BOR CRONK

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PROFILE SNAPSHOT

Accomplished, Strategic and Performance-driven Director of Operations with years of progressive expertise in delivering initiatives aimed at transitioning R&D prototypes in high tech and automotive industries. Exceptional performance record focused on designing new manufacturing process systems and optimizing existing processes to ensure fluid business operations. Possess Lean Six-Sigma Black Belt Certification from Dartmouth College and strong proficiency in applying Quality Management Systems including expertise in TS16949 and ISO 9001. Earned reputation as a "Trusted Advisor" with excellent cross-functional management skills to work across multiple departments and manage multi-engineering teams and projects. Recognized for consistent success in developing manufacturing processes and procedures to streamline operations and enhance revenue performance.

SIGNATURE STRENGTHS

- Project Management and Delivery
- Product Development/Verification/Validation
- Process Development/Analysis/Control
- Lean Six Sigma Manufacturing
- Supply Chain Operations
- Quality Management Systems (QMS)
- TS 16949/ISO 9001 Expertise

- 8D Corrective Action
- Design of Experiments
- Research and Development (R&D)
- Resource Management
- Risk Analysis and Management
- Strategic Planning
- Stakeholder Management

SELECTED ACCOMPLISHMENTS_

Designed and implemented a manufacturing process, while developing an operations team, to produce an advanced electric drive system used in electric and hybrid electric vehicles. Successfully completed the scale up of a prototype process with the capability to produce 15,000 electric drive systems annually. Implemented process start up within capital equipment budget and project timeline of one year. Built operations team and infrastructure to support manufacturing operations as aligned with company's business goals. Led development of automotive quality management process and served as the Management Representative to ensure processes needed for the quality management system were implemented and maintained. Fostered excellent relations with customers by expeditiously resolving any product quality issues that arose.

Scaled up a newly developed DC link power capacitor product used in electric vehicle drive systems. Led a small engineering team in preparing a proposal to the Department of Energy to construct a new manufacturing facility capable of supplying over 200,000 DC link capacitors annually at a competitive cost in the world marketplace. Generated proposal resulting in a \$9.1 million dollar matching grant (\$18.2 million total project) to construct a new state of the art 50,000 square foot manufacturing plant. Designed the production process utilizing lean manufacturing principles and employed a high degree of process automation in order to keep labor contribution costs to a minimum. Applied design of experiments in developing optimum conditions for key processes. Successfully completed facility on time and within budget - facility is currently supplying product to the automotive market.

PROFESSIONAL EXPERIENCE

CLEAN WAVE TECHNOLOGIES

MOUNTAIN VIEW, CALIFORNIA

Director of Operations / Quality & Process Development

2014 to 2017

- Successfully developed and managed all aspects of Manufacturing, Supply Chain, and Quality / Reliability operations.
- Scaled the company's advanced electric drive systems from prototype to high volume manufacturing capacity (15,000 systems / year) within 12 months.
- Built the operations team from the ground up including Manufacturing Technicians, Quality Technicians, Manufacturing Engineering, and Supply Chain Management.
- Managed the selection and implementation of a companywide (manufacturing centered) ERP system.
- Trained staff and cross functional teams in the application of Lean Six Sigma tools including the DMAIC methodology, 8D corrective action process, process capability analysis, line balancing, waste reduction, and 5S.
- Developed Quality Management System foundation, including quality performance metrics and product traceability process, in preparation for implementation of TS16949 (Automotive QMS)
- Efficiently resolved customer satisfaction issues and drove continuous improvement initiatives as the appointed Management Representative for the Quality Management System.

SERIOUS ENERGY

NEWARK, CALIFORNIA

Engineering / Quality Manager

2012 to 2013

- Handpicked to improve manufacturing efficiencies and help position the company for acquisition.
- Increased productivity more than 200% in 10 months.
- Successfully enhanced product quality improvements, allowing us to drop down to a single shift from a three-shift
 operation while consistently meeting Takt time requirements.
- Stabilized and improved manufacturing yield from 95% to greater than 98%.
- Stepped in, turned around, and reduced field returns by 50% compared to the previous year.
- Achieved manufacturing improvements through application of the DMAIC methodology utilizing a focused multidisciplinary team approach and application of other Lean principles such as work cell development, 5S, and standardized work practices.
- Directed manufacturing stabilization and improvements resulting in a successful multi-million dollar company sale.

SB ELECTRONICS

BARRE, VERMONT

Senior Manufacturing Engineer/Quality Representative

2008 to 2012

- Oversee the management and monitoring of the engineering team in the design, construction, and start-up of a high volume, state of the art, capacitor manufacturing facility.
- Expertly designed facility using Lean manufacturing principles to level the product flow throughout the process, and minimize product travel time.
- Utilized Design of Experiments in optimizing processes prior to final product verification and validation.
- Scaled the company's new Power Ring® capacitors from prototype to high volume manufacturing capacity (200,000 units annually) in less than 2 years. This \$18.2 million dollar project was completed on time and within budget.
- Appointed team leader to manage the implementation of an automotive Quality Management System, TS 16949 that
 uses ISO9001 as its foundation.
- Trained in Advanced Product Quality Planning (APQP), which is a key element of TS 16949. Core tools used in the
 application of APQP are; SPC, FMEA (Failure Mode Effects Analysis), MSA (Measurement System Analysis), and
 PPAP (Production Part Approval Process).

SPECTRA-MAT INCORPORATED

WATSONVILLE, CALIFORNIA

Senior R&D Engineer

2005 to 2008

- Successfully developed manufacturing process for metal matrix composite wafers.
- Utilized controlled expansion wafers to reduce unit device packaging costs by integrating high power devices and heat sink at the wafer level.
- Engineered manufacturing process for a Micro Channel Cooler device made of controlled expansion material and used to cool high power laser diode stacks.
- Established characterization metrics, and evaluation techniques, in support of joint, Army funded, Kinetic Energy Penetration (KEP) program. Program was successful in achieving performance goals.

Applications Engineer 20

- Provided engineering guidance to customers in meeting their technical requirements relative to integration of metal matrix composite heat sinks, and sub-mounts, into their high power device packages.
- Assisted customers in defining mechanical form, and metallization specifications to meet their product application requirements.
- Actively supported marketing activities via trade show presentations, technical product bulletins creation, website
 design, and lead follow up.
- Fostered close communications with customers regarding their new product development activities and potential requirements for controlled expansion heat sink materials. Information was used to define product and process development activities.

Senior Manufacturing Engineer

1994 to 2000

- Managed material fabrication production department. Successfully met production quality, capacity, and cost requirements. Managed engineering and product development efforts within material fabrication department.
- Designed closed loop automatic control systems for high temperature furnaces used in manufacturing porous refractory metal materials.
- Served as Project Manager, and Engineer in Charge, for new Lean facility layout.
- Directed a project encompassing repositioning of process equipment for improved flow, facilities reconstruction to accommodate equipment, and design/installation of class 100 clean room. Successful implementation of project led to increased process capacity, efficiency, and yield.

PRIOR WORK HISTORY

EDUCATION
LEAN/SIX SIGMA BLACK BELT
Dartmouth College, Hanover, New Hampshire
MASTERS OF BUSINESS ADMINISTRATION (50% Complete) Santa Clara University, Santa Clara, California
BACHELOR OF SCIENCE, CHEMICAL ENGINEERING San Jose State University, San Jose, California
TOOLS & TECHNOLOGIES

Proficient in Minitab Statistical software, Arena PLM, expandable ERP, Salesforce CRM, and Microsoft Office Suite: Word, Excel, PowerPoint, and Outlook