

AARON STEPHENS

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DIRECTOR OF PRODUCT DEVELOPMENT | PRODUCT DESIGN | ENGINEERING LEADERSHIP

EXECUTIVE SUMMARY

Product design, engineering, and manufacturing leader with 30+ years turning concepts into commercially successful products. Led engineering organizations and remained hands-on in mechanical design, prototyping, design for manufacturing, supplier development, and commercialization. At Geremarie, led product engineering supporting approximately \$40M–\$50M in annual output and flagship MasterCraft, Aviara, and premium pontoon platforms. At Pursuit Marketing, helped grow monthly production from about 6,000 to 22,000 units and net income from \$8M to \$24M. Four granted U.S. patents; all commercialized.

CORE EXPERTISE

Product design and development | Mechanical engineering | Engineering leadership | New product introduction | DFM and product commercialization | CNC machining and fabrication | GD&T | Supplier development and global manufacturing | Polymer-derived ceramic and forged-carbon composites | Pneumatic and pressure systems | ERP: Global Shop and EstiTrack

PROFESSIONAL EXPERIENCE

Owner | Spin Doctor Cyclewerks | Bartlett, IL

- Grew annual revenue from \$350,000 to \$1,000,000 through operating improvements; led a four-person team across bicycle and e-bike sales, service, inventory, and custom builds.
- Introduced 5S shop organization to improve workflow and customer throughput.

Director of Engineering | Geremarie | Lake Zurich, IL

- Led approximately 12 engineers supporting 160 production employees and \$40M–\$50M in annual output; directed new product development, prototype and sustaining engineering, manufacturing support, and documentation.
- Led product engineering for MasterCraft, Aviara, and premium pontoon platforms; partnered with executives, customers, suppliers, and manufacturing from concept through production.
- Applied DFM and GD&T and used Global Shop ERP to streamline concept-to-production work and improve manufacturability, production efficiency, and quality.

Owner | Kettle Cycles

- Founded and owned Kettle Cycles; developed and commercialized silicon-carbide carbon-ceramic bicycle rotors, then sold the business.
- Designed tooling and personally compression-molded forged-carbon composite parts using Quantum Composites AMC 8590 material.

PROFESSIONAL EXPERIENCE CONTINUED

Consultant to Hire | Product Design, Engineering & Manufacturing | Independent Consulting

Independent consulting and project work since 2005, supporting product development, manufacturing, DFM, CNC processes, sourcing, and production improvement.

- Zeman Manufacturing: led CNC tube-fabrication production work, including programming, scheduling, process standards, and cycle/setup-time improvement.
- Pressure Specialist Inc. (PSI): designed industrial regulators, valves, composite housings, and a high-pressure hydraulic pump; developed parts, molds, and CNC programs for manufacturability and safe production.
- L3DFX: contributed to product and production work involving Nerf Arena attractions and Walt Disney floats.
- Premiere Seals: controlled all offshore source development for rubber and machined goods, worked directly with customers and suppliers, and spent about a year in China supporting supplier development.
- Premiere Seals projects included Wilson baseball bats and quality/manufacturing work involving Honeywell, Toyota, Chevrolet, and Starlight.
- Across additional industries, led DFM consulting, supplier coordination, domestic/offshore sourcing, and manufacturing optimization; designed UAV products and developed forged-composite manufacturing methods.

Vice President of Engineering & Manufacturing | Pursuit Marketing Inc. | Des Plaines, IL

- Led product development, engineering strategy, domestic manufacturing, and international supplier relationships for a roughly \$100M manufacturing company.
- Helped increase monthly production from about 6,000 to 22,000 markers and net income from \$8M to \$24M through product innovation and manufacturing improvements.

Design Engineer & CNC Programmer | Smart Parts Inc.

- Developed paintball products for high-volume manufacturing; supervised CNC programming and quality checks across 14 CNC mills and 14 Star Swiss-style turning centers.

TECHNICAL SKILLS

Design and engineering: SolidWorks, Mastercam X5, GD&T, manufacturing drawings, product architecture, prototyping, risk and failure analysis

Manufacturing and materials: CNC programming and machining, tube fabrication, BMC molding, AMC 8590 forged-carbon compression molding, C/SiC composites, pneumatics and pressure systems

Operations and systems: DFM, supplier development, domestic/offshore sourcing, production planning, cost improvement, Lean/5S, Global Shop and EstiTrack ERP

PATENTS

Granted U.S. patents: 11,560,983; 11,085,585; 11,085,586; 7,765,999 | Published application: US 20140131151 | Provisional application: 64/082,259

All four granted patents were commercialized.