Gary William Gathen

21 Elm Park Boulevard Pleasant Ridge, MI 48069 USA Tel: 248-543-5400 Fax: 248-543-5410 E-mail: gary@gathen.net

Website: www.gcorponline.net

PROFILE

EXPERIENCE:

Currently Chief Engineer, G Corp.

International consulting services and manufacturers' representative sales firm working within the automotive and other industries as a liaison between the supplier and customer. A full service organization doing what it takes to orchestrate the satisfaction of both. Providing consulting in such areas as manufacturing processes, computer technology, engineering, simulation and applications, as well as new industrial procedures and methods. Very familiar with current state of the art in technology. Gained exposure to practices and methods of tool, die and stamping firms while representing companies in Europe, North and South America, Asia and South Africa.

Aligned with an international network of suppliers and consultants in automotive industry. Offers a full service tooling capability from product design, prototype, soft tool development, design and manufacture of tools, dies, jigs, fixtures, special machines and handling equipment to sheet metal stampings, assemblies and automotive components. Consultants on manufacturing processes, management, and computers. Marketing research specialists. Benchmarking in tool and die, and stamping industries.

Stamping and tooling associates offering benchmarking, plant assessment, best practices and competitive analysis consulting. Developed proprietary next generation stamping and die making systems (several patentable processes and intellectual properties currently under development). Represented developers of state of the art technologies such as simulation software for crash analysis, metal forming and die stamping development. Refined development of lean die making system.

Worked for many years at tool and die manufacturer which closed its doors in December, 1991 due to the retirement of the owner. For 41 years this firm supplied precision tools and dies and stampings to major American manufacturers in the automotive, appliance and aerospace industries. Instituted lean manufacturing concepts along with constraint management, manufacturing systems principles and techniques. Began effort to reduce cost and timing of die design & build by 50% which improved profits by more than 200%. Sales: \$8 million; employed 100.

Directed manufacturer's representative firm engaged in sales of contract structural engineering analysis personnel and services (finite element modeling and analysis of structural, vibration and thermal modeling results) to automotive OEMs for sheet metal parts, especially underbody and outer skin panels.

Ran a firm doing engineering processing and design of tools, dies, molds, fixtures, special machines and automation equipment for the major automotive OEMs and their tier one suppliers. Involved in computer training program for handicapped and did consulting in various other computer training applications such as programming and systems analysis.

Employed by firm operated as a contract manufacturer of tools, dies and special machines. It employed 80 people and grossed \$5,000,000 annually. Performed duties of general manager including manufacturing, purchasing, office staff, data processing and especially sales and marketing. Conducted financial planning, legal and accounting functions as well as wage, salary and fringe benefit negotiations and pension administration. Planned and implemented cost-cutting program which reduced overhead by nearly \$300,000 per year. Conducted comprehensive analysis and supervised the installation of a Burroughs minicomputer system with custom software.

Real estate sales for a commercial, industrial and investment real estate firm. Sold and leased buildings, income properties, business opportunities, investments, vacant land and farms. Involved with investment trusts, pension funds, limited partnerships and syndications. Took several courses toward designation as Certified Commercial Investment Member of National Association of Realtors.

Designed and supervised construction of 27,000 square foot industrial facility including subcontracting of all electrical, pneumatic, heating, ventilating and air conditioning system. Oversaw all areas of operation with emphasis on equipment acquisition, creation of design engineering department, government prime and subcontract efforts and diversification into special machines, fixtures, plastic injection and compression molds, forging and die cast dies. Researched state-of-the-art advances in manufacturing methods and stamping die technology.

Employed by automotive OEM as apprentice and journeyman designer of large stamping dies, progressive and transfer dies and pressroom automation devices. Very active suggestion plan participant.

Worked summers and spare time as a teenager in small tool and die concern, spending time in both the office and shop floor, performing all duties. Became journeyman die maker.

EDUCATION

General Motors Institute, (now Kettering University) Flint, MI - B.M.E., 1965

The degree of Bachelor, Mechanical Engineering required completion of a bachelor's thesis *Standardization of Component Parts of Mechanical Handling Devices* Sponsoring unit was Fisher Body Div., GMC, Die Engineering Activity. Cooperative experience included one year at the die manufacturing plant (#23), die tryout plant (#37) and assignments in estimating, scheduling, layout, nesting, design, automation, processing and special projects departments.

University of Michigan, Ann Arbor, MI - 1958 to 1960

3 semesters pre-medical curriculum.

PROFESSIONAL AFFILIATIONS

National Tooling and Machining Association (NTMA) – Detroit Chapter president, 1970 and 1976, director 1968 to 2000, chaired apprenticeship, forward planning and golf committee, trustee, member national government relations, apprenticeship, membership and technical standards committees. Contributing columnist to "Skilline", chapter newsletter: Executive Computing.

NTMA – Past Service Life Member, , Washington, DC. (national)

Society of Manufacturing Engineers (SME)

- Member Forming and Fabricating Community Steering Committee
- Chair, Lean Tool and Die Making Tech Group
- Active in Stamping and Dies technical group currently focused on variations in the stamping process
- Participant in SME Lean Certification program development
- Member, Machining & Material Removal Community
- Member, Process, Product Design & Management Community
- Member, TCN Leaders Committee
- Member, Human Side of Lean Technical Community
- Participant, Lean Certification Development, Lean Blitz Week, 2006.
- Lean Certification Volunteer

SKILLS

Description	Skill Level	Last Used	Experience
Manufacturing Process Engineer.	Expert	Currently used	40+ years
Journeyman Die Designer	Expert	30+ years ago	10 years
Journeyman Die Maker	Expert	30+ years ago	10 years
Forensic expert witness	Expert	Currently used	6 years

ADDITIONAL INFORMATION

Have studied and attended numerous courses, seminars and workshops: Lean production, constraint management, industrial engineering, metal forming, process and capacity simulation and have applied this knowledge to the tooling industry, especially stamped sheet metal.

Currently active in domestic and international forensic litigation as expert witness for attorneys on behalf of plaintiffs and defendants in design and build of tools and dies, and manufacturing processes, especially sheet metal stamping. Also assist in job shop business management and small and medium sized equipment matters and case litigation support.

Currently involved with trade associations, such as NTMA, SME, FMA, PMA and international firms as course developer, trainer, presenter, workshop moderator, seminar leader, and discussion group facilitator in the areas of my experience. (See below)

COURSE AND SEMINAR DEVELOPMENT OFFERINGS

Have developed and offer the following workshops, seminars and courses on tool & die, stamping, shop and plant management, and manufacturing process topics in conjunction with various organizations:

- New Lean Tools: VR and Animation Technology for Tool and Die Profitability (IMTS September, 2008)
- Adapting Lean for One-Off Production in Tool and Die Shops (Job Shop Lean Conference, Ohio State University, December, 2007)
- Lean Tool & Die Solutions SME (Fabtech November, 2007)
- Introduction to iT! (ideal Toolbox) G Corp.
- <u>Building Dies With Less</u> Precision Metalforming Association (PMA)
- <u>Lean Methods Applied To Die Making</u> SME
- Value Stream Mapping for the Tool & Die Shop, SME
- Production Principles for the Tool & Die Industry, SME
- Stamping Estimating
- Stamping Process Planning
- Six Sigma Considerations for the Tool & Die Making Arena SME

Design custom programs for small and large firms to suit special needs presented on or off site.

RECENT ARTICLES IN TRADE PUBLICATIONS

Publications And Articles

- Gathen, Gary, <u>Automotive toolmaking tricknology Applying NUMMI's concepts to tool and die making</u> (Stamping Journal, June, 2008)
- Gathen, Gary, <u>Creating A Die Factory System</u> (American Tool, Die and Stamping News, March-April-2008)
- Gathen, Gary, Lean Tool & Die Solutions, (THE FABRICATOR, September, 2007)
- Gathen, Gary, Fixing The Tool And Die Crisis (Business Xpansion Journal, April, 2007)
- Martin, Frank and Gathen, Gary, <u>Revitalizing the U.S. Tool & Die Industry</u>(Stamping Journal, May 10, 2005)
- Gathen, Gary, <u>Lean DOES Work For Tool & Die</u> (Business Xpansion Journal, October, 2005)
- Gathen, Gary, What Can SMED Do for You? Cover story, IMPO (Industrial Maintenance and Plant Operation) magazine, Jul, 2004

RECENT PROFESSIONAL ACTIVITIES UPDATE

Manufacturers' Representative

- One of the largest die shops in France: introduced new software which automatically creates draw die addendum, optimized for processing, formability and blank size. Placed first major die design job for a US car manufacturer.
- One of the largest die shop in Argentina: brought into joint venture with large North American stamper for vehicle program in Brazil as die & tool supplier
- Organized and escorted a ten-day tour by major US die and weld tool manufacturer to Argentina and South Africa to develop foreign business opportunities with these firms. A number of joint ventures have been initiated as a result. Resulted in US firm acquiring on of the South African companies.
- Represented two of the largest die shops in South Africa; placed a highly successful \$6 million tooling program from US automotive OEM.

Consultant

- Developed new system of die manufacturing resulting in increased profits of 200% within two years at tool and die shop.
- Developed and implemented 50% lead time and cost reduction program for designer of sheet metal stamping dies.
- Assisted small start-up pressroom controls designer and developer in marketing and business planning effort.
- Assembled a coalition of tool and die shops and weld tool builders capable of tooling an entire vehicle overseas at low cost and fast delivery in Europe, South Africa, South America, Asia and North America. Combined employment: 2,000+.
- Developed an international consultant pool available to advise US firms seeking assistance with overseas business development and contacts in the automotive tooling industry.
- Various expert witness assignments for plaintiff and defendant attorneys in tooling and stamping litigation.

PERSONAL DATA:

Date of Birth: 02/26/41 Height: 6' 8" Place of Birth: Detroit, MI Weight: 215

Health: Excellent Married 2 children, 3 grandchildren

Myers-Briggs personality type: INTJ

PERSONAL INTERESTS:

• Speak German. Hobbies include astronomy, cryptanalysis, genealogy.