



## Advanced Energy Announces Successful Qualification of Its Onyx Series Pyrometers at Steel Dynamics

November 6, 2018

### Global Power Solution Leader to Demonstrate Industrial Capabilities Through Improvements in Safety, Cut Costs and Decreased Cycling Time

FORT COLLINS, Colo.--(BUSINESS WIRE)--Nov. 6, 2018-- [Advanced Energy Industries, Inc.](#) (Nasdaq: AEIS), a global leader in temperature measurement and control, as well as precision power conversion products, announced today that [Steel Dynamics, Inc.](#) (Nasdaq/GS: STLD), one of the largest domestic steel producers and metals recyclers in the U.S., has successfully qualified its Onyx™ series optical temperature pyrometers at its Columbus Division. The line of industrial pyrometers provides the flat roll steel mill with robust and repeatable temperature measurement for vessel monitoring.

This press release features multimedia. View the full release here: <https://www.businesswire.com/news/home/20181106005135/en/>



(Photo: Business Wire)

[Learn more about the Onyx series of industrial pyrometers.](#)

### About Advanced Energy

Advanced Energy (Nasdaq: AEIS) is a global leader in the design and manufacturing of highly engineered, precision power conversion, measurement and control solutions for mission-critical applications and processes. AE's power solutions enable customer innovation in complex semiconductor and industrial manufacturing applications. With engineering know-how and responsive service and support around the globe, the company builds collaborative partnerships to meet technology advances, propel growth for its customers and innovate the future of power. Advanced Energy has devoted more than three decades to perfecting power for its global customers and is headquartered in Fort Collins, Colorado, USA. For more information, visit [www.advancedenergy.com](http://www.advancedenergy.com).

"We couldn't have made a better choice in deciding to move forward with the implementation of Advanced Energy's Onyx series," says Richard Thomas, process technician and electrician for Steel Dynamics. "With the significant safety improvements, cost savings, and reduced cycling time, the Onyx series is the ideal replacement for existing thermocouples."

Steel Dynamics employs an electric arc furnace (EAF) to process recycled steel. This process utilizes vessels to transport the molten steel from the EAF to the caster. The maintenance of these vessels, when not in service, is critically important. Temperature has been traditionally maintained by use of thermocouples (TC). Temperature must be maintained at around 1800°F to ensure optimal performance of the refractory lining. Unfortunately, in using TCs, Steel Dynamics encountered slow reaction time and continual damage. TCs were also causing inconsistent temperature variation and the use of additional gas for no benefit, incurring unnecessary costs.

Due to the ability to improve temperature-measurement, decrease natural gas usage (with better measurement), and speed throughput, the Onyx series pyrometers have been selected to replace the TCs. Through this replacement, Steel Dynamics will be able to more precisely control the temperatures of the ladle between cycles. Pyrometers will allow the burner to only ramp up full when necessary, as well as help to extend the life of the ladles, all of which results in cost savings.

"We are pleased to have the opportunity to equip Steel Dynamics with the thermal technology needed for optimization of melting processes," said Mark Ritzheimer, senior product marketing manager for Advanced Energy. "The Onyx series and its ability to provide top-of-the-line temperature measurement - even in the harshest environments - is a great demonstration of our industrial capabilities."

The Onyx series of industrial pyrometers provides measurement precision, repeatability and reliability to industrial applications. A non-contact device, it provides a wide temperature range based on selected wavelength and carries excellent accuracy and repeatability.

Advanced Energy | Precision. Power. Performance.

**About Steel Dynamics, Inc.**

Steel Dynamics is one of the largest domestic steel producers and metals recyclers in the United States based on estimated annual steelmaking and metals recycling capability, with facilities located throughout the United States, and in Mexico. Steel Dynamics produces steel products, including hot roll, cold roll, and coated sheet steel, structural steel beams and shapes, rail, engineered special-bar-quality steel, cold finished steel, merchant bar products, specialty steel sections and steel joists and deck. In addition, the company produces liquid pig iron and processes and sells ferrous and nonferrous scrap.

View source version on businesswire.com: <https://www.businesswire.com/news/home/20181106005135/en/>

Source: Advanced Energy

Global Results Communications for Advanced Energy Industries, Inc.

Priya Dua / Lora Wilson

[aei@globalresultspr.com](mailto:aei@globalresultspr.com)

+1 949.306.0276