



Name: ROBERT A. WAGNER

Title: Mechanical Engineer and Director of Safety

Education: Diploma, BS in Mechanical Engineering

Affiliations: Member, American Society of Mechanical Engineers (ASME)
Member, International Society of Automation (ISA)
Vietnam Veteran

Rob has over 35 years of experience in diverse manufacturing industries, including specialty chemicals, specialty metals (including NaK and sodium), textile fibers, pigments, and glass. Rob has extensive background in project engineering, project management, automation, plant engineering, and maintenance. A few highlights of his career are as follows:

- Extensive background in project management, automation and maintenance.
- Experienced in specialty chemicals, specialty metals, powdered metals, and glass.
- Goal oriented, yet analytical in approach for expeditious solutions to complex problems.
- Skilled in project management and team building.
- Adept in developing written procedures and specifications.

Relevant Professional experience includes:

- Project management and construction experience with large capital projects.
- Authored Piping Standards, Equipment and Construction Standards, Contract General Conditions, Drawing Standards, Contractor Safety Training Manuals, and Functional Specifications.
- Experienced in designing piping systems for a wide variety of materials including steam, water, gasses, hazardous and non-hazardous chemicals.
- Experienced in taking small-scale R&D pilot work to full size production units.
- Designed and programmed PLC machine control systems for various industries. These industries included warehouse systems, bakeries, robotic vehicles, chemical batch and continuous processes.
- Experienced in instrumentation and automation of furnaces, tunnel kilns, spray dryers, paddle dryers, and chemical reactors.
- Experienced with highly hazardous materials including hydrogen, diborane, sodium, potassium, acids and caustics, and various other organic and in-organic chemicals.
- OSHA Process Safety Management, ASME Piping & Press Vessel Codes, NFPA Standards.

Alkali Metal Experience with Creative Engineers, Inc. Includes:

- Operator – Australian Magnesium Corporation – Sodium removal and cleanup of process pilot plant – 6 tons of sodium.
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- Field Manager – ASARCO Sodium Storage Tank Cleanout - 2006
- Operator – TSF SNAP Reactor Dismantlement Project - 2006
- Operator – Fluor Hanford Cold Trap Sodium Removal – 2004
- Operator – Fluor Hanford CRCTA Residue Removal – 2004
- Operator – NaK Reaction Tests and Demonstration (UKAEA) 2003
- Operator – NaK System Modifications Titanium Metals Inc 2009

Alkali Metal Experience with Callery Chemical Company Includes:

- Construction of a new alkali metal alkoxides production unit.
- Design and construction of one bulk alkali metal storage systems with 2 large tanks

Employment History:

Creative Engineers, Inc. Mechanical Engineer	2003 to Present
Hoeganaes Corporation, Inc. Project Manager	1999 to 2003
Callery Chemical Company (division of Mine Safety Appliances) Senior Mechanical Engineer & Project Manager	1994 to 1999
Synerfac, Inc. Project Manager	1989 to 1994
Philadelphia Control Systems, Inc. Senior Automation Engineer	1987 to 1989
PQ Corporation, Inc. Maintenance Engineer & Plant Engineer	1979 to 1987
W.R. Grace & Company Plant Engineer	1977 to 1979
E.I. DuPont de Nemours & Co. Process Engineer	1975 to 1977