



# f Mutual Interest

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Helping Our Service Center Marketing Partners Activate Their Ideas in Stainless

## New Castle Improvements Look to Brighter Future

Not all the country's current economic stimulus is coming from the U.S. federal government. For the 175 employees of Outokumpu's New Castle, Indiana stainless steel

plate mill, their stimulus package arrived in the form of nearly \$58 million in corporate investments approved in late 2007. Despite the recent economic downturn, Outokumpu has no plans to alter their investment commitments to New Castle. "We're preparing now for

road tankers, storage tanks, ethanol plants and numerous other applications — including public art installations such as The Bean (Cloud Gate) in Chicago and the Air Force Memorial in Arlington, Virginia.

### Shipping Bay and Process Improvements

The initial stage of the investment is now complete — a 16,000 sq. ft. shipping bay that will substantially increase New Castle's ability to ship more plate in a timely manner. The bay was created with a drive-through design for added efficiency and features a crane capacity of 70 tons, staging and shipping spaces to accommodate three trucks under the roof at any one time, and a separate covered area to tarp shipments.



The New Castle operations will soon experience a face-lift as Outokumpu looks to a brighter future fueled by demand for stainless steel in the energy segment.

when the economy rebounds, so we'll be ready to move forward," reported Chris Streit, New Castle's Vice President of

Operations. "These investments will ensure the sustainability and viability of this mill for many more decades to come."

New Castle produces individually rolled, wide and thick stainless steel plate, including special grades such as a family of duplex grades. New Castle has produced plate mill plate for energy plants, water reclamation projects, architectural construction,

Throughout 2009 the new investments will continue in the form of process improvements to keep New Castle responsive to customer needs. "We're in a specialty business, and that requires flexibility," noted Mike Stateczny, Senior Vice President for Plate Operations. "At New Castle we produce a variety of different grades, as well as different thicknesses and widths. We have to be able to run products in sequence within the same footprint — efficiently and reliably — one after another. The capital investments will help us do this."

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# OUTOKUMPU

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### Expanding Markets for Plate

Outokumpu's confidence in North American plate operations is based on a number of expanding markets, not the least of which is energy. Stainless steel is an essential material in virtually every form of energy production from coal-fired and nuclear power plant construction to new generations of biofuels. "The markets that will drive the demand for stainless steel are those that provide more energy, alternative energy, clean energy, renewable energy, fresh water, wastewater treatment and environmental protection — everything that the world needs," Stateczny stated.

New Castle's technical marketing staff has also been proactive in its outreach to design and engineering professionals, anticipating their needs for new and improved products in a number of key industry segments, such as oil and gas, transportation, and infrastructure. "These contacts could pay long-term dividends," Stateczny predicted. "We're already a leader in stainless plate, and we think we'll be able to grow the business not by taking a bigger market share but by growing the market itself." ■

## PRODEC® Hits the Highway

**J**BA Precision in Manitowoc, Wisconsin is basically a one-man fabricating and machining shop. So any efficiencies that owner-operator Jeffrey Kopidlansky can muster, he's all for. Which is why he's sold on Outokumpu's PRODEC® bar.

One of the products fabricated at JBA Precision is a grouping of washers that are used in the Harley Davidson aftermarket. The washers connect the Harley fairing and windshield to the

frame. "Since I started using PRODEC I've noticed that tool life has improved, the surface finish is much better and more consistent, and the quality is very predictable," Kopidlansky reported. JBA Precision produces the washers for a customer that manufactures high-quality fairings for the motorcycle industry. "The washers are on the exterior so they have to look good, because they are going to be both functional and cosmetic. My customer is very happy with the

quality," Kopidlansky noted.

JBA Precision produced between 5,000 and 8,000

parts last year for the Harley Davidson aftermarket and Kopidlansky expects that the number could double this year. "We're going super strong right now," he said. Serviced by Rolled Alloys, JBA Precision has been purchasing PRODEC in 1" bar. Kopidlansky indicated he would likely expand into other diameters, as well — all in PRODEC.

PRODEC is a special quality of austenitic and duplex stainless steel bar and plate produced to lower the cost of machined parts with better final surface and dimensional tolerances. PRODEC offers advantages such as reduced chip breaking, faster machining, consistent performance and lower scrap loss. ■

getting to know our products



Outokumpu's proprietary PRODEC® bar products are being used in the fabrication of washers for the Harley-Davidson aftermarket.

## Burgeoning Biomass Market

**B**iomass is a general term for sub-groups of plant material and animal waste that can be used as renewable energy sources for the production of heat, electricity and transportation fuels. It could be called 21st century alchemy — and as Elisabeth Torsner, Vice President Technology and Market Development for Outokumpu explains — if gold can be made from



Plant material, like wood chips may someday be efficiently converted to energy through stainless steel vessels, storage tanks and pipes.

garbage, people are going to try — and right now energy is golden. “We don’t know how large the potential biomass market is,” Torsner noted. “But we know it’s coming — everything based on renewable sources is coming.” First, however, significant high-temperature corrosion issues that impede efficient production must be addressed by the emerging biomass industry— and this is something that Outokumpu is working hard to remedy.

### Heat Resistant 253 MA®

At the 2009 NACE conference, Outokumpu metallurgist Rachel Pettersson presented a paper on “high temperature corrosion under simulated biomass deposit conditions.” (The paper’s findings were based on studies she conducted prior to joining Outokumpu.) Pettersson and her team tested materials including carbon steel, low alloyed steels, AISI 304 and the high-temperature grade 253 MA® from Outokumpu. The results showed that the corrosion rate for 253 MA was five times lower than carbon steel at 1300° F (700°C) and twenty times lower at 1000°F (550°C). The paper concluded: “appreciable reduction in materials wastage rates can be achieved by replacement of low alloyed steels by stainless steel.” Stainless steel is used for process vessels, storage tanks and pipe work in biofuel production.

Torsner explained, “one of the things we have learned working with the pulp and paper industry is that corrosion can begin under deposits, in this case, of ash and alkali salts.”

In response, Outokumpu developed special grades that benefited the pulp and paper industry, including 2205 Code Plus Two®. Current industrial applications, beyond biomass, for 253 MA include extraction hoods and flue gas ducts in steel melting and continuous casting plants; expansion bellows and piping in blast furnace plants; and multiple uses in the cement production industry. ■



## Outokumpu Joins Sustainable Index

**O**utokumpu’s history of corporate responsibility has

resulted in the company being selected for membership into the **Kempen/SNS Smaller Europe SRI Universe, an index** launched by **Kempen Capital Management in 2003 for socially responsible investing. European companies that meet or exceed high ethical, social and environmental performance standards are included in the Kempen SRI Universe. The acknowledgement is based on extensive analysis and Outokumpu has passed the exacting standards imposed.**

**Outokumpu is also a member of the pan-European Dow Jones STOXX Sustainability index and in the Dow Jones Sustainability World index. ■**

## Opportunities for Bar Products in the Energy Segment

**T**he drive for self-sufficiency in energy production is seen as a good opportunity for all stainless steel forms, including bar. "We're well positioned in the energy field with the many specialty grades

we make and with our ability to make 6" to 10" bar products," reported Lou Kern, Executive Vice President for Long Products.

Bar is primarily used in the energy field by component manufacturers of valves, flanges, fittings, shafts, fasteners, and pumps. Bar has also long been used in construction of nuclear power plants. With more than 30 nuclear plants now being

planned in the U.S. (for construction or redesign) this is a large market for bar products. "We're good at producing 630, nitrogen alloyed grades including XM-19, the 400 series, and the low-cobalt grades 304L and 316L that are important to the nuclear industry," Kern noted. "We also think LDX 2101® can be a good grade in this area." ■



The energy segment — and particularly nuclear power — provides opportunities for sales of stainless steel bar products.

## Outokumpu Webinar Series Begins

**W**ith topics ranging from fabrication of household appliances to water treatment and other issues relevant to a variety of markets, Outokumpu has launched a new Webinar Program for 2009. These live Webinars are hosted by subject experts and are free to Outokumpu customers. Most Webinars are typically 30-45 minutes in length and are scheduled monthly. To register your participation in a Webinar, log-on to the Outokumpu web site at the online event area at [www.outokumpu.com](http://www.outokumpu.com). Since all Webinars currently originate in Europe, they are broadcast early in the morning in the U.S., at 7 a.m. (EDT).

"We see Webinars as an ideal opportunity to communicate technical information to our customers in a manner that reduces travel expenses while still activating our ideas in stainless," said Maureen Meeker, Manager of Marketing Communications and Advertising. For all upcoming Webinar dates, visit the company web site at [www.outokumpu.com](http://www.outokumpu.com). ■

### Upcoming Webinar Topics

<b>July</b>	<b>S&amp;P Capabilities in Europe</b>
<b>September</b>	<b>2BB Surface for Household Appliances</b>
<b>September</b>	<b>Duplex for Oil and Gas</b>
<b>October</b>	<b>Water Treatment</b>
<b>November</b>	<b>Special Grades</b>
<b>November</b>	<b>Stainless for General Industrial Use</b>
<b>December</b>	<b>Outokumpu in Asia</b>

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Outokumpu is a global leader in stainless steel. Our vision is to be the undisputed number one in stainless, with success based on operational excellence. Customers in a wide range of industries use our stainless steel and services worldwide. Being fully recyclable, maintenance-free, as well as very strong and durable material, stainless steel is one of the key building blocks for sustainable future.

What makes Outokumpu special is total customer focus – all the way, from R&D to delivery. You have the idea. We offer world-class stainless steel, technical know-how and support. We activate your ideas.

