



Contact

N3502 Wellman Road
Lowell, WI 53557

Education

Case Western Reserve University
BS Metallurgy & Materials Science

Key Skills

Part, Gating & Mold Design
Casting Process Simulation
Heat Treatment
Melting Procedure & Alloy
Development
Slurry Formulation & Optimization
Dip Cell & Plant Startups
Training

Technical Areas of Expertise

Thirty plus years in the foundry industry with experience in alloy selection, design and optimization for specific applications. Melting and melting procedure development, refractory selection and usage. Slurry and shell creation with both automated and manual shell systems. Twenty years plus experience with atmosphere and vacuum heat treating. As part of a team, helped start-up three highly automated IC foundries. Designed some novel processes and equipment related to materials and heat treating.

Background

January 2023 – Present

Casting, Metallurgical, and Heat-Treating Consultant

Consultant to Casters and other producers of high-performance metallic components. Helped a particular client reduce reject rate from approx. 40% to <5% across three product lines. Have assisted other startups through dip cell qualification and slurry creation.

June 2024 – Present

Technical Director then Director of Operations – Investment Foundry in Wisconsin

Responsible for operations and P&L at a medium sized aerospace investment foundry.

September 1992 – January 2023

Process Engineer, Engineering Manager, Technical Director - Signicast Investment Castings

Started as a Process Eng, responsible for gating and part development. Introduced casting simulation, developed slurries and optimized them for our product mix and dip environment. Assisted material suppliers with quality issues that affected slurry performance. Performed a similar role with our metallic material processes and suppliers. Then managed process and project engineering in specific plants after assisting in their startup. Ended as Technical Dir with multi-site responsibilities.

October 1988 – August 1992

Plant Metallurgist - Manoir Industries

Alloy design and melting (arc and induction) of high temperature alloys for sand and centrifugal castings serving the petrochemical and thermal process industries. ASME Section IX welding procedure creation and qualification. Provided technical communication in support of sales, failure analysis and Metallurgical Services in support of our customers.