



# INDUSTRIAL HEATING EQUIPMENT ASSOCIATION

## IHEA welcomes a new member: RoMan Manufacturing, Inc.

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**Our value offering is aligned to the needs of today's furnace OEMs and heat treaters by offering standard and custom product and system solutions that improve processes and lead times and reduce material and maintenance costs.**

high current DC output. DC heating is more efficient than AC heating, since the displacement power factor with IGBT/MFDC is close to unity at most setpoints. The operating frequency of the water-cooled DC power supply allows us to build very compact units that can be mounted directly on the furnace at the heating element terminals, eliminating the need for long water-cooled cable runs and also eliminating secondary cable inductance. The IGBT control provides a balanced three phase input and precise, multi-zone power control, as well as strong analytics capabilities communicated via Modbus and other protocols.

For the furnace OEM, power delivery systems from RoMan provide a high level of value to you and your customers including:

- › Compact footprint virtually eliminates overhead scaffolding and other VRT support structures that take up headroom.
- › Compact, lighter DC power supplies and close coupling design reduce shipping, maintenance and material costs.
- › Precise power control and analytics capabilities brings furnace power to the 21st century.

**R**oMan Manufacturing was founded in 1980 with a singular corporate commitment to manufacture water-cooled, high-current, low-voltage power sources, controls and power delivery systems used in resistance welding; melting, boosting, refining, and forming of glass; and in vacuum and atmospheric furnace OEM builds and retrofits. This commitment has made us an industry-leading manufacturer of AC and DC power sources and related specialty products.

Our innovative application-centric engineering, ISO certified and efficient lean manufacturing (Toyota Production System – TPS) processes produce the highest quality products. From three manufacturing facilities, we provide you with more than 7,000 designs, which gives us the flexibility to customize a product to any configuration, specification, or application requirements. We also offer value-added services such as technical and application support.

There is a consumer driven, cultural sea change toward materials and technologies that are – or are perceived to be – environmentally friendly. In most places, it is still environmentally cleaner (on global emission basis) to burn

fossil fuel than to use it to generate electricity; however, fossil fuel combustion technologies' rate of improvement in energy efficiency has all but flatlined. The contribution of electric renewal energy in the reduction of emissions is increasing rapidly and within 10 years, western Europe will have made a major move to renewables along with the rest of the world.

Our value offering is aligned to the needs of today's furnace OEMs and heat treaters by offering standard and custom product and system solutions that improve processes and lead times and reduce material and maintenance costs. This helps deliver significant energy efficiencies and utility savings.

Our IGBT/MFDC power delivery system replaces outdated SCR and VRT technologies. The IGBT/MFDC is an inverter system that creates 1,000 Hz output coupled with a DC transformer to the furnace. It utilizes a 3-phase input to a rectified bridge, which acts as a "shield" from load imbalances. The IGBT (insulated-gate bipolar transistor) is able to rapidly turn on-off high current at 1,000 Hz, creating a

#### DETAILS

RoMan Manufacturing Inc.  
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## IHEA 2020 CALENDAR OF EVENTS

**MARCH 12–16**

### IHEA 2020 Annual Meeting

Tampa, Florida – *Brilliance of the Seas*  
[www.ihea.org/event/AM2020](http://www.ihea.org/event/AM2020)

**APRIL 6–9**

### Electrification 2020

Charlotte, North Carolina  
[www.electrification2020.com](http://www.electrification2020.com)

**APRIL 13–MAY 24**

### Fundamentals of Process Heating

Six-week online course | [www.ihea.org/event/OnlineSpring20](http://www.ihea.org/event/OnlineSpring20)

**For details on IHEA events, go to [www.ihea.org/events](http://www.ihea.org/events)**

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