



MFN Shot Peening Workshop, Tilburg

Date: April 20-22, 2027



- FAA accepted courses with 19 different Topics
- Basic/Intermediate/Advanced Courses (L1-L3)
- MFN is a Partner in Education in Nadcap
- Hands-on training for Flap Peening



Basic/Level 1 Course	Intermediate/Level 2 Course	Advanced/Level 3 Course
April 20, 2027	April 21, 2027	April 22, 2027
Level 1 is the minimum requirement for shot peen operators and is the foundation for level 2. The level 1 course provides training in peening workshop operations & inspections. The content includes: Introduction to peening; Intensity L1; Coverage; Engineering, Planning, Documentation; Masking; Peening media L1; Shot peening in the automotive industry L1. FAA acceptance ref. no. will be on certificate of achievement	Level 2 is the minimum requirement for shot peen supervisors & technicians. Level 2 builds on the knowledge gained in level 1 to provide further capability in: Intensity L2; Preparing for shot peening audits; Wheel peening machines & equipment; Air peening & nozzles; Peening media L2; Flap peening; Shot peening in the automotive industry L2. FAA acceptance ref. no. will be on certificate of achievement	Level 3 is the recommended standard for auditors, trainers & specifying engineers. Level 3 provides greater breadth and depth of knowledge to enhance the competence gained from the previous levels. Residual stresses & their measurement; Fatigue stress corrosion; Optimization of shot peening; Shot peening in the automotive industry L3; Durability & performance test / Photo optical particle analysis; New technologies & alternatives; Conducting a Shot Peening Audit. FAA acceptance ref. no. will be on certificate of achievement

Location: - Straaltechniek International BV, Tilburg, further information see page 4

Registration Fees:

- € 650 per person and course, group discount available
- Included: course documentation, break refreshments and lunches
- Not included: transportation, lodging and other meals
- Class size is limited. Make early reservations.
- Certificate of completion is issued to each participants
- Optional certificate of ACHIEVEMENT (€ 130)
- Payments have to be made before the workshop
- Cancellation will be charged € 70 and must be made in writing 7 days prior to the start of the workshop. - "No Shows" will be liable for the full fee.

Description about the courses at:
www.mfn.li/workshop/courses



Note: Workshops sometimes get cancelled. Check with organizer before making non-refundable flight or hotel arrangements.

Registration: (One form per person. You may copy this form.)

Name:	Surname:
Company:	Street:
Postal Code:	City:
Country:	Phone:
E-mail:	Fax:
For Europe only - Company VAT Number:	

New Topics!
Completely revised!

	basic/level 1	intermediate/level 2	advanced/level 3
Shot Peening Course € 650 per course, group discount available. Each course to be paid separately.	☐	☐	☐
Optional Test for Certificate of Achievement (€ 130)	☐	☐	☐

E-mail to marco@mfn.li

For questions call Marco Klijsen at +31.162.748 010 or the headquarters at +41.44.8312644

Why attend the MFN Shot Peening Workshop



FAA
accepted

MFN offers training that is accepted by the FAA

MFN is organizing frequently these international 1-4 days Shot Peening Workshops and to attract a wide spread audience. Operators, supervisors, process & maintenance engineers, buyers, even trainers will be able to either learn something completely new, or at least be able to refresh their knowledge.

FAA accepted Courses:

All 3 courses offered during the workshop are FAA accepted. Participants who passed the optional examination receive a "Certificate of Achievement", which has the related FAA identification number on it. The FAA acceptance gives the courses a general credibility. However, there are a lot of aviation repair and overhaul stations, which do receive frequent FAA audits. Especially those companies will appreciate to have access to a FAA accepted shot peening training.

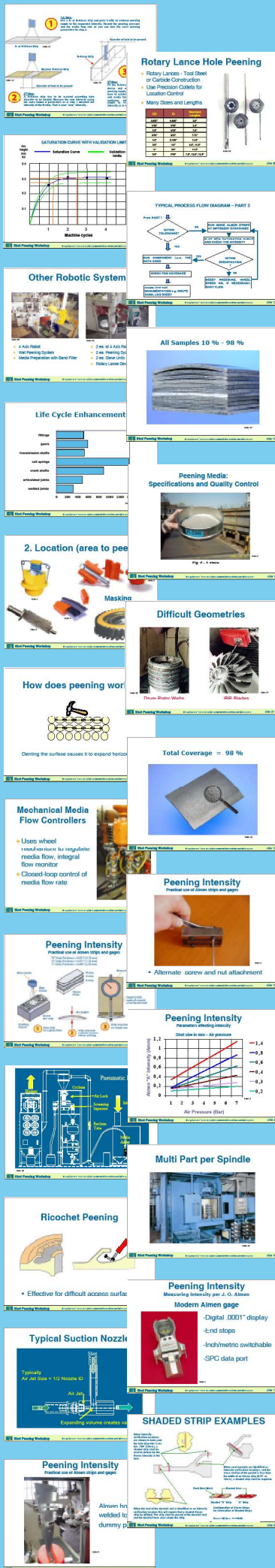
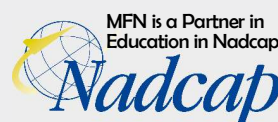
MFN is Partner in Education in Nadcap:

Nadcap and MFN have agreed to recognise and promote the cooperation between the two organisations in areas of common interest according to their purpose, namely aerospace special process assessment. The cooperation will be known as "Partners in Education" and is intended to create synergy, making optimal use of the resources available, for the accreditation related activities offered by both organizations so as to provide an effective and efficient service to the aerospace industries in the world.

Topics of Workshop:

-introduction to peening and theory, -peening intensity, -effect of peening, -Almen saturation curve, -peening coverage, -exposure time, -peening location, -process documentation, -masking solutions, -workpiece fixtures, -shape & size inspection of peening media, -specifications, -shaded strips, -audits by 3rd parties, -durability/performance tester for shot peening media, -specifications & standards, -peening equipment components, -air & wheel peening, -machinery styles and application examples, -hole peening, -flap peening, -peen forming, -optimization of shot peening for fatigue critical applications, -residual stress, -XRD and BNA measurement of shot peening induced stresses, -laser peening, ultrasonic peening, cavitation peen, -deep rolling, -photo optical particle analysis, -shot peening in the automotive industry, -etc.

Description about the courses at: www.mfn.li/workshop/courses





Basic / L1 Course

Description about the courses at: www.mfn.li/workshop/courses

Time	Subject	Course	Official MFN Trainer
8:15-8:25	-Official Opening of Basic Course / L1	-----	Marco Wildhagen
8:25-9:10	-Introduction to Peening	Basic, FAA recognized	Marco Wildhagen
9:10-9:55	-Intensity L1	Basic, FAA recognized	Marco Wildhagen
Morning Break (35 minutes)			
10:30-11:15	-Coverage	Basic, FAA recognized	Marco Wildhagen
11:15-12:00	-Engineering, Planning, Documentation	Basic, FAA recognized	Marco Wildhagen
13:00-13:45	-Masking	Basic, FAA recognized	Marco Wildhagen
13:45-14:30	-Peening Media L1: Applications & Quality Control	Basic, FAA recognized	Marco Wildhagen
Afternoon Break (30 minutes)			
15:00-15:15	-L1: Shot Peening in the Automotive Industry	Basic, FAA recognized	Marco Wildhagen
15:15-15:45	-Repetition Basic Shot Peening Course	Basic, FAA recognized	Marco Wildhagen
15:45-16:30	-Test for FAA accepted Certificate	Basic, FAA recognized	Marco Wildhagen

Intermediate / L2 Course

Description about the courses at: www.mfn.li/workshop/courses

Time	Subject	Course	Official MFN Trainer
8:15-8:25	-Official Opening of Intermediate Course / L2	-----	Marco Klijnsen / Marco Wildhagen
8:25-9:10	-Intensity L2	Intermediate, FAA recognized	Marco Klijnsen / Marco Wildhagen
9:10-9:55	-Preparing for Shot Peening Audits	Intermediate, FAA recognized	Marco Klijnsen / Marco Wildhagen
Morning Break (35 minutes)			
10:30-11:15	-Wheel Peening Machines & Equipment	Intermediate, FAA recognized	Marco Klijnsen / Marco Wildhagen
11:15-12:00	-Air Peening & Nozzles	Intermediate, FAA recognized	Marco Klijnsen / Marco Wildhagen
13:00-13:45	-Peening Media L2: Specification & Quality Control	Intermediate, FAA recognized	Marco Klijnsen / Marco Wildhagen
13:45-14:30	-Flap Peening	Intermediate, FAA recognized	Marco Klijnsen / Marco Wildhagen
Afternoon Break (30 minutes)			
15:00-15:15	-L2: Shot Peening in the Automotive Industry	Intermediate, FAA recognized	Marco Klijnsen / Marco Wildhagen
15:15-15:45	-Repetition for Intermediate Shot Peening Course	Intermediate, FAA recognized	Marco Klijnsen / Marco Wildhagen
15:45-16:30	-Test for FAA accepted Certificate	Intermediate, FAA recognized	Marco Klijnsen / Marco Wildhagen

Advanced / L3 Course

Description about the courses at: www.mfn.li/workshop/courses

Time	Subject	Course	Official MFN Trainer
8:15-8:25	-Official Opening of Advanced Course / L3	-----	Andrzej Wojtas (Ph.D.)
8:25-9:10	-Residual Stresses & their Measurement	Advanced, FAA recognized	Andrzej Wojtas (Ph.D.)
9:10-9:55	-Fatigue Stress Corrosion	Advanced, FAA recognized	Andrzej Wojtas (Ph.D.)
Morning Break (35 minutes)			
10:30-11:15	-Optimization of Shot Peening	Advanced, FAA recognized	Andrzej Wojtas (Ph.D.)
11:15-12:00	-L3: Shot Peening in the Automotive Industry	Advanced, FAA recognized	Andrzej Wojtas (Ph.D.)
13:00-13:45	-Durability & Performance Test / Photo Optical Particle Analysis	Advanced, FAA recognized	Andrzej Wojtas (Ph.D.)
13:45-14:30	-New Technologies and Alternatives: Laser Peening, Ultrasonic Peening, Cavitation Peening, Deep Rolling	Advanced, FAA recognized	Andrzej Wojtas (Ph.D.)
Afternoon Break (30 minutes)			
15:00-15:15	-Conducting a Shot Peening Audit	Advanced, FAA recognized	Andrzej Wojtas (Ph.D.)
15:15-15:45	-Repetition Advanced Shot Peening Course	Advanced, FAA recognized	Andrzej Wojtas (Ph.D.)
15:45-16:30	-Test for FAA accepted Certificate	Advanced, FAA recognized	Andrzej Wojtas (Ph.D.)



MFN North Europe in Holland
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The Trainers:
Marco Klijnsen
Official MFN Trainer
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The Trainers:
Marco Wildhagen
Official MFN Trainer



The Trainers:
Andrzej Wojtas (Ph.D.)
Chief Editor of MFN and
Official MFN Trainer

E-mail to
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More details at www.mfn.li/trainers



MFN Workshop Location:



MFN North Europe Office
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The Netherlands



For questions contact:
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The MFN Workshop is sponsored by:

Straaltechniek International BV
Lovense Kanaaldijk 61, 5013 BJ Tilburg
The Netherlands

Hotel Recommendations:

Van der Valk Hotel Tilburg
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For more information or ordering
see www.mfn.li/books