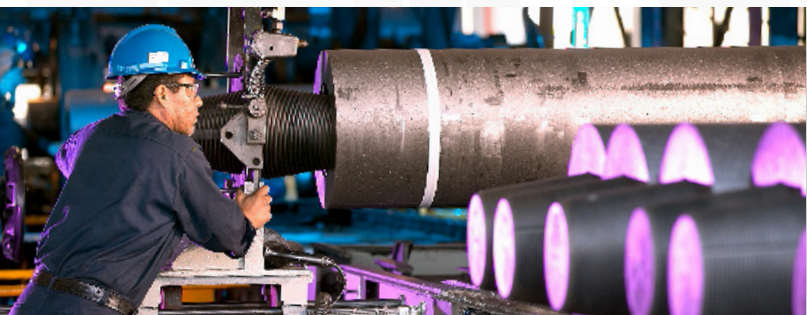


# GrafTech Customer Technical Service

*Assisting you in achieving your business objectives*

**UCAR<sup>®</sup>**  
GRAPHITE ELECTRODES<sup>®</sup>

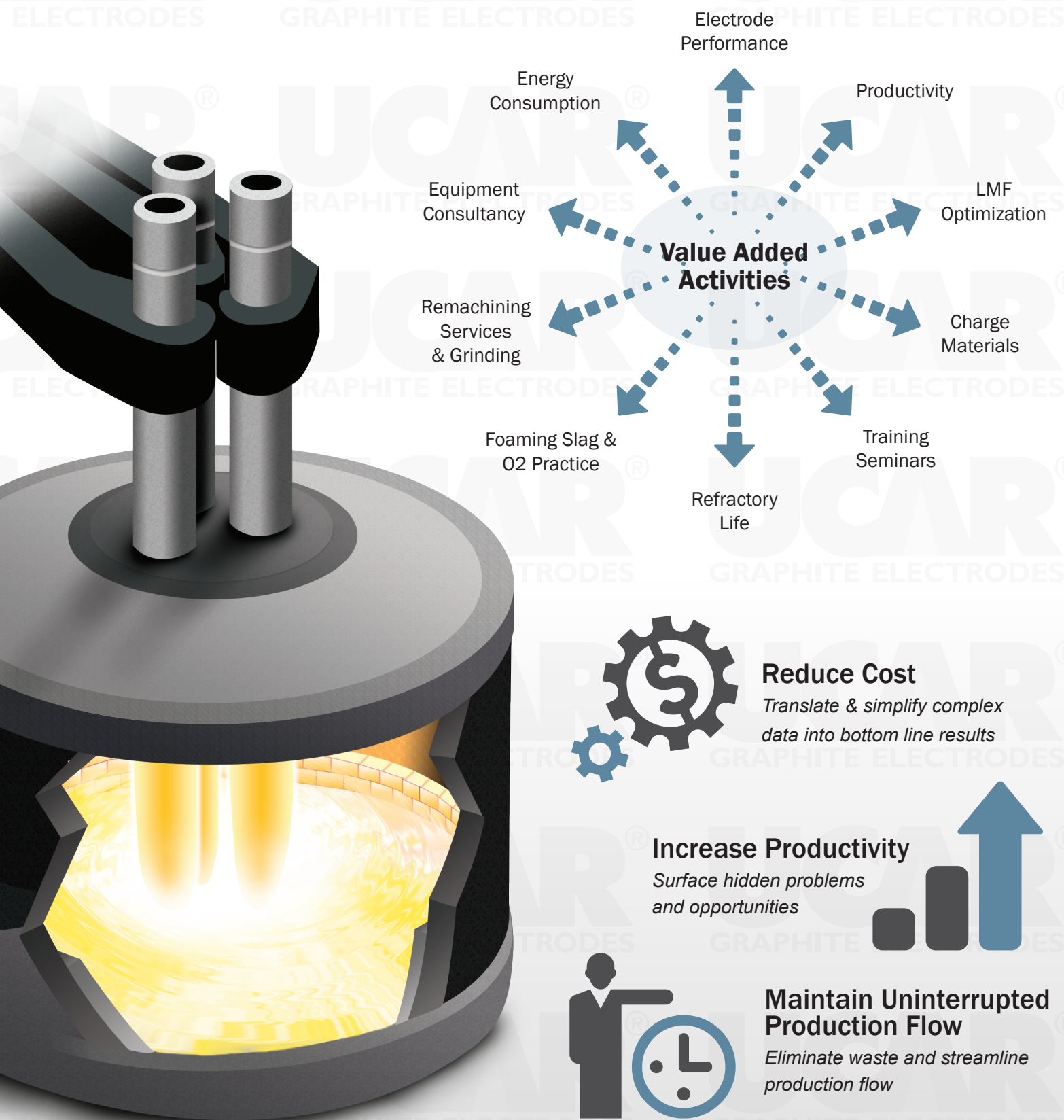


**GRAFTech<sup>®</sup>**  
*International*

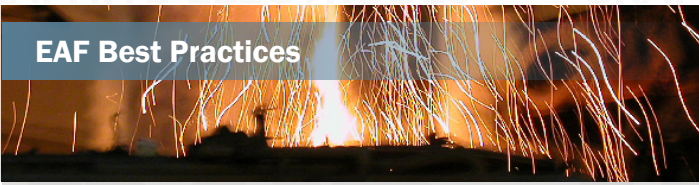


# GrafTech Service Solutions

Scope of Advantage Services is Wide




### EAF Best Practices



- Comparative analysis through benchmarking
- Advice and training on industry best practices
- Total energy audits

### Equipment Consultation



Our global presence gives us an independent overview of all EAF equipment and technology. We can help you in your new project planning.

- Equipment selection
- Productivity planning and capability
- Configuration and vetting

### New Arc Furnace Technology




GrafTech experts can help in understanding implications of new developments.

### Optimizing Electrode Performance



- Handling practices
- Jointing techniques
- Time utilization
- Oxygen and burners
- Foaming slag
- Electrode spray cooling
- Furnace regulation
- Power programs
- Raw materials

### Training Programs



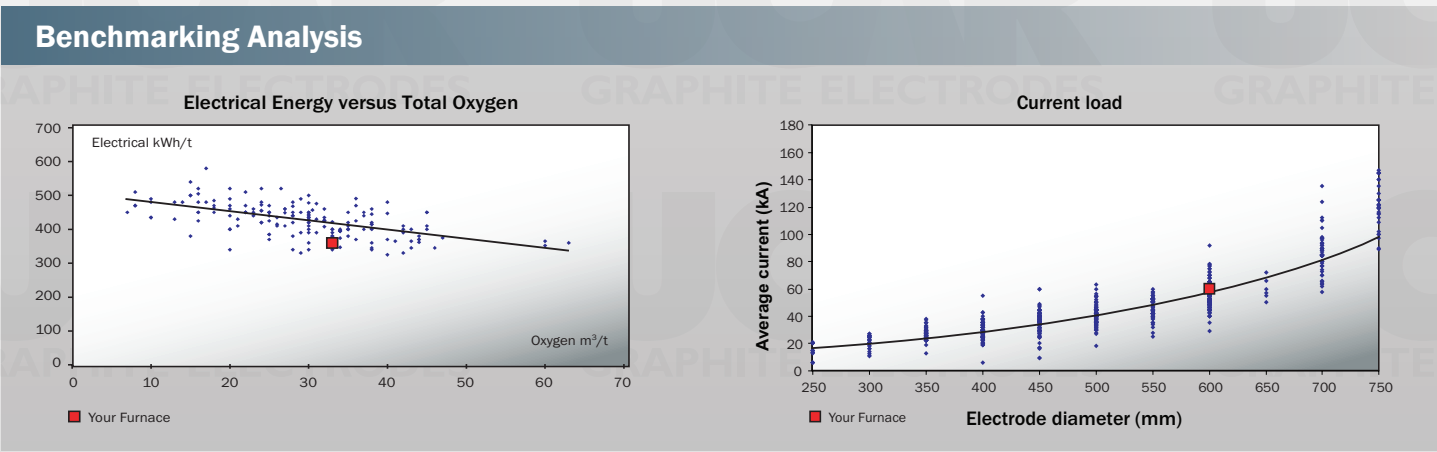
- Electrode handling
- Modes of consumption
- EAF benchmarking
- EAF productivity
- Total energy utilization
- Ladle furnace operations
- Electrical principles
- Chemistry energy
- EAF raw material
- Oxygen practices
- Inventory management
- Slag practices

### Technology Seminars



We offer customized seminars for customer groups focused on subject areas of interest.

- Equipment selection
- Productivity capability and planning
- Configuration and layout
- Start-up services

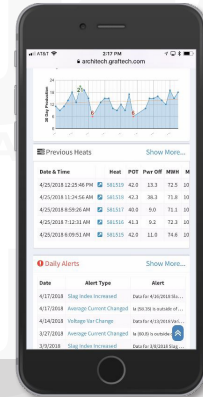
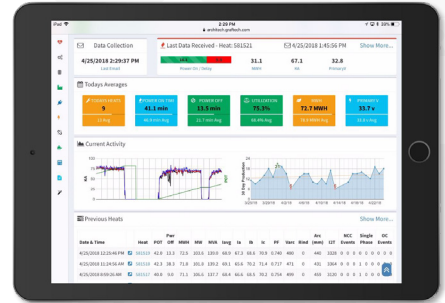




# Arc Furnace Optimization



- Evaluate and trend electrode consumption by phase
- Maximize power input by determining effectiveness of power profile
- Determine electrical balance and solve arc flare problems
- Enhance foaming slag practice
- Trend more than 75 furnace parameters, including those affecting electrode consumption
- Power input optimization
- Primary and secondary metering, as well as phase sequence verification
- Regulator response and interaction analysis
- Calculate short circuit reactance, line reactance, and other key parameters
- Mobile platform
- Surface hidden problems with statistical based alerts
- Benchmarking



## The GrafTech Team

- Largest technical service team in our industry with a proven track record
- Multi-disciplined with wide-ranging skills
- Tailored service offerings from a comprehensive list of over 30 different services



For more information:

1.216.676.2000 (Toll-Free USA) | 41.21.821.33.11 (International) | [www.graftech.com](http://www.graftech.com)

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