

# **SPOTLIGHT**

SOLAR ATMOSPHERES' NEWSLETTER AUTUMN 2015









## SPOTLIGHT



### Solar Atmospheres Of Western PA Breaks Ground To Make Way For The World's Largest Production Vacuum Furnace

Solar Atmospheres of Western PA recently had a groundbreaking ceremony for a facility to house their newest addition – a brand new 6-1/2 foot diameter by 48 foot long vacuum furnace with a load capacity up to 150,000 lbs. In the beginning of the new year, the behemoth furnace will be assembled within the newly constructed 18,000 square foot building. The furnace will be uniform to within +/- 10°F per AMS 2750 E between the production temperature ranges of 300°F to 2250°F with a maximum operating temperature of 2400°F. Rapid vacuum pump down to the low 10<sup>-6</sup> Torr range will be attained by utilizing three Edwards booster pumps, three Stokes roughing pumps, and three 35" Varian diffusion pumps. Fast and uniform cooling will be achieved by using three 300 HP variable speed drive blower motors. Finally, a unique insulation pack will be installed into both load cars which will ultimately help reduce normal atmospheric (dew point) contamination.





This \$10 million dollar plus project will complement the other large US patented dual bottom load car vacuum furnaces (one 36 foot long vacuum furnace, three 24 foot long vacuum furnaces, and one 12 foot long vacuum furnace) that are currently in production along with ten mid-size vacuum furnaces. Bob Hill, President of Solar Atmospheres of Western PA, states, "It is truly hard to believe that only 15 years ago we bought an empty 16,000 square foot building with a vision to expand Solar's customer base into western PA and northeast Ohio. After three building expansions, extensive investment, and hiring 50 extremely talented and dedicated employees, Solar will soon be operating within an 80,000 square foot state-of-the-art facility. The markets served will continue to be primarily quality aerospace and nuclear vacuum heat treating and brazing of large components."

#### Halloween Benefit

Solar Atmospheres took part in PBGW's 1st Annual Halloween Bash for children with special needs. We know it can be difficult for some kids to go door to door on Halloween. On behalf of the Miracle League, PBGW's Halloween Bash provided the children an opportunity to trick-or-treat in a fun and safe environment.

The event took place at the Montgomery Township Community Center in Montgomeryville, PA on October 29th from 6-8 pm. Over 100 special needs children, along with their families, took part in the event which also raised money for the Miracle League of Lehigh Valley and the Miracle League of Horsham. Marianne Nace, Judy Koenig, Trevor Jones, and Brittney Jones took part in this year's event for Solar Atmospheres.



#### Donald Jordan Named 2015 ASM Fellow



Solar Atmospheres' Corporate Metallurgist, Don Jordan, was awarded the high honor of ASM Fellow (FASM) at the ASM Awards Dinner held October 6, 2015 during the MS&T15 Conference in Columbus, OH.

According to ASM, "The honor of Fellow represents recognition of distinguished contributions in the field of materials science and engineering, and develops a broadly based forum for technical and professional leaders to serve as advisors to the Society." Don's citation reads: "For sustained technical excellence in a career that includes development of wear and corrosion resistant materials for Navy submarines and outstanding leadership in the development and implementation of novel vacuum heat treatment technology for surface treatment of metals." Don's comment on becoming FASM, "Obviously I am

honored, yet I am privileged to work with the Solar R&D Team; they make me look good."

Mr. Jordan is a 27-year member of ASM International and has served in every executive position of the Philadelphia Liberty Bell Chapter, including 2002-03 Chairperson. As evidence of Don's service and commitment to the ASM Philadelphia Chapter, he has received: two President's Awards (2004 & 2007), Adolph Schaeffer Special Achievement Award (2005), Philadelphia Chapter Distinguished Service Award (2008), Delaware Valley Materials Person of the Year Award (2010), Albert Sauveur Lecture Award (2013), and Meritorious Service Award (2014). Mr. Jordan also is a member of: NACE, SAE & the Aerospace Metals Engineering Committee (AMEC), and APMI.

#### Solar Atmospheres Southeast Receives Nadcap Accreditation

Nadcap

Solar Atmospheres Southeast received Nadcap (National Aerospace and Defense Contractors Accreditation Program) accreditation for demonstrating their ongoing commitment to quality by satisfying customer requirements and industry specifications. President Steve Prout notes, "Our South Carolina plant just opened in June 2015 and we were extremely motivated to better serve our customers by becoming Nadcap accredited. In 3 months we have achieved a goal that typically takes double that amount of time. The quick turnaround in reaching this quality milestone is a testament not only of our corporate commitment, but also the expertise and dedication of our staff.

A heat treat supplier with Nadcap accreditation is a supplier that has proven to be able to effectively meet the most demanding and stringent customer requirements that exist in the aerospace industry. "Achieving Nadcap accreditation is not easy. It is one of the ways in which the aerospace industry identifies those who excel at manufacturing quality product through superior special processes. Companies such as Solar Atmospheres work hard to obtain this status and they should be justifiably proud of it," said Joe Pinto, Executive Vice President and Chief Operating Officer at the Performance Review Institute. "PRI is proud to support continual improvement in the aerospace industry by helping companies such as Solar Atmospheres be successful and we look forward to continuing to assist the industry moving forward."

#### Solar Employees Run Local 5K



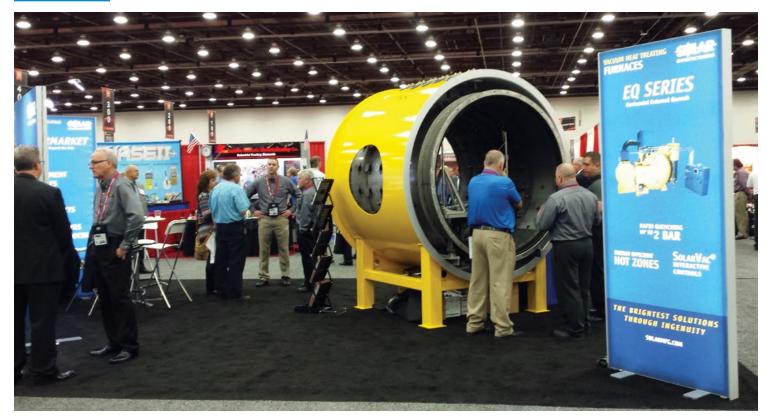
On September 20, 2015, 28 members of the Solar Atmospheres family in Souderton, PA. participated in the 15th Annual Heart to Heart 5K Run and Fitness Walk held at the Lake Lenape Park in Sellersville, PA.

Solar generously paid for half the registration cost for each employee, and provided everyone on the team with a Solar t-shirt. The weather was perfect as the temperature was in the mid 70s with partly cloudy skies making it a perfect day for a walk or run.

The Healthy Hearts Foundation goals are to raise awareness for the prevention and treatment of heart disease, and to promote heart healthy lifestyles in our community, which it does through this annual 5K run and fun walk.

An award ceremony followed the events for 1st, 2nd, and 3rd place to the overall male and female winners in the 5K run, and 1st, 2nd and 3rd place awards were given to the winners in 5-year age groups. From Solar Atmospheres, Nathan Skelton and Josh Isaak both came in 2nd place in their respective age groups.

#### Solar Exhibits and Presents Technical Sessions at ASM Heat Treat 2015



Solar Atmospheres and Solar Manufacturing exhibited at this year's ASM Heat Treating Society Conference and Exhibition held in Detroit, Michigan. On display were Solar Atmospheres' vacuum heat treating services, as well as, Solar Manufacturing's Mentor® furnace, and the newly developed hot zone.

Along with the displays, three Solar personnel gave presentations during the conference sessions. Bob Hill, President of Solar Atmospheres of Western PA, gave a presentation on Vacuum Furnaces Were Made for Additive Manufacturing. Don Jordan, Vice President/Corporate Metallurgist, presented a session on Minimizing Alpha Case during Vacuum Furnace Heat Treating, and Roger Jones, Corporate President of Solar Atmospheres, presented on Retiring Paper-Based Maintenance Systems within Commercial Heat Treating Shops. These presentations can be found on our website at solaratm. com/tech-downloads/.

Bill Jones, CEO of Solar Atmospheres, also took part in a panel discussion on New Developments and Opportunities in Heat Treating, and his focus was on New Developments in Vacuum Processing. In addition, Nick Cordisco, Electrical Engineer and Service Manager for Solar Manufacturing, presented two workshops in our booth giving a live demonstration of proper Temperature Uniformity Surveys (T.U.S).

A highlight for the Solar Atmospheres organization, Roger Jones received the 2015 George H. Bodeen Heat Treating Achievement Award, along with a plaque for serving as the HTS President from 2013-2015.

#### **Upcoming Trade Shows**





**D2P Grapevine** February 24-25, 2016 Grapevine, TX



BIOMEDevice Aprl 13-14, 2016 Boston, MA

#### This newsletter is published by Solar Atmospheres, a leader in world-class vacuum heat treating.

Lori Atkinson Editor Keith Reim Corporate Marketing Manager Andrew Nagy Graphic Designer



If you no longer wish to receive *The Spotlight*, would like a co-worker to receive it, or need to update your address, please email us at marketing@solaratm.com