

STEEL FOUNDERS' SOCIETY CTA CONSULTANT

1. Richard H. Sailors -----ENGINEERED MATERIAL SOLUTIONS LLC

2. (931) 363-1732 Off., (931) 638-0798 Mobile, richard.sailors@att.net

3. Employment/Education:

Purdue University (1957 – 1963) BS, MS, Metallurgical Engineering
GMC-Allison Div. (1963 - 1964) Research Metallurgist
Caterpillar Tractor Company (1964-1970) Research Metallurgist
University of Ill. (1970 – 1973) PhD. Engineering
University of Ill. (1973 – 1974) Post Doc.
Bucyrus-Erie Company (1974 –1980) Chief Engineer of Technical Services
Magotteaux (1980 – 1995) Director of Research and Quality Assurance
Consultant (1995--1997)
Metso Minerals (1997--2002) Technical Director
Retired (2002)

4. Have matched materials to their applications for numerous castings used in mining equipment concentrating on Fracture Toughness and Wear Resistance. Includes Mechanical as well as Metallurgical considerations. Field and Laboratory Failure Analysis provided information for Alloy modification (Design for Bainite rather than Martensite) and/or modifications to production procedures.

Have written Material Specifications and Foundry Manufacturing Procedures for Low Alloy Steel, Manganese Steel, High Chromium White Iron, Gray and Ductile Iron (i.e. Charge makeup, melting, pouring, shake out, heat treating, finishing, final inspection). This includes a formal Integrated Manufacturing Quality Plan with Procedures listed and “Hold” points designated for potential Customer Inspection.

5. Categories of Consulting: Metallurgy: Charge Make-up to final Inspection
Material Specifications/ Manufacturing Procedures
Failure Analysis, both Field and In-House