

ROBERT S. FLIGHT, P.E.

71 Eagle Rock Drive
Rochester, NY 14609
585-666-0172
rsflight@cdr-roc.com

EDUCATION Clarkson University, B.S., Mechanical Engineering

TECHNICAL EXPERTISE In depth experience in mechanical design, development and analysis of machine elements and tooling components from concept to production. Strong knowledge of automation equipment, metal removal applications, and sheet metal processing. Extensive design of tooling, jigs and fixtures to locate and hold components. Thorough product design experience of metallic and non-metallic products. Trouble shooting existing designs and products. Thorough knowledge and application of power transmission components, hydraulic and pneumatic actuators, pump systems, spring design, injection mold design. Familiar with setup, application, and use of PLC systems. FMEA and MPC process experience. Knowledgeable with programming languages C, BASIC, and LISP. Fluent in the use, organization, and customization of AutoCAD, SolidWorks,, MasterCAM, Anvil, and Intergraph CAD software. Broad use of Microsoft Word, Excel, Access, PowerPoint, Office, and Project.

CERTIFICATIONS & PATENTS Professional Engineering License
Patents granted: 4,654,928, 4,672,713, and 4,689,850.

EXPERIENCE

10/04 to date **SENIOR LABORATORY ENGINEER-**
University of Rochester, Physics & Astronomy Department

Primarily responsible for the design, development, and group integration of the Minerva project for neutrino research funded by DOE and assembled at Fermi National Laboratory. Developed concepts, completed designs, and created details drawings of custom equipment, fixtures, and analysis of mechanical components from concept through manufacture. Responsible for accurate job estimating, scheduling, and tracking from project start to project completion. Continually assisting professors, students, and technicians, at many universities, to maintain schedules and budgets within targets. Coordinate team efforts with other groups at different project phases. All facets of design and FEA analysis is 3D, SolidWorks and AutoCAD based. All project presentations and progress tracking involve extensive use of Microsoft Word, Excel, Access, PowerPoint, and Project.

ROBERT S. FLIGHT, P.E.

Page 2

2/88 to 10/04 **SENIOR ENGINEER**- Creative Designs of Rochester, Inc., Designers and builders of custom machines and equipment.

Developed concepts, completed designs, and created details drawings of custom equipment, sheet metal components, injection molds, tooling, jigs, fixtures, product design, and analysis of mechanical components from concept through manufacture. Responsible for accurate job estimating, scheduling, and tracking from project start to project completion. Continually assist customers in overseeing all aspects of the build phases of industrial projects to maintain schedules and budgets within targets. Supervised team efforts with Mechanical and Electrical designers and build leaders involving design concept, design specific details, build sequence, and debug of custom equipment. Created custom software creation in C, BASIC, and LISP to automate computer tasks, control automated machines, and automate data acquisition needs. All facets of design is 2D & 3D CAD based utilizing AutoCAD, SolidWorks, MasterCAM, Anvil, and Intergraph softwares. All job presentations and tracking phases involve extensive use of Microsoft Word, Excel, Access, PowerPoint, and Project.