

#### A True Original retires

Andrew "Jack" Jackson retired after 43 years of loyal service to Smith-Midland Corporation. Over the years, Jack has seen many changes as the company has grown and Jack continued to develop as he worked at SMC. His last stop was in the Quality Control department where his experience in production and rebar cage fabrication enabled him to assist our associates to make top quality products. He continued to learn, taking and passing ACI Concrete Field, VDOT Field and NPCA PQS Level 1 certifications. Jack managed the Steel Shop where rebar cages are fabricated, and led this department to its highest levels of safety performance. The Steel Shop also conducted many continuous improvement projects.

Jack is quick with a joke and a laugh, but he was serious about the quality of work being performed and would let us know if our quality or cleanliness needed to improve. In retirement, Jack is planning on visiting Florida and spending time with his friends and family. He was an integral part of SMC's history and will certainly be missed. Thank you Jack!



#### **New Website Launched**

SMC launched a new website this past year that consolidates all its services into one easy to navigate online platform. The site also serves the savvy investor by prominently displaying the company's governance and financial information including information on all of its wholly-owned subsidiaries. The site incorporates both desktop and mobile versions to comply with the latest in Google search engine optimizations standards.

At the same time, new sites for Concrete Safety Systems and the Smith-Carolina Plant were built using the same platform. Later this year SMC's product licensing subsidiary, Easi-Set Worldwide, will launch a new corporate and five proprietary product websites. This will complete a long-term initiative to bring all of the online offerings of the Smith-Midland Corporation up to the latest in web technology standards.

#### New Kanbans added to the mix

Kanban is a Japanese word meaning signboard or billboard and is a widely used inventory control scheduling system for lean and just-in-time (JIT) production. Developed by Taiichi Ohno, an industrial engineer at Toyota, as a system to improve and maintain a high level of production.

According to our president, Ashley Smith, "A Kanban ensures you have just the right amount of parts and materials available for your manufacturing processes. The biggest problem was we were running out of parts, had too many parts that we weren't using, or the parts were not organized." Since first implementing the Kanban process, SMC has gone from maintaining precise controls on 6 different parts to 60. He adds, "One Kanban we created was what we call a 'milk run'." We have seven stations around the facility. Twice a day one of our associates from purchasing goes around to each station, and if people are



running low on a certain material, they put a request card in the outbound internal mailbox for pick up. The associate on the 'milk run' picks up the cards then fills the orders on the next run (or heads to purchasing with an order request). What use to take a minimum of ten minutes per incident for dozens of individual plant workers has been eliminated.



#### New Engineering Manager on board

SMC welcomed Amit Tilak on board early this spring to provide leadership and technical expertise to all engineering functions within a major precast concrete producer's business. Mr. Tilak brings more than eight years of design experience in the construction industry for commercial, industrial and

residential developments to his role as Engineering Manager.

# ALM

#### Employee Spotlight

In January of this year, Allison Zebrowski joined SMC as Assistant Project Manager. Allison's experience is in plan coordination across multiple disciplines with extensive coursework in reinforced

and pre-stressed concrete design. She possesses technical knowledge of building systems through studies of architecture and engineering. Allison recently worked at STV, Inc. in Fairfax VA where she was a Designer providing AutoCAD and Microstation drafting support, produced advanced analysis of reinforced concrete structures and provided calculations. Allison holds a Master of Architecture from VA Tech and a Master of Engineering from George Mason.

#### Moving on up, Recent Promotions

Chris Kemp, is now responsible for managing our Continuous Improvement activities and will be working closely with all departments in our Continuous Improvement efforts. Clay Horn has been promoted to Supervisor, Steel Shop; Carranza Ambriz Gabriel has been promoted to Lead, Carpenter Shop; William Whitmer has been promoted to Manager, Finishing & Yard Operations; Luis Nativi has been promoted to Lead, Structural Shop; and Ismael Candela has been promoted to Lead, Architectural Shop. Congratulations!



Mr. Tilak earned a Masters of Business Administration from New York University in 2014, a Masters of Science in Civil Engineering from Syracuse University in 2006, and a Bachelors of Engineering in Civil Engineering from Mumbai University (India) in 2001. Amit says, "Smith-Midland places special emphasis on quality control at every stage of production. I am pleased to have the opportunity to ensure a high-level of quality remains true in every step of the engineering and contractual process. In addition, I'll provide engineering guidance and expertise to ensure that all company, industry and regulatory standards continue to be met for our products and projects."



#### SMC receives ABC Silver Safety Award

Associated Builders and Contractors, Inc. (ABC) has awarded us with the Silver Level of Achievement Safety Training and Evaluation Process (STEP)

Award for 2015. The STEP Awards recognizes companies for their meritorious safety performance using safety factor calculations that incorporate data from Occupational Health and Safety Administration (OSHA) reports and 20 key elements of our safety program that includes safety policies, employee commitment and training, management commitment and budgeting. Accepting the award on behalf of all the Smith-Midland associaties was **Chet Gnagey, Environmental Health & Safety Manager**.

Chet joined us in January 2015 and has brought a wealth of safety knowledge to our company. He has served as the Safety Manager for Packers Sanitation Services Incorporated, who provide sanitation for over 450 food processing plants across the US and Canada. Chet spent 3 years as EHS Supervisor for Tyson Foods in Temperanceville, Virginia. He holds a BS in Chemical Engineering from West Point in NY. Chet's philosophy on safety is one "where zero accidents is obtainable, but only through knowledge, ownership, and follow up." He wants to give our associates the knowledge to succeed through training and will feel successful when every employee at Smith-Midland embraces a culture that will result in an accident free workplace.

SMC Newsline is published by Smith-Midland Corporation 5119 Catlett Road • PO Box 300 • Midland, VA 22728 (540) 439-3266 • www.smithmidland.com

## SUMMER/FALL 2015 CORPORATION

"Quality is not an act. It is a habit." - Aristotle



#### Johns Hopkins facility receives American Concrete Institute Award

he Nelson/Harvey Building on the Johns Hopkins Hospital campus in Baltimore, Maryland has been recognized as an ACI Excellence award winner. The choice of SlenderWall precast panels from Smith-Midland played an important role in the successful reconstruction of this 1970's in-patient medical facility.

Nestled amid the pioneering clinical and research facilities is the Nelson-Harvey Building, a 1970s-era modernist structure with narrow ribbon windows and long expanses of brick colored to match the nearby Halstead Building and the 1880s Billings Building, a campus landmark with its classic dome. After opening a major new facility next door, the Zayed Bloomberg complex, the hospital began renovating existing facilities on its East Baltimore campus. The nine-story Nelson-Harvey was next on the list.

After decades of wear, the hand-laid brick envelope of the Johns Hopkins 9-story Nelson/Harvey inpatient facility began failing. "Late in the game, during design development, the client determined that we should also address envelope issues," said Dan McKelvey, an associate principal and building envelope expert with Ayers Saint Gross, describing the existing, hand laid brick façades with a concrete masonry unit (CMU) backup on structural steel. "There were problems including cracking and deflecting brick, and the window system was outdated. The building had no insulation in the wall system, either."

The architectural firms Wilmot Sanz and Ayers Saint Gross needed a solution that met two criteria: one, that is was lightweight enough to prevent any need for additional superstructure or foundation costs; and two, that the facility would be able to stay operational during the exterior renovation.

SlenderWall met the requirements. Its 28 lbs. per square foot specification and unique composite construction allowed for the re-cladding to take place without the removal of the old fascia. The 158 SlenderWall panels (27,164 sq. ft.) were designed with a factory-applied Endicott thin brick facing, maintaining continuity with the campus and the original 1970's exterior. Johns Hopkins also chose to include factory-applied closed-cell foam insulation and the proprietary H2Out advanced sealant rain screen system with leak detection.

SMC Newsline



#### Smith-Midland hosts Clark Group

group of 11 summer interns and seasoned veterans from the Clark Builders Group Building Company (CBG) visited our Midland plant location. They are part of CBG's ongoing educational program and represented both their Virginia and Maryland offices. The interns that participated are from VA Tech, VMI, and Towson University and are studying building construction, mechanical engineering, and project management. CBG Building Company consistently ranks among the top five multi-family builders in the country, delivering award-winning communities from coast to coast for more than 25 years.

The visit began with a presentation on SMC's history and capabilities from its President, Ashley Smith, "We welcome the opportunity to share how Smith-Midland's focus on safety, quality, delivery and cost benefit our clients and how, by working together with builders and owners, we can improve the construction delivery process."

After a brief safety meeting, the group was broken into two

#### **Total Productive Maintenance**

A successful TPM program is a maintenance philosophy designed to integrate equipment maintenance into the manufacturing process by driving out waste and reducing or eliminating production time lost to equipment failures. By minimizing rework, slow running equipment and downtime, maximum value is added at the minimum cost. According to Andy East, SMC's TPM Manager, "TPM provides the tools to turn maintenance programs into a competitive advantage."

The metric developed to measure the success of our TPM program is OEE (Overall Equipment Effectiveness) which takes into account three measurables: availability, performance and quality. The goal of SMC's TPM program is to eliminate losses tied to equipment maintenance – and keep equipment producing only good product, as fast as possible



teams led by Mark Loscudo, V.P. of Operations, and Chris Kemp, Director of Continuous Improvement. The attendees were treated to SMC's standard plant tour process where at each tour stop they are turned over to our associates to give their specific perspective on improvements in their individual areas. During the tour, the team from CBG was able to inspect multiple pieces from their 2 projects currently being produced at Smith-Midland. The "Latitude Apartments", is a 12-story, 265 unit, mixed-use, luxury apartment community located within the bustling Rosslyn-Ballston corridor. Smith-Midland is providing 712 panels of traditional architectural precast for the exterior cladding of the structure. Smith-Midland is also producing a total of 1,077 balcony and breezeway panels for "The Elms" projects, a series of 3 separate multi-family apartment communities.

"The plant tour was a big hit, everyone found the tour very informative," said Jeffrey McCoy, Senior Project Superintendent of CBG, "I would like to thank Smith-Midland for taking the time out of your busy schedules to accommodate our education program. Your hospitality and consideration is greatly appreciated."



with no unplanned downtime.

Autonomous maintenance, a key aspect of TPM, focuses on training our associates to take care of the equipment and machines they work with and builds a solid, plant-floor based system to prevent accidents, defects, and breakdowns.

#### SMC at the National Zoo!

S mith-Midland Corporation worked with contractor Hensel Phelps to build a 850 foot long retaining wall for the Smithsonian National Zoo in Washington, DC. The precast concrete panels were formed and hand-stained to mimic the look and color variations of a natural stone wall. Hensel Phelps' site manager, Kim Slusher, expressed feelings that the benefit of constructing a wall this way, compared to what was originally designed as a cast in place wall was profound, "You have a better looking wall this way. The joints all lined up well and the shoulder joints are set consistently. Speed of construction was good. The owner is pretty happy."

#### Standard work on J-J Hooks improved

Starting in April of 2014, we implemented a process standard called CEDAC (Cause and Effect Diagram Adding Cards). This began when Bruce Hamilton, who is famous in the lean community, came to SMC to present a two-day workshop for 20 SMC employees. The workshop focused on processes to make productivity improvements in our manufacturing by applying these principles to our standard work for J-J Hooks. We looked at all the processes, labor needs, wasted time, energy and materials. Streamlining the processes and eliminating wasted time allowed for the reduction of people working on the J-J Hooks line from 13 to 7. As an additional result, the line was made easier and safer for our associates by reworking the forms to a higher standard.

CDEAC helped us establish a baseline. At any time, you can enter a work area and tell by observation if we are following the correct processes. "On time delivery, efficiency and productivity have all been improved with CDEAC," says SMC President, Ashley Smith.



### Educating the Industry in Quality, Safety and Production

Chris Kemp, SMC's Yard Manager, has taught a course in PQS-II Production at the last three National Precast Concrete Association (NPCA) conferences in Indianapolis, Houston and Orlando. He has been invited to teach the lean module course again in December in Philadelphia! Each class has on average 40-50 attendees, where they learn the basic concepts in Lean Manufacturing. Additional course topics Chris has taught at these Production and Quality School seminars include Safety, Production and Quality Control. More information may be found here: http://precast.org/education/precastuniversity









#### One of Virginia's Largest Wastewater Treatment Facilities Leverages SMC

MEB General Contractors engaged SMC to install the tallest Easi-Span Building the company has ever produced. The structure was commissioned for the Proctors Creek Wastewater Treatment Plant, one of the largest facilities in Virginia, handling 27 million gallons of wastewater per day. The 1,200 sq. ft. (30'W x 40'L x 21'H) chemical storage building was completed over the course of just 3.5 days.



#### **Smith-Midland Wins Architectural Project Contractor Award**

SMC earned first place honors in the annual AGC (Association of General Contractors) awards competition! The award was for the 420 National Business Park (NBP) architectural precast project located at in Annapolis Junction, MD. NBP is a 375-acre, 2.3 million square foot defense contractors' development located adjacent to the National Security Agency and U.S. Army facility, Fort Meade. The award was in the under \$150 million dollar category and was presented to the company by the Metro Washington chapter at its annual awards banquet at the Arena Stage Theater in DC. This was the fifth architectural precast project that SMC was entrusted to do within the NBP.



#### Tysons Corner Center Expansion Features More Than 1,000 SMC Precast Panels

beautiful new mixed-use project in Tysons Corner, Va., features more than 97,000 square feet of Smith-Midland architectural precast panels. The gray medium acid-washed panels contribute to the project's durability and make the 31-story building visually appealing. The Vita Tower project is large – the 350 foot tower includes a multi-unit luxury apartment complex, a rooftop pool, amenity areas, retail space, a pedestrian bridge (connecting to both the Tysons Corner Center and metro station), and four levels of parking. The building was designed to achieve LEED® Gold certification status.





#### Smith-Midland Helps Bring Clean Water to Community

A planned community in Bealeton, Va., was able to say goodbye to worrying about its water quality. They had recently learned their well water had above normal arsenic levels. General contractor Sydnor Hydro Inc. of Richmond, Virginia was brought in to solve the problem. The solution was a new four filter water system connected to two wells, to be housed in a 20' x 30' Easi-Span Precast Building manufactured by Smith-Midland. The initial erection of the building was completed in one day.