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Abrasives Market ***E-zine***



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Some photos and articles are from internet, so we couldn't contact with authors. Hope understanding thanks a lot!

Editorial:

Times goes by with no trace, and the world is continuously moving on, as well as the abrasive industry, the import-export volume began to rise, most of the abrasive factories went into production after the industry shuffle. The abrasive enterprises have learned a lot from this financial downturn, they realized that the importance of self-development and self-management, therefore, as one thing goes, no cross, no crown, Abrasives Market stand together with you regardless of situation.

Abrasives Market

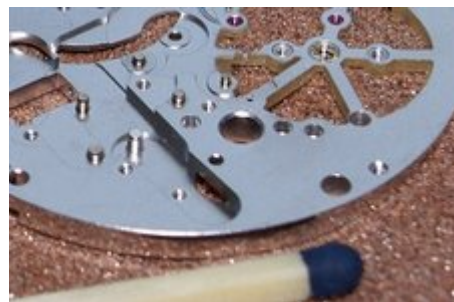
Global metalworking tool manufacturer Kennametal has won a Delphi Supplier Excellence Award.

This is the first time that a metalworking tool company has been recognised with one of the 56 supplier awards, which Delphi confers per year. Only two of them are dedicated to indirect material suppliers.

The Delphi Pinnacle Award recognises outstanding achievements in service and delivery. Besides product quality and problem solving competencies are also evaluated environmental aspects and competitive cost structures. The Award has been conferred to valuable partners since 2004.

Delphi is a leading global automotive supplier with headquarters in Troy, Michigan, but the award was handed over at a meeting at the European

headquarters of Kennametal, where Bjorn Goeke, director indirect purchasing Europe Delphi and Pascal Dutoit, category leader Delphi handed over the Award to the European



management team of Kennametal. Dr. Kemal Yegenoglu, president EMEA, Grald Goubau, managing director sales & services EMEA and Philippe Bourg, manager global key account received the award.

China Attempting Another "Largest" - The Largest Diamond Polishing Center

China's diamond polishing capacity has positioned it as the world's second largest manufacturing center, predicted to continue growing, at least partially at the expense of the Indian industry.

China's polished diamond exports totaled \$788 million in the first nine months of 2004, bringing it, to the number two slot. By that time, annual exports were expected to total over 3

million carats, worth an estimated \$1 billion.

By the fourth quarter of 2008, diamond exports totaled \$772 million and annual diamond trade through the Shanghai Diamond Exchange (SDE) totaled \$1.307 billion, a 30.5 percent increase compared to the previous year.

In a recent report, KPMG forecasts

suggest that by 2015, China's share of the global processing business will rise to 21.3 percent, while India's current 57 percent market share will decline to 49 percent.



In 2006, the Chinese industry got incentives from the government in the forms of tax breaks. A 17 percent VAT on imported rough diamonds was eliminated, and reduced to 4 percent VAT on imported polished diamonds.

With high quality makes, competitive labor costs, and a booming local market, China is starting to cause some concern in the Indian market. India suffered from mass factory closures and a loss of an estimated 400,000 employees in the process from the recent economic downturn.

Abrasives Manufacturer Noritake to Invest More Than \$8

Million in New Ohio Site

Abrasives maker Noritake (Mason, Ohio) will invest more than \$8 million to expand operations here in southwest Ohio.

The company plans to build a 42,000 square foot facility, more than double

More and more Israeli, European and even Indian diamond companies are opening plants in the country, which has built a reputation as an industrial power house in almost any area it decides to focus on.

Two elements seem to work at this point in India's favor - cost of labor and tradition.

Polishing a one carat diamond costs in China about 70 percent more than in India - where it costs about \$10. This gives India a lead in lower cost goods, where the cost of manufacturing represents a larger component of the total cost of the diamond. Conversely, this lead dissipates with higher cost diamonds.

Tradition is the second advantage, providing India with many years of invaluable experience, which it continually builds upon. China entered diamond polishing in the 80s, lacks the inherent years of experience, but is importing know-how, and trying to set high standards in the quality of polishing, referred to in the diamond industry as the 'make.'

the size of its current site in nearby Blue Ash.

Mason will be the headquarters for the Noritake Abrasives U.S. division and will continue to provide sales and engineering throughout the United

States, Canada and Mexico. The company will also manufacture several types of grinding wheels at the new facility, according to a spokesperson.

Noritake will relocate 25 workers and plans to hire 15 additional employees as the company expands production at Mason.

No date has been set for construction, but company officials hope to get the project underway in the first quarter of 2010. The \$8.4 million investment includes land, construction and new

equipment.

Japan-based Noritake was founded in 1904 as a manufacturer of western-style dinnerware and has since branched into other businesses with a focus on ceramics technologies. The company's five business groups provide a wide variety of products and technologies ranging from dinnerware to the products for core and high-tech industries such as automotive, steel, energy including solar cells, electronics, etc

Exactaform buys Walter Helitronic Power Diamond

Korber Schleifring UK has supplied a Walter Helitronic Power Diamond tool grinder to Coventry-based Exactaform Cutting Tools.

Exactaform will use the Helitronic Power Diamond to make a range of diamond, CBN, PCD, Amborite and special carbide cutting tools.

The Helitronic Power Diamond can handle tools 350mm long (280mm for face grinding) and up to 320mm diameter. It is a two-in-one multi-axis tool grinder that combines CNC erosion with conventional CNC tool grinding for the fast, accurate and cost-efficient machining of both PCD and carbide tools.

The machine uses rotational erosion technology to produce radii down to 0.1mm and generate surface finishes that can eliminate the need for finish-grinding. It can quickly revert to being a Helitronic Power by utilising its

twin-head electrode/grinding wheel spindle unit and the same dielectric.

Its erosion process depends on an automatic measuring program that determines all necessary parameters such as angle between axes, angular pitch and tool orthogonal rake, cutting-edge position convex/concave and length of cutting edge.

The electrode dressing device allows the creation of contours down to 6mm.



The machine also features an erosion technique for hogging cutters (roughing cutters that hog out large amounts of material) that uses a cup electrode during plunge-cutting.

It presents the face of the electrode along the entire length of the PCD

cutting edges, with a resulting reduction in processing time and enhanced surface finish.

John Inglis, managing director of Exactaform, said: 'The machine's capability for unmanned running is enhanced by its integral Eco loader and the automatic electrode/wheel

changer.' The loader can accommodate up to 20 tools, while the auto electrode/wheel changer can hold up to eight grinding-wheel sets or 24 electrodes/grinding wheels.

It can easily and quickly switch between the processing of PCD/CBN and carbide tools.

OMAX Unveils New Brand of Abrasive Waterjet

OMAX Corp. is introducing a new line of abrasive waterjet machines this month, a series that will appeal to operations where affordability is a guiding factor in the choice of equipment. It describes the MAXIEM line as machines that incorporate its proven technology for high-pressure cutting in an affordable, highly productive package.

"Through years of marketing the OMAX line of JetMachining Centers, we recognized the strong demand for a line of basic abrasive waterjet equipment," OMAX CEO Dr. John Cheung explained. "With the new MAXIEM line, we meet this demand, as well as the varying performance needs required by the international community."

MAXIEM will be a separate brand from the current OMAX offerings, with a different market profile in terms of cost and function.

"As waterjet technology has evolved, the precision and accuracy of OMAX machines has moved beyond the point

of what some manufacturers require," detailed Dr. John Olsen, co-founder and vice president of operations for OMAX. He described MAXIEM as an "entry-level line of abrasive waterjets," and one that is well timed to the financial concerns of the machine shop market.



The targeted MAXIEM users will be fabrication shops, metal service centers, trade schools, and job shops. OMAX further identifies shops that specialize in architectural work, signs, stone, and gaskets, or any operation that processes large parts or multiple parts from large stock, including metal, plastic, glass, ceramics, stone and composites.

The first machine to be available will

be the 1530MX. It will have a 1.5 by 3-meter table size; a smaller, 1.5 by 1.5-meter version (MAXIEM 1515) will be introduced in the coming months, and other sizes will follow. All MAXIEM



designs will have OMAX Intelli-TRAX

traction-drive technology (developed to perform in the abrasive atmosphere) in the X-Y axis, and a motorized Z axis. The 50,000-psi pumps will be offered in 20 and 30 horsepower options. The OMAX Intelli-MAX Basic control package will power the MAXIEM machines, including its proprietary control software.

Drill-bit maker Varel opens Denver-area sales office, service center

Texas industrial drill-bit manufacturer Varel International said recently it has opened a

The office is located at 7315 S. Revere Parkway, Suite 602, in Centennial. The Carrollton, Texas-based company's Denver-area center will service up to 350 polycrystalline

"Once a bit is run, it can be quickly returned to Denver for evaluation and service," Jim Dahlem, Varel's regional manager for the Rockies, said in statement. "This also allows a swifter flow of information to our customers as to any issues relating to the operating practices or bit design that may affect bit performance."

Founded in 1947, Varel makes drill bit for use in oil and gas production, mining and other industries.

Denver-area regional sales office and service center.

diamond compact drill bits, and the sales office is home to field engineers and technical sales personnel focused on the Rocky Mountain region.

It was formerly owned by Denver buyout firm KRG Capital Partners, which sold Varel in November 2007 to Atlanta-based private equity firm Arcapita Inc. for a reported \$369 million.



Silicon Carbide as a Platform for Power Electronics

For high-voltage, high-current devices that can be operated at elevated temperatures, silicon carbide (SiC) has been the material of choice. Efforts to produce single-crystal SiC began 30 years ago, but intrinsic problems in growing high-quality single-crystal boules free of micropipe defects-micrometer-scale pinholes created by dislocations-have only recently been overcome. A series of developments in crystal growth have made large-area, high-quality SiC substrates readily available for applications such as high-frequency transmitters and solid-state white lighting. Additional reductions in defects in the active region of devices have been achieved through epitaxial approaches, in which single-crystal layers are grown on the substrate. SiC is now poised as the linchpin to "green energy" that will replace less energy-efficient switches now based on silicon technology.

High-performance Tool Grinder

The MX7, ANCA Inc.'s next-generation CNC grinding system, was made for high flexibility and quick changeover to accommodate smaller batch sizes with high volume capability for production houses. The machine can manufacture, unattended, a variety of tools with diameters to 0.625 in.

Ten-second automated wheel exchanges are just one selling point of the ANCA MX7 CNC cutter grinder.

Flexibility, quick changeovers, and high output result from the machine's 10-second automated wheel exchanges and 10-second workpiece changing with an integrated loader.

A newly developed permanent magnet

20-kW/27-hp 10,000-rpm spindle delivers high torque at lower rpm, making the machine well suited for carbide-grinding applications. Due to the lower current draw, less heat is generated, so there is less expansion and greater energy efficient operation and accuracy.

Add an MLX loader to the MX7 and further increase productivity. The integration of the loader into the machine's base ensures repeatable loading to go along with the one gripper set for loading that reduces set-up time.

Other available machine features include a high-speed headstock for wheel dressing, traveling steady and secondary side dresser.

Self-sharpening ceramic flap discs

A new line of ceramic flap discs that provide aggressive and controlled stock removal is being added to their Sigma Green line of fast grinding specialty products by Rex-Cut Products, Inc. Rex-Cut Sigma Ceramic Flap Discs feature ceramic abrasive grains bonded to a proprietary treated material that is layered and stacked in a way that provides aggressive and controlled stock removal with minimal pressure. Self-sharpening and durable, these standard density Type 29 discs are ideally suited for use on stainless steel, mild steel, and exotic metals.



Available in 4-1/2", 5", and 7" dia. x 7/8 sizes and offered in 36 and 60 grit versions, with or without hubs, Rex-Cut Sigma Ceramic Flap Discs run cool, produce a better surface finish, and last longer than alumina oxide abrasives, claims the firm. They are also available with 5/8-11 adapters.

Suhner FVV surface conditioning discs for polishing and finishing aluminium

Aluminium can be a difficult material to work with when a brushed or polished finish is required.

Aluminium grinding is best achieved by using a non woven nylon abrasive such as the Suhner . Coarse (80-100g) A brushed, grained Aluminium finish is best achieved by removing welds and marks with a coarse (36 to 40 grit) Zirconia disc and then using a belt (on a drum) or wheel form of the nylon surface conditioning material. Coarse, medium and fine will produce ever finer finishes.

Mill Finish Aluminium will require an aggressive abrasive such as a 36 grit

can remove reasonable welds and 'soaks up' the fine aluminium dust. This material can be supplied in a belt form as well as a disc form and the choice will depend on surface finish of the Aluminium required.

sanding disc or a special grinding disc such as Suhner Magic Flexible discs. These abrasives are available from 50mm diameter up to 180mm dependant on type. Once the mill scale is removed, the process above can be undertaken.

Mirror finishing/polishing of aluminium is a simple process of using Stitched Cotton mops and decreasing

grain pastes. Suhner Australia stock a range of mops and pastes to meet all Aluminium Mirror finishing applications.

One of the most common applications is for large Truck and UTE bull bars. Large diameter mops may be required and to use these High Torque machines are required. Suhner Rotomax 1.5 delivers 1.5Kw at the head but the tool only weighs Half a Kilo. To achieve this Rotomax supplies the power throw the Suhner Flexible

Shaft drive system.

Rotomax is quiet, powerful and very safe. It can deliver a speed range from 500 Rpm to 15,000 Rpm in 100 Rpm steps, infinite control and constant torque. For hand held machines, the Suhner USK 3R Barrel Grinder/Polisher is an efficient model. It features variable speed from 1500 to 3000 Rpm and high torque from the 1530 Watt motor, but still only weighs 3 Kg.

China's May exports plunge by record 26.4 percent

China's exports fell by a record margin in May as the global slump battered trade, while imports also fell sharply, data showed Thursday.

May exports tumbled 26.4 percent from a year earlier, exceeding February's previous record drop of 25.7 percent, the Chinese customs agency reported.

China's trade collapsed in late 2008 as the global economic crisis cut demand for Chinese goods, wiping out millions of factory jobs. Analysts say exports will not recover until the U.S. and European economies rebound.



Beijing is trying to shield the world's third-largest economy from the global downturn by boosting domestic consumption with a 4 trillion yuan (\$586 million) package of spending on public works construction and other initiatives.

May imports dropped by 25.2 percent, exceeding April's 23 percent decline but short of January's record 43.1 percent drop, according to the customs agency.

China's demand for iron ore, industrial components and other foreign goods has picked up as companies buy supplies for stimulus-financed projects. But global commodity prices are down from last year's highs, so imports have declined in financial terms even as they have increased in volume.

China's global trade surplus in May narrowed to \$13.4 billion, down 33 percent the same month in 2008. April's surplus was \$13.1 billion.

German power tools distributor urges government to release stimulus funds

ROBERT BOSCH, Inc., the local subsidiary of German car parts and power tools maker Robert Bosch GmbH, expects sales this year to slow from the "exceptional" 56% growth recorded in 2008, officials yesterday said.

The sales mix is also likely to change this year, with the firm's power tools division looking to gain against car parts' share in total sales with an uptick in public infrastructure activity, they said.

"We are eyeing double-digit growth but we don't have figures right now 2008 was an exceptionally good year. It will be difficult to match it," Managing Director Franz Roland Odenthal told reporters at a briefing.



Sales to the Philippines stood at 13.6 billion euros last year, up by 56% from 2007, Mr. Odenthal said. As earlier reported, the group credited its year-on-year growth to the continued hike in car sales and expansion in the construction and mining sectors.

China machine tool market in the spotlight of the world

China consumed and imported most machine tool products in the world in 2008, making it the world's largest consumer and importer of machine tool products for seven consecutive years.



Despite the global economic downturn, the Chinese machine tools industry experienced a positive growth last year. According to a report from the CMTBA (China Machine Tool & Tool Builders' Association), in 2008 the country imported US\$ 7.59 billion of metal working machine tool products, up 7.3% from previous year;

while the export value amounted to US\$ 2.11 billion (+27.6%) and consumption value reached US\$19.44 billion. In 2008, China was also the world's third largest producer and the sixth largest exporter.

Rays of recovery - US construction materials costs in May up by 0.5%

According to the Producer Price Index report by the US Labor Department, climbing out of an economic drought, prices of construction materials increased 0.5% in May. However, prices are still down by 5.3% YoY.



Construction materials trending higher include fabricated ferrous wire,

up by 0.5%, marking the first increase since October 2008. On a YoY basis, prices are up 0.1%. Prices for prepared asphalt and tar roofing are 1.3% higher from April, and up by 40.4% YoY. Plumbing fixtures and fittings prices were unchanged on a monthly basis and are up 0.6% from May 2008.

In contrast, prices for fabricated structural metal products continue to decrease, down by 0.7% MoM from April and down by 2% YoY. Softwood lumber prices dropped by 2.1% MoM and are down by 18.4% YoY.

Japan machine tool orders steeply declined in May, but rebounding

Japan Machine Tool Builders' Association [JMBTA] revealed that the booked order for Japanese machine tool industry totaled at 283 million in May, sharply down by 79.3%.

Although, the record is 9.1 percent higher than that of April 2009, explaining the whole industry now is slightly warming up in the global financial crisis.

Among the volume, domestic orders were down by 77.8% YTD, and 0.4%

up to April, while orders from overseas declines by 80.4% YTD and 17.2% up to April, the statistics by JMBTA also detailed

