



Picture to be updated with new 2k injector(s)

[Radius Engineering Inc.](#) (Salt Lake City, Utah, U.S.) delivers net-shape composites manufacturing capabilities to aerospace companies leveraging 35 years of composites experience. This is accomplished with high degrees of process control using OOA (Out Of Autoclave) methods including RTM (Resin Transfer Molding), SQRTM (Same Qualified Resin Transfer Molding), and VARTM (Vacuum Assisted Resin Transfer Molding). As an AS-9100D certified supplier, Radius provides equipment, tooling, and process know-how to help customers achieve the highest level of quality and productivity.

The infusion of resin in RTM, SQRTM, VARTM, and other OOA methods is critical to producing high quality composites. Precise control is needed over temperature, pressure, vacuum, and flow rate of the resin throughout infusion and cure. This is often done with an injector, which uses a single operator interface to manage the process. Equipment must be compatible with a variety of materials, including standard injection (1k) and unmixed multi component (2k) resin systems. Multi component systems can be advantageous for a variety of reasons including safety, productivity, and ease of transport.

Radius 2k injectors use servo driven pistons and hydrostatic pressure to govern resin flow rate and mix ratio. This allows precise flow and pressure control regardless of high pressure or vacuum environments. Flow control is key to good resin mix ratios and performance can be automatically verified as required. Radius 2k injectors can also dispense conventional 1k resins or pre-mixed resins as a standalone single component resin system. Using either method the process is highly automated with limited resin handling and almost no operator involvement during the cure. Data logging and software designed by Radius Engineering provides stringent process specification compliance, and pairs readily with a workcell for seamless process integration. Radius 2k injectors build upon proven experience with 1k injectors to continue providing the highest level of quality and productivity to the composites industry.

More information can be found at the Radius Engineering booth, ###.