

Thomas W. Caldwell, PE

Curriculum Vitae

Professional Experience

Mr. Caldwell has over forty-five years experience in specialty materials and process development, manufacturing products for the automotive, instrumentation, telecommunication, power transmission, hand tool, aerospace and defense industries. His experience spans all the metal casting processes and most 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. For twenty years, Mr. Caldwell was a technical paper peer reviewer for an engineering society; and 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.

Safety-Critical Products

For much of his career, Mr. Caldwell has led organizations that designed, built and operated manufacturing lines for critical safety components for medical products, aircraft landing gear brakes, aircraft hydraulics, automotive seat belt lockup, and both windshield wiper and window lift motor systems. He has deep experience in new product design and development, new product launch and quality control systems for high precision manufacturing and assembly operations.

Technology Development

He has launched ten technologies generating over \$400 million annual sales and has bought, sold or licensed fifteen technologies in seven countries in North America, Europe and Asia. Mr. Caldwell has created and guided an injection molding joint venture in the USA, 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.

Forensic Experience

Mr. Caldwell has been retained as a consulting or testifying expert in civil court cases regarding product failure, technology valuation and misappropriation of trade secrets. Product related subject matters have ranged from product design and failure modes to fitness for use, manufacturing process control and quality assurance practices for metallic and polymer bases products. Technology based disputes have included patent valuation, infringement and misappropriation of trade secrets for metal products manufacturing.

Background and Professional Honors

M.S. (Metallurgy), Massachusetts Institute of Technology, }
B.S. (Metallurgy and Materials Science), Massachusetts Institute of Technology} both Degrees in 1971

Registered Professional Engineer, Ohio #44056

US Patent Holder (metal fiber manufacturing)

Author, six published, peer reviewed research papers (batteries, materials selection and processing)

Sigma Xi, The Scientific Research Society, Full Member

Positions held

President, Summit Associates of Bedford, Bedford, NH (2003, 2006-current)

Chief Operating Officer, Light Metals Coloring, Inc. Southington, CT (2015-2016)

Principal, Blackstone Management & Consulting, Sutton, MA (2010-2014, current)

Vice President & General Manager, Hitchiner Manufacturing Company, Milford, NH (2004-2005)

President, MKC Worldwide, Inc., Madison, WI (2002)

President and CEO, Madison-Kipp Corporation, Madison, WI (1989-2001)

Executive Vice President, Doehler-Jarvis, Inc., Toledo, OH (1988-1989)

Vice President, Purchasing, Engineering and Operations, Doehler-Jarvis, Inc., Toledo, OH (1987)

Vice President, Marketing and Sales, Doehler-Jarvis, Inc., Toledo, OH (1982-1986)

Director, Marketing and Sales, Doehler-Jarvis, Inc., Toledo, OH (1982)

Marketing Manager, Doehler-Jarvis, Inc., Toledo, OH (1978-1980)

Manager, Engineering, Bearings Division, NL Industries, Inc., Toledo, OH (1975-1977)

Senior Engineer, Central Research Laboratory, NL Industries, Inc., Hightstown, NJ (1971-1974)

Research Assistant, Massachusetts Institute of Technology, Cambridge, MA (1971)

Teaching Assistant, Massachusetts Institute of Technology, Cambridge, MA (1970)

Professional Activities

Solidification Committee of AIME, American Institute of Mining, Metallurgical,
and Petroleum Engineers (1974-1978)

Co-Chair and Lecturer, Solidification Processing Seminar Series, University of Toledo (1976)

Nonferrous Materials Committee, Society of Automotive Engineers, Member (1982-1988)

Peer Reviewer, Technical Paper submissions, Society of Automotive Engineers (1984-2004)

Board of Visitors, University of Wisconsin Department of Mechanical Engineering,
Member (1992-1997) and Chair (1997)

Steering Committee, Advanced Casting Research Center, Metal Processing Institute, Worcester
Polytechnic Institute (1997-1999)

Guest Speaker, Tufts University, Gordon Institute, Operations Management (2010)

CEO Mentor, The Entrepreneur's Organization (2010-2012)

Board of Advisors, Viridis3D LLC (2010-2014)

Judge, Business Plan Competition, Boston College Carroll School of Management (2010-2015)

Member, American Society for Metals (current)

Member, American Society of Mechanical Engineers (current)