Bolting leader partners with solar pioneer on Tenn. plant

HYTORC supplies speed, safety, efficiency to WACKER Polysilicon

YTORC, an industrial bolting leader, and WACKER, a worldwide authority in producing highly specialized chemicals, recently partnered to improve productivity at the \$2.4 billion WACKER Polysilicon plant in Charleston, Tennessee.

Polysilicon is a raw material used primarily in solar panels for generating electricity in sunlight. WACKER, a pioneer in the polysilicon market since 1959, began construction on the Tennessee plant in early 2011 and will soon become operational. Once fully completed, WACKER will be producing over 18,000 metric tons of hyper-pure polysilicon. The product is not only utilized in the photovoltaic solar cell market but also for the semiconductor electronic sector.

Just as WACKER sets a high precedent for product quality and competitive edge, the brand also seeks to fulfill ever-growing worldwide demand by achieving optimal speed, safety and efficiency at production plants. By implementing HYTORC services and products, WACKER improved management and maintenance on plant Chemical Vapor Deposition (CVD) Reactors used specifically to manufacture polysilicon by employing 15 HYTORC Lithium Series BTM-1000 Torque Guns with offset links.

WACKER sought HYTORC's expertise for numerous concerns related to its CVD Reactors' maintenance. Daily upkeep was a struggle as confinement due to location presented difficulties, and the hydraulics were operating at suboptimal performance. The application specifically addressed the 96 1¹/₄-inch bolts, with 90 percent easily accessible but still presenting both radial and vertical obstructions. With CVD Reactors presenting two levels of over 96 bolts and half at heights above torso level, achieving optimal speed proved difficult. The 4-inch thread protrusion on all studs, coupled with four to five nuts in hard-to-reach locations, also contributed to the substantial hurdles HYTORC was tasked with overcoming.

HYTORC combated the challenges by addressing each with action. The HYTORC Lithium Series Torque Gun was introduced on the job to present uncompromised efficiency, speed and versatility. HYTORC's battery-powered Lithium Series Torque Guns provide the swiftness and convenience of a pneumatic torque gun without the noise, vibration and load variation. By updating procedures from traditional tools to torque guns, WACKER optimized efforts by assigning multiple operators to multiple tools. This new teamwork approach has resulted in a significant increase in efficiency, with bolting times being reduced to less than 30 minutes — a huge improvement

over the standard four-hour maintenance time at German plants. An Offset Link also added to flexibility and quick adaption of the Lithium Series Torque Guns, allowing for easy fastening on nuts or bolts with limited clearance or protruding bolt ends. On each of these applications, WACKER

simplified procedures and enhanced speed. Due to HYTORC's innovative custom designs, reliable products and forwardthinking industry knowledge, WACKER achieved considerable savings in money, safety and efficiency. With more U.S. plants in development and an increasing worldwide demand for renewable energy sources, the relationship between the WACKER and HYTORC brands is expected to continue to grow with future endeavors.

For more information, visit www. hytorc.com or call (800) FOR-HYTORC [367-4986]. ●



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