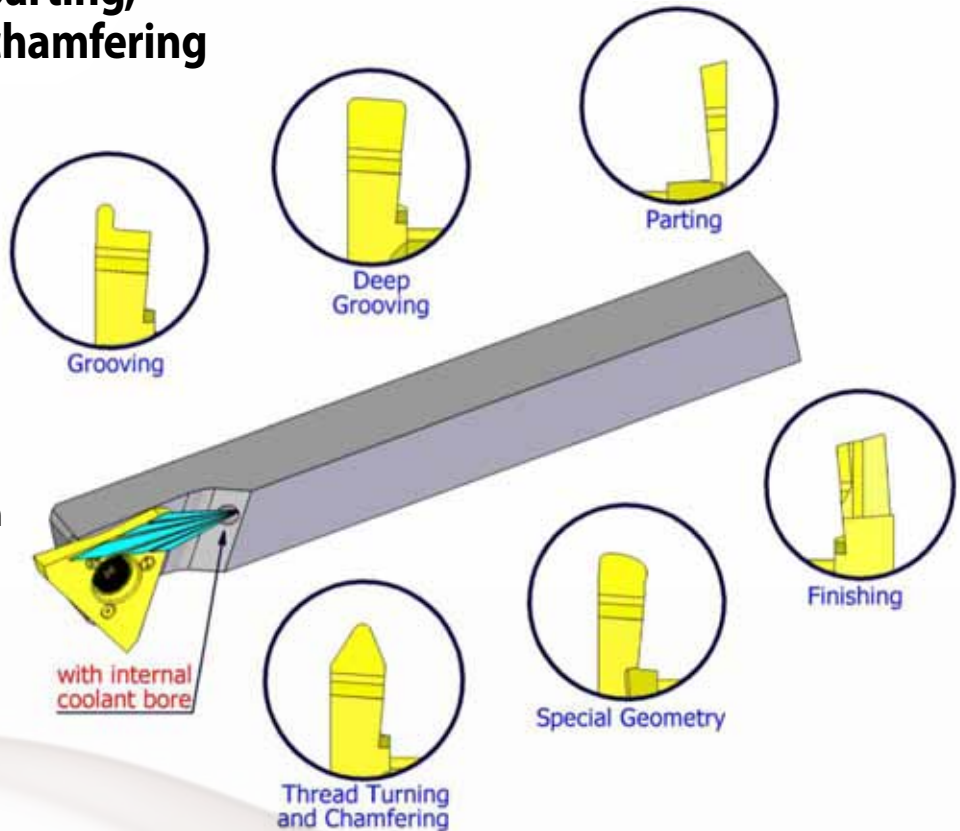
## Swiss-Line

**Carmex is introducing a new line of inserts and toolholders, developed for automatic lathes and Swiss Type machines. Designed for economic parting, grooving, profiling and chamfering mass production.**

### Advantages

Advance sub-micron grade (K10-K30) with unique PVD triple coating - a combination of strength, toughness, wear resistance and edge sharpness.

- Three grounded cutting edges.
- For most types of material, including Stainless Steels, Titanium and Super Alloys.
- The insert can be indexed directly on the machine.
- Internal coolant to the cutting edge.



## Mini Tools

**Carmex expands Mini tools product line of vertical inserts and toolholders for threading, chamfering, grooving and turning by offering smaller inserts and holders for small diameters starting from 8mm.**



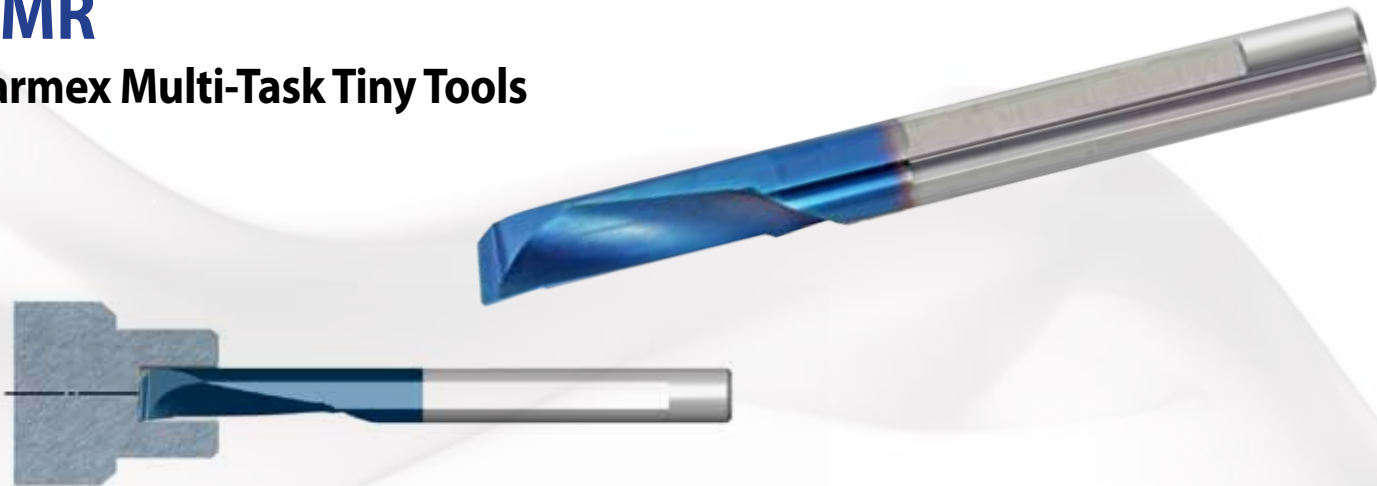
- Carbide shank toolholder provides excellent vibration resistance.
- Long reach.
- Through coolant.
- Quick indexing.



**Carbide grade BLU:** Sub-micron grade with advanced PVD triple layer coating delivering high heat resistance and smooth cutting operation.

## CMR

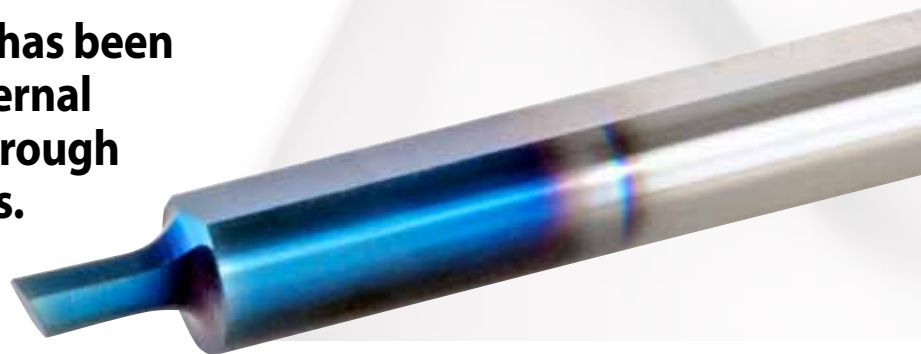
### Carmex Multi-Task Tiny Tools



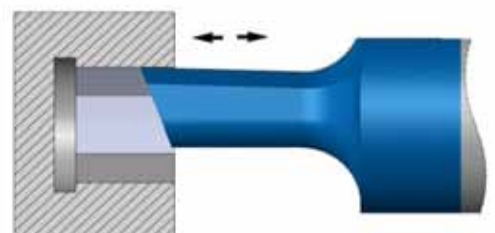
- Carmex is introducing a new and innovative Multi-Task Tiny Tool CMR for Boring, Turning, Facing and Chamfering with a single tool.
- A unique design enables to machine the material with no need for a pilot hole.
- The new tool shortens the machining cycle time and the number of tools required - providing "High Productivity"
- Effective through coolant hole with spiral flute, evacuates the chips out of the hole uninterruptedly.
- BMK Grade - A PVD triple coated grade for high performance and normal machining condition.
- To use with standard SIM toolholders on Swiss Type or CNC lathe machines.

## HK - Broaching Tools for Hexagon Keys

**The HK broaching system has been developed to machine internal keyways inside blind or through holes, using CNC machines.**



- BMK Grade - A PVD triple coated grade for high performance.
- To use with Carmex standard SIM Bar Holders. The holder can be located directly in the turret or the machine spindle.
- Holder with rear clamping screw for full support during operation.



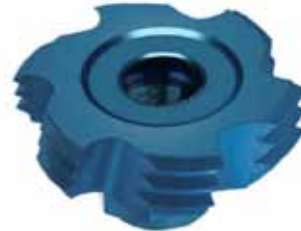
## CMT Vertical Thread Milling

### CMT Spiral Multi flute inserts

**Carmex presents the new generation of CMT vertical thread milling inserts to perform a wide variety of threading, grooving and chamfering.**

- Grounded profile
- Multi flute: 4-8 cutting edges
- Spiral flute for smooth cutting

The new cutters are designed for large range of materials including hardened steel up to 62 HRC. To use with the same CMT tool holders, C18 type.



## CMT High performance milling head

**Using indexable three cutting edges milling inserts for Threading, Grooving, Chamfering and Facing**

- To use with the standard CMT tool holders, S35 type
- Cutting diameter -  $\varnothing$  41 mm
- Thread pitch up to 4 mm
- Groove Depth up to 9 mm
- Ground profile inserts for high precision and excellent performance
- Multiple cutting edges for high productivity and economical machining
- High surface finish



## Mini Spiral Mill-Thread

Newly designed Mini Spiral inserts and toolholders with cutting diameter smaller than 20mm.



## FMT Fast MT

- Carmex has designed a unique line of solid carbide thread milling tools FMT for increased productivity, and high performance.
- Large number of flutes enables to achieve significant shorter machining time.



### **Carbide grade MT8:**

Sub Micron grade with advanced PVD triple coating (ISO K10-K20). Extremely high heat resistant and smooth cutting operation, for high performance, and normal machining conditions. General purpose for all materials.

## MG - Groove Milling

**Carmex expands the MG Groove Milling line with new full carbide cutters.**



### **Precision Ground Profile**

- 6 flutes minimize cycle time and increase productivity
- Spiral flutes reduce cutting forces and provide smooth cutting actions
- High stability to prevent vibration

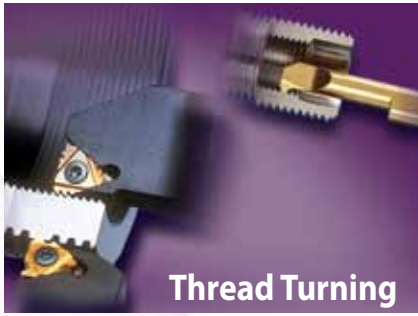
### **Applications**

- Machining deep holes
- Allows high overhang
- Can fit on small or large machining centers and Swiss type lathe machines

### **Carbide grade: MT8**

Sub-Micron grade with advance PVD triple coating (ISO K10-K20). Extremely high heat and wear resistance for high performance, and normal machining conditions. General purpose for all materials.

# Carmex Product Lines



**Thread Turning**



**Miniature Threading**



**Grooving**



**Mill-Thread**



**D-Thread**



**Spiral Mill-Thread**



**CMT**



**Mill-Thread Solid Carbide**



**Mini Mill-Thread**



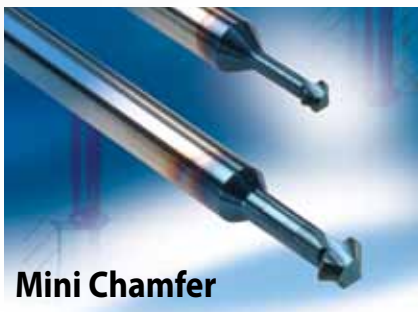
**Hardcut**



**DMT & DMTH**



**Groove Milling**



**Mini Chamfer**



**Tiny Tools**



**Thread Whirling**



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*x-treme thread cutting™*

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