

## **CEO Note: Sensor Use Case – Composite Materials**

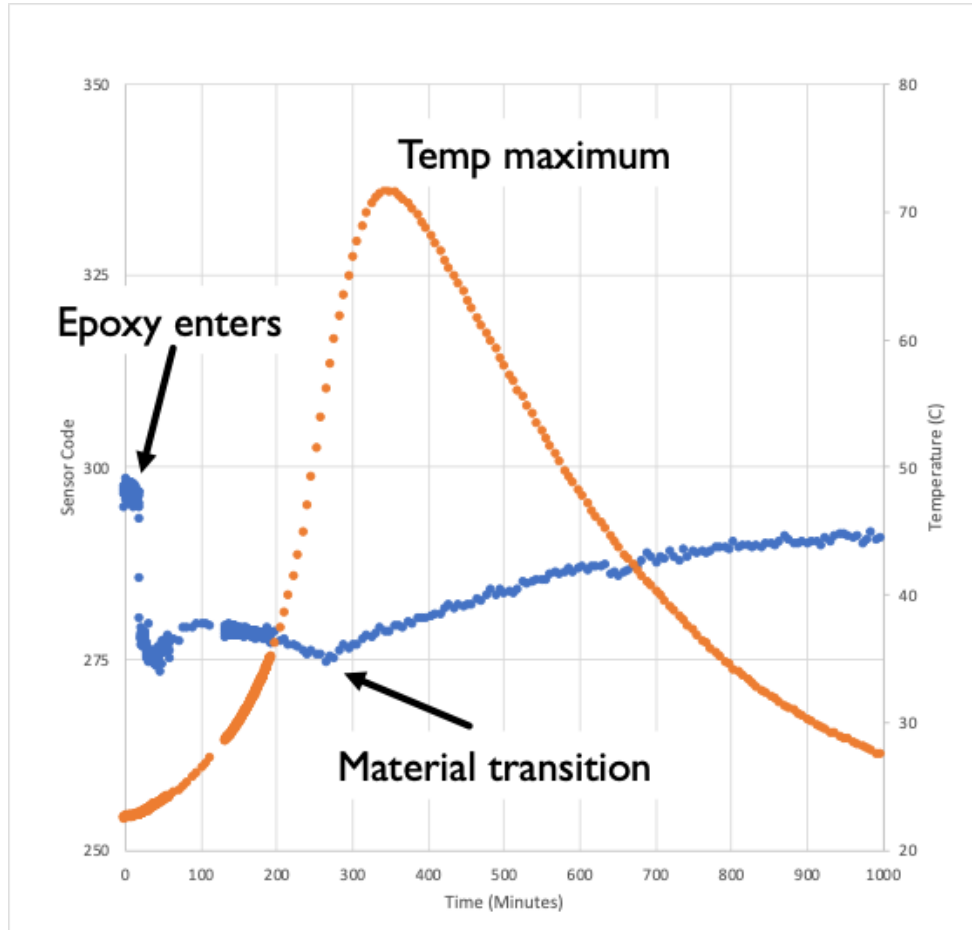
A Series of Messages from our CEO... Jo Major



RFID sensor tags are inexpensive requiring no batteries or wiring. They can sense a wide variety of parameters. To show this, below are the results of a single sensor tag placed within fiberglass during an epoxy infusion process. We can track, in real-time, both the local temperature and general material properties with this single tag.

We can provide powerful insights into this manufacturing process. About 20 minutes into the process, it is clearly observed that epoxy has arrived. Next, the epoxy transition point, a critical step in the curing of the epoxy, is directly observed at 260 minutes. Simultaneous tracking of the epoxy temperature shows the maximum temperature of the epoxy, above 70°C, at 340 minutes into the process.

These critical parameters are costly and difficult to measure in conventional composite manufacturing. These low-cost sensors revolutionize the ability to monitor and control critical composite manufacturing processes.



**EMBEDDABLE** - See within your composites

**REAL-TIME** - Directly observe critical steps

**REMOTE-SENSING** - No wires or batteries

**PERMANENT SENSORS** - Sensors can remain in-situ for field inspections

**LOW-COST SENSORS** - Economics allows disposal between uses

*Ready to Learn More About Wireless Composite Sensing?*

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