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Spectrum Control: RF First





hen API Technologies rebranded in January 2023 to become Spectrum Control, the name was not new. Spectrum Control is wellknown to the industry, having been founded as Spectrum Microwave in 1968. Their first products were sophisticated electronic filters to prevent interference, and over time, Spectrum Control grew organically and used strategic acquisitions to diversify and extend their product offerings and market reach. Spectrum Control continued along this path until they were acquired by API Technologies in 2011.

The rebranding of API Technologies to Spectrum Control is likened to the legend of the Phoenix, rising to signify renewal and rebirth. In this case, the rebirth of Spectrum Control includes well-known brands like Weinschel, Inmet, Aeroflex, Magnum Microwave, Remec Components, Sage Microwave and a number of other acquisitions that extend the company roots back more than 70 years. The renewal of the company means that the goal of developing reliable, high performance technologies for powering and conditioning RF and microwave signals and protecting electronic equipment from electromagnetic interference remains the same. In this rebirth, Spectrum Control takes up the mantle of offering breadth and depth of electromagnetic spectrum capabilities to both the aerospace and defense and commercial industries.

The resurrection of the name embraces the transformation of the company. When CEO Rich Sorrelle joined Spectrum Control two years ago, he began a process to build a new kind of RF company. He implemented steps to:

- Modernize and streamline the go-to-market approach to better align with customers and be more responsive
- Invest in people and culture
- Strengthen the innovation pipeline to expand the solution set and reach new applications
- Improve delivery speed.

The Marlborough, Mass., facility is an example of this process. It has been completely re-imagined with upgrades that create better customer outcomes. These outcomes include better performance from an expanded product



portfolio as well as more consistent on-time delivery and greater product reliability. The facility upgrades include:

- Advanced solder workstation
- X-ray analysis
- Increased/higher speed test equipment
- Faster and improved aqueous cleaners and plasma treatment tools
- · Higher capacity package-sealing equipment
- Increased electronic monitoring systems for improved speed and accuracy
- Improved higher speed photo documentation equipment for increased reliability
- Class O ESD equipment.

This multi-purpose facility includes Spectrum Control's custom solutions team for design and development, as well as manufacturing. Spectrum Control leverages decades of design and manufacturing knowledge and experience to produce RF and mmWave components and subsystems from this facility. The Marlborough team uses that experience, along with a thin film deposition line, complete inhouse assembly and hermetic packaging, to develop hybrid microelectronics and integrated microwave assemblies. Further enabling vertical integration capability, this facility has complete in-house electrical and environmental testing capabilities. The commitment to quality is evident by the facility's MIL-PRF-38534 Class K (Space) qualification.

The re-imagining results in disruptive technologies, along with standard and custom products. These products include Spectrum Control's new SCi Blocks that incorporate RF and digital building blocks. These SCi Blocks function as standalone components or they may be integrated into higher-level assemblies. The products designed and manufactured in Marlborough also include SAW filters and oscillators. From this facility, Spectrum Control is the only U.S. manufacturer with high-power SAW filter capability.

With its heritage, investment and "RF first" philosophy, Spectrum Control is being renewed and reborn into a new kind of RF company.

www.spectrumcontrol.com