

Andrew Grove

205 Trenton Avenue • Pittsburgh, PA 15221-4809
Phone: (412) 351-4993 • andrewgrove1@verizon.net

Computer Skills:

• Microsoft Word, Excel and Publisher • SolidWorks Office Professional 2012 • Autodesk Inventor V7 - 2010

Education:

June 2008	SolidWorks CSWA Certification
January 2007	Autodesk Inventor Vault 5 and Routed Systems Training
December 2003	Autodesk Inventor Basic Design Training
May 1998	Pro/ENGINEER Basic Design Training
December 1996	Carnegie Mellon University, Donald H. Jones Center for Entrepreneurship Executive Course in Technology Commercialization
October 1988	Pittsburgh Technical Institute - Associate Degree in Specialized Technology Intergraph CAD Computer Systems Management
October 1983	Pittsburgh Technical Institute - Associate Degree in Specialized Technology Mechanical Drafting and Design Technologies
June 1982	Woodland Hills High School, Pittsburgh, PA

Work Experience:

01/2010 - Present	Grove Mechanical Solutions, Inc., Pittsburgh, PA Position: Mechanical Designer - Owner Responsibilities: Contract mechanical design service to a variety of customers utilizing SolidWorks CAD software. Projects include servicing the energy, health care, manufacturing and consumer product design industries.
07/2009 - 01/2010	Classic Conveyor Components, Blairsville, PA Position: Mechanical Designer - Contracted through JH Technical Services Responsibilities: Developing CAD standards and assisting in the transition from 2D CAD to Autodesk Inventor 2010 3D solid modeling software.
01/2008 - 02/2009	Versa-Matic Pump Company, Export, PA Position: Mechanical Designer - Contracted through Grove Mechanical Solutions, Inc. Responsibilities: Assisting Versa-Matic in updating a 4,000 part database consisting of SolidWorks part, drawing and assembly CAD files that span over a decade. Supporting drafting and document control efforts while implementing CAD and drafting standards.
12/2006 - 01/2008	Chemco Systems, L.P., Monongahela, PA Position: Mechanical Designer - Contracted through Grove Mechanical Solutions, Inc. Responsibilities: Chemco designs and fabricates bulk material processing equipment contained within a silo. A silo would commonly incorporate dust collectors, volumetric feeders, cyclone particulate classifiers, piping, ductwork and blower driven material delivery systems. I assisted in transitioning Chemco from 2D Autocad to 3D Autodesk Inventor CAD software.
01/2004 - 10/2006	Westinghouse Electric Company, Monroeville, PA Energy Center Position: Mechanical Designer - Subcontracted through MESA Responsibilities: Using Autodesk Inventor software, I supported the Reactor Vessel Head Program (RHVP) on the H.B. Robinson, Millstone, Beaver Valley and South Texas projects involving all reactor vessel components above the vessel flange. I assisted co-workers with Inventor CAD issues, implemented cable routing software and interfaced with vendors and fabricators.
06/1998 - 02/2002	PPG Industries, Windshield Fabrication Plant, Creighton, PA Position: Mechanical Designer - Contracted through Grove Mechanical Solutions, Inc. Responsibilities: Supporting the plant engineering and maintenance departments using Microstation Modeler and SolidWorks software to design new and enhance existing plant tools and equipment in the automotive windshield manufacturing process. Due to just in time manufacturing and zero defect policies, much of the existing equipment and processes had to be upgraded to enable hardware quick change capabilities and part traceability for quality control purposes.

- 04/1998 - 06/1998 ASKO, Inc., Manufacturing Facility, Homestead, PA
Position: Industrial Designer - Contract Employee
Responsibilities: Supporting plant and industrial engineers, I measured and drafted the entire facility including building, machines and cranes for a plant upgrade study. I plotted the floor plan with existing equipment in phantom line and attached this drawing to a sheet metal base. Machines and equipment were plotted and attached to foam core figures with a magnetic strip underneath. Engineers were able to envision many different "what-if" scenarios to complete their study.
- 05/1996 - 04/1998 ALKAB Contract Manufacturing Inc., New Kensington, PA
Position: Mechanical Design Department Manager
Responsibilities: Start up of Mechanical Design Department to compliment the manufacturing facility that had been in place for six years prior. Major customers were ALCOA, PPG Industries and SONY Corporation. I was responsible for computer hardware, software, hiring personnel, customer contact, and project coordination. Major focus was supporting the PPG Creighton facility with mechanical design services. I numerous hours in the fabrication shop and became well acquainted with manufacturing, assembly, troubleshooting and field installation activities.
- 04/1994 - 03/1996 PPG Industries, Automotive Glass Division at Glass Technology Center, Harmarville, PA
Position: Mechanical Designer - Contract Employee
Responsibilities: Supporting automotive glass and research department in mechanical design efforts at several production facilities. I built a comprehensive 3-D model of an existing test furnace undergoing upgrade. At this point very little design work was done in 3-D and some new ground was broken on this project. Field work included inspections at fabrication vendors as well as PPG Tipton, Crestline and Creighton glass production facilities.
- 04/1990 - 01/1993 Eichleay Engineers, Pittsburgh, PA
Position: Piping Drafter
Responsibilities: Supporting the industrial piping group, working in a 2-D Microstation CAD environment, drafting single line, double line, P&ID and PFD drawings. Major projects were for Wierton Steel Mill coiling operation and BASF chemical facilities. I Assisted the CAD development group in evaluating 3-D piping software packages.
- 01/1990 - 04/1990 Key Design, Carnegie, PA
Position: Mechanical Drafter - Contract Employee
Responsibilities: Revisions and markup drafting in a 2-D Intergraph CAD environment for a Steel Mill Pickeling line project.
- 09/1988 - 07/1989 PPG Industries, Commercial Glass Division, Pittsburgh, PA
Position: Mechanical Drafter
Responsibilities: Supported the Commercial Glass Division in the design of the Perry, GA float glass plant. Major activities involved the scrap glass reclaiming system, a series of hoppers, conveyors and crushers that operated underneath the production line.
- 04/1988 - 09/1988 Pittsburgh Technical Institute, Pittsburgh, PA
Position: Evening Supervisor / CAD Instructor
Responsibilities: I was responsible for the CAD lab, duties included: assisting students and completing daily system backups, I also developed a curriculum and instructed a basic course for Intergraph CAD Engineers and managers that interfaced with CAD personnel.
- 10/1986 - 01/1987 Keystone Drafting Company, Wilksburg, PA
Position: CAD Drafter
Responsibilities: Computervision 2-D and 3-D drafting of parts manuals for Westinghouse Light Rail Transit Systems.
- 01/1984 - 09/1986 PPG Industries, Automotive Glass Division, Pittsburgh, PA
Position: Mechanical Drafter
Responsibilities: Supported the automotive glass engineering department using Intergraph CAD on material handling and plant layout projects for numerous facilities. I was tasked with orienting new employees and training them on Intergraph and drafting standards.