

## THE WORD

Earlier this year, Stan Musial, a St. Louis icon, passed away at the age of 92. Memorials written about him spoke not just of his skills as a baseball player, but what type of man he was. His values, loyalty to his team and support for his community were known worldwide. His reputation transcended sports.

His passing caused me to consider the reputation of our company. Essex engineers and manufactures quality products, but our organization is much more than that.

When Essex set a new strategic direction in 2011, we identified four values to use as benchmarks. We looked at our performance in these areas and considered what we should modify to achieve our goals. It seems appropriate to review those now and assess how we, as a company, are doing.

**Be Creative** Create an environment that allows our people to be creative in terms of new product ideas, new production methods and identifying new markets via the application of our technologies.

Essex has New Product Development teams that track, review and prioritize the many opportunities generated. These teams involve engineering, sales and key individuals from other departments.

We are looking beyond our current capabilities through our Technology Development Group, who research alternate and emerging technologies to uncover the next generation of product development.

All employees are encouraged to submit new product concepts through the Idea Generator. This program provides a process for the company to evaluate ideas and reward those with particular merit.

To encourage new production methods, Essex has just completed Lean Six Sigma training for twenty-five individuals from production, quality and manufacturing engineering.

The Sales Team continues to identify new markets for our existing technology. Life-saving equipment developed for military operations is being sold in the civilian market for emergency preparedness. Our cryogenic expertise is

extending to non-oxygen applications and our Medical group is expanding the use of components we offer.

**Be Competitive** Be fast-moving with increased "face-time" with customers to penetrate existing and future markets.

Essex has always valued the personal relationships we have with our customers. Our expanded sales team has increased our availability to make calls, meet at trade shows, and conduct product seminars.

Sales representatives are located in the field to provide better accessibility to customers, including a new international presence to develop key market areas.

To further support our customers and our sales efforts in the field, our customer care team has been expanded and restructured. We believe this will enable us to be more responsive and keep us competitive in the marketplace.

**Collaborate** Create and maintain a work environment that allows interaction between functional teams and cross-company resources to capitalize on growth initiatives.

Our new headquarters was designed to encourage collaboration between departments and we see the value of this on a daily basis. Interaction has also increased between the facilities, as departments work together to standardize processes and optimize efficiencies.

Cross-functional capture teams are formed to respond to commercial opportunities and government RFP's. IT has played a major role in the success of these teams by supplying electronic tools and programs that enable file sharing, project updates and program management.

Our internal collaborative efforts are the foundation for the external ones we create with our customers. The partnerships we form with them on product design and development are critical to our continuing relationships and future success.

**Control** Control what's necessary and increase speed of decision making. Drive decision making down the organizational structure.

This is the most difficult aspect for us at Essex.



As a family-owned business, we tend to be more controlling. Regulations that govern many of the products we manufacture add a heightened level of responsibility.

I do believe we are making progress in this area. Decisions are being moved down to Vice Presidents, Directors and Managers for their areas of responsibility. We are stretching comfort zones and supporting choices, even if they vary from ours. We know that driving decision-making down internally is necessary for the personal growth and development of our employees.

I believe Essex does demonstrate the values outlined almost two years ago. By keeping a focus on these ideals, we can certainly maintain a reputation notable as that of Stan Musial.

*Mickey Waldman*

President

# LEAN 6σ MANUFACTURING

Essex recently held their first on-site class in Lean Six Sigma Training for members of the production, quality and manufacturing engineering staff. By partnering with St. Louis Community College and utilizing a Missouri Customized Training Grant, Essex was able to develop a customized program that focused on the specific needs of our organization.



Lean Six Sigma combines two management philosophies into a single strategy: Six Sigma and lean manufacturing. Developed by Motorola during the 1980s, Six Sigma aims to

continuously improve production methods to eliminate errors. Lean manufacturing, introduced in the 1990s by Toyota, sought to further improve the manufacturing workflow by cutting the wasted use of resources. When successful, Lean Six Sigma lowers costs, improves production quality and increases

employee involvement.

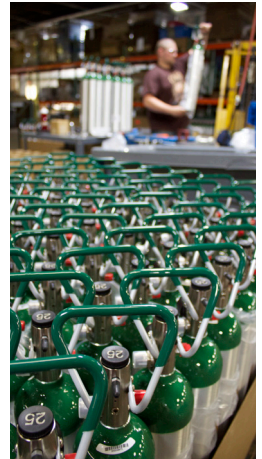
Lean Six Sigma uses martial arts hierarchy to identify levels of expertise in the program methodology. In the initial Essex training classes, employees participated in belt designations as follows:

Black: Manager of Manufacturing Engineering, Quality Managers (5 employees)

Green: Manufacturing Engineers, Quality Engineers, Quality Supervisors (12 employees)

Yellow: Production Management (8 employees)

Chuck Steele, Lean Manufacturing Coordinator, is the Lean Six Sigma Champion for Essex. As a Master Black Belt, Chuck has been the resource for everyone going through the program. He also will lead the project work identified in the training that will benefit both Essex and our customers.



## NEW SAFETY BROCHURE AVAILABLE

The new Essex Safety brochure provides detailed information on Essex fire-safe thermal and electro-thermal ball valve assemblies and butterfly valve actuators designed to open or close lines automatically when hazardous situations occur. Multi-port ball valve actuators, custom fire-safe valve assemblies and personal breathing protection products are also included.

*This new brochure can be found on [www.essexindustries.com](http://www.essexindustries.com) in the Document Center. You can request copies through the Contact Us form or by emailing us at [info@essexind.com](mailto:info@essexind.com).*

## ENGINEERING DISCOVERS DAVINCI

The engineering team from Essex recently had an opportunity to view the DaVinci Machines Exhibition in downtown St. Louis.

The collection, on loan from the Museum of Leonardo DaVinci in Florence, Italy, included over sixty machines and inventions, as well as representations of his most famous works of art, such as the Mona Lisa and the Last Supper.

Of the many inventions showcased, highlights of the exhibition included the DaVinci bicycle, hang glider and air screw, the precursor to the modern-day helicopter. Two of Leonardo's revolutionary robotic inventions were also on display: the life-size robot drummer and his legendary mechanical lion. Of particular interest to the

Essex engineers were his underwater scuba design, Archimedes screw, hang glider, parachute, mechanical cam mechanisms and flywheel inventions.



*Helicopter (air screw) at the DaVinci Machines Exhibition.*

Leonardo's Herodotus Machine, his version of the machine believed to have helped build the great pyramids of Egypt, was also revealed for the first time at the exhibition in North America.

According to Russ Jacobsmeyer, VP of Engineering, "DaVinci was a brilliant inventor and scientist, in addition to being an incredible artist. Today's engineers are still

inspired and fascinated by his remarkable designs of 500 years ago."



# NEW TEAM MEMBERS

## > SALES

**KEN OWENS**, *Sales Agent - Asia*

# NEW ROLES

## > INFORMATION TECHNOLOGY

**DONNA WIRTH**, *Network Manager*

**ANDY HAGEN**, *Network Administrator*

## > OPERATIONS

**JOHN EBERHARDT, CPIM**, *Purchasing Supervisor*

# ESSEX PBE NOW AVAILABLE ON GSA ADVANTAGE



The **Essex PBE** (Protective Breathing Equipment) is now available for purchase on GSA Advantage under contract number GS-07F-0483N.

This quick-donning unit provides crewmembers with ocular, head and respiratory protection during emergency conditions in an aircraft at cabin altitudes. Up to sixty minutes of protection is supplied to the wearer, as fifteen minutes of compressed aviator's grade oxygen is released in the unit.

The PBE features a unique design that eliminates the need for an oral/nasal mask so that crewmembers can communicate while wearing the unit. The amber-tinted hood provides 270° of visibility and the elastic neck seal requires no adjustment. The Essex PBE is FAA TSO-C116, TSO-C99, CAA, EASA, CAAC and ANAC approved and is used by over 90% of the Commercial Airline Industry in the United States.



For more information, visit [essexindustries.com/pbe](http://essexindustries.com/pbe)

# NOTEWORTHY

## HARD WORK RECOGNIZED



Essex has received two Boeing Performance Excellence Awards for 2012. The physical awards have finally made their way into the hands of the hard-working employees that made this recognition possible.



Two facilities of Essex Industries received a Silver award: the Carr Lane Court facility (pictured above) supplies the Protective Breathing Equipment (PBE) to Boeing for all of their commercial aircraft and the Chivvis Drive facility (pictured right) provides four different kinds of heat exchangers for the C-17 Globemaster III program as well as a variety of spare parts.

For more information visit [www.boeing.com/companyoffices/doingbiz/supplier\\_portal/bpea.html](http://www.boeing.com/companyoffices/doingbiz/supplier_portal/bpea.html)

## IN GOOD COMPANY



Chuck Bauman, VP of Human Resources at Essex, was invited to present at the annual AAIME Leadership Conference on May 9, 2013. This one-day conference is a highly attended event for HR professionals, managers and business leaders in the St. Louis area.

Keynote speakers at the conference included Jeff Fisher, head coach of the St. Louis Rams, addressing leadership; Susan Carpenter, nationally recognized expert in the health industry, sharing her views on healthcare reform; and Jack Lannom, CEO of Lannom Worldwide, presenting on how to develop a high performance culture. Chuck's presentation focused on building a trust-based workplace.

For more information on AAIME, visit [www.aimea.org](http://www.aimea.org)



# TRADE SHOWS

## VISIT ESSEX AT THESE UPCOMING SHOWS:

<b>July 25-27</b>	<b>Firehouse Expo</b>	<b>Baltimore, MD</b>	<b>Booth #619</b>
<b>August 8-10</b>	<b>FIME</b>	<b>Miami, FL</b>	<b>Booth #2552</b>
<b>August 16-17</b>	<b>Fire Rescue International</b>	<b>Chicago, IL</b>	<b>Booth #5339</b>
<b>September 7-11</b>	<b>European Respiratory Society</b>	<b>Barcelona, Spain</b>	<b>Booth TBD</b>
<b>September 10</b>	<b>Ft. Detrick Vendor Day</b>	<b>Frederick, MD</b>	<b>Vendor Booth</b>
<b>September 24-26</b>	<b>Modern Day Marine Combat Expo</b>	<b>Quantico, VA</b>	<b>Booth #1229</b>

# SAUDI HEALTH SHOW AND CONFERENCE



The Essex Medical Sales team exhibited at the Saudi Health Exhibition and Congress. Held in Riyadh, Saudi Arabia, May 12-14, the show featured over 250 international and local exhibitors from 19 countries with more than 3,500 conference delegates.

Hugo Morales, Business Segment Manager International, met with over 50 prospective customers who expressed a high degree of interest in importing our oxygen regulators and portable liquid oxygen systems.

# MODS FIELD TRAINING

The Essex First Response sales team was busy traveling in May, conducting seminars on the features, set-up and use of the MODS, Mass Oxygen Distribution System.



The first two sessions were held in Cleveland, Ohio. On May 9th, representatives from St. John's Hospital received classroom and hands-on training for the MODS and other related Essex products. The training was repeated on May 10th for participants at Ahuja Medical Center. The greater Cleveland area currently has two MODS which were purchased for the shared use among members of the University Hospital group. Attendees included Beth Gatlin, the Director of Emergency Preparedness along with Don Barnes and Mike Johnson, the EMS Training &

Disaster Preparedness Coordinators for these two hospitals.

Then it was off to New Orleans for a May 15th MODS seminar with attendees from the Office of Homeland Security & Public Safety of New Orleans. Ken Bouvier, Deputy Chief of Emergency Medical Services and Carl Flores, Deputy Director/Chief of Emergency Medical Services were both present. Numerous hospital and EMS personnel from New Orleans and the surrounding areas also participated in the training. The New Orleans seminar was coordinated for Essex by Martin Otillio, Sales Associate from Airgas. Other Airgas attendees included Richard Sniezek, Vice President, David Larson, Vice President and John Bookhout, Marketing Manager.





# QUALITY IN THE DETAILS



Essex has a new addition to the Quality Assurance team, a Coordinate Measuring Machine (CMM). The Mitutoyo Crysta-Apex S544, with its Renishaw Indexable Probe Head, can accurately check multiple features on different planes and angles of a product or component, then store this information for later reference.

The Engineering Department will have the capability to send a model from SolidWorks to a 'Step File' and then directly to the CMM. Overall, this new addition will increase product manufacturing accuracy (to one Micron), reliability, data collection and through-put.

Coordinate measuring machines add value to everything you make. Russ Zavadil, Quality Assurance Manager, is excited about the new machine and says, "This new tool is definitely a big investment in our future as we strive to improve product quality."



# MAN VS THE MACHINE

Breathing apparatus are critical life-saving devices used by firefighters, miners and emergency rescue personnel. Certification agencies previously relied upon human subject testing to evaluate products. However, this method had a high level of inconsistency, as results could vary with the weight, physical condition and other physiological factors of the person being tested.

Today, machines can accurately simulate both the breathing and the metabolic functions of a person for breathing apparatus and eliminate the human variability factor in testing.

Thanks to a true collaborative effort by the Engineering department, Essex now has one of these machines in-house to use for product development and evaluation. The automated breathing and metabolic simulator (ABMS) has the capability to vary a number of parameters including: ventilation



rate; O<sub>2</sub> consumption rate; CO<sub>2</sub> production rate; breathing frequency and gas temperature. Additionally, different work rates may be combined to simulate various activities.

The mechanical portion of the machine is relatively simple; the complexity of the system lies in its computer software. All of the breathing and metabolic functions are controlled by a computer and the key to the machine is in the programming. The machine provides high-speed data acquisition and test results can be plotted in any manner desired.

The machine can be used to evaluate any type of respiratory device, so it is applicable to all of the markets we serve, as well as Essex competitor's devices.

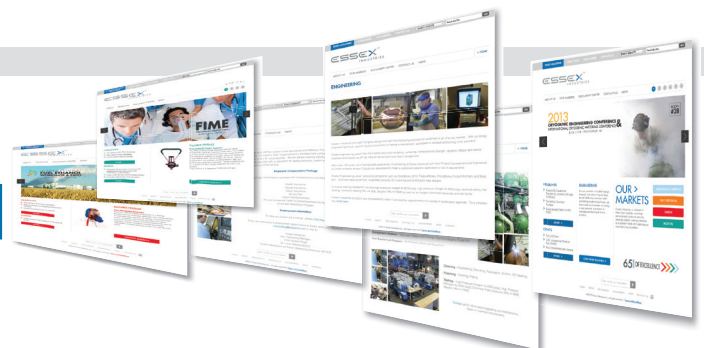
Essex is currently using the machine to correlate test data between us and regulatory agencies, such as NIOSH or ISO, as well as testing equipment to meet customer specifications.

# SEE WHAT'S NEW @ ESSEXINDUSTRIES.COM

We continue to make improvements and add features to our Essex website. Throughout the site, recent enhancements include more visual content, easier ways to navigate and improved search capability.

Our Engineering Page has been revised to showcase our capabilities in New Product Development and Engineered to Order projects.

The new MRO Page details the capabilities we offer to our customers for the maintenance, repair or overhaul of their existing equipment—whether purchased from Essex or from another manufacturer.



A Career Page was added as a starting point for prospective employees with links to job postings and contact information for our recruiting department.

Be sure to check out these new pages on our website!



Any device, anytime, [essexindustries.com](http://essexindustries.com).



## EXCERPTS

### IN THIS ISSUE...

Lean Six Sigma

Discovering DaVinci

PBE on GSA

Trade Shows

MODS Field Training

Quality In the Details

Man vs. the Machine

What's New

65 YEARS OF EXCELLENCE



Trade shows and conferences have long been important venues for Essex Industries to meet current and prospective customers. Our booth has evolved over the years to the present design which reflects the company's new brand standard and leadership position in the market.

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[WWW.ESSEXINDUSTRIES.COM](http://WWW.ESSEXINDUSTRIES.COM)

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