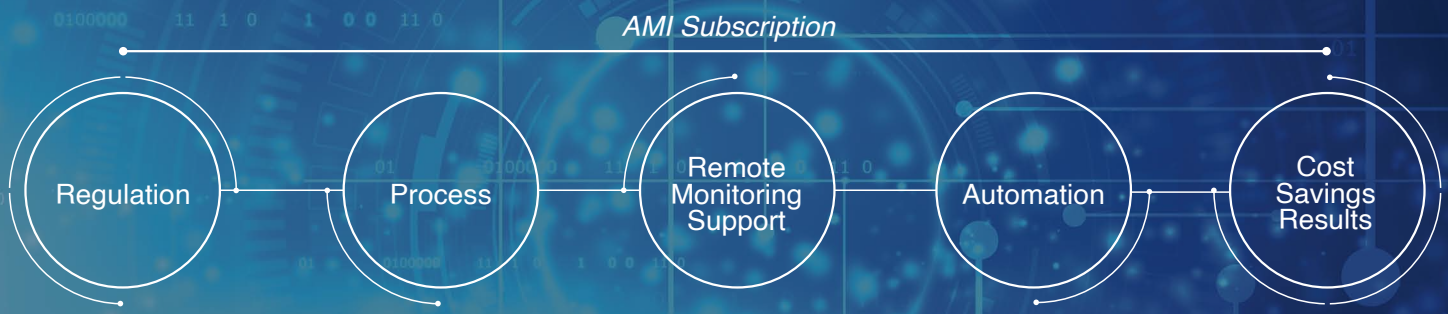


AMI Subscription

For EAF Optimization

NEW! AMI Subscription

AMI's subscription is a new commercial approach for steelmakers to use AMI's technology and services to achieve rapid performance improvements on their EAF.

Based on the AMI SmartFurnace™ suite of EAF optimization equipment, this comprehensive subscription service provides steel plants with the latest technology, service, and continuous support to rapidly implement the EAF process improvements needed. All for a simple monthly fee.

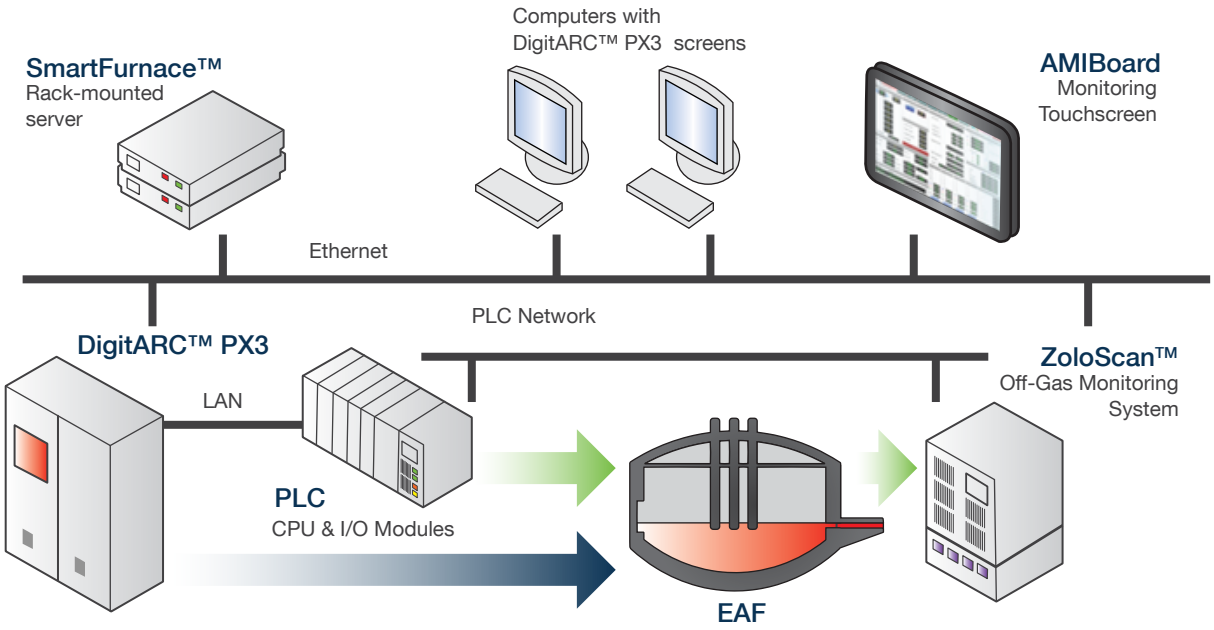
This new business approach is all-inclusive providing:

- All necessary AMI SmartFurnaceTM Equipment- kept to the latest and most modern version at all times.
- Commissioning Services for the startup.
- On-Site Support.
- AMI Continuous remote monitoring via the AMI Technology Center (ATC).
- Concierge level service and support .
- Rapid Implementation, rapid results, world class EAF Performance.
- Technical and Commercial approach tailored to the specific needs of the plant.
- All with a simple monthly fee.

AMI's Subscription is not a lease, rental or service contract. When you subscribe to AMI you receive AMI's latest generation arc regulator and all of their latest updates for EAF control. When AMI makes improvements in equipment or processes and the customer is subscribed, then AMI will automatically update the system as part of the subscription.

The subscription requires a commitment to work together for a certain period of time with shared goals to improve variable costs in the melt shop. EAF Optimization is less of a one-time project, and more in line with this continuous improvement approach.
Together we can create a competitive advantage.

The SmartFurnace™ System utilizes several individual modules to adapt and optimize every aspect of the furnace operation. The open architecture allows the user to customize the operation and enhance the EAF performance.



SmartFurnace™ Modules

- **SmartARC™**
  Decides the best operating points based on the heat stage, slag level, arc stability and scrap mix for transformer and reactor tap reference.

- **IoTrode™**
  Measures, Controls, and Optimizes the consumption of graphite electrodes using advanced digital technologies and the tools of Industry 4.0.

- **Oxygen**
  Utilizes electrical data from the PX3 and SmartARC™ to become more than a burner control program. The SmartFurnace™ Oxygen Module controls the rates of gas, oxygen and carbon considering the conditions of the heat the composition of the bath and additional inputs to provide accurate end point prediction and control.

- **Slag Optimization**
  For carbon steel producers this SmartFurnace™ Module implements an online mass balance to model the slag composition and recommend and control flux additions to achieve the target basicity and MgO Saturation.

- **Off-Gas**
  The Off-Gas Module saves energy. The main goal is to optimize the chemical energy into the EAF. The EAF control system is capable of analyzing on real time the EAF off gas using the TDLAS technology with a laser beam.

- **AWVP (Abnormal Water Vapor Detection)**
  One of the most advanced SmartFurnace™ Modules AWVD utilizes *AI* and machine learning to compare the many normal sources of water in a furnace vs an abnormal water vapor condition.

- **DRI/HBI Feed**
  Optimize the time to start the DRI/HBI feeding and control the steel temperature using advanced metallurgical modeling to avoid accumulation of un-melted material in the furnace.