CRAIG HARBAUER

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SEEKING

CHIEF OPERATING OFFICER / VICE PRESIDENT / DIRECTOR OF OPERATIONS

EXPERTISE IN

MANUFACTURING EFFICIENCY / SUPPLY CHAIN OPTIMIZATION WE CREATE FLOW

Lean, Six Sigma, Theory of Constraints & Continuous Improvement Methodologies
P & L Accountability | Financial Data Analysis & KPIs | Due Diligence for Corporate Acquisitions
Multi-site & Multinational Experience

Capital Investment Projects for Manufacturing Infrastructure: Rebuilding & Reengineering Facilities R&D Advisory: Subject Matter Expert in Production Feasibilities & Cost to Manufacture Demand Planning & Scaling of Labor | Process & Quality Training for Value Stream Managers Supply Chain including Materials Resource Planning | Inbound & Outbound Global Logistics Inventory Management | Distribution & Warehouse Efficiencies

WORLD-CLASS MANUFACTURING ENGINEERING COMPETENCIES:

Micro-hybrid Production, Precision Machining, Automated & High-Precision Robotics, High Speed Manufacturing, Clean Rooms, Manual Assembly Processes & Injection Molding

PROFESSIONAL EXPERIENCE

HARBAUER CONSULTING LLC—Arnold, MD – 9 years

Owner / Founder | 2006 - 2009; 2018 - Present

International consulting firm specializing in lean manufacturing and lean logistics advisory. The firm enjoys a steady stream of clients representing the automotive, music, and consumer goods industries.

Key Clients:

Kohler Energy Group: Heavy Industrial

Fully analyzed, and re-envisioned value stream. Worked directly with executive management. Waste Identification and elimination resulting in over 20% increase in output in large (up to 2400kW) power generation products.

<u>D'Addario and Co. - \$200M Annual Sales Globally: Consumer Goods</u>

Conceptualized and led implementation of single piece flow work cells in legacy value stream. Developed customized daily improvement program that systematically identified waste involving all levels of organization. 14% Piece Cost Reduction mostly through improvements in First Pass Yield.

Paul Reed Smith Guitars - \$100M Annual Sales Globally: Consumer Goods

Redesigned material flow and process connections between wood manufacturing and instrument finishing to leverage predictability of demand and slash throughput times by 33% for highest running product families. Led project to design and stand-up foreign distribution and cross dock within USMCA.

Volvo Bus Corporation: Automotive

Internal Logistics and Production Scheduling - Rectified systemic and point issues, inclusive of lean manufacturing training and improvements to the availability and accessibility of discrete components on the production line. Delivered 10% improvement in first-pass yield.

Rexroth Corporation: Heavy Industrial

Internal Logistics - Hydraulic and pneumatic heavy equipment components, analyzed and then remedied bottlenecks in the production line. Significantly improved up-time by leading the conceptualization of effective replenishment systems within the facility. The design was subsequently rolled out to other plants.

Michelin North America: Automotive

Continuous Improvement; Managing Daily Performance - In a highly competitive process, my firm was selected for a consulting engagement that spanned 18 months and would achieve the goal of introducing and solidifying lean manufacturing concepts and continuous improvement systems at four production facilities in the US and Canada. Trained teams and frontline managers to monitor their own performance, which was measurably improved as measured by regular audits.

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D'ADDARIO & COMPANY—Farmingdale, NY – 9 years Executive Director of Operations Fact Coast I Jun 2009

Executive Director of Operations-East Coast | Jun 2009 – September 2018

D'Addario & Co. is the industry leader and largest manufacturer of musical accessories. The company has a customer base of ~4500 accounts (amazon.com, industry distributors, national accounts, and small retailers). It sells product into 140 countries.

- Reporting to the President, accountable for comprehensive P&L oversight of the company's US
 manufacturing efforts spanning production facilities in four states with more than 700 employees.
- Lead a team of up to nine direct reports (Director of Operations, Director of Global Supply Chain, Quality Manager, and six Value Stream Managers) delivering \$120M in annual revenue. Credited with realizing the company's highest levels of profitability despite some recent sales volume declines.
- Re-conceptualized and entirely redesigned production processes in each factory, moving from pool manufacturing to flow manufacturing methodologies. Improved information and material flow in the production of approximately 7,000 SKUs with hundreds of components, capturing economies of standardization. Oversaw the allocation of a multimillion-dollar capital investment for new equipment and reconfigured factory layouts. Concomitantly delivered precision manufacturing (tolerances in the tenthousandths of an inch), attributable to setting high standards for job performance and mentoring and retraining machine operators.
 - In the NY manufacturing facility, which generates \$40M annually, mentored engineering and machine design groups in lean automation development techniques. Enabled Value Stream Manager to scale labor costs with demand fluctuations. Also eliminated 50,000 sq ft of production floor space, while increasing overall output 10% (13% for the company's highest volume products).
 - In MA and TX production facilities, improved gross margins by 6% (record level) by instituting process improvements. Reduced backorders to zero from a high mark of \$350,000 (4.3% of sales).
 - Monitor cost metrics daily and investigate and ameliorate variances in the categories of overhead, labor, and materials. Monthly, as a member of the Executive Team, participate in comprehensive financial reviews, with the frequent outgrowth of new goals for cost reductions through continuous production improvements as well as project prioritizations.
- Designed and deployed replenishment-based inventory management system. Created the IT algorithm to improve production efficiency as it relates to production signaling, and raw component availability. Adjust/maintain a delicate manufacturing balance to ensure exceptional order fulfillment while keeping levels of warehoused inventory as tight as practical. Result: doubled inventory turns.
- Participated in all due-diligence activities for major corporate acquisitions, and presented findings to the Board of Directors. After the acquisition, effectively served as the General Manager in addition to my traditional responsibilities. Led the corporate integration effort spanning IT and distribution consolidations.
- Collaborate with R&D teams throughout the company as a subject matter expert (SME) on the processes needed to retool production methods for a new product entrant.
- Restructured processes at the company's global distribution center. Improved picking and packing productivity by 8% through redesign of facility, automation, and velocity analysis. Result: \$180K in annual savings.
- Lead continuous improvement across manufacturing, raw material logistics, and distribution. Eliminated \$2.5M in work-in-progress (WIP).

ROBERT BOSCH LLC—Anderson, SC / Abstatt, Germany / Nürnberg, Germany – 13 years

Divisional Bosch Production System Manager | Oct 2004 – Jun 2006

Project Manager | Sep 2001 – Oct 2004

Operations Group Leader / Senior Manufacturing Engineer | Jan 1993 - Sep 2001

Robert Bosch is the largest privately-held, tier-one automotive supplier worldwide. It has enjoyed a stellar reputation for automotive engineering innovation and is credited with the technologies of fuel injection, antilock brakes, traction control, and vehicle dynamics control.

- Reporting directly to President of multibillion-dollar division, pioneered the vision, developed the standards, and led the tactic rollout of Lean principles in 24 plants across 10 countries.
 - Introduced Lean Systems; Pull Systems (Kanban), 5S, Standardized WIP, quick changeover, and documentation reform, collectively bringing to fruition a 30% improvement in manufacturing productivity. Delivered up to 15% reduction in WIP and a 20% reduction in raw materials.
 - Led an international team (German/American/Mexican) in the development of Lean Production Cells for Transmission Control Module components and associated peripheral systems.
 - Championed modifications to the production floor for new product line introductions.
 - Developed production facility layout and value stream maps.
 - Trained hundreds of employees and mentored VPs in new techniques while maintaining stringent autoindustry manufacturing compliance (TS16949).
- Managed a \$5M budget for capital improvements in German and Mexican production facilities.
- Served on the Simultaneous Engineering Team with engineering peers in product and process development. Reverse-engineered competitors' products as well as designed new products to meet performance requirements with the simultaneous goals of high-volume production feasibility.
- Managed logistics for company-owned distribution facilities and third-party logistics provider (3PL).
 Established processes between onsite and offsite warehouses, local suppliers, and point of use.
- Improved customer service levels under the most demanding circumstances set forth by Fortune 25 customers. Unconditionally met expectations for availability and delivery while reducing logistics headcount by approximately 8%.
- Ensured compliance with worker agreements set forth by unions. Interfaced with union representatives to proactively address production process changes affecting workers' tasks.

EDUCATION

Bachelor of Science, Mechanical Engineering, 1996 Clemson University—Clemson, SC

SPECIAL SKILLS

Native English speaker + fluency in German
Extensive Lean Manufacturing and Six Sigma Training
Accomplished Irish Traditional Musician