

Thomas R. Snape

Research Engineer
Advanced Structures and Composites Center
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Professional Preparation

B.S. Mechanical Engineering, University of Maine 1983

Appointments

2006 – present

University of Maine
Advanced Engineered Wood Composites Center
Research Engineer

Coordinate materials testing and research projects for industrial clients using composite materials in commercial applications.

Conduct and supervise testing of advanced composite materials, with an emphasis on marine composites.

Design and selection of composite materials based on service loads and other requirements.

Fabrication of composite material samples for mechanical testing, using a variety of materials and methods, including prepreg and VARTM technologies.

2004 – 2006

Ramsay Welding & Machine Co. Inc.
Project Engineer

Involved in mechanical projects for a variety of industries, including saw mills, paper mills, OSB plants, and municipal applications.

Engineering design work including manufacturing machinery, and structural and process applications.

Estimate jobs and supply quotes to customers.

Plan and manage labor, materials, and associated costs, for projects both inside shop and at remote job sites.

Setup and operation of CNC flame cutting machine.

AutoCAD drafting.

1984 – 2004

Lincoln Pulp & Paper Co., Inc.
Project/Maintenance Engineer, Paper Mill 1995-2004

Maintenance planning including preventive and predictive work.

Major maintenance outage planning and supervision.

Projects involving manufacturing process design and installation of associated equipment.

- Projects involving procurement, reconditioning, and installation of manufacturing equipment from the used equipment market.
- Projects involving design, fabrication, and installation of many paper machine related components and supporting equipment.
- Mill-wide on-call responsibility for mechanical maintenance.
- Coordination of maintenance and engineering projects with many outside contractors and vendors.
- Responsible for submitting operating and capital budgets.
- 1989-1995 Paper Mill
Beater Room Supervisor
- Supervised 20 union employees in stock prep for paper machines.
- Responsible for operation and maintenance of all equipment and processes in area.
- Introduced improvements to processes to reduce variation and improve quality and production.
- Managed budgeting, inventory and ordering for area.
- 1987-1989 Paper Mill
Production Engineer
- Improved procedures and practices in paper mill to reduce waste, improve quality, and increase production.
- Initiate and oversee installation of new process equipment.
- Troubleshoot and address process and production problems.
- 1984-1989 Technical Department
Process Engineer
- Responsible for designing and conducting trials on paper machines for new chemicals and processes.
- Development of new paper grades including writing specifications and running on-machine trials. This included the development of the business reply card grade, which is still a staple product on the Lincoln paper machines.
- Quality control responsibilities, including setting up and auditing of testing procedures and equipment. Managed collaborative testing of measuring equipment to ensure test accuracy.
- Investigation of customer concerns and requests. This often involved travel to customers' shops as a field technical rep.
- 2002-2003 Northern Penobscot Tech Region III
Adult Education Instructor

Created curriculum and instructed adult education class “Advanced Excel with VBA”.

Created curriculum and instructed adult education class in AutoCAD. Have taught AutoCAD three semesters to date.

2001-present

Self Employed

Freelance CAD and Development work

Created hundreds of 2D CAD drawings and 3D models for an OEM tube fitting and assembly manufacturer in the Netherlands. All business was conducted over the Internet. Some work involved calculation of coordinates for automated tube bending machinery, based on customer supplied dimensions.

I have completed various smaller CAD and programming projects for individuals via Internet contact.

Skills Summary

Mechanical engineer with 22 years experience in industrial manufacturing environments. In depth knowledge of mechanical equipment and systems, including pumps, drive trains, and material handling and processing.

Most recent experience (5 years) working in advanced composite materials R&D facility. Proficient in design, fabrication, and mechanical testing of composite and other materials.

Experienced in mechanical design and drafting, project management, and maintenance planning. Possesses strong ability to analyze and troubleshoot mechanical systems and processes.

Advanced computer (PC) user, with skills in CAD, spreadsheets, databases, and Visual Basic programming.