➤ WIDIA CONFIDENTIAL MATERIAL FOR OUR INTERNAL SALES TEAM AND DISTRIBUTION PARTNERS ONLY

WIDIA™ Announces the Addition of KM[™] Quick Change System to its Portfolio

The market is demanding machines with greater horsepower and torque capabilities for machining of large components. These machines are being designed to take greater advantage of the software and computer controls and thus multi-tasking activities can excel at static and rotating applications.

The spindle connection must provide greater stiffness and dampening to minimize undesirable vibrations that affect tool life and part quality. The KMTM designed system gains the best spindle stiffness and torque which in turn delivers the best possible productivity from the machine tool with a quick change system allowing tool setting off-line.

Specifically engineered for all roughing over medium to finishing turning operations of all types of alloyed and unalloyed steel workpiece materials, this new grade portfolio covers the full range of application needs.



Quick-Change Tooling

KMTM quick-change tooling is the central component of a machine utilization strategy, by reducing downtime due to both set up and inserts changes. It consists of two basic parts: the clamping unit and the cutting head. The clamping unit mounts to the machine and acts as a receptacle for the interchangeable cutting units. It is the interchangeability of the cutting unit that makes this type of tooling "quick-change". To change tooling, the machine operator simply releases the locking system, changes the cutting unit, and locks the new tool in position. The operator then makes the offset adjustments according to the previously recorded, pre-gauged data, and continues to machine the part. The total machine downtime is about 30 seconds.

KM[™] tooling drastically reduces time spent on tool change and part set up, both of which have a major impact on downtime reduction. WIDIA's proven program includes change of an entire pre-gauged cutting unit, as opposed to changing a single insert.

Target Applications and Markets

Customer's are seeking opportunities to gain greater production from existing equipment. Manufacturers are reaching out to industries outside of their core business in search of additional manufacturing opportunities and suppliers must drive the new and innovative solutions for the metalworking market by offering time savings solutions.

WORLD HEADQUARTERS
WIDIA Customer Care
1600 Technology Way
Latrobe, PA 15650 USA
Phone: 800.979.4342
w-na.service@widia.com

EUROPE HEADQUARTERS
Kennametal Europe GmbH
WIDIA Customer Care
Rheingoldstrasse 50
CH 8212 Neuhausen am Rheinfall
Switzerland

Phone: (41) 52.6750.100 w-ch.service@widia.com

ASIA-PACIFIC HEADQUARTERS
WIDIA Customer Care
Kennametal (Singapore) Pte. Ltd.
No. 11 Gul Link Jurong
Singapore 629381
Phone: (65) 6.2659222
w-sq.service@widia.com

INDIA HEADQUARTERS
WIDIA Customer Care
Kennametal India Limited
8/9th Mile, Tumkur Road
Bangalore - 560 073
Phone: +91 (80) 2839.4321
w-in.service@widia.com

WIDIA

➤ WIDIA CONFIDENTIAL MATERIAL FOR OUR INTERNAL SALES TEAM AND DISTRIBUTION PARTNERS ONLY

KM™ Advantages over other quick change systems

- Higher maximum speed capabilities.
- Higher mechanical advantage due to low friction yields greater clamping force without requiring elevated levels
 of pull back force.
- No loss of clamping force after continuous use.
- Eliminates concerns of fatiguing and sticking fingers.
- Maintains taper contact at higher speeds due to WIDIA's use of interference levels on the gage diameter.

Competitors

Sandvik/Seco/Walter have Capto™. Ceratizit Maxiflex UTS, Iscar and HSK also have quick change products.

Stratagy

Our key strategy for selling KMTM is educating the customer of the full features, functions, and benefits of the KM system. This will allow them to make the best decision when purchasing new capital equipment or when retrofitting KM to an existing machine tool, giving our customer an added advantage of increasing their throughput with a proven quick change system, with minimal investment compared to a large purchase of complete new capital equipment.

Our MTI Global teams are our regional experts and our direct contacts with machine tool builders, who can team up with you and help present the business and performance benefits and lead your customer in the direction of KM quick change the demonstrate the machine utilization strategy to their advantage.

REMEMBER, this is the way to lock your customer into the best spindle connection on the market and to pull through the valuable ongoing annuity at proven 4x to 10x factors for milling, holemaking, and turning long-term consumables!

As part of the transition to the ISO standard you will see several enhancements to the KM™ system as shown below.

Note: The WIDIA UTS cutting units fit into all KM[™] clamping units.

Features, Functions, and Benefits

KM™ Mechanical Advantage

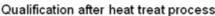
- Mechanical advantage is gained by the result of the interference fit between the male and female taper of the system.
- The mechanical action between the lock rod, balls and ball track create additional clamping forces.
- The KM[™] system requires a lower activation force, resulting in lower stresses on the internal components.
- Lower activation forces protect the clamping mechanism in the event of a crash.
- Lower activation forces provide a longer life for the spindle or clamping unit.
- Ability to run at higher metal removal rates without causing damage to your spindle connection.
- Lower cost of ownership due to limited warranty issues.
- KM[™] is now an ISO standard, ISO26622.
- KM[™] spindle designs are front loading; this allows for easy access to the KM[™] spindle if repairs are necessary.
- Sandvik's Capto[™] spindle design is not a front load design, when repairs are necessary on a Capto[™] spindled
 machine the entire spindle must be removed. This causes the machine to be down for an extended period of time.

➤ WIDIA CONFIDENTIAL MATERIAL FOR OUR INTERNAL SALES TEAM AND DISTRIBUTION PARTNERS ONLY

- All KMTM extensions and reducers are side activated. Sandvik offers very few side activated tools.
- When using standard Capto[™] extensions or reducers the customer must disassemble the entire tool in order to change the Capto[™] unit on the end of the assembly.
- The KM[™] design is an interference fit, this allows the KM[™] system to generate a 4:1 and upwards of 7:1 mechanical advantage in clamping force.
- All KM[™] LOC-II clamping units are capable of 1,500 psi coolant pressure.

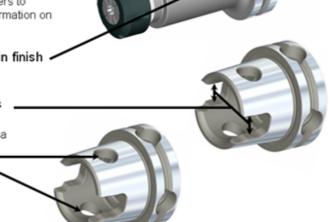
Addition of ATC configuration and Data Carrier capability a. provides machine tool builders with one standard KM™ design b. allows customers to use data carriers to record tool offsets and tool life information on

H13 High Strength Steel, Silver Satin finish



 a. addition of qualified pads machined after heat treat provides a higher degree of repeatability

 b. qualification of the ball tracks after heat treat



How to Beat the Competition

- KM[™] is now an ISO standard one standard for all machine tool builders to follow.
- KM™ has the highest tangential load carrying capabilities when tested against competitive tooling systems.
- A wide product portfolio allows you to offer a complete tooling package.
- The KM™ system is easily configured to meet your customer's most demanding needs (Adavanced Engineering Support).

Key Selling Arguments

- Better high speed rotating capability than Capto[™], HSK and BigPlus[™].
- Superior rigidity and accuracy over competitive systems.
- Three surface contacts (flange plus two areas of contact on the taper).
- Greater mechanical advantage than competitive systems, allowing for higher interference levels.
- Modular design allows for adaptation to any machining operation.
- Flexible and versatile clamping designs (ability to customize for different drawbar forces).
- · Wide range of sizes and styles available.
- Designed with turning, boring, drilling and milling in mind.
- · No loss of clamping force, fatiguing, or sticking fingers.

➤ WIDIA CONFIDENTIAL MATERIAL FOR OUR INTERNAL SALES TEAM AND DISTRIBUTION PARTNERS ONLY

KM[™] allows for disassembly without dismantling of the entire modular system to exchange

Capto[™] requires the complete disassembly of the modular system to exchange cutting units.





Product Portfolio

An electronic copy of the KM portfolio will be available for download starting April 15, 2011:

www.widia.com



Appearance

- KM will be marketed under the KM™ trademark with etching and neutral packaging.
- Catalog/part nomenclature will utilize the tooling systems designation system KM63TSxx followed by our normal numbering structure.

Example: **KM63TSTG100100M** — for a TG Collet Chuck

Supporting Material Availability

InfoNet has presentational material available to support your customer acquisition for applications, how to tool up a lathe, machine utilization strategy and KM versus Capto material. Your local support will be able to supply copies in WIDIA format:

Infonet > Workspaces > Sales and Marketing Workspace > MTI - Information Portal > Tooling Systems Latest Information > Widia Tooling Systems > Latest Product Training

http://infonet/workspaces/one.cfm?workspace_id=3253017&object_id=5694889

April 11, 2011 A-11-02617 Tooling Systems Page - 5 -

GLOBAL MARKETING BULLETIN

➤ WIDIA CONFIDENTIAL MATERIAL FOR OUR INTERNAL SALES TEAM AND DISTRIBUTION PARTNERS ONLY

Contacts for Our Internal Sales Teams

MTI Team:

Rich Mcdonough (USA) +1 865-310-1675 Guenter Jarosch (Euro) +49 175 435 6587 Minoru Amamo (Japan/Far East) +0120-509-085

Engineering:

Carol Bridge (USA) +1 724-539-5464 Calvin Hiles (USA) +1 724-539-8183

Product Management:

Juergen Puschmann-Frenken (Germany) +49 911-9735-286 Keith Wiggins (USA) +1 724-539-8093

➤ WIDIA CONFIDENTIAL MATERIAL FOR OUR INTERNAL SALES TEAM AND DISTRIBUTION PARTNERS ONLY

Contacts for Our Distribution Partners

Authorized **WIDIA Distributors** should contact their local WIDIA Representative or one of the below contacts for additional information.

Country	Language	Phone	Fax	Email
Australia	English	001-724-539-6921 *	001-724-539-6830 *	ap.techsupport@widia.com
Austria	German	0800 291630	0800 291631	eu.techsupport@widia.com
Belgium	English / French	0800 80410	0800 80411	eu.techsupport@widia.com
China	Chinese	400-889-2237	001-724-539-6830 *	w-cn.techsupport@widia.com
Denmark	English	808 89295	808 89297	na.techsupport@widia.com
Finland	English	0800 919413	0800 919415	na.techsupport@widia.com
France	Frensh	080 5540 379	080 5540 029	eu.techsupport@widia.com
Germany	German	0800 1015774	0800 0007531	eu.techsupport@widia.com
India	English	001-724539-6921 *	001-724-539-6830 *	ap.techsupport@widia.com
Israel	English	1809 449907	1809 439845	na.techsupport@widia.com
Italy	Italian	800 916568	800 917749	eu.techsupport@widia.com
Japan	English	001-724539-6921 *	001-724-539-6830 *	ap.techsupport@widia.com
Korea (South)	English	001-724539-6921 *	001-724-539-6830 *	ap.techsupport@widia.com
Malaysia	English	001-724539-6921 *	001-724-539-6830 *	ap.techsupport@widia.com
Netherlands	English	0800 0201131	0800 0201135	na.techsupport@widia.com
New Zealand	English	001-724539-6921 *	001-724-539-6830 *	ap.techsupport@widia.com
Norway	English	800 10081	800 10001	na.techsupport@widia.com
Poland	Polish	00800 4411943	00800 4411940	eu.techsupport@widia.com
Singapore	English	001-724539-6921 *	001-724-539-6830 *	ap.techsupport@widia.com
South Africa	English	0800 981644	0800 981645	na.techsupport@widia.com
Sweden	English	020798794	020790477	na.techsupport@widia.com
Taiwan	English	001-724539-6921 *	001-724-539-6830 *	ap.techsupport@widia.com
Thailand	English	001-724539-6921 *	001-724-539-6830 *	ap.techsupport@widia.com
United Kingdom	English	0800 028 2996	0800 028 5721	na.techsupport@widia.com
USA	English	888 539 5145	001-724-539-6830 *	na.techsupport@widia.com

^{*)} no toll free numbers

Download Marketing Bulletins

Please download this Bulletin and other helpful marketing material at the following sites:

For WIDIA Products Group, internal employees:

http://infonet/workspaces/one.cfm?workspace_id=5209712&object_id=5610815&tab=object_view

For our Distribution Partners: https://www.widia.com/widia/en/login/index.jhtml

Note: Marketing bulletins will be on the WIDIA Portal by mid April, 2011

NOTICE:

The information contained in this bulletin is intended for comparative purposes only and is based upon a limited test sample. The information is no guarantee of actual future results. The information is provided "as is" without warranty of any kind whether express or implied.