### **MFN Trainer Team**





n 2003 MFN decided to create a completely new training program for SHOT PEENING. Since it is almost impossible for one party to have access to all aspects of this important application, a new approach was chosen. A team of MFN trainers was selected and companies within the peening industry were contacted from around the globe to donate training material and exhibit items. The creation of this program has been a real team effort, not just by the MFN trainers, but also by a number of companies which normally compete against each other. And this is especially worthy of mention - the common understanding that there is a need within the peening industry to establish a qualified training program and to create the spirit to do this together.

Official MFN Trainers (alphabetic)

François-Xavier Abadie, Saint-Gobain (France) Steven Baiker, Baiker AG (Switzerland) Peter Beckmerhagen, Frohn GmbH (Germany) Roger Fang, Wyne Tech. Int. (Taiwan) Ray Fontana, RCF Inc. (USA) Giovanni Gregorat, Pometon S.p.A. (Italy) Nai Puay Guan, Nako M-Link (Singapore) Wolfgang Hennig, Rools Royce (Germany) Paul Huyton, Surface Dynamics (England) Marco Klijsen, Straaltechniek (Holland)

Guy Levasseur, Aerosphere (Canada) Alan Nudelman, Composition Material (USA) Shlomo Ramati, IAI (Israel) James Whalen, Progressive Technologies (USA) Frank Wüstefeld (Ph.D.), KSA (Germany)

Scientific Advisers

Heribert Gray (Ph.D.), (Gremany)

Eckehard Müller (Ph. D.), University of Applied Science, Bochum (Germany)

Chris Rodopoulos (Ph.D.), Sheffield Hallam University (England)

Andrzej Woitas (Ph.D.), Stresstech Oy (Netherlands)



### Official MFN Trainer Peter Beckmerhagen

eter Beckmerhagen was born in 1966 in Altena, Germany and originally apprenticed as a tool and die maker. He later studied Industrial Management at the Ruhr Academy in Bochum. During his studies in Bochum he also worked part time for Frohn and introduced a quality assurance system tailored specifically to the Shot Peening Media Department per ISO standards. Upon graduation from the Ruhr Academy he was hired as full time assistant to the owner of Frohn. In 1995 he established a manufacturing facility for Shot Peening Media in North America. Shortly thereafter in 1996 he was made President and part owner of Frohn GmbH.

Peter has been engaged with and committed to Shot Peening since the early 90's.

As part of his commitment to the industry he has attended all major Shot Peening workshops and conferences. Not only as an attendee but also as an active participant presenting several papers on separate occasions over the years. He is a member of the Deutsche Gesellschaft fuer Qualitaet (DGQ), the Verband der deutschen Federnindustrie (VDF) and a member of the GAAC German American Chamber of Commerce (GAAC).

E-Mail: peter@mfn.li



### **Official MFN Trainer Steven Baiker**

teven Baiker, born in 1966 has majored in mechanical engineering (Dipl.-Ing. HTL) at the Technical University in Rapperswil, Switzerland. Just after majoring he worked as a project engineer for Ciba-Geigy in Kaoshiung, which is in the South of Taiwan. He lived in Taiwan for 3 years before returning to Switzerland to join Baiker AG, a Swiss manufacturer of peening and blasting machines in Zurich. Steven has been working for Baiker AG since 1994.

He gave a paper on shot peening at the ICSP6 in San Francisco and during the ICSP8 in Garmisch-Partenkirchen he was allowed to chair the session "Fatigue of Light-Weight Alloys".

Steven has organised several shot peening workshops and trade shows in Europe and Asia and has written over 80 articles on peening and blasting in a number of surface preparation magazines.

E-Mail: steven@mfn.li



### **Official MFN Trainer Giovanni Gregorat**

Giovanni lives near Venice, Italy. E-Mail: giovanni@mfn.li

iovanni Gregorat is a Sales Manager for Pometon S.p.A., a manufacturer of cast steel shot for peening and blastcleaning located in northeastern Italy. After obtaining a diploma in Business and Account ing, his first employment was in banking, where he started in the Foreign Commerce Department of a large private Italian bank, first in Venice and then in the head office in Milan. In the late 1970's and early 1980's, he acted as Vice Representative for the same banking group in Hong Kong for 2 years and later as Chief Representative for 4 years in Singapore, where he opened and managed the group's new office. During his tenure in Hong Kong, Giovanni also assisted in the establishment and management of a trading company which quickly became active in the growing Chinese foreign trade market. Giovanni has been with Pometon since 1995, first as a Sales Manager for the company's light metals division and currently for their range of cast steel shot and grit. Although a relative newcomer in the field of shotpeening, he has attended several workshops and conferences and has presented papers

at the 2nd Asian Shotpeening Workshop in Singapore and at the ICSP8 in Garmisch-Partenkirchen.

### <del>Vorkshop</del>



### **Official MFN Trainer Jim Whalen**

im Whalen is the Vice President of Sales and Marketing for Progressive Technologies in Grand Rapids, Michigan. Jim has been active in the shot peening industry for over 15 years and holds a Masters Degree in Mechanical Engineering. Upon receiving his degree, Jim went to work with General Electric and was assigned in various areas of the GE Aircraft Engines manufacturing operation. During this time he was involved in the development and implementation of special processes including shot peening and waterjet cleaning. In 1994 Jim joined Progressive Technologies as the process engineering manager until 1997 when he assumed the responsibilities of his current position. Progressive serves the aerospace, automotive and general equipment industries as a premier manufacturer of shot peening, abrasive blasting, waterjet cleaning, and thermal spray systems.

E-Mail: jim@mfn.li



### Official MFN Trainer Frank Wüstefeld (Ph. D.)

rank Wüstefeld was born in 1961 in Dortmund (Germany/North Rhine Westphalia). Frank did his engineering studies in metallurgy and material science at the RWTH Aachen with the focus on forming technologies. He graduated as a Diploma Engineer in 1987 and attained his Ph.D. with a thesis on quantitative models for shot peen forming in 1992. Subsequently in 1993, Frank founded in conjunction with an Aachen-based corporate venture unit the company KSA (Kugelstrahlzentrum Aachen GmbH). Frank's and the company's first project was the production of spherical curved tank segments for European space launcher ARIANE 5 through peen forming.

Other projects followed, all centred on high performance and cost efficient production. Frank gained a strong reputation in shot peening by a number of publications and lectures, i.e. at several ICSPs (International Conference on Shot Peening) from 1987 till last ICSP 8 in Garmisch. Frank is co inventor of some international patents on shot peening. Frank's passion is a new way of shot peening with online diagnostic and full process control. He is CEO and shareholder of KSA, an upcoming company providing cutting-edge services and solutions for the implementation of automated shot peening processes.

E-Mail: frank@mfn.li



### Official MFN Trainer Shlomo D. Ramati

Shlomo D. Ramati graduated with honors from the University of Illinois at Chicago Circle and did his graduate work at U of I Champagne-Urbana in metallurgical engineering. He then joined ALCOA-Warrick plant rolling aluminum RCS, working as a Hot-Mill metallurgist and QC for 2 years. Since 1979 he has been working at the Israel Aircraft Industries in the Materials Engineering Dept. As head of the design support group he was involved with both civilian and military aircraft and various other projects. His responsibilities included running the metallurgical R&D and the labs, as well as being involved with project and manufacturing support. He has a strong background in both castings and forgings and has worked with suppliers in optimizing and specifying both. He has also developed EBW techniques for special projects in Titanium, and HSLA Steels. Shlomo is active in the IAI training centre instructing in the fields of metallurgy, materials and related processes.

In 1981 IAI designed their first shot peen formed wings for the Astra G100 business jet. This required the materials department to get involved intimately in the peening technology. When IAI went to the design of the larger Galaxy G-200 jet its wings grew but the outboard were kept common to the G-100 wings by introducing the stronger Al 7150 T7751 alloy for the upper wing panels. Together with NMF he developed a method of combining "warm forming" with peening to improve the forming capabilities of some of the more complicated geometries included in the new design and improving the manufacture ability.

He co-authored with NMF a paper presented at ICSP7 in Poland on advanced wing peening. During this period of receiving peen formed panels he introduced the flap peening on to the assembly line for minor corrective actions, and as the experience mounted expanded the use of the flaps beyond re-saturation to the machining areas for straightening purposes. The method is now used on a regular basis by technicians he has trained.

E-Mail: shlomo@mfn.li



### Scientific Adviser Chris A Rodopoulos (Ph.D.)

hris A Rodopoulos, born in 1968, studied Mechanical Engineering at the University of Patras in Greece from 🥒 1987-1992 with a special interest in Fracture Mechanics and Fatigue. In 1992, he moved to Nottingham University in the United kingdom to read for an MSc in Materials Science. In 1993 he joined the Structural Integrity Research Institute of the University of Sheffield (SIRIUS) to read for a PhD in the Fatigue behaviour of Metal Matrix Composites. Between 1997 and 1999 he undertook consultancy work for a variety of Automotive and Aerospace companies. In 1999, he went back to SIRIUS to take up several academic posts. In 2002 he received a senior research fellowship from the Northern Aerospace Technology Exploitation Centre for the design of the first fully automated crack testing facility. In 2003, he moved to an academic position at the Materials Research Institute at Sheffield Hallam University, in the United Kingdom. In the last 7 years he participated in a variety of research projects around the world and for various research sponsors including NASA-Langley, Rolls-Royce plc, Airbus UK, ISTRAM, the European Union, The Royal Academy of Engineering, Hyundai Motor Company, CLFA, Metal Improvement Inc., EPSRC, etc. He taught fracture mechanics and fatigue of materials at Sheffield University, while he supervised the research of numerous postgraduate students. Since 2003, he has been the Group Leader of the Interest Group - Surface Engineering Treatments of the European Aerospace Science Network. He has published over 60 scientific papers and he is the co-author of two books. E-Mail: chris@mfn.li

# <del>Vorkshop</del>



### **Official Trainer Guy Levasseur**

Guy Levasseur was born in 1968. He is the President and founder of a company called AeroSphere specialized in the Peening and Peen forming technology, Operator Training and certification, Shot peening supplies, and Wing skins fabrication in general.

He was director of the Research and Development department and also of the business development group at NMF Global, a company specializing in Aircraft wing skin forming and assembly. Guy has studied in the Metallurgical field specializing in metallic fabrication and High Pressure Welding. After several years as welder, tool / die maker and machinist, he started his career at NMF in 1994 as general foreman and specialist in tooling and fabrication methodology. At NMF Canada (now part of the Sonaca group) he performed consecutively the role of Quality control agent, special equipment fabrication, manufacturing engineering, Director of Operations (overseeing over 200 employees) and was then transferred to the Corporate Head Office (NMF Global) to manage the research and development group called Formax and also the business development group. During this time frame, he has participated in numerous designs / built group with many renowned aerospace companies for new wing programs as well as hands-on experience in Peen forming mainly the Bombardier Global Express wing skins for Mitsubishi heavy industry, at the time the biggest single piece wing skin ever fabricated for a corporate jet. Guy has also been President of the Quebec Aerospace Association (AQA) (2000 - 2001) and is still very active within the Canadian aerospace community being part of the AIAC (Aerospace Industry Association of Canada) airworthiness committee. Also, Guy has presented many papers in the field of peen forming, namely at the 7th international shot peening conference in Warsaw and also has published several articles on this subject. His expertise is sought by numerous organizations in the fields of aerospace and metallurgy around the world. E-Mail: guy@mfn.li



### Scientific Adviser Andrzej Woitas (Ph.D.)

Andrzej Wojtas was born in 1958 in Wroclaw, Poland where he completed his secondary education and studied Mechanical Engineering at the Technical University of Wroclaw. After moving to the Netherlands he continued at the Department of Materials Engineering at the Delft University of Technology where in 1989 he presented his Master's thesis on the evaluation of residual stresses using the Barkhausen Noise Analysis. He then joined American Stress Technologies Inc. as applications engineer and continued in research and marketing. In 1992 he moved to Germany from where he supported the European customers of Stresstech Oy in fundamental research and industrial applications of BNA. After years of research and numerous publications he presented his doctor's dissertation at the Military Institute of Armoured Vehicle and Automobile Technology, in Poland. As the Head of European Operations Andrzej is responsible for marketing as well as for scientific support for Stresstech's customers and sales representatives. He has initiated and chaired four international conferences on the applications of the BNA technique and participates in several European societies for residual stress analysis.

In May 2005 Andrzej will join the MFN Trainer Team. In his courses he will cover the residual stress evaluation methods and their application in the optimisation and process control of shot peening. **E-Mail:** andrzej@mfn.li



### **Official MFN Trainer Wolfgang Hennig**

Wolfgang Hennig was born in Koblenz, Germany, in 1963. Initially, he learned as a mechanic. He later studied mechanical engineering, focussing on production engineering and nc-programming. Wolfgang has been working in the area of shot-peening for over 14 years, and he enjoys a wealth of planning experience. Following his further professional development in Heidelberg, Germany, he worked from 1990 until 1996 as a manufacturing engineer at "Liebherr Aerospace GmbH" in Lindenberg, Germany. Here, he was responsible for the process of shot-peening, mechanical brush deburring and vibro polishing. He planned the manufacturing sequences and programmed the machines for many different types of landing gear parts in the areas mentioned above. In 1997 he began working for Rolls-Royce Germany. He conducted the integration of shot-peening technologie into the existing frameworks in machining production of aero engine components such as compressor drums and turbine discs. During the course of this project, he established a success-

as compressor drums and turbine discs. During the course of this project, he established a successful system for shot-peening manufacturing, including aspects of ne-programming system, quality control, inhouse training and managing the implementation of three NC- peening machines. At present, he is working on a project aimed changing the drawing requirements by shot-peening to reduce the manufacturing costs. Future targets include online diagnostic and process control. **E-Mail:** wolfgang@mfn.li



### **Official Trainer Paul Huyton**

aul Huyton, born in 1954, started his career with aerospace manufacturer Dowty Group and progressed through various technical and managerial positions in both the private and public sectors. In 1989 Paul was appointed General Manager at a UK distributor for US blast equipment and blast media suppliers, where he gained extensive applications knowledge on both sides of the Atlantic. In 1992 Paul founded Surface Dynamics Limited and set about designing a whole new range of blast treatment equipment, some of which incorporates his own patented technology. Paul has introduced and implemented new blast treatment processes in many companies, particularly in the aerospace industry. His training skills have been employed at companies such as British Aerospace, British Airways Engineering and Messier Services. With his practical knowledge of quality systems, Paul has also provided companies with the design of documentation for shot peening and other blast treatments

Paul's most enduring enterprise is his 29 year joint venture with wife Diana, resulting in the creation of three subsidiaries – Jasmine, Claire and Thomas.

E-Mail: paul@mfn.li

## <del>Vorkshop</del>



### **Official MFN Trainer Nai Puan Guan**

ai Puan Guan was born in Singapore in 1963. He started his career with the Republic of Singapore Airforce and specialized in Aircraft Ground Support Equipment and is also a specialist in the aircraft arresting system. He was later trained to be an instructor at the Air Engineering Training Institute where he provided training in his area of expertise. In his later years with the airforce from 1986 to 1990, he was posted to the Examination Center to take up the position of an Examiner for the Electro-mechanical engineering section of the training institute. Apart from invigilating examinations, his responsibility also includes modulating of examination results, setting and reviewing of examination questions, ensuring a high level of examination standard. In 1990, he left the airforce to join GT Industrial, a company that provides products and services in vibratory finishing. He started off as its sales engineer and from there, he rose through the ranks to become the General Manager of the company in 1998 and is responsible for the company's operations in Singapore, Johor and Kuala Lumpur. While in GT Industrial, he helps the company to set up a subsidiary company GT-Baiker in 2000, the first Approved Shot Peening Jobshop in Singapore and Asia. In his attempt to provide high value-added services in metal finishing especially in the aerospace industry, he initiated the companies' ISO program and was instrumental in helping to obtained the ISO 9001:2000 certification for both GT Industrial and GT baiker taking the role of the facilitator for the 2 companies throughout the ISO projects. Apart from this, he has been the driving force behind all the operational approvals from Singapore Aerospace Manufacturing; Boeing; GE; Hamilton Sundstrand; DCMA; BFG; Slumberger etc. and all within a record one year period. A very hands-on person, he was himself trained in Shot Peening in Switzerland and Shot Peening Workshops in Singapore and has obtained the advance level of training. On top of that, he is also a key member in Organising the annual Shot Peening Workshop in Singapore and is also a contributing editor to the MFN since its debut in 2001. He was recently been appointed the Official Examiner for the Asian Shot Peening Workshop in Singapore and would be conducting all levels of Examinations during the workshop. Nai is also the Official Trainer for the MFN "Fundamental in Shot Peening". E-Mail: nai@mfn.li



### **Official MFN Trainer Alan K Nudelman**

A lan Nudelman is President of Composition Materials, manufacturer of Plasti-Grit. He graduated from the University of Illinois in Champaign, Illinois in Industrial and Mechanical Engineering. His studies concentrated on Operations Research and Manufacturing processes. He was with IBM for 28 years managing Sales and Marketing organizations including an International Market Research organization. While employed at IBM Alan was in the MBA program at the University of Connecticut.

After leaving IBM, Alan became President of Composition Materials, an 80-year-old company in the abrasives, fillers and extenders business. Under Alan's management Composition Materials developed an international distribution organization, became the worlds largest Walnut Shell distributor, and introduced SpeedMask, a novel UV activated polymer for masking parts to be peened, grit blasted, plated, and finished. He was an instructor at our workshop in Singapore, presenting a survey of existing and new masking techniques.

E-Mail: alan@mfn.li



### **Official MFN Trainer Roger Fang**

oger Fang graduated from the Electrical Engineering, Oriental Institute of Technology. He is now in his second year of the EMBA program at National Kaohsiung First University of Science & Technology in Taiwan.

In 1993 Roger founded the company Wyne-Tech International, which by now has 8 employees. The company sells equipment of different makes within Taiwan and is in most cases also responsible for the installation, start-up, and final acceptance tests.

In 1997, Wyne-Tech was appointed to be the official agent of Baiker AG, a Swiss manufacturer of shot peening and blasting equipment. In the meantime, Wyne-Tech sold on behalf of Baiker AG two CNC shot peening machines to the Aerospace Industrial Development Corporation (AIDC) and two PLC controlled shot peening machines to FAT (Far Eastern Transportation). Furthermore they retrofitted an existing steel shot peening machine at AIDC into a glass beads peening machine.

Roger Fang received extensive practical and theoretical shot peening training from Baiker AG in Switzerland and participated at the MFN shot peening workshops in Singapore from 2001-2003. He also passed the final examination of the advanced shot peening course. In June 2004 Roger was recruited by MFN to become an official trainer for the Asian workshops and to offer the "on-site" course "Fundamental Knowledge in Shot Peening" within Taiwan.

E-Mail: roger@mfn.li



### **Guest MFN Trainer Ray Fontana**

ay Fontana was born in 1946 in Baltimore, Maryland. For 20+ years he has worked in the research and development of medical equipment for various companies: Curtain Scientific, Sherwood Medical, Bausch & Lomb, Corning, and New Brunswick Scientific. In 1983he was offered a position by McDonnell Douglas in the Medicine In Space Program as the Equipment Manager for the project. Over nine years he worked on various projects, unmanned vehicles, test equipment for aircraft, Harpoon and Tomahawk, UAV aerial vehicles, satellite communications, structural repair procedures, and ISO 9000 certification, along with various other projects. In 1992, RCF Inc. was started with the philosophy of ,"We find solutions for the customer", working with long-term engineering projects for; Southwestern Bell Mobile, American Meter Corp., Roar Gas (Germany), Chlorox, 3M Corp., Flex-a-lite and others. The company set up and introduced the first FAA certified program for Roto Peening Training. Expanding the FAA Training Certification courses to include Corrosion Control, Structural Repair Advanced Training, Aircraft Plastic Welding, Aircraft Acrylic Window Restoration and Advanced Roto Peening Training. Customers include: American Airlines, Delta Airlines, Iceland Air, Erickson Helicopter Company, TACA Airlines and Boeing.

E-Mail: ray@mfn.li

# Vorkshop



### Scientific Adviser Eckehard Müller (Ph.D.)

ckehard Müller was born 1957. He studied physics, mathematics and educational science at the University of Dortmund. Afterwards he worked at the University of Dortmund and Mainz in the field of experimental particle physics. In this period he stayed several times at the nuclear research center CERN in Geneva and received his Ph.D. in exp. Physics. In 1987 he started to work at HOESCH Federn in the development department and in1988 he got the head of the research department. In this time he worked on stress peening. At the end of his research activities the stress peening of coil springs could be integrated in the normal production. Afterwards from 1994 to 1996 he was sales manager and product manager for springs the aftermarket. Then he held a position as a in-house-consultant at the headquarter of the Krupp AG for Kaizen and process reengineering. Since 1998 he is professor for physics at the University of Applied Science in Bochum. His research fields are stress peening stress rolling and spring technologies. Since 1999 he is member of the scientific committee on shot peening. In 2004 he found the Steinbeis-Tranfercenter for spring technology, behavior of structural components and process in Iserlohn (Germany). Eckehard is married and has 3 children. His hobbies are ham radio and model railways.

Email: eckehard@mfn.li



### Official MFN Trainer François-Xavier Abadie

orn in 1961, after studying Mathematics and Mechanics, François-Xavier had his first experience in R&D for design and automation of packaging equipments for large distribution networks. Then François-Xavier was in charge of the reorganization of the design office of an American OEM of sealing devices for aerospace, nuclear, defence and industrial applications. François-Xavier Abadie is now Surface Treatment Product Manager for SAINT-GOBAIN ZIRPRO, manufacturer of ceramic media for surface treatment based in Avignon, in south-east of France, with 1, 200 employees. François-Xavier's first commitment is technical support to the worldwide sales force. He is also initiating and coordinating several actions inside ZIRPRO Department for R&D, production, customer support, quality management, communications and budget. He has been involved in surface treatment since 1988. At first as R&D engineer for a leader in shot blasting equipment, in charge of tests for customer's applications and equipment design and testing. During this period, François-Xavier had the opportunity to test a lot of different media in any type of equipment and for many different applications. François-Xavier designed and tested some pieces of equipments such as regulated generator for direct pressure blasting and peening, including media flow regulation, specific media recovery and recycling systems, wheel turbine adaptation and characterisation, wet systems. In 1994, about to set up his own business for Shot peening services, François-Xavier met a former managing director of SAINT-GOBAIN ZIRPRO who appointed him as a Regional Sales Manager for France & Benelux. As a new member of MFN Trainers Team, François-Xavier would like to share his practical knowledge and thus become a strong supporter of the MFN initiative in the promotion and advancement of shot blasting and peening technologies.

E-mail: f-xavier@mfn.li



### Scientific Adviser Heribert Gray (Ph.D.)

eribert Gray, born in 1955, studied General Mechanical Engineering at the Ruhr-University in Bochum with the main subjects of Material Science & - Technology for graduated examination, from 1976 – 1983. After the undergraduate examination in 1990 he took a practical year as Works Student at DEMAG-Plastic Extrusions & Mannesmann Metallurgy. From 1984 till 1987 he intensified his studies of the effects of Shot Peening on the fatigue performance of Titanium Alloys at the technical University of Hamburg. He studied the fatigue performance particularly under the aspect of modification of surface texture and the shifting and changing of residual stress profiles at elevated operational test temperatures. These studies were finished by Ph.D.-Thesis that is showing the effect of shot peening by systematic separation of the main influencing factors on fatigue properties of Titanium alloys, tested at elevated temperature.

Since 1988 Mr. Gray has been engaged with the newly founded Vulkan Blast Shot Technology. After optimization of the production process for atomized stainless steel shot he is now engaged in optimization of Shot Blasting & Peening Processes on an international basis. He did introduce spherical conditioned cut wire as optimized shot peening- and peen forming media at the Boeing Corporation. Heribert Gray also is a Certified (European) Welding Engineer. He is a member of the DGM, Shot-Peening- and Titanium Group & Verein Deutscher Ingenieure (VDI), engaged in the Group for Materials Engineering and Sales Engineers.

E-mail: heribert@mfn.li



### **Official MFN Trainer Marco Klijsen**

arco Klijsen was born in Kaatsheuvel, the Netherlands, in 1969. Initially he studied at a commercial high school, later on focusing more on the mechanical engineering. He also passed the Technical Training from KLM Training Department with a FAA-approved training certificate.

Marco has been working in the area of shot peening for over 12 years and he enjoys a wealth of practical experience. In 1992 he started working for Straaltechniek International where he started as sales representative for the Netherlands. As he had to learn the complete process he joined the mechanical engineers to install several shot blasting and shot peening machines all over the world. Over the years he specialized more in shot peening machines and applications and travelled the world for technical meetings and presentations for shot peening equipment.

During the last couple of years he moved more to the project management of shot peening machines, in which his challenge in the field of mechanical engineering appeared to his full advantage. Due to this experience built up over the years, he is perfectly able to create the best possible solution for customers needs.

He has written a number of articles for the magazine and participated at several MFN workshops as a guest speaker. Marco has not just a lot of experience in peening equipment and processes, but also speaks, besides his native language Dutch, fluent English and German.

Email: marco@mfn.li

### **Companies donating Tutorial Material**

(alphabetic order)

- Baiker AG
- · Composition Materials Co., Inc.
  - Disa Industrie AG
    - Frohn GmbH
  - Gerard Poly Mouldings
  - Israel Aircraft Industries
  - · Kugelstrahlzentrum Aachen

    - Nako M-Link
       Sonaca NMF Canada
  - Peening Accessories GmbH
    - · Pometon S.p.A.
  - Progressive Technologies
- Sheffield Hallam University
  - Surface Dynamics UK
    - Stresstech Oy

### **Companies donating Exhibits**

(alphabetic order)

**Composition Materials: Masking Samples** Frohn GmbH: Cut Wire Samples **Gerard Poly Mouldings: Masking Samples** 

KSA GmbH: Coverage Sample Plates Peening Accessories GmbH: Almen Gages, Strips and Holders

Pometon S.p.A.: Steel Shot Samples

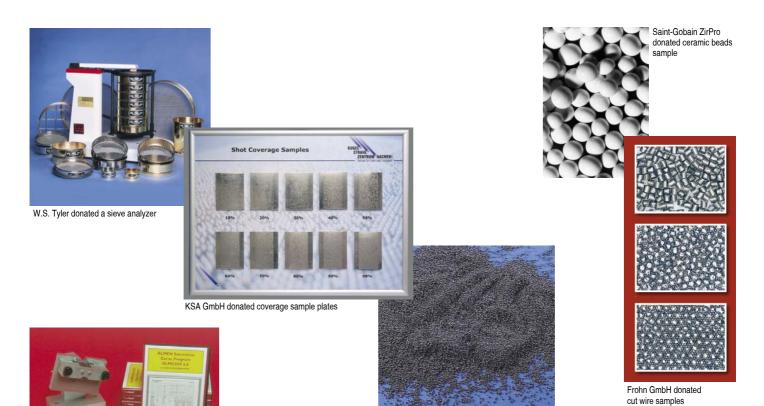
Rösler: Fan Blades

Saint-Gobain ZirPro: Ceramic Beads Sample

W.S. Tyler: Sieve Analyzer

### **Special Thanks to**

Hans Jörg Stoll, Disa Industrie AG and Frank Wüstefeld (P.h.D), KSA who both made an outstanding effort to improve the training program



Pometon S.p.A. donated steel shot samples

Peening Accessories GmbH donated Almen gages, strips and holders and software for the Almen saturation curve





Composition Materials donated masking samples