## **Kurt Lillie**

# **Summary:**

I present to you an outline showing my 40 years of proven skills in planning, directing and handling multiple projects. Highly experienced in directing, internal and external resources to keep projects on time and in budget. Managed multiple projects in Automotive, Residential Construction, Manufacturing, Lighting, and Military. Earned a Six Sigma Green Belt in Lean Manufacturing and Project Management studies. Adept at communicating, project milestones, goals and results to a team or stakeholders using Power Point and other graphic tool.

#### **Area of Expertise:**

SMC Sheet Molding Compound – BMC Bulk Molding Compound

SMC Machine Design and Process Development

**SMC Process Automation** 

SMC Machine Bulk Handling Systems

SMC / BMC Manufacturing Processes

Application development of commercial products

Market Research Studies for new product development

Analytical Problem Solving skills

Development and Implementation of process controls

Tactical Planning and Training Programs

Part and Product Consolidation skills

Compression and Injection molding, Vacuum Infusion, Hand Lay-Up, and Chopped Fiberglass Processes

Automotive Injection and Compression Molding

Large Panel Compression Molding in SMC and BMC

Process and Automation Modeling

Raw Material and Vender selection for SMC and BMC production

Carbon Fiber SMC Production and processes

40 Years Expert Knowledge in Multiple Manufactures of SMC Machine Design, Repair, Upgrade, and Rebuild for

Machine Manufactures like; EB Blue, Brenner, Finn & Framm, and Schmidt Heinzmann SMC Machines

Technical design knowledge and capabilities in optimizing

Glass Chopper Height and Glass Drop Design

Fiber Glass Rack design and Fiber Glass Flow process

Doctor Box and Blade design including best fit construction materials

High Speed Carrier Film Change Over System

Compression Cot-Roll Shore Hardness

Stainless Steel and composite compaction belt utilization

Designed and implemented a new pump system with a Waukesha Pump for fast pump exchange on SMC Machines.

Festoon Packaging process

**25 Years Working Knowledge** in SMC, BMC and TMC Manufacturing technology, processes, and formulation design, used in the Automotive Headlights and Body Panels, Heavy Truck, Construction, Electrical and Sanitary Market.

Expert in SMC and BMC product and mold design

Have the know-how skill set to identify critical Raw Material cost structures, implement new Raw Material(s), and formulate cost reductions in areas such as pigmentation, viscosity, reinforcement types and contents.

Designed and assisted in the development of SMC Machine Process Lay-outs for Composite SMC manufacturing from 2 million to 49-million-pound production process.

Worked through multiple vendors and process to develop a Bulk Handling & Dispensing System for the dry components for SMC production.

Designed layouts for Bulk Tank Farms for SMC site production.

Wrote and Issued 100 Operational SOP's for Compression Molding.

Technical Advisor to Guide, in Anderson IN for Injection Molded Spoiler and End Cap assemblies.

Authored 30 Plus Laboratory Operating Procedures for testing SMC and BMC finished products

Authored 2 SMC and BMC Compression Process and the Trouble Shooting Manuals

Authored an Injection Molding Design Guide for Injection Molding BMC Headlights.

Authored an Injection Molding Trouble Shooing Guide and Matrix Wheel.

Published a Forward Lighting Tool and Process Design Guide.

Published a Low Temperature - Low Pressure Process Manual for Optor® SMC Molding Compounds.

Published a "Problem Solving Methods" Guide; designed to train employees in the methodology of problem solving.

Facilitated a Fisher Guide Turnkey Program for automotive Forward Lighting Equipment, molds and design of parts

Established vender relationships for Unsaturated Polyester Resin, Calcium Carbonate, ATH and Clay filler, Viscosity Additives, Thickeners, Pigment, Glass Fiber and other Raw Materials used in the production of SMC and BMC.

Material and Technical Adviser to General Electric - Puerto Rico. Injection Molding residential Circuit Breaker Division

Materials and Technical Adviser to Cutler Hammer Manufacturing facilities in Puerto Rico for process and cost improvement programs for Injection Molded BMC.

Technical advisor to Hosan Group, South Korea for "UBR" Unitized Bathroom Systems process for large scale hotels.

Developed an international supply source in, Mexico, Japan and South Korea for Injection and Compression Molding Head Lights, Bath and Shower units and Fiberglass Door Skin production.

Developed and approved SMC and BMC, Raw Materials for duplicate production of US goods in South Korea, Japan and Mexico.

Led Value Stream Mapping processes for capital needs with multiple companies.

Trained and mentored employees in the Six Sigma Process to achieve their Green Belt Certifications

Design, Develop and Implemented programs to streamline production flow and build improved quality and reliability levels into production processes.

Achieved significant head count reduction through improvements in the productivity and by adding robotic automation equipment.

Authored a Plan for Control Process and Documentation used in the Value Stream and Process Flow mapping. Executed P-PAP documents for first piece inspection, PFMCA'S, and ISIP requirements in Automotive and non- automotive processes.

# **Safety**

Reduced Workman Compensation costs and safety issues each by 20% with employee educations and training programs.

Designed and implemented safety training, cross training and employee rotation processes that reduced safety incident by 70% in 2 years, while achieving a Safety TIR rate of .01% with no recordables for 5 years in a row, within a 200 Employee Manufacturing environment.

#### Quality

Developed and executed 3,700 hours of employee training related to Cost of Quality.

Developed Methodology and processes to reduce customer return PPM by 1000% in door skin manufacturing. Developed and Implemented Quality policy utilizing process improvements in equipment, process, stabilization of work force, job enrichment, training, and positive discipline programs.

Built process to reduce defective product returns utilizing D-FMEA and P-FMEA processes.

Formulated a Customer Maintenance and Repair Program for SMC Machines based on OEE and quality rejection rate.

Lead Team member DFMEA and PFMEA programs for new products.

Developed systematic career development programs in areas related to General Educational Deferment, secondary Education and Behavior Skills Designed to increased their confidence and productivity.

Continuous Improvement – achieved a Six Sigma Green Belt with Project Management training.

## **Tooling**

Developed first commercial composite tooling for SMC, opening up opportunities in low and mid volume applications for compression molding.

Can operate a Williams White, Macrodyne, Dieffenbacher, Wabash, and other Compression Mold Presses.

Can operate a Bucher, New Brittian, Hull Cincinnati Milacron Strokes, Vandorn, and other Injection Molding Machines.

Redesigned a window tab design for the open molded door market. Reduced weight by 8.3% and met all Florida Impact and HVHC requirements.

Modified a David Wolf Air Poppet design to improve reliability in Compression Molding.

Designed special Stainless-Steel heating and cooling circuit for specialized Compression Molding in the medical field

## **Automation**

Designed an Automation Maintenance Program for TPM for SMC Automated Cutting Cells

Authored a Robotic Automation - Preventive Maintenance and Service Program

Designed a Fully Automated SMC Compression Molding Cell for the SMC Door Skin Manufacturing Process Developed a 4-Cell Automated SMC Door Skin Trim Process, designed to trim large SMC panels. Set up a TPM System for the Designed Continuous BMC product equipment.

Authored a TPM maintenance and repair program before failure and the replacement process.

#### **Business**

Compiled and analyzed a U.S. Industry Market Study on Thermoset Plastics.

Developed a US Market Study for Compression molded SMC Ceiling Tiles.

Developed a US Electrical Market Study for SMC in Electrical equipment.

Developed a US Market Study for SMC garage door panels and Construction process.

Developed the first commercial Composite Mailbox and Door Skin applications in SMC

Developed first Commercial Fiber Glass Door Skin SMC in 1985 for Cell Co Doors

Directed and managed over 500 new product launches for GM, Chrysler Headlights and Exterior Door facing products

Awarded Merit of Recognition from Armstrong World Industries for development of compression molded commercial floor tile material.

Developed first high gloss thermoset SMC Sanitary Ware material for the Bath and Construction market

#### **Education:**

Lake Erie College, Painesville, Ohio - 1994-1999, Bachelor of Science,

Wharton, Philadelphia, PA, 1996, New Product Introduction and Development

Kent State University, Ashtabula, Ohio – 1978, Associate Degree Mechanical Engineering Technologies

Bucher Stokes Injection School, Camden, N.J., Certificate in Maintenance and Operation

Certified Six Sigma Green Belt

# On the Job Training:

Internal Training and Certificates Facilitator

Team Leader, Leadership

PPG 2000 Sales Training

Plant Productivity, National Labor Relations Training, Incident Investigation Training

**Problem Solving Techniques** 

Fire Command Training

1996 Command Post Certificate

Project Estimation Planning and Reporting

Plant Management skills

Safety Coordinator Training

Project Management

Workflow Planning

Work Breakdown Structure

Risk Mitigation process

SMC Formulation and Design

Compression and Injection Molding Tool Design