

Isothermal Melting Takes R&D100 Award

Apogee Technology and Partner Aleris International Recognized

PITTSBURGH, PA. – July 6 2006: Apogee Technology, Inc. and its industrial partner, Aleris International, have received a 2006 R&D 100 Award for the high efficiency Isothermal Melting process. According to R&D Magazine: “The winning of an R&D 100 Award provides a mark of excellence known to industry, government, and academia as proof that the product is one of the most innovative ideas of the year.” Tim Studt, Editor and Chief of the magazine characterized this year’s R&D 100 Award program as “especially competitive”. The Apogee-Aleris award will be formally conferred at a banquet in Chicago on October 19.

Apogee’s Isothermal Melting process melts aluminum using 25 to 30% of the in-plant energy required by conventional natural gas-fired melters. The process occupies 25% of the floor-space compared to conventional melters and operates without the in-plant emission of greenhouse gases. If implemented across the domestic aluminum industry, Isothermal Melting can save 62 trillion BTUs of energy *annually*, which is the equivalent of \$620,000,000 in natural gas savings at \$10/therm. Over 30 U.S. patents protect Apogee’s Isothermal Melting process.

The Isothermal Melting process was developed by Apogee through a 4 year/\$5 million cost share project sponsored by the Office of Energy Efficiency and Renewable Energy of the U.S. Department of Energy (<http://www.eere.energy.gov/industry/>). Under this project, Apogee constructed and operated a 300 lb/hr melt rate proof of concept unit in December 2003. The first commercial-scale melter was installed and operated at an Aleris International flat rolled products facility in October 2005, with a maximum melt rate of 7,000 lb/hr.

Apogee is currently developing advanced over-the-road heated delivery and in-plant dispensation technology that will extend the capabilities of Isothermal Melting and result in the elimination of in-plant holding furnaces. This work is being supported by a new 4-year DOE-EERE sponsored project, along with General Motors and Aleris International as major industrial partners.

Since 1993, Apogee Technology has been a source of advanced metal treatment and heating solutions for the aluminum industry. With a seasoned team of accomplished industry experts and over 100 patents ranging from metal treatment to highly efficient heating and melting methods, Apogee delivers consistent, valuable benefits that establish revolutionary new benchmarks in both metal quality and low cost production. Additional background information on Apogee Technology and Aleris International can be found at: www.apogeetechnic.com and www.aleris.com