

American Concrete Pipe Association, Irving, Texas 75063-2595, USA

The right mix for the best concrete pipe is training, a culture of health and safety and pursuit of higher learning

■ Russell Tripp, P.E., President, American Concrete Pipe Association

This year, 2017, is a milestone year for the American Concrete Pipe Association (ACPA) and its members. Among the pages yet to be written, are changes in leaders, new directions, and a refreshed organizational structure. The concrete pipe industry is blessed with highly experienced engineers and support staff who can engage in problem-solving and training almost immediately in any region of the USA. All people in the industry are backed by the best technology and knowledge of pipe products and materials.

Product Quality

There is one element, however, that remains constant no matter what level of change; and that is the high quality of concrete pipe products produced by ACPA member companies. The quality of concrete pipe can be traced to constant training, a culture of health and safety in the plants, and the pursuit of higher learning to advance the science of concrete pipe production, installation, and management.

ISO 8402:1994 standard defines quality as the "totality of characteristics of an entity that bear on its ability to satisfy stated and implied needs." Each unit of concrete pipe that is created by a concrete pipe plant is an engineered product. Production runs are standardized, tested, and inspected. The equipment used to produce a single unit of pipe is inherently high quality to be able to produce concrete pipe consistently within tolerances that are easily managed.

The American Concrete Pipe Association offers an on-going quality assurance program to member and non-member companies. Under the "Quality Cast" Plant Certification Program, known as QCast, the inspection of materials, finished products and handling/storage procedures, as well as performance testing and quality control documentation is managed by independent inspectors. Plants in each of the certification categories that score 95% or better on their annual QCast audit are recognized with the QCast Award. One overall winner is selected in each category. In 2016, the Chairman's Quality Award was presented to Northern Concrete



Overall, individual location and company-wide winner of 2016 Chairman's Quality Award was presented to Northern Concrete Pipe Inc. at 2016 AGM in Hilton Head, SC. Photo: S. Clevenger, ACPA

Pipe, Inc. (Bay City, MI) and Rinker (Fredrick, MD). Northern Concrete Pipe was the overall winner of the award.

Health & Safety

In the concrete pipe industry, health and safety is now a major element of the culture of a family-owned and operated business, or the largest transnational. The American Concrete Pipe Association champions the continuous drive within the industry to improve plant safety and provide the ways and means for an employee to live a healthier life while on the job. A with the Chairman's Quality Award, the ACPA honors members with the Chairman's Safety Award that recognizes plants, individuals and companies that have implemented successful initiatives that result in a safer, more productive workplace.

The 2016 Chairman's Safety Award in the company-wide category was presented to Rinker (Houston, TX) for a publication called the Leading Edge Bulletin; a monthly publication that identifies the top 4 Leading Indicators for the previous month. The top 4 is not determined solely on the number of reports. In addition, the Bulletin identifies severity of near misses; unsafe acts or unsafe conditions; the potential for injury and the severity, if an injury occurs; and any past injuries associated

CONCRETE PIPES AND MANHOLES



■ Russell Tripp, P.E., Clemson University alumnus, earned his Bachelor of Science degree in Civil Engineering in 1982. He spent the first 21 years of his professional career working in the natural gas industry. He then served three years in the PVC sheet pile industry and four years in the plastic drainage industry before joining the ACPA. rtripp@concretepipe.org

The Leading Edge		To be proactive is to prevent		Oct 2016																																																																																
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Leading Edge Bulletin identifies leading indicators, near misses and unsafe conditions to improve training

with the near miss, unsafe act or unsafe condition. The publication provides opportunities for continuous improvement, as well as continuous training. The Leading Edge informs the District Safety Committee of issues that employees are identifying while performing work.

The winner of the Chairman's Safety Award in the Individual Plant Category was Oldcastle Precast (Folsom, NJ) for its wire-rolled machine guarding. Guards and parts were upgraded on the facility's Elk River Wire Machine to improve safety and ergonomics. Upgrades included replacing the rear stopper bar with a swing bar that features a fastening pin, and replacing the steel pipe that runs through the center of the wire roll with dual pins that are adjustable and removable.

Best Practice

Plant 2/3 Wire Machine In House Upgrade



Guards and parts were upgraded on the facility's Elk River Wire Machine to improve safety and ergonomics



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A forklift attachment allows the operator to set the header and pallets in a safe and efficient manner



Besser Scholarship presented to Joe Pelica (R) of Northern Concrete Pipe by Ryan Suszek, Besser Company

The Equipment -related category of the Chairman's Safety Award was presented to Forterra (Bar Nunn, WY) for the pallet and header setter. Setting headers and pallets over the cores for manholes and riser production was accomplished using a forklift and chains. Concerned over a crush or strike by a swinging load, two lead men developed a forklift attachment that allows the operator to set the header and pallets in a safe and efficient manner. The attachment has arms with slots that hold the header or pallet in place. Once the equipment is set they pull the pins from of the arm to release the equipment from the attachment. The overall 2016 Chairman's Safety Award was presented to Rinker for the Leading Edge Bulletin.

Education and Training

The ACPA and its members take continuing education and training very seriously to help advance market share for concrete pipe. By elevating the industry's knowledge about products and materials of all types for pipelines and culvert systems, the quality of concrete pipe production and installations contribute to the reduction of a design engineer or contractor's liability for specifying a concrete drainage system.

Besser Company, one of ACPA's sponsoring Associate members, introduced a \$2,500 scholarship in 2016 as a tribute to predecessors, Jesse Besser, Jon Dannenberg, Joe Pelchat and countless others who embraced training and education. Besser did this in recognition of the American Concrete Pipe Association's annual National Concrete Pipe Week held in August. The college scholarship is awarded through the ACPA's Research and Education Foundation to a student whose course of study is related to concrete pipe production, application/installation, or research. The 2016 scholarship was presented to Joe Pelica of Northern Concrete Pipe by Ryan Suszek, Besser Company Vice President - Pipe & Precast. Pelica is a second-year Mechanical Engineering Technology student at Delta College in Bay City, Michigan. The presentation was made during the ACPA's Annual Meeting in Hilton Head, SC. Throughout the year, ACPA engineers work with engineers of its producer-member firms to deliver numerous train-

ing events on all topics of concrete pipe from design, through production and installation. These include the ACPA's flagship training and education event, Pipe School and Pipe Show held in the winter or early spring each year. But ACPA's support of education and training nation-wide does not stop with events and plant tours. The Association is a supporter of the Concrete Industry Management (CIM) program, established in 1996, as a partnership between the concrete industry and Middle Tennessee State University to deliver a four-year B.Sc. degree in Concrete Industry Management. The program is available through Arizona State University; California State University, Chico; and the New Jersey Institute of Technology. The goal of the program is to produce broadly educated graduates who are knowledgeable of concrete technology and techniques and promotion of products and services.

The Right Mix

In 2018, the American Concrete Pipe Association will hold its 110th annual meeting. Founded in 1907, ACPA is enjoying its 110th year through 2017. The industry has not enjoyed 110 years of producing the best product for sewer pipelines and culverts without being ever-vigilant of the need for better specifications, modern standards, education and training and a culture of safety and health in production facilities. The ACPA and its members know that modern precast drainage products will last well over a hundred years and that many structures constructed with precast concrete pipe and boxes will be performing as designed when the ACPA celebrates its bicentennial. ■

FURTHER INFORMATION



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