# Andrew S. Kwiecien

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# Summary of work experience:

I have over 20 years experience in the engineering field with mechanical design and development of off-road vehicles for the agricultural and construction industry, which include locomotive & construction diesel engines. Machine design of automotive, printing presses, industrial automation and robotics, plant and equipment layout and design. Hydraulic hose and tube design used on construction and agricultural off-road heavy equipment. I have experience with plastic parts and components used in the food package container industry. E/M packaging design for the aerospace industry. ANSI Y14.5 Drawing & Tolerance Standards Used MIL-STD and DOD-STD for drawing release. I have extensive experience on Pro-E/2000i ,v2001 and CATIA v4.2 design systems, using solids, surfacing, sheet-metal, advanced assembly and modeling, GD&T, Intra-link, Pro-Process and PDM & CMS. Experience with Unix, Windows NT, and IBM Mainframe hardware platforms.

# **Professional Experience:**

## Caterpillar, Inc. - Aurora, Illinois

July 2003 to December 2008

Engineer Mechanical Design – Pro-E Wildfire & v2001

Design of hydraulic systems for medium wheel loader tractors, including specification requirements of hydraulic/mechanical components. In process of taking tier IV hydraulic system project from conception to production. Weekly design review meetings and management of tasks. Design and layout of hydraulic fluid lines and hoses for production tractor assembly. Design of miscellaneous sheet-metal and mechanical parts.

## Prairie Engineering Inc. - Naperville, Illinois

April 2002 to June 2003

Engineer Mechanical Design – Pro-E v2001

Involved in design and development of new agricultural equipment used in ground preparation. Created necessary assemblies, 3D models, drawings, Bill of Materials for production. Also worked in the combine drive-train group for CNH Corp. Prepared new design and layouts necessary for final release to production.

#### CNH Corporation - Burr Ridge, Illinois

November 2000 to March 2002

Sr. Mechanical Designer – Pro-E v2001

Worked on various Agricultural Equipment. Combine Drive-Train Group new production releases. Designed new plastic components used in new production planter. Other responsibilities included designing new equipment for Emerging International Markets overseas. Designed according to specifications and standards requested per marketing and sales. Attended meetings and communicated with production facilities to meet customer orders and shipping requirements. Created necessary assembly drawings, BOM and Pro-E models. Groups I worked in were Combine, Planters, and Tractor. *Also worked at CNH:* 04/99-01/00, 2/94-11/97, 12/89-12/90, 01/86-04/86, 07/85-10/85

#### BMI Corporation - Palatine, Illinois

August 2000 to November 2000

Mechanical Designer - Pro-E v20/ 2000i

Created custom designs with Pro-E sheet-metal of one and two piece shields used in the computer and wireless industry. Customers included Motorola, Nokia, Cisco, Intel, Ericsson and various companies. Communicated with companies to insure design met their specifications. Design requirements were done according to their physical PCB layouts and parameters. Created necessary drawings and Pro-E models for final submittal to customer. Worked with machine shop to get parts made on schedule to meet deadlines.

April 2000 to August 2000

Mechanical Designer - Pro-E v2000i

Worked on the electro/mechanical components for the Bus and Rail Groups. Created necessary assembly drawings, BOM and Pro-E models. Design involved new updates and technology for Electro-Mechanical Door Systems used in the transportation industry.

# Whirlpool Corporation - St Joseph Tech Center, St Joseph, Michigan

January 2000 to April 2000

Mechanical Designer - Pro-E v20

Worked on the electro/mechanical components for the washer/dryer group. Also designed plastic components and part for the dryer group. Created necessary assembly drawings, BOM and Pro-E models. Designed new Test Fixture to be used for motor dynameter, test. Worked with machine shop to get parts made on schedule to meet production date requirements.

# **Sundstrand Corporation- Rockford, Illinois**

December 1997 to March 1999

E/M Designer/Checker - Pro-E v20/Catia Support

Responsible for layout, design and documentation of new power generation and controls for various aircraft programs military and commercial. E/M packaging design and assembly per customer requirements. Some of the programs were Hawker Horizon, 767-400, Global Express and Fairchild Dornier. Other responsibilities included, checker for engineering change orders for final release to specifications. Was data manager for electronic controls drafting department. *Also worked at Sundstrand* 06/87-12/88, 04/86-12/86, and 10/85-01/86.

# **List of Other Professional Experience**

Rockwell Int'l. Corp. – Westmont, IL. - Goss Printing Press Systems – Commercial Printing Press Design Matsushita Industrial Co. - Franklin Park, IL - Automation Equipment Layout & Design

IBM Corporation - Lexington, Kentucky - Test Equipment Design

Gilman Engineering & Mfg - Janesville, Wisconsin - Automation Equipment

Harnischfeger Corporation-P&H - Milwaukee, Wisconsin, - Heavy Equipment Controls

Danly Machine Co. - Cicero, IL 1989 - Automotive Press Design

Navistar International Corp.- Melrose Park, IL -Diesel Engine Design Group

Imperial Eastman Corporation - Niles, IL - Hydraulic Valve Package Design

A.B. Dick Co – Vidoejet Systems - Elk Grove Village, IL – Ink Jet Printing Systems

General Motors Corp. -Locomotive Div.-LaGrange, IL-Diesel Engine Design Group

Abbott Laboratories - North Chicago, IL - Pharmaceutical Facilities Equipment Layout

Herman Bogot Co. - Chicago, IL - Heat Recovery Systems

Chicago Finished Metals - Bridgeview, IL – Plant Engineering

Meade Electronics - Broadview, IL - Electronics Equipment Design

International Harvester Co. - Libertyville, IL Hough Equipment Division - Construction Equipment

Skill Corporation - Chicago, IL - Power Tools Group

AM Kinsey Engineering - Bloomingdale, IL - Civil Engr. - Subdivision Design & Development Illinois Dept. of Transportation - Schaumburg, IL - Civil Engr.-Roads & Bridges Design.