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Professional Experience

Schultz Associates, 2001 - Present and 1995 - 1998

A manufacturing management consulting business working with clients developing and implementing lean/world class manufacturing operations. Some clients are GE Motors, Emerson Electric, Wilton Tool, Baldor Electric, Synetics Solutions, and North American Lighting. Travel included client projects in China, Mexico, and England. Give lean/world class manufacturing presentations at several technical conferences.

Accomplishments:

- Reconfigured a food server cart product line manufacturer with “Lean Manufacturing” processes including kanban, defined work stations and cells, systems for “pull through” production, flex manning, “Just-In-Time” techniques, and a revised facility layout. Significant cost reduction and improvement in “speed to market.”
- Completed an evaluation and implementation of a new precision vise manufacturing line system with cells for about \$2 million. Is a world-class operation. Included request for quotes and a variety of machine system concepts. Also initiated and assisted in the installation of a quick-change setup process for about 50 machines. Cross training and employee involvement. Significant cost reduction and provided competitive advantage.
- Evaluated a China electric motor manufacturer for a possible joint venture. Included a “green field” site facility evaluation with processes, equipment, and manning and production output.
- Plant rearrangement for a 200,000 square foot facility to increase capacity, reduce cost and shorten cycle time for a major electric generator manufacturer. Included major process changes. Was less than 2-year payback.
- Assisted an electric motor component manufacturer in site selection in the Monterrey, Mexico area.
- Evaluated various assembly line techniques and processes for a fractional horsepower motor manufacturer.
- Worked with a railroad locomotive manufacturer on a new product program to reduce cost by 30% through value analysis focusing on design for manufacturability and employee involvement.
- Project leader for a three-plant/production consolidation for a vise manufacturer.
- Provided a lean manufacturing process with production re-arrangement into cells, fixture design, line balancing, and detail operator instructions for a laser component manufacturer. Improved capacity by 100% and cost reduction of 25%.
- Developed and conducted for the *Small Motor and Motion Association* a two day class on “Motor Manufacturing 101.” Conducted for four years.

BMI, Inc., 1999 – 2001

Director of Manufacturing; Schaumburg, IL., 1999 - 2001

Leader of \$72M manufacturing operation. Direct reports (8) are manufacturing cell leaders with 150 hourly, materials management, automation/manufacturing engineering, facilities management, and die repair. Manufactured products are precision stampings with automation and vision for cell phones and other electronic industries. P&L responsibilities. Environment was a rapid growth industry.

Accomplishments:

- Grew sales 100% in two years with 20+% net income. Sales and income were significantly above budget. Productivity was 6% and cost reduction was 2.8% of sales. Practiced “visual management” by weekly sharing information with employees.
- Renovated 80,000 square foot warehouse into lean/world class facility with cellular flow-through processes, cross-trained employees, kanban, and “make-to-order” processing. Relocated 150 people and 100 machines in 5 weeks without interrupting production.
- Did a kaizen “blitz” to reduce press setup time from 120 minutes to 20 minutes utilizing “Single Minute Exchange of Dies” process.
- Successfully completed ISO 9001 audits.
- Named “Most Valuable Player” in 2000 by subordinates.

Wilton Corporation, 1998 - 1999

Manager, Illinois Operations; Wilton Tool Group, Schiller Park, IL., 1998 - 1999

Leader of a \$25M manufacturing and warehouse operation. Direct reports (14) were production with 75 hourly, scheduling, purchasing, product and manufacturing engineering, human relations, and facilities management. Manufactured products are industrial vises. P & L responsibilities. Environment was a turn-around situation.

Accomplishments:

- Reduced customer past dues by \$600,000 in 3 months with improved scheduling and manpower allocation.
- Implemented \$2M state-of-art cellular flexible machining system. Setup is 10 minutes or less with cross-trained operators. Major reduction in inventory (raw, work-in-process, and finished goods), and a reduction of 17 hourly to 5.
- Initiated a safety program that resulted in nearly 4 months without a lost time accident.
- Implemented a manufacturing strategic process that includes ISO 9001 certification and continuous improvement processes.

General Signal Corp., 1992 - 1995

General Plants Manager; Hevi-Duty Electric Division, Mt. Vernon, IL., 1992 - 1995

Multi-plant manager for 4 plants (sales \$22M, 280 employees), while directly managing the Mt. Vernon, IL plant (sales \$12M, 175 employees). In addition to P&L responsibility, direct reports were 3 plant managers, production, purchasing, manufacturing engineering, and maintenance. Product was remanufactured and decommissioned electrical transformers for the utility industry.

Accomplishments:

- Managed a \$3M income turnaround in 2 years. Reduced unit cost by 15%. Tripled cost reduction in 2 years to 3% of sales.
- Reduced accident rate from 7 in 1992 to 0 for 1 1/2 years, resulting in a reduction of Workmen's Compensation cost of \$80,000.
- Negotiated a 3 year union contract with less than 1% per year overall cost increase. Improved assignment flexibility and developed a teamwork process for "win-win".
- Changed culture by initiating employee involvement with every person in an improvement process.

General Electric Co., 1988 - 1992

Division Manager, Manufacturing Engineering; GE Motors, Ft. Wayne, IN., 1990 - 1992

Leader of 25 (direct reports) electric motor manufacturing engineers and 10 manufacturing development personnel. Supported 20 plants worldwide. Sales were \$1.2B. Focused on world class manufacturing processes and the practical application of new technologies, with emphasis on quality (ISO 9001) and cost reduction. Products were AC & DC motors from fractional HP to large power plant sizes.

Accomplishments:

- Reduced cycle time from 35 days to 14 days with additional improvements in quality and reductions in inventory by using cycle time flow analysis, yield analysis, process mapping with employee involvement, and reducing setup time with the "Single Minute Exchange of Dies" process. Also changed process flow from line to cellular.
- Performed competitive analysis for benchmarking, examining international electrical motor manufacturers.
- Recognized as the Total Quality Management expert in the "Workout" process. Trained many groups in process mapping.
- Co-leader of various new product programs involving "design for manufacturing" concepts.

Consultant, Factory Operations; Corporate Engineering & Manufacturing, Bridgeport, CT., 1988 - 1990.

Developed and implemented white collar productivity and quality best practice programs in self-managing work teams. Focused on implementing lean manufacturing techniques in the office environment. Conducted seminars and workshops for all of GE businesses and some non-GE businesses.

Accomplishments: Implemented lean manufacturing best practice processes in several GE white-collar businesses achieving the following results:

- Reduced paper work cycle time by up to 80%. Improved quality, ranging from 20% to 40%. Increased productivity by 20%.
- Delayed into self-managing work teams. Reorganized from functional groups into customer focus groups.

Emerson Electric Co., 1977 - 1988

Division Director, Manufacturing Engineering; U.S. Electrical Motors Division, Milford, CT., 1977 - 1988

Managed the high technology skills group, consisting of automation, cellular manufacturing, value analysis/cost reduction, quality engineering, metallurgy and welding, gear manufacturing, and industrial engineering. Supported 6 plants in U.S. and Mexico. Sales were \$150M. Products were AC motors from 1/4 HP to 5,000 HP, gears and drives.

Accomplishments:

- Directed value analysis/cost reduction programs resulting in annual savings of 7% to 10% cost of sales.
- Benchmarked competitor products with involvement of product engineering, marketing/sales, cost accounting, purchasing.
- Co-leader of various new product programs involving "design for manufacturing" concepts.
- Implemented three plant consolidations as project leader; one a Maquiladora in Monterrey.

Clark Equipment Co., 1968 - 1977

Worldwide Manufacturing Executive; Material Handling Group, Buchanan, MI., 1974 - 1977

Manager, Manufacturing Engineering; Industrial Truck Division, Battle Creek, MI., 1973 - 1974. Managed 300 employees.

Assistant Manager; Corporate Manufacturing Research, Buchanan, MI., 1968 - 1973. Managed 7 professionals.

Chrysler Corp., 1965 - 1968

General Superintendent; Detroit Universal Division, Dearborn, MI., 1967 - 1968. Managed 100 hourly.

Tool Engineering Supervisor and Tool Engineer (B); Detroit Universal Division, Dearborn, MI., 1965 - 1967

Cincinnati Milacron Corp., 1962 - 1965

Metal Forming Process Development Engineer; Metal Forming Division, Cincinnati, OH., 1962 - 1965

Education, Professional Associations, Awards

B.S., Mechanical Engineering, Western Michigan University, 1962

Former member of the Society of Automotive Engineers, Society of Manufacturing Engineers and Small Motor and Motion Association. Best Industry Award, Mt. Vernon, IL community, 1994.

BMI performance awards in 1999 and 2000. General Signal performance award, 1994. GE performance awards, 1991 and 1989.

Presentations at various technical conferences on world class manufacturing and electric motor manufacturing.

Contributor to McGraw-Hill book, "Handbook Of Small Electric Motors."

Adjunct Faculty: "Operations Management," "Total Quality Management," "Process Improvement," "Materials Management," and "Strategic Management," *Oregon Institute of Technology*.