

Michael A. Waggoner, MSME, EIT
7734 15th Ave NE
Seattle, WA 98115

Email: mikewagg@gmail.com
Phone: (206)954-4564

ABILITIES

- Exceptional interpersonal skills developed during teaching, working directly with suppliers, direct sales, and interfacing with factory personnel to solve production problems
- PLC, JAVA, C++, Matlab, and other programming
- Documentation skills developed during a Master's Thesis and during BOM development at Kenworth
- Solidworks - Over 5 years experience. 10 years CAD Experience, including Pro/E, CosmosWorks and ANSYS FEA
- Thermal Management of Exhaust Flows using CFD
- Hands-On Manufacture and Repair of Test Equipment; CNC Machining and Welding
- Data logging and analysis using a variety of DAQ equipment, including proprietary

ACCOMPLISHMENTS, AWARDS, AND PROFESSIONAL TRAINING

- Master's Thesis, *Gas Impregnated Thermoforming of Recycled Polyethylene Terephthalate*.
- Mechanical Engineering Teaching Assistant of the Year, 2005.
- Participation as project manager, designer, and fabricator in Formula SAE, SAE Mini Baja, and SAMPE Composite Contests. Top finishes in multiple events.

EDUCATION

Fall 2007 – Sp 2008 University of Washington, Seattle, WA
Certificate Course in Basic Medical Sciences

Fall 2003 – Sum 2005 University of Washington, Seattle, WA
MSc Mechanical Engineering, Thesis Option
Focus in Manufacturing and Thermodynamics

Win 2000 – Sum 2003 Western Washington University, Bellingham, WA
BSc Industrial Engineering Technology with Focus in Vehicle Design
Minor in Mathematics, 1.5 Years Coursework in Computer Science, Dean's List Winter '02

WORK HISTORY

Jan 2013 – Current

CEO
Grow Plastics

Developed pilot line and technology for generation of sandwich core PLA products.

March 2010 – July 2013

Project Engineer
Measurement Tech NW

Developed flame test chamber for evaluation of firefighter turnout gear to ASTM F1930 standards. Responsible for all aspects of system, from design of components to budget and selecting subcontractors. Video at: <http://www.youtube.com/watch?v=Ifz37WpYuq8>

July 2008-March 2010

Technology Leader
Microgreen Polymers

Developing new processing conditions for microcellular plastics, including developing control systems for thermoformers and pressure vessel systems. Integration of both Lab-style and PLC controlled systems for quality control. Analysis of feedback for quality control. Business development, management of joint development projects.

Sept 2005-July2008

Design Engineer
Kenworth Truck Co, Kirkland, WA

Designed process control systems for power steering systems, including closed loop fan systems. Used CFD to design exhaust diffusion systems, including arranging prototyping, and evaluating using thermocouples. 1 patent issued, 4 in process.

Sept 2004-June 2005

Research and Teaching Assistant
ME495 Formula SAE and ME355 Manufacturing, Plastics research
University of Washington, Seattle, WA

Management and supervision of 25 students in senior design project. Lecturer in plastics processing, shop supervisor for mechanical engineering department. Developed new process for foaming plastics; 6 patents filed with University, 2 under license currently.