

Thomas W. Caldwell, PE
Summit Associates of Bedford, LLC
16 Pebble Beach Dr, Bedford, NH 03110
Cell: 608.345.3050
twcaldwell@summitofbedford.com

Experience: Thomas Caldwell has over forty-five years experience in specialty materials and process development, manufacturing products for the automotive, instrumentation, power transmission, hand tool, aerospace and defense industries. His experience spans all metal casting processes and major alloy systems from lead to nickel superalloys, and includes eliminating defects in cast and wrought products, welding and heat treatment processes, and surface finishing. He has lectured in the USA, Germany, Switzerland and India on manufacturing premium quality castings. His experience also includes the design and operation of low and high volume precision machining operations, automated assembly and applying destructive and non-destructive analytical methods for insuring product integrity.

Forensic Experience: Retained as a consulting or testifying expert regarding product failure, technology valuation and misappropriation of trade secrets. Product failure subject matters include product design, material selection, failure modes, manufacturing process control and quality assurance for metallic and polymer based products. Technology based disputes have included patent valuation, patent infringement and misappropriation of trade secrets for metal products materials and manufacturing.

Safety-Critical Products: He has led organizations that designed, built and operated manufacturing lines for critical safety components for medical products, aircraft landing gear brakes, hydraulics and structural components, and automotive seat belt lockup, windshield wiper motor and window lift motor systems. Extensive experience in new product design and development, new product launch and quality control systems for high precision manufacturing and assembly operations.

Technology Development: Mr. Caldwell has launched ten technologies generating over \$400 million annual sales and has bought, sold or licensed fifteen technologies in North America, Europe and Asia. He has created a domestic injection molding joint venture, a technology development partnership in Switzerland, marketing and manufacturing partnerships in Germany and India, and has sold and sourced products to and from China. His experience includes creating and managing domestic and international supply chains and transforming organizations with lean manufacturing practices.

Degrees, Licensing, Professional: S.M. (Metallurgy), Massachusetts Institute of Technology, S.B. (Metallurgy and Materials Science), Massachusetts Institute of Technology, Registered Professional Engineer, Ohio #44056, US Patent Holder
Author, six peer reviewed publications (materials selection, materials processing and batteries)
Member, American Society for Metals
Member, American Society of Mechanical Engineers