



Dr. Lee Rothleutner

The Timken Company

Dr. Lee Rothleutner is the Manager of Materials Research & Development at The Timken Company, where he leads a global team driving innovation in steel alloy design, heat treatment processes, coatings, and additive manufacturing. With a Ph.D. in Metallurgical & Materials Engineering from the Colorado School of Mines, Dr. Rothleutner specializes in advanced ferrous alloy development and sustainable metallurgical practices.

At Timken, he has pioneered deep case induction surface hardening for main shaft bearings used in some of the world's largest wind turbines, demonstrating a strong track record of applying cutting-edge materials science to enhance manufacturing efficiency and product durability. His leadership extends to managing state-of-the-art materials characterization and damage analysis laboratories that support over 1,000 technical requests annually.

Dr. Rothleutner's expertise bridges fundamental metallurgy and practical manufacturing challenges, making him a key contributor to integrating advanced technologies like AI into materials development and process optimization. His work supports Timken's strategic goals of improving productivity, quality, and innovation on the shop floor.

Recognized as an emerging leader in heat treatment and surface engineering, he actively contributes to ASM International's Heat Treating Society and holds a Professional Engineer license in Ohio. Dr. Rothleutner's unique blend of technical depth and leadership experience positions him to provide valuable insights on the opportunities and barriers of AI adoption in industrial settings.