

Global Training Program







"The performance of a machine is just as effective as the performance of the people who are operating it."

Tim Klingenhof, Head of Training

The tablet presses offered by Fette Compacting work with more than 300 parameters in order to adapt the machines to individual manufacturing processes. On the one hand, this offers the opportunity to control and influence specific pressing processes. On the other hand, it requires constant updating of the technical knowledge and practical skills availed by employees.

Thanks to our modular range of training offers, employees in production, technology, maintenance, development and even in cross-sectoral departments can be trained in specific areas of production relevance. Individually compiled training sessions are also available.

We attach particular value to the provision of integrated knowledge of both theoretical and practical applications. Our trainers would be delighted to come to you and train your team right at their everyday equipment. However we recommend conducting the training sessions in the Fette Compacting Competence Centers, which offer the advantage of enabling your employees to concentrate on the training content away from work routines, while different machine types are available for practical training. A guided tour of machine production and assembly serves to further intensify their understanding of the tablet press.

How you benefit: Trained employees increase machine availability, output and product quality while reducing material losses. They are faster at finding and fixing errors, reducing changeover times, detecting wear and reducing downtimes.

All training courses are concluded with success monitoring. After completion, a certificate is issued in accordance with 21 CFR.

Staff training is increasingly shifting into focus to benefit from the latest technology and achieve maximum

- Uptime
- Output
- Product quality and
- Yield

realized by

LMTGROUP ACADEMY

Case Studies – Increase Results Through Staff Training

TABLETING PERFORMANCE

Reducing on product loss

Savings: € 42,550 p.a.

2 days of training

- + Analysis of team skills/ gaps in production/ process troubleshooting
- + Train the team
- + Increase in yield from 93.5% to 96% = 2,300 kg p.a., 250 batches, $\in 18.50 \text{ cost per kg}$
- + Product cost €18.50/kg for 2,300 kg p.a.

MAINTENANCE

Optimize preventive maintenance & train team

Savings: €20,000 p.a.

5 days of consulting & training

- + Analysis of existing preventive maintenance process
- + Development of preventive maintenance schedule
- + Train the team
- + Reduction of unplanned downtime by 200 hours per year
- + 200 h p.a. machine capacity freed
- + 1 machine hour = €100 p.a.





Training Concept



MODULES ► FUNCTION ▼	STANDARD TRAINING	STANDARD TRAINING	ADVANCED TRAINING	SPECIALTY TRAINING
PRODUCTION	Introductory	Operations	Tableting Performance	+ Bi-Layer Compression + Tableting Tools + In-Process Control + Turret Changeover + Cleaning & Changeover
R&D			Galenic	
MAINTENANCE MECHANICS		Maintenance Mechanics		+ Turret Changeover
MAINTENANCE ELECTRONICS		Maintenance Electronics		+ Turret Changeover + 2090i Removal Arm

Additionally, Fette Compacting offers **customized training** with content prepared individually.

Global Training Offer

FETTE COMPACTING FETTE COMPACTING MIDDLE EAST FETTE COMPACTI FETTE COMPACTING IBERICA SPAIN FETTE COMPACTING NORTH-WEST AFRICA ALGERIA FETTE COMPACTING ASIA PACIFIC FETTE COMPACTING AMERICA LATINA BRAZIL • Fette Compacting subsidiaries • Fette Compacting production sites

Contact: Training

Fette Compacting GmbH

training@fette-compacting.com Phone +49 4151 12 569

Fette Compacting conducts training at your sites as well as on training machines in the Competence Centers in Germany, Brazil, China, India and the USA.

Fette Compacting offers training in the following languages:

- + English
- + German
- + Spanish
- + Portuguese
- + French
- + Mandarin

Evaluation Process



Individual testing and definition of training required

Evaluation of individual staff knowledge.

Fette Compacting proposes standard or customized training.

Training & Certification

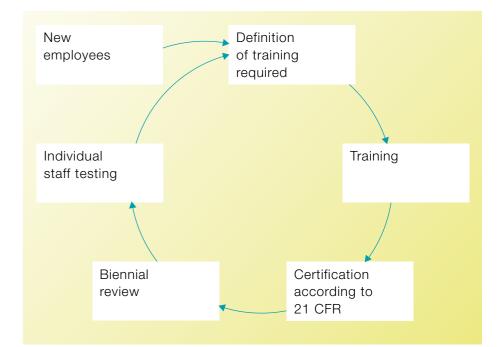
Each training ends with a test. (If unsuccessful, the gaps will be retrained and the test will be taken again.)

If successful, the participant receives a certificate for the training topic according to 21 CFR.

Biennial review

Fette Compacting provides a re-test and re-evaluates the individual knowledge of staff.

The training circle starts again with the definition of necessary training.





Standard **Training Modules Tablet Presses**





INTRODUCTORY

Audience:

Operators, Maintenance Staff, Machine Setters, Developers, Quality Managers, Technologists, Project Managers, IT Administrators, Supervisors

After this training course, you will master the specialist terms and functional operation associated with a tablet press. You will be familiar with all of the machine's safety features and will have manufactured your first tablet.

- + Machine & System Overview
- + Work Safety Instructions
- + Functional Principles
- + Production Parameters
- + Practical Exercises



OPERATIONS

2 Days

Audience: Operators, Machine Setters, **Quality Managers, Technologists**

After this training course, you will be capable of safely handling the machine and the tasks associated with it. You will manufacture tablets to specifications and independently perform minor optimizations in production. Furthermore, you will detect at an early stage any possible signs of wear and take action to prevent it.

- + General Settings
- + Production Parameters
- + Formulation Setup
- + Production Setup
- + Compression Force Control
- + Sorting System
- + Wear Parts
- + Initial Troubleshooting Skills
- + Practical Exercises



MAINTENANCE MECHANICS

2 Days

Audience:

Maintenance Staff (Mechanical)

After this training course, you will be capable of safely handling the machine and the tasks associated with it. You will systematically remedy errors and carry out professional maintenance.

- + General Settings
- + Wear Parts
- + Reference Marks
- + Zero Balance
- + Lubrication System
- + Sorting System
- + Rotor Clamping System
- + Practical Exercises



MAINTENANCE ELECTRONICS

2 Days

Audience: **Maintenance Staff (Electronic)**

After this training course, you will be capable of safely handling the machine and the tasks associated with it. You will systematically remedy errors and

+ System & Component Overview

carry out professional maintenance.

- + Network & CAN-Bus
- + Safety PLC
- + Reference Marks
- + Zero Balance
- + Lubrication System
- + Drives
- + Fault Finding
- + Battery Exchange (only i-Generation)
- + Practical Exercises



Specialty Training Modules





BI-LAYER COMPRESSION

Audience: Experienced Operators, Developers, Quality Managers, Technologists

After this training course, you will be capable of safely handling the machine and the tasks associated with it.

You will manufacture 2-layer tablets to specifications and independently perform minor optimizations in production.

- + Functional Princple of Bi-Layer Tablets
- + Mechanical Modifications of the Press
- + Parameters of Bi-Layer Relevance
- + Bi-Layer Product Setup
- + Practical Exercises



TABLETING TOOLS

1 Day

Audience: Operators, Machine Setters, Quality Managers, Technologists

After this training course, you will be familiar with the various manufacturing standards for tools. You will know how tools are cleaned, maintained and stored. This will enable you to reduce downtimes and improve machine availability.

- + Manufacturing Standards
- + Coatings
- + Dies & Segment Technology
- + Handling, Cleaning, Polishing & Inspection
- + Defect Analysis
- + Practical Exercises



IN-PROCESS CONTROL

1 Da

Audience: Operators, Maintenance Staff, Developers, Quality Managers, Technologists

After this training course, you will be capable of correctly setting the in-process parameters and evaluating the respective protocols. You will be able to clean, maintain and operate the tablet tester. Furthermore, you will master operation of the control loops for tablet weight and breaking strength.

- + Mechanical Construction
- + Operation
- + Process-Relevant Parameters
- + Tablet Weight & Hardness control
- + Practical Exercises



TURRET CHANGEOVER

0.5 Days

Audience: Operators, Maintenance Staff, Machine Setters, Technologists

After this training course, you will be capable of safely and quickly changing the turret. This will enable you to reduce conversion times and improve machine flexibility.

- + Installation & Removal of a Turret
- + Practical Exercises



2090i REMOVAL ARM

0.5 Days

Audience: Maintenance Staff

After this training course, you will be capable of safely handling the removal arm. You will be able to adjust electronic boundaries and traverse paths. This will enable you to reduce conversion times and improve machine flexibility.

- + Position & Functional Principles
- + "Teaching" of the Removal Position
- + Practical Exercises



CLEANING AND CHANGEOVER

2 Days

Audience: Maintenance Staff, Operator

After this training course you can set up the tablet press and safely clean all the components. You will master the safe handling of machine parts and tableting tools.

- + System overview
- + Preparation of Cleaning
- + Storage and Transportation of Machine
 Parts
- + Cleaning of the Machine
- + Handling, Cleaning and Preservation of Tableting Tools
- + Setup of the Machine

Specialty Training Modules



WIP AND AIRMANAGEMENT

2 Days

Audience: Operator, Technologists

After this training, you will be familiar with the components of the system and will be able to operate them safely. You can prepare the machine and process equipment for a washing cycle and perform then.

- + Overview of the Machine/Equipment
- + Install/Removal of Tableting Tools
- + Ports
- + WiP-Gun
- + WiP-Centre
- + Dryer
- + Wash Program
- + WiP-Functions
- + Airmanagement



MAINTENANCE MECHANICS WIP

3 Days

Audience: Maintenance Staff (Mechanical)

After this training course, you will be familiar of safety handling of the machine and the tasks associated with it. You will systematically remedy errors and carry out professional maintenance.

- + Standard adjustments and wear parts
- + Tablet scraper/Sorting
- + Adjustment of Reference Marks
- + Lubrication System
- + Main Drive
- + Rotor clamping system
- + Adjustment drive

MAINTENANCE ELECTRONICS WIP

3 Days

Audience: Maintenance Staff (Electronic)

After this training course, you will be familiar of safety handling of the machine and the tasks associated with it. You will systematically remedy errors and carry out professional maintenance.

- + Electronic System Overview
- + Electrical Diagram of the Machine
- + Network and Bus-Systems
- + Explanation of the PLC
- + Main encoder
- + Fill-O-Matic drive
- + Compression Station / Dosing Station / Adjustmentdrive
- + Measuring System
- + Sorting and tablet chute
- + Battery exchange
- + Adjustment of Reference Marks
- + Main Drive
- + Rotor clamping system

Advanced Training Modules





TABLETING PERFORMANCE

2 Days

Audience: Experienced Operators, Developers, Quality Managers, Technologists

After this training course, you will be capable of safely handling the machine and the tasks associated with it. You will systematically remedy errors of production relevance and independently carry out performance-optimized processes.

Customized Training with selected content such as:

- + Eliminate Quality Issues (e.g. Weight Variation, Tablet Contamination, Sticking, Capping, Lamination)
- + Optimize Product Flow
- + Minimize Product Loss
- + Increase Output



GALENIC

2 Days

Audience: Experienced Operators, Developers, Quality Managers, Technologists

After this training course, you will be capable of safely operating Fette Compacting Galenic software and generating graphics (force-way diagrams).

- + Machine Adjustment
- + Single-Punch Pressing
- + Production of Multi-Layer Tablets
- + Using the Galenic Software
- + Practical Exercises

Digital Training Offer

alva





alva is our digital learning platform with exclusive training content covering all aspects of Fette Compacting's products and solutions. New employees learn the basic principles of the tablet press as well as the entire tablet production process reliable and available on mobile devices at any time. Our experienced team of trainers has developed all content. User-friendly and interactive 3D graphics and animations support the detailed instructions. In addition to a basic module on the functional principle, the user gets to know everything about the different components and assemblies of a tablet press. Moreover, alva provides comprehensive knowledge on how to increase production and quality. After each module, users have the opportunity to test their knowledge in order to document their understanding of the training content.

The alva Training Modules

Functional Principle

This basic module provides the user with a general overview of the tablet manufacturing process.

Learning objective:

The user knows the most important terms and components for the tablet production in a rotary tablet press.



Components and Assemblies

The components and assemblies of a tablet press are explained in various training sessions - from the description of the individual parts to setting and optimization options.

Learning objective:

The user knows the exact function of the component/ assembly, can assess the wear and replace spare parts independently if necessary.





Process Optimization

This training module addresses the most common topics for improving tablet quality and production efficiency.

Learning objective:

The user knows the most common issues such as weight variations, hardness problems, and product loss and is able to rectify them.



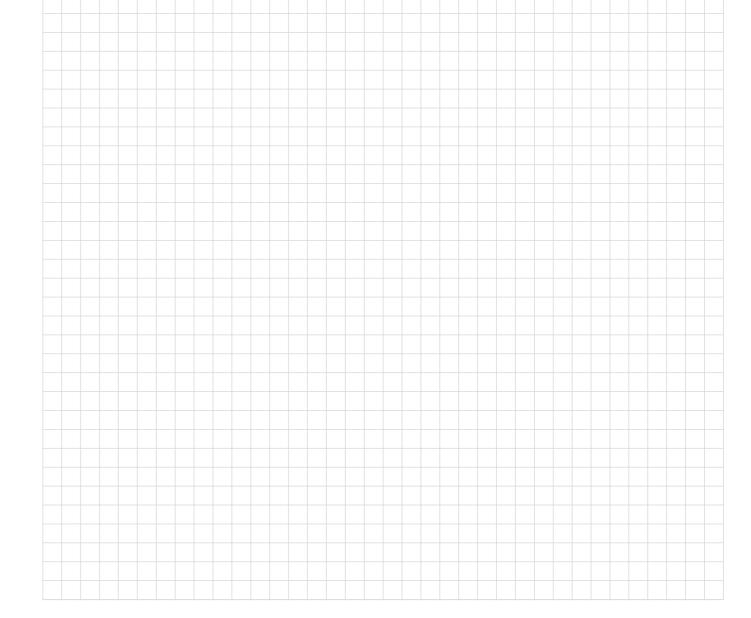


Complete Onboarding Process

New employees are familiar with the tablet production process and are able to operate and maintain the most important parts and functions of the tablet press.







For further information about alva please contact: training@fette-compacting.com

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