

Daryn D. Bertelson
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OBJECTIVE

Mechanical Engineer.

EXPERIENCE

Mechanical Design Engineer. Full Time. [Cannon](#) – Marine Electronics Group - [Johnson Outdoors, Inc.](#) Mankato, MN. Apr 2006 - Present

Mechanical design and project management of electric downriggers and accessories for deep water controlled depth fishing. Coordinate with marketing, electrical engineering, manufacturing, purchasing, suppliers, quality control, and other members of the Research and Development Team. Use Pro/E Wildfire 3.0 and AutoCAD to design injection molded plastic parts, machined stainless steel, machined aluminum, weldments, gears, drive shafts, clutches, gaskets, electronics (geometry only), fasteners, liquid crystal displays, membrane switches, wiring harness, power cables, decals, and packaging for downriggers (consumer product).

Major Projects:

1. Part of Mechanical Design team that improved the newly acquired Cannon product including creating a new salt-water resistant version of the downriggers. Received the Chairman's Recognition Award for that effort.
2. Tilt-Up Bracket: Project Manager and Mechanical Design Engineer for a new product that allows users to tilt up their downriggers. This allowed us to compete better with some of our competitors. Maintained a high profit margin on this product.
3. Mechanical Design Engineer for a complete re-design of the downriggers. Helped complete several functional prototypes using several different rapid prototyping technologies including FDM and SLA.

Mechanical Design Engineer. Full Time. [SECOA](#). Champlin, MN. Dec 2003 – Apr 2006

Performed lead drafting and design support for portable stages, risers, stairs, guardrails, and cross bracing. Solved complex geometric and structural problems on short schedules. Calculated load and deflection for aluminum and steel frame members. Maintained standard CAD block and detail database. Organized and tracked the status of numerous projects. Created spreadsheets to expedite routine calculations. Created mechanical and electrical installation and fabrication drawings using AutoCAD and SolidWorks.

Custom Products Engineer. Full Time. [Landscape Structures](#). Delano, MN. Jun 2002 – Oct 2003

ISO 9001:2000 and ISO 14001 certified company. Designed custom parts for playground equipment. Created drawings, CNC programs, bills of materials, and routings for creative steel, aluminum, and High Density Polyethylene parts and assemblies within very strict design parameters. Provided quotes for sales representatives.

Project Engineer. Full Time. [Daktronics](#). Brookings, SD. Dec 1997 – Dec 2001

Coordinated the mechanical design of large integrated display systems and their support structures. Worked with customers, architects, and consulting structural engineers. Designed and analyzed structures with dead, live, and wind loads using LRFD. Designed aluminum cabinets and assemblies. Supervised interns.

Mechanical Design Assistant. 20 - 25 hrs/week. [Daktronics](#). Brookings, SD. May 1994 - Dec 1997

Produced mechanical shop, structure, assembly drawings, and bills of materials for electronic display systems. Became a mechanical project design leader, trainer, and Student Employee of the Month.

Assembler / Metal Fabricator. 20 hrs/week. [Daktronics](#). Brookings, SD. May 1991 – May 1994

Constructed electronic displays. Fabricated sheet metal parts. Operated the Press Brake, CNC Strippit Punch, 30/30 Strippit Punch, Notcher, and Spotwelder.

EDUCATION

Mechanical Engineering. [South Dakota State University](#). Brookings, SD

Received a BS from the college of Engineering with a major in Mechanical Engineering in May 1997. Qualified as an Engineer-In-Training. Electives: Aerodynamics, Propulsion, Turbo Machinery, Intro. to Numerical Analysis, Design of Thermal Systems, Computer Aided Engineering (ANSYS), and Child Psychology. Senior design project: Ground Effect Vehicle. Also took Design Fundamentals (Visual Arts) and private pilot classes. Transferred from Embry-Riddle Aeronautical University.

DESIGN TOOLS

- **Pro/E:** Complex mechanical and electro-mechanical design.
- **SolidWorks:** Experienced with "Top-Down" parametric solid model assemblies.
- **AutoCAD:** Complex 2-D and 3-D drawings. Very experienced.
- **Carrara:** 3D Computer animation software. Here are a couple of my creations: [journey](#) and [landing](#)
- **Dos, Windows, Word, Project, Excel, and HTML.**