



WEEK Ending **November 10, 2006**

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INDUSTRY WATCH

Arcelor Mittal Steel – (NYSE:MT)

- [Associated Press reports that newly formed Arcelor Mittal Steel earned a combined \\$2.18 billion](#) in the third quarter, boosted by rising world oil prices, while announcing that Mittal's Chief Executive Lakshmi Mittal would take the helm as CEO of the combined steel company. Sales revenue totaled \$22.06 billion for the period. The venture will create the world's largest steel company with close to 10% of global production.
- [In other Arcelor Mittal news, Reuters reports that the company plans to acquire 40%](#) of Noble International ([Nasdaq:NOBL](#)) in a deal combining the two firms' laser-welding operations, potentially creating a company with an estimated post-transaction revenue and core profit for 2006 of \$1.1 billion and \$122 million respectively.

Boeing – (NYSE:BA)

- [In a large victory for Boeing, FedEx became the first customer to cancel an order for Airbus's 2-year delayed A380 superjumbo jets](#) choosing to instead purchase 15 Boeing Co. 777 freighters with a list price of \$3.5 billion. FedEx Corp., the world's largest express transportation company, has also taken options on an additional 15 Boeing 777s. FedEx cited production delays for its decision to retract an order for 10 of the new double-decker A380s. The A380 cancellations leave just 15 superjumbo freighter orders on the Airbus books — from UPS Inc. and International Lease Finance Corp. — and 142 orders for the plane's passenger version. Airbus' stock took a 3% hit in European markets while Boeing's share surged more than 5% on the NYSE.

Caterpillar – (NYSE:CAT)

- [In the face of a weaker U.S. economy and decreased demand of its on-highway engines](#) due to a slowing U.S. housing market, Caterpillar has set for itself a lofty goal. The company aims to hit more than \$50 billion in annual sales by 2010, a 20% increase from current levels. "While next year will likely be a year of slower corporate growth, the fundamentals for key global industries we serve are strong, and after the 2007 pause we expect continued solid growth through the end of the decade," said the article source (Caterpillar).

ESAB Welding and Cutting Products – Charter - (LondonExchange:CHTR.L)

- [The York Daily reports that ESAB and United Auto Workers Local 1968 reached a new contract agreement](#) that was ratified by the majority of the union. According to the article, the new contract accounts for a 24-hour, seven-day-a-week schedule at ESAB. Employees would work 12-hour shifts and every other weekend. Yet, even with the positive move towards a more normalized working environment for everyone involved, several striking workers have doubts about returning to the plant, citing that the new contract contains elements that are not particularly conducive to their wants and/or needs, and some say they plan to begin looking for employment elsewhere.

**Lincoln Electric - (NASDAQ:LECO)**

Earthtimes.com reports that Lincoln Electric has acquired Metrode Products Limited, a privately-held manufacturer of specialty consumables focused on the process and power generation industries. Headquartered near London, England, Metrode's annual sales are approximately \$24 million. The Company expects the acquisition to become accretive to earnings in its first year.

United Technologies - (NYSE:UTX) / Lockheed-Martin - (NYSE:LMT) / Boeing – (NYSE:BA)

- o Bloomberg reports that United Technologies helicopter unit, Sikorsky, could lose a \$13 billion contract for U.S. pilot rescue helicopters. A Thompson Financial poll showed that analysts estimate that Air Force officials will turn the contract to Lockheed Martin or Boeing, both of which make bigger and more-powerful aircraft than Sikorsky. Although the favorite is said to be Lockheed. The Air Force plans to buy 141 of the helicopters through 2019.

Toyota – (NYSE:TM)

Associated Press reports that Toyota's net profit surged 34% in the second quarter ended September 30, 2006, boosted by strong sales in North America – mainly due to the RAV4 and Yaris, and the new model FJ Cruiser - and Europe while its U.S. rivals are struggling. Rumors of the Japanese automaker's intent on becoming the world's biggest automaker in coming years continue to circulate as the company again raised profit forecasts by about 15% for the full fiscal 2006 year. "It looks like Toyota's efforts to overtake GM are going according to plan," said the article source (Shiichiro Kobayashi, Mitsubishi UFJ Research and Consulting). "Basically, Toyota is eating the pie of the Big Three in the United States."

FINANCIAL WATCH**Kansas City Approves Light Rail System**

- o The Kansas City Business Journal reports that Kansas City voters have approved the Heartland Light Rail System that will start at Kansas City Zoo in Swope Park and conclude at a transit hub, park-and-ride lot and shuttle station near Madrid Avenue at Kansas City International Airport. It also would include new ground-level power supply technology and other park-and-ride lots. According to the article, the plan would implement 60 electric shuttles to provide connecting transit service to all light-rail stops to enable the expansion of the light-rail system's service area to nearby job centers, neighborhoods and other primary destinations not directly served by the rail line.

What Lies Beneath the Gulf of Mexico

- o The New York Times reports that a fleet of ships are on a three-month mission in the highly remote Gulf of Mexico region to find new petroleum prospects. With oil consumption growing and political turmoil making it difficult to access the world's oil-rich regions, companies are drilling deeper in untouched oceanic areas to find energy. The article explores the Gulf, calling it the "next oil frontier and the next great challenge for oil explorers." The drilling begins 10,000 feet below surface, and goes through five miles of hard rock, thick salt and tightly packed sands. But it will take time for these companies to reap the rewards of their finds. In fact, the article notes that "it can be another decade and billions of dollars to transform oil from these ultra-deep reserves into gasoline."

Manufacturing Slowing, Wall Street Bets on Rate Cuts

- o Bloomberg reports that manufacturing growth has slowed in October along with the decline of construction spending due to a deteriorating housing market. Amongst the key economic index's showing lackluster results is the Institute for Supply Management's factory index, which fell to 51.2 – this is lower than forecast and from September's 52.9. A reading higher than 50 signals expansion. Raw materials prices dropped to the lowest in more than four years and construction spending fell 0.3% in September following no change, the Commerce Department said in Washington. With manufacturing's depressed results and weaker consumer confidence reported recently, Wall Street is betting a Fed Reserve rate cut by the end of March.



INNOVATION WATCH

Dubai Erects World's Highest Skyscraper

- [The AFP reports that Dubai is slated to erect the world's tallest skyscraper for a mere \\$1 billion.](#) The "Burj Dubai," or Dubai Tower, is quickly taking shape, as builders tack on two stories every week. The building will house 30,000 apartments and the world's largest shopping mall, and is a part of a 20-billion-dollar venture to construct the new district of "Downtown Burj Dubai." The project leaders have not revealed the planned height of the building, which is scheduled for completion in 2008, but they do say that it will be more than 2,296 feet and 160 stories. The article notes that the world's tallest inhabited building is "Taipei 101" in Taiwan, which is 1,666 feet tall.

Evolution of MMCs

- [Science Daily reports that Cast metal matrix composites \(MMCs\) are taking the transportation industry for a spin.](#) These alloys are cheaper, lighter and stronger than their predecessors and may be the key to allowing car engines to consume less energy and run on less oil. The article highlights the research and innovation that has sparked the evolution of these composites, making mention of an aluminum-based MMC being developed at the University of Wisconsin-Milwaukee that may be able to replace iron-based alloys. "These composites have many applications in the transportation, small engines, aerospace and computer industries," says an article source (Pradeep Rohatgi, a Wisconsin Professor of Engineering who is credited in the article for pioneering cost-effective methods of manufacturing these composites). MMCs are widely used today, from computers to transportation vehicles, such as trains and space shuttles.

Robot Lends an Arm

- [Fox News reports that when Swiss developer Neuronics AG created the robotic arm, Katana, the first thing the team set out to do was prove its safety.](#) And that wasn't hard considering that Katana is small potatoes compared to the average industrial robot. It has a 20-inch reach, weighs only 6 to 9 pounds, lifts no more than a pound, and can easily be packed away in an average backpack. So what is it good for? "Neuronics designed the small robotic arm to work with people the same way a nurse works with a surgeon," according to the article. It is meant to work alongside the human, not in place of the human. The article also says that "like more powerful industrial robots, Katana uses several small motors for six-axis motion (up-down, left-right, and diagonally back-and-forth)." But unlike the larger bots, all it needs to run is a laptop computer-style power supply that plugs into a wall socket.

CAREER WATCH

Companies and Schools Partner to Churn out More Workers

- [The DesMoines Register reports on a new program that will train students in vital areas to combat an impending worker shortage.](#) The program provides targeted training for students to prepare them for specific jobs at local businesses. The system requires businesses to donate money, training or scholarships for community colleges in exchange for specialized trained workers. One example is a student at DMACC who is part of a Ford Motor program that teaches him how to be a Ford dealership technician. "Instead of taking, like, a general college automotive program where you don't know how the shop goes about things, how warranty stuff works, I learn while I'm being watched, so I don't make too many big mistakes," said the student quoted in the article. Students split their time between school at the community college and learning on the job at a sponsoring company." Courses offered in welding for example also covers "essential skills" for the modern workplace, including resume preparation and workplace communication.

Union Seek Out Students Early

- [The Worcester Telegram, MA, reports that two trade unions are recruiting students for five-year apprenticeship programs at the unions prior to earning a diploma — typically a main requirement.](#)



Worcester Technical High School and four other vocational schools in the region will be allowed to enter the union apprentice program one year in advance of other young trade workers who are beginning their five-year apprenticeship after graduation. "This is going to benefit students in ways beyond belief," said an article source, (Raymond P. Beaudry Jr., a union organizer who is credited with helping to shape an apprenticeship agreement between unions, schools and contracting companies). Mr. Beaudry represents Plumbers and Pipefitters Local No. 4. That union as well as Sheet Metal Workers International Local No. 63 of Springfield is accepting high school students into its apprenticeship program.

PEOPLE WATCH

Robot Project Teaches Teamwork to Students

- [The Carson Times reports on a class of fifth graders who team up to work on a variety of robots that can kick a soccer ball, lend a hand and react to sound.](#) Through this "robot project" these students are learning about more than robotic construction – they are learning about teamwork and technology. With a goal to make each of the robots perform a specific task, students are forced to learn several skills, including soldering, wiring, circuitry and assembly. Additionally, the students are being exposed to how the robots may function in the real world. On a recent field trip to a local manufacturing facility, students had the opportunity to observe the entire manufacturing process, learn about quality control, and talk with engineers and sales representatives.

Welder's Abilities Build Niche Business

- [The Kansas City Star/Associated Press covers a story about a welder who opened a Fabrication Shop](#) 12 years ago to work with iron. His abilities range from fabricating an intricate iron bed to repairing farm equipment. People bring pictures or sketches of what they want crafted from iron and he does his magic. His abilities are far-reaching – he can transform a banister post into a candelabra or an iron gate into a table. The article reports that two iron beds crafted by the welder have been featured in home decorating sections of The Kansas City Star and Peak Magazine. At this point, he has crafted everything from baker's racks to wine racks.

SAFETY WATCH

BP Accused of Having Prior Knowledge of Refinery Lapses

- [Bloomberg reports that BP's management team is being accused by U.S. safety investigators that they](#) had prior knowledge of problems at the Texas City, Texas, oil refinery before a deadly explosion last year. The article reports that "flammable vapors were discharged in eight instances between 1994 and 2004 from the same tank that caused the March 2005 explosion," according to a Chemical Safety Board report. The report also charges that BP failed to comply with a 1994 action item to analyze the equipment, which was nearly 60 years old. The explosion that killed 15 people and injured 180 is one of the worst in 10 years, and BP has already set aside \$1.6 billion to compensate victims.

Get a Front Row Seat for an Epic Blast

- [The vast, 25,000-square-foot Structural Engineering and Earthquake Simulation Laboratory at the University](#) at Buffalo will set the stage for an unprecedented earthquake on Tuesday morning. At approximately 11 a.m., the fully furnished, three-bedroom, two-bath, wood-frame townhouse that has been constructed in the laboratory will undergo a 6.7 magnitude earthquake. You can observe the shaking in real-time along with Buffalo's community members, news media, students and other spectators from around the world at <http://nees.buffalo.edu/projects/NEESWood/video.asp> and at <http://www.buffalo.edu/yourub>. "We are pleased to host this earthquake test, the largest ever conducted worldwide on a wood building, and one that is important to the life and safety of many people," said the article source (Harvey Stenger, dean of the School of Engineering and Applied Sciences).



LEGAL WATCH

Welding Rod Litigation in Cleveland Underway

- The Plain Dealer Reporter covers the second lawsuit in six months against welding-rod makers that began on Tuesday in Cleveland, Ohio. The case involves two men who worked for more than 20 years as welders at Duke Power Co. that claim to have the neurological disorder manganism. About 3,800 similar cases from across the country were consolidated in U.S. District Court in Cleveland and many have already been thrown out. The article notes that lawyers for the welding-rod manufacturers said there is no conclusive link between the fumes and illness and that any problems from welding fumes can be offset with proper ventilation.

AWS IN THE PRESS

FEATURE STORY:

- November 3, 2006 – *Atlanta Journal-Constitution*: *“Blue-collar Welding Yields White Collar Pay”*

OTHER AWS MENTIONS:

- November 6, 2006 – *San Jose Business Journal*: *“Inspecting Everything”*
- November 2, 2006 – *TheStoryGroup.com*: *“Industrial technology takes center stage at Georgia World Congress Center this Week”*
- November 1, 2006 – *Lancer Pulse*: *“Former EWC Student Wins”*

AWS NEWS

- November 1, 2006 – *“Edison Welding Institute Joins American Council of the International Institute of Welding”*