

Global Industrial Outlook: Reality Sinks In

Brian Langenberg

Our “Batten Down The Hatches” call proved timely as the market sold off by about (10 percent) before staging a partial recovery.

This column is not, and will not become, a “market letter” but the point is that financial markets transmit information and what transpired is an increased realization that corporate outlooks, particularly with respect to those supplying heavy capital equipment, have not fully incorporated the scope of what dramatically lower oil prices is meaning for their outlook.

Fundamentally there is no plausible near-term improvement. WTI (West Texas Intermediate) crude oil futures are now at about \$30/barrel. Any headline touting a “rally” that moves oil back to \$35, \$40, or even \$45 won’t do it because companies are now going bankrupt and prior overinvestment decisions were made on oil prices starting at \$60 or higher.

Negative interest rates signal potential deflation. The Fed is out of policy levers as we do not believe cutting interest rates from 0.50 to 0.25 percent



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or even zero will stimulate anybody to do anything.

Political uncertainty dampens spending. CEO’s like certainty. They like knowing the ground rules so they can compete. They like to control their own destiny or at least influence the debate. Right now, they don’t and it makes them confused. And when they

do not know what to do ***they do not do anything*** involving capacity expansion.

Driving financial engineering and cost synergistic deal making. Honeywell’s recent overture to United Technologies is telling. It also had precedent given that UTX tried to buy Honeywell fifteen years ago before a trump bid by





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GE that was later gunned down by the European Union. Basically, it would have been a cost synergy deal that would “wring costs” (i.e. pricing) out of you and other suppliers along with facility consolidation and headcount reductions. It is the kind of deal you pitch because you are short on growth ideas and are thinking about how you deliver growth over the next few years.

FEATURED COMPANY: BOEING (BA)

Emerging market headwinds have stomped demand for machinery and heavy equipment in a range of sectors, yet Boeing trudges on. The investment world has looked at the commercial aviation cycle as just about impervious to anything based upon the historically strong relationship between strong airline cash flows and subsequent capital investment.

This has, in fact, largely been playing out to date except that supply chains are stretched by OEM demands for higher production rates that are testing some lower tier suppliers. While pro-

duction rate cuts have occurred here and there the balance of our work supports a constructive bullish view for both Airbus and Boeing.

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Brian K. Langenberg, CFA

has earned recognition as a member of the Institutional Investor All-America Research Team, a Wall Street Journal All-Star, and Starmine Best on the Street. As Principal of Langenberg & Company, he advises CEOs and senior executives on strategy and capital markets, and makes numerous public speaking appearances. In July 2015 he was named Chair (and Lecturer) of Graduate Business Programs at Aurora University.



WABCO

ACQUIRES MICO INCORPORATED

WABCO, an innovator and global supplier of technologies that improve the safety and efficiency of commercial vehicles, recently announced that it is expanding its global business by acquiring MICO Incorporated (MICO), a global market leader in hydraulic components, controls and brake systems for heavy-duty, off-highway vehicles in agriculture, construction, mining and similar industries. MICO generated revenues of approximately \$52 million in 2015 and is headquartered in North Mankato, Minnesota.

A long-time industry leader in pneumatic braking systems, WABCO is expanding its product offerings through the acquisition to become the first and only supplier with a portfolio of complete pneumatic and hydraulic braking and control systems for off-highway vehicles worldwide.



Jon Morrison (left), WABCO President, Americas, and Brent McGrath, MICO President.

In addition to this unique offering, the acquisition harnesses powerful synergies between technology leaders WABCO and MICO. WABCO's strong global presence provides increased access to growth markets and customers worldwide for MICO products. In return, WABCO gains improved access to the off-highway market in North America while expanding its operational footprint in the region. Both companies will also be able to build on demonstrated world-class engineering and manufacturing capabilities.

"We are excited to welcome our MICO colleagues to the WABCO family," said Jon Morrison, WABCO president, Americas. "We are committed to growing our off-highway business worldwide and to strengthen our presence in North America. MICO is key to our growth and expansion. Over the past 70 years, the team at MICO has done a tremendous job of developing world-class products and engineering and manufacturing capabilities. We are honored and excited to be taking the next steps with them."

"We are thrilled to join WABCO, a technology leader in the commercial vehicle industry that is known and respected worldwide," said Brent McGrath, MICO president. "This acquisition presents exciting new opportunities for MICO, our customers, and our employees. We look forward to working with our new colleagues to leverage our respective strengths to better serve customers in the off-highway industry. Together, we are ready to enhance MICO's long-term competitiveness, innovation and growth."

Siemens Drive Selector App

INTEGRATES RESISTANCE, PEAK PERFORMANCE AND CONTINUOUS POWER RATINGS

For some time, it has been apparent that mobile apps have been spreading more and more across the industrial environment and have become a popular medium among users. One special feature in this field is the variable frequency drive app for the easy selection of all necessary components from the respective corporate portfolio. The online selection is always up-to-date, available in many different language versions and saves the user time—laboriously poring over catalogs is now a thing of the past.

Due to the special requirements in some cases, selecting the right drive is not always straightforward and can often waste valuable time. After all, the fields of application and the requirements regarding operating behavior and costs are wide-ranging. Whether the drives are used to operate pumps, fans or compressors, or to drive conveyors, mixers or kneaders, it is important to find the appropriate drive for the required range of performance and voltage quickly and easily for each of these applications. And wherever possible, this must be done without the need for expert knowledge of drive technology.



Assembling components by smartphone

In order to simplify this sometimes complex process, Siemens, for example, has been offering its Sinamics Selector app free-of-charge. This is a solution that displays the entire collection of products from the portfolio of low-voltage frequency drives—Sinamics V20, G120C, G120 and G120P—on the most popular iOS and Android smartphones and can be used both online and offline. This offline capability is of particular importance in regions which do not have full cellphone coverage. Since Version 4.0, not only have brochures, product videos and application examples (Fig. 1) been available to users and electrical distributors, but also more language versions.

Cicoil

ACQUIRES LONG-LOST SPACE CABLE

Almost 50 years after an Apollo Spacewalk, a long-lost flat cable harness returned back home to Cicoil. The “bio-harness” assembly, built by Cicoil for the 1969 Apollo 9 Space Flight, was acquired by Cicoil in a NASA Apollo Space Program Auction. Amazingly, the harness looks virtually brand-new, considering its age and the number of miles it has travelled.

Everything up-to-date

Katharina Roehlein, marketing manager for Sinamics drive systems at the Siemens Digital Factory division, explains additional innovations: “With the latest update, Version 5.0, we have adopted the second generation of the Sinamics G120 modular Frame Size D-E, as well as the Sinamics V20 Power Extension up to 30 kW, into the app. In addition, we have integrated more technical values such as resistance, peak performance and continuous power ratings into the logic of the app. And for good reason, because we want to make it as easy as possible for our customers to find the right drive in order to save valuable time.”

As a matter of principle, when assembling the appropriate components, the Sinamics Selector app offers not only a product-specific, but also an application-specific approach. In other words: either the user knows from the outset which frequency drive is required, or the app guides the user step-by-step to the right drive by asking for key parameters (Fig. 2). The information held by the Sinamics Selector app is kept up-to-date at all times by the central storage of data and continuous updates. Bob Hendrickson, applications engineer at Wesco, one of the largest distributors in the United States, regards this as an enormous advantage over conventional catalogs, especially when the app can save him a great deal of time in preparing a bid. “The Sinamics Selector app is very helpful as it lets me create a complete bill of materials for a customer offer very quickly. This option saves me a huge amount of time since I no longer have to create bills of materials by hand. The app also makes it easier for me to respond to queries arising from projects when I’m on the road and don’t have any catalogs or other documents to hand.”

Bid preparation made easy

After choosing the required type of frequency inverter, the rated output, device options and accessories can then be selected and adapted individually — if necessary, also with the support of the respective Siemens contact, whose details are also stored in the app. Once the components have been selected, the user has the option of either saving or emailing them. To make it easier for end-users to get in touch later, the headers and footers of the email can be adapted individually, for example, with personal contact information. The overview includes actual part numbers for all of the selected components. This can be used as information for the customer, but also as the basis for ordering specific components or preparing an offer at the local dealer/distributor. Kevin Young, application engineer at electrical distributor C&E Sales Inc., in the U.S., also confirms this: “I really like the Sinamics Selector app. I copy the result into my bill of materials, which enables me to immediately present a bid to my customer.” His colleague Jay Swank adds, “I use the application almost every day now.”



The 26 inch long electrical biomedical harness was worn by Commander Jim McDivitt during the Apollo 9 flight, that launched into orbit on March 3 and returned to Earth 10 days later. Typically, the “Bio-Harness” was worn underneath the Intra-Vehicular Constant Wear Garment when in the spacecraft, and under the extra-vehicular (EV) pressure suit during spacewalk activities.

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The assembly enabled continuous monitoring of vital signs, such as blood pressure, respiration, body temperature and pulse rate for each astronaut during flight, orbit and spacewalk operations. In addition to Commander McDivitt, astronauts David Scott and Rusty Schweickart also utilized bio-harnesses made by Cicoil on the Apollo 9 Space Mission as well.

Cicoil's space flight approved bio-medical instrumentation and telemetry harnesses were chosen for their unique ability to separately encase shielded signal pairs to eliminate electronic interference; provide uninterrupted signal integrity during the harsh rigors of space flight; exceptional performance when exposed to temperature extremes (-65°C to +260°C); resistance to UV Light, radiation and vibration; high efficiency in dissipating heat between inner cable components; highly flexible and lightweight materials; and high reliability in mission critical applications.

The flawless operational performance of Cicoil's biomedical instrumentation and telemetry harness designs were, in NASA's words, "Vital to the successful achievement" of these history-making flights."

Cicoil's flat cable harnesses were also there to help Astronaut John Glenn (Mercury-Atlas 6) to become the first American to orbit the Earth, Edward White (Gemini 4) to be the First American to walk in space, Neil Armstrong (Apollo 11) to take his historical "First Step" on the surface of the moon and Buzz Aldrin (Apollo 11) to take his infamous second walk on the Moon.

In addition to every Apollo space flight, Cicoil has manufactured cable assemblies for the Mercury and Gemini space missions, Skylab, Mercury Voyager, the Space Shuttle, Tri-Athlete Lunar Vehicle, the Mars Rover; and today are utilized on space transport rockets and satellites.

For an out of this world experience, be sure to check out the Cicoil bio-harnesses worn on the Apollo 9, 11 and 17 missions at the Smithsonian Museum in Washington DC.

If you would like to learn how Cicoil developed the First IDC Ribbon Cable, helped put a Man on the Moon, and find out more about our Innovative Flat Cable Technology, please contact our office at 661-295-1295 to discuss your application or to set up an on-site visit to your location.

Heidenhain

HIRES VICE PRESIDENT OF SALES AND MARKETING

Heidenhain Corporation announces the new hire of **David Doyle**, as vice president, sales and marketing in North America. With over 25 years of extensive management experience, Doyle joins the Heidenhain family to assume the day-to-day responsibilities of the sales and marketing departments.

With Heidenhain based in Schaumburg, IL, Doyle moved from Oregon where he most recently served as vice presi-



dent, material characterization business unit of nanometrics, a manufacturer of automated metrology solutions, supporting semiconductor industries.

Serving other high technology industries in corporate management positions over the years, Doyle originally started his career by earning a bachelor's of science degree in chemistry and experimental physics from the National University of Ireland, where he earned double honors.

Matrix Design

OPENS INDIANAPOLIS SALES OFFICE

Matrix Design, LLC has announced the opening of their Indianapolis sales office. The new sales office will be lead by Tim Fenner, who recently joined Matrix as a sales specialist. "We are thrilled that Tim has joined our team to lead our Indianapolis sales office. Tim has a wealth of experience in robotics, automation and manufacturing and looks forward to working closely with manufacturers to identify and implement



automation solutions as the demand for automation continues to grow at a rapid pace," said Jeff Bennett, vice president of sales and marketing at Matrix Design, LLC. "Our Indianapolis office gives us a more focused presence to better serve industries in Indiana, Ohio, Kentucky and surrounding regions, where more and more manufacturers are looking for robotics to improve their competitiveness."

Gilman

LAUNCHES CANADIAN WEBSITE

The launch of Gilman Precision's Canadian website is the final step in expanding Canadian operations, a project that began in May of 2015 with the addition of RGW Sales Canada to Gilman's sales force. This new site will not only further extend Gilman's international business opportunities, but more importantly, offer Canadian customers a user friendly and convenient online experience.

The Canadian host site allows Gilman to optimize international search engine results, therefore improving viewers' ability to search, review, and communicate with Gilman in a simple and safe manner. English and French Canadian translations are available to fully accommodate visitor preferences. Furthermore, all information unique to Canadian customers is located on the new site, including Canadian sales representatives, news updates and more.

"The investment in a Canadian site empowers customers to find the information they require and communicate with

us in an easy and familiar way,” remarked Douglas Biggs, vice president sales and marketing at Gilman Precision, “We are very excited to offer this opportunity and continue standing as a trusted resource for quality products and outstanding customer care.”

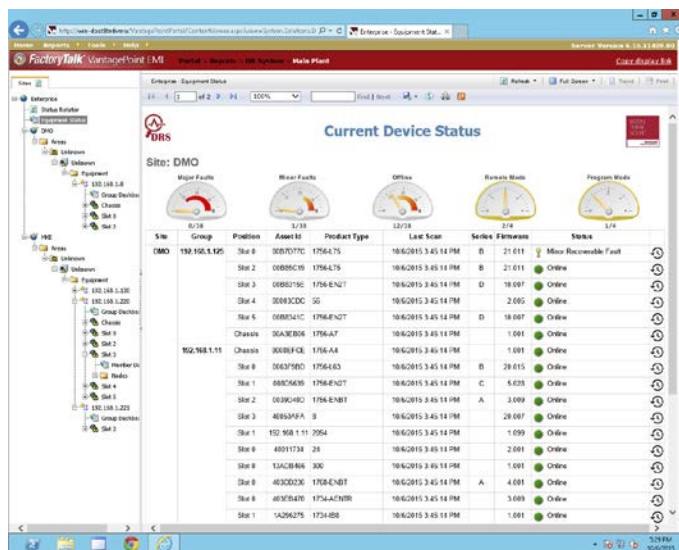
Additional international sites are available to provide support for prospects in Australia and Singapore. Gilman hopes to continue growing international relations in 2016, and is currently investigating and pursuing new markets for expansion.

Rockwell Automation

IMPROVES MAINTENANCE STRATEGIES AND OPERATIONAL EFFECTIVENESS

The new diagnostic reliability service from Rockwell Automation helps manufacturers and industrial producers drive a streamlined maintenance strategy on these mission-critical, integrated equipment lines. The solution deploys a layer of technology across plant devices and equipment to monitor and perform analysis, and create a continuous improvement approach to reliability maintenance, reducing operational risk. As part of the service, a Rockwell Automation domain service expert also closely tracks equipment performance to advise on reliability improvements to the production facility.

“Our customers have access to a huge amount of data within their assets, but they often struggle to turn data into useful operational intelligence,” said Ryan Williams, prod-



uct manager, Rockwell Automation. “In the past, companies relied on maintenance personnel on-site to check the status of equipment in the field and then develop corrective action plans. Now, with the diagnostic reliability service, they can transform maintenance data into asset intelligence. This helps build a more Connected Enterprise, leveraging interconnected data systems and producing actionable information. Companies can better prioritize choices on maintenance and production, and do more with less.”

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