

### Dauber Company, Inc.

577 North 18 Mile Road Tonica, IL 61370 Phone: 800-682-8478 Fax: 815-442-3669

Volume 2, Issue 9 September 2008

Welcome to DCI's POWERMELT. We hope this quarterly newsletter will provide helpful information about silicon carbide, its applications, and our company.

#### Inside this issue:

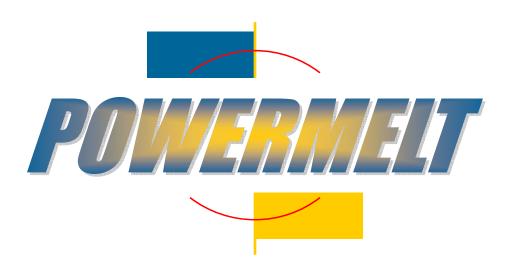
POWERMELT HP And Increasing Nodule 1

1

DCI POWERMELT Carbon Bricks a Big Hit

DCI Working
To Balance Global
SiC Pricing Woes

In the next Issue of *POWERMELT* watch for more news about DCI, global supply and demand, and pricing.



# **POWERMELT HP and Increasing Nodule Count**

auber Company's (DCI) *POWER-MELT HP* is a proprietary product developed for use in treatment or transfer ladles. This is not a by-product or a blend, but a premium grade 97% -plus SiC that took over six months to develop in order to select the optimum size and chemistry.

As stated in previous issues of *POWER-MELT*, DCI's *HP* product is meant to maximize your benefits in the following areas:

- Enhance Nodule Count
- Increase Fade Time
- Improve Mag Alloy Recovery
- Lower Shrink, Chill, and Slag Defects

Although it's rare for any one foundry to realize all of the aforementioned benefits, one is certain to benefit from one or more.

As additional testimony to the benefits of SiC for increasing nodule count, we refer to the August issue of *Modern Castings*. Research by R. Zavadil, M. Popescu, and M. Sahoo along with Materials Technology Laboratory – CANMET, Canada confirm many of the claims made by advocates of SiC. For example, according to the researchers, "The results obtained under industrial conditions confirmed the beneficial effect of 0.3% SiC addition on the nucleation potential of ductile iron producing an increase in nodule count and a decrease in chilling tendency of ductile iron."

Keep in mind, the researchers also ran tests using Crystalline Graphite, FeSi, and a blend of products and concluded that iron receiving the SiC addition showed the best results.

For samples, please contact your DCI representative (see list on page 2).

## DCI POWERMELT Carbon Bricks a Big Hit

n *POWERMELT* issue #8, we reintroduced DCI's *POWERMELT* Car-

**bon Brick** project. As foundry coke surpasses the \$350 net ton level and approaches the \$400 n/t threshold, demand for DCI's **POWERMELT Carbon** 

**Bricks** has increased dramatically.

Although not a direct substitute for traditional foundry coke, *POWERMELT* Carbon Bricks can be used to average down the price of coke and provide an increased level of supply security.

Consider that a US cupola shop recently eliminated their coke breeze injection and

also reduced foundry coke addition per charge by nearly 18% since using *POWER-MELT* Carbon Brick; pound for pound. In addition to the cost savings and added supply security, this cupola foundry also benefited from

faster melt and higher spout temperatures.

If you are interested in running trials with DCI's *POWERMELT* Carbon Brick, please contact a DCI representative.



- SiC briquettes for cupola melting
- SiC grain for electric melting
- SiC experts for customer support
- ISO 9001 : 2000 Registered
- Central U.S. location provides 1-2 day truck deliveries
- Rail service available

## Dauber Company, Inc.

577 North 18 Mile Road Tonica, IL 61370 Phone: 800-682-8478 Fax: 815-442-3669



For assistance, please contact:

<u>John Redshaw</u> redshawjl@aol.com

Skip Fristoe
sfristoe@daubercompany.com

John Basich basich@cogeco.ca

Ernie Tesch tesche@charter.net

Mike Baker mbaker@daubercompany.com

Maynard Gardiner mgardiner@new.rr.com

# DCI Working to Balance Global SiC Pricing Woes

blobal prices for all SiC products continue to increase. Despite slowing economies in North America and Europe, pricing on many commodities continue upward.

Very few SiC experts knew what to expect after the Beijing Olympics. Would expensive SiC in history will not hit global end-use markets until late in the first quarter of 2009.

The driving forces behind the price increases include the cost of kWh and export licenses, coupled with the continued weakness of the dollar against the Yuan. Re-



Some Finished Bulk Briquettes at DCI's Processing Facility in Tonica, IL

prices go up, stabilize, or come down? Well the jury is in. North American processors ordering SiC during the month of September discovered that prices have increased since June 2008. SiC ordered in September will not arrive in the states until late December or early January. This means that the most

cent kWh price increases across Europe and China virtually guarantee that prices will remain at record or near-record levels throughout 2009.

A possible silver lining during 2009 could be the reduction of the cost of a SiC export license in China. What could offset that silver lining, however, could be a reduction in the SiC tonnage dedicated for exports or the implementing of an export tariff.

At DCI, silicon carbide remains "King". DCI remains arguably the world's largest processor of metallurgical SiC and, as a result, continues to dedicate time and capital dollars to improving the efficiencies of plant operations. Although controlling the cost of SiC feedstock is a difficult challenge, DCI is dedicated to controlling or reducing plant operational cost components in order to add value to its customers.

Furthermore, while prices continue to increase on new material, DCI manages what is arguably the largest inventory of metallurgical-grade SiC in the western hemisphere. For our customers, this effort provides insulation against price spikes and product shortages. By keeping large inventories of SiC we are able to average down the overall cost of raw materials so we can deliver the highest quality SiC products at reasonable prices. Rest assured that as pricing continues to increase DCI continues its efforts to effectively manage plant efficiency, inventory, and supply chain issues as part of helping to keep its customers competitive.



A Very Small Portion of the SiC Inventory at DCI.