

# Maxim Gots P.Eng., Ph.D

771 Upper Horning Rd., Hamilton, Ontario, Canada, L9C 7R7 Tel.: 905 385 6455 Fax. 905 385 6655 Cell: 289 439 0173

E-mail mg@mgots.com Web: www.mgots.com

# Resume

Expert witness services in product liability litigation; accident investigation / reconstruction; product defect analysis (design, manufacturing, warning); evaluation of deposition testimony; compliance with OSHA Regulations and conformance to Standards.

#### AREAS OF PRACTICE:

Lifting and material handling equipment, cranes (overhead, terrain, special), elevating platforms, conveyors.

Off-road machinery, earth moving equipment, trench walls stability, drilling equipment.

Construction equipment, concrete pouring and vibrating, precast concrete, prestressed concrete production, demolition.

Steel structures fabrication, transportation, assembling and erecting, scaffolding.

#### SKILLS:

Management of multiple projects coordinating specifications, tasks, schedules and changes from concept to accomplishment.

Design/ development of equipment and components including: power transmissions, gears, hydraulics, pneumatics, controls, support structures. Design leading and management of engineering team.

Manual and computer based (see "Computer Skills") analysis of any machine's structural components strength, Static and dynamic loading and stability calculations. Calculations of transmissions, hydraulics, tolerances etc.

Practical knowledge of materials' properties and applications: steels, aluminum, plastics. Onhand knowledge of industrial processes: machining, assembling, material handling, welding, sheet metal forming, extrusion, casting, inject molding.

Knowledge of Canadian, US and European Standards, Codes and Specs (SAE, CSA, ANSI, ASTM, ASME, UL, ASCI (LFRD and ASD), Aluminum association, Electrical Codes and Building Codes). Familiar with Restatement of Torts, Product liability litigation procedures, and product safety regulations: OSHA Reg.29, Provincial OHS Acts, Machinery Directive 98/37/EC and related European and ISO Standards, NFPA.

Theoretical knowledge in Theoretical Mechanics, Structural Mechanics, Fluid Dynamics, Dynamics of Mechanical Systems, Statistics, Final Elements Method.

Quality improvement. Experience in ISO 9000 documents development and quality control.

# Maxim Gots P.Eng., Ph.D

#### **COMPUTER SKILLS:**

AutoCAD, Solid Works, Solid Edge, CATIA

Final Element Analysis:

**ANSYS**/Multiphysics (Nonlinear analysis, Harmonic response); **COSMOS** (Assemblies Stress analysis); **ALGOR** (Turbulent nonlinear flow analysis – structural elements' aerodynamics); STRAP, STAAD, GT Strudel, LARSA and other structural software since 1985.

Dynamic Systems Analysis: 4D Visual NASTRAN; Working Model 2D

CNC Programming: Master CAM.

Data Acquisition: Lab View

#### PROFESSIONAL REGISTRATION:

**Professional Engineer** – Professional Engineers Ontario.

#### AFFILIATIONS:

CSA B354 Technical Committee – member.

(ASME) American Society of Mechanical Engineers – member.

#### **EDUCATION:**

All degrees are recognized by University of Toronto (06/1998):

06/1989 **Ph.D.** (Engineering) Kiev Civil Engineering Institute (Kiev, Ukraine) 12/1985-12/1988 Doctorate (Thesis 'Optimization of Parameters of Deepwater Mining Machines')

**09/1975-06/1983 B.Sc., M.Sc.** (Mechanical Engineering) Kiev Civil Engineering Institute exept.11/1976-11/1978 military service

## Professional Development:

**09/2000-02/2001** Effective Management Development LMI, Inc. (Mississauga, Ontario) **12/1996-03/1997** Project Management School of Management (Tel-Aviv, Israel)

Publications: 6 papers/articles, 5 thesis's, 6 Pat. of USSR (List of papers will be supplied by demand)

#### **EXPERIENCE:**

**05/2002- present Test and Compliance Engineer** Skyjack Inc (division of Linamar Inc.) (Guelph, Ontario)

www.skyjackinc.com www.linamar.com

Moving Elevated Working Platforms testing, analysis (ANSIS, COSMOS), calculations and certification. Testing data analysis (LabView), CE (European) Certification procedures. Conformity Assessment Policy development and Product Liability litigation. Customer requests management and Contract Reviews approval. Standard committees and industry association (IPAF) participation.

## 08/2001- 04/2002 Senior Design Engineer Trylon TSF. (Elmira, Ontario)

www.trylon.com

R&D of monopoles Vortex Shedding effect; Design of antennae attachments, safety climbing / fall arrest devices; Design and Analysis of communication towers (knock down, all weld, Self support (up to 330-ft); Guyed (up to 450-ft)) and Monopoles (up to 180-ft). Titan towers (cold formed angle leg).

## 06/1998- 08/2001 Senior Engineer Maxal Structures Ltd. (Mississauga, Ontario)

http://www.pappilighting.com/maxal.html

Design: Custom Saw (22' blade, 2300 rpm, 45deg.(vert.) feed), Permanent Molds for cast aluminum parts, Tooling for housing assembling; Punch dies.

Design and Analysis of Structural Supports for Signs and Luminaires (AASHTO Specs., Aluminum Association Specs.), Extruded aluminum sections, Baseplates, Oudoor Lighting fixtures. Supervision of Manufacturing.

## 10/1998- present Engineer (Contract) AM Technologies (London/Hamilton, Ontario)

www.eco-engine.ca

R&D project proposal – ecologically clean diesel engine.

Design and Analysis of Rod Handling System for drilling rigs (API, AISC Specs); Low-profile Carousel Cart (Cap. 5000 lb), Jib Crane 1/2t Cap. (beam 18'), Design and Analysis of 14 gage corrugated material roll former.

## 01/1994-05/1998 Project Manager Yoram Gadish Eng. Ltd. (Jerusalem, Israel)

tel.: (972)-2-6588555 fax: (972)-2-6588544

Responsible for Problems solving; Scheduling, Estimating, Quality control (ISO 9002) document development), Choice of Equipment and Techniques, Surgical design, Facing local government and agencies.

Main projects (all in Jerusalem): Tzomet Bait Junction (\$25m); Bait Zafafa Bridge (\$8m); Walk bridge of Supreme Court (suspended); Gan Sacker tunnel (\$2m).

# 09/1995-05/1998 Engineer (Contract) Gafny Metal Works Ind. Ltd. (El-Kana, Israel)

tel.: (972)-3-9363598 fax: (972)-3-9362291 rousso@inter.net.il

Design and Analysis of steel structures: Hip roof, stairs for Magpro Inc.; Erection Crane for reconstruction works at Moria Hotel (Tel-Aviv); Erection Crane for Bridge Segments (66 t.) (bridge over Farran valley); variety of mezzanines, roofs (spherical, conical, hip), stairs and formworks, development and optimization of roll formed sections (up to 6mm).

# **01/1992-12/1993 Foreman** TEFEN Plastic Production 1990 Ltd.(Kibbutz Nahsholim, Israel) tel.: (972)-6-6395550 fax: (972)-6-6390813

Supervised manufacturing of pipes and fittings etc., Setting up of injection machines and extruders, Quality control (ISO 9000).

# **12/1990-08/1991 Senior Design Engineer** Giprostroymost (Design Office of 'Mostostroy #1'-the biggest Bridge Building Contractor in Ukraine) (Kiev, Ukraine)

Directed design of: Erection Crane for T Beams(33m); Production Line for Bridge TT Segments (redevelopment); Equipment for concrete piles production; Concrete Paver; Mobile Concrete Plant, Custom flat freight car for prestressed 33m beam transportation to steam room.

## 12/1988-12/1990 Head of Design Group Kiev Civil Engineering Institute (Kiev, Ukraine)

Directed design of: Support structures for Coal- handling system of open mine; Sand Handling System for Dnepropetrovsk river Port Development Project.

## 02/1987-09/1987 Expedition to the Pacific (during postgraduate curse)

Uzmorgeo-Geology of Southern Seas Inc. (Gelendgik, Russia Offshore testing of research equipment; Research of 'machine- seabed soil' interaction.

## 07/1982-11/1985 Engineer, Research Associate R&D Department

Kiev Civil Engineering Institute (Kiev, Ukraine)

R&D in Big Wheel Excavator Dynamics. Performed analysis, experimental works, physical modeling, data analysis; Design and testing of earth-moving attachments for gold fields.

# 09/1976-07/1982 Technologist

Giprostroymost (Kiev, Ukraine)

Exept.11/1976-11/1978 military service

Participated in projects: Riga Suspended Bridge (over r. Daugava); Benderi Bridge (over r. Dnestr); Rose Valley Viaduct (Kishinev); Herson Bridge (over r. Dnepr, TT segments); Karachi Bridge (over r. Dnepr) - techniques and equipment.