



Background

Merit Medical Systems makes medical devices for the cardiology and radiology industries, including catheters, digital pressure systems and angiography needles and has received a variety of awards from Fortune, Forbes and Business Week. Merit Medical (www.merit.com) is a \$250MM company and was founded in 1987.

Challenge

Quality sensor needed. Merit Medical envisioned a significant market opportunity for a first-ever digital inflation device. A plan was developed and the project was progressing, except the sensor component. Merit Medical could not secure a sensor source because the existing supply base was unable to provide a reliable design or high manufacturing yields. Many sensors were defective upon receipt or experienced infant failures (failures within 24 hours). The sensor component threatened to derail the entire project and jeopardize the opportunity.

Solution

A company was born, and sensors were shipping in record time. To address the sensor need, Fred Lampropoulos (Chairman/CEO, Merit Medical Systems) and Manny Rossell (co-founder, IC Sensors) formed Sentir Semiconductor, Inc. in 1991 – known today as Merit Sensor Systems, Inc. With limited resources and within one year, equipment was purchased, space was rented, employees were hired and product was shipping.

Key success factors were as follows:

- 1. Design** – the design was drafted, refined and perfected.
- 2. Process** – the process was developed, honed and institutionalized.
- 3. Equipment** – the equipment was installed, calibrated and monitored.

Results

- Merit Medical maintains virtually 100% of the global market for digital inflation devices.
- Merit Sensor Systems provides reliable pressure sensors to Merit Medical today.

About Us

Located near Salt Lake City, Utah, Merit Sensor Systems, Inc. (www.MeritSensor.com) partners with clients to design, manufacture and service high-performing, component-level piezoresistive pressure sensor solutions for automotive, medical, consumer, aviation, defense and industrial applications.

We offer full-service design capabilities, in-house wafer fabrication, unparalleled production yields at 95%, flexible shipping, packaging and assembly, piezoresistive technology (PRT), expansive pressure ranges (below 5 psi and above 10,000), complete pressure measurement (absolute, gage, differential and vacuum) and unmatched operating temperature range (-40°C to 150°C) via our **Sentium®** process.