Haupteingang Main Entrance

# Training Info

## Pester Training Program

[Our individual trainings focus on increasing the participants qualification and efficiency. Participants gain knowledge and experience to better operate Pester machines in a safe, productive and responsible manner.]

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## Instruction – page 2

Target group: All those requiring basic machine knowledge.

*Instruction upon request* – During FAT/after SAT/after a modification of a pester machine or when individually requested, a pester technician will instruct the participants on safety and the functional theory of the machine. This instruction takes place within the agreed upon time of the visit. If the customer wishes the instruction to extend longer than agreed, the extra costs incurred will be billed according to the current *assembly work and service rates*.

Duration: Dependent on the complexity and number of pester machines/participants.
Location: On site at customer's plant.

## Standard and Custom Module Training – page 3

Target group: Operating, maintenance and technical personnel

*Training upon request* - Depending on the needs, one of our 3 standard training modules can be selected for equipping the trainees for their new responsibilities on the machine(s). In some cases a customization of the modules is required, when the trainees have previous experience on Pester equipment or their responsibilities overlap the standard pester modules. To ensure a high level of retention as well as maintain a quality standard, pester limits the maximum group size of participants. Training manuals and written testing are optional.

Duration: 0.5 – 1.5 days (depending on training module chosen)
Location: On site at customer's plant or after FAT at pester pac automation, Germany.

## Workshops – page 4

Target group: Technical and electrical support staff

*Workshops upon request* – the customer may choose between 5 individual workshops to increase competency and efficiency of the trainees on the pester machine/s. Trainees will benefit from the knowledge and experience of our experts as well as receive practical hands-on time implementing what was learned. To ensure a high level of retention as well as to maintain a quality standard, pester limits the maximum group size of participants.

Duration: 0.5 – 2 days (depending on Workshop)
Location: On site at the customer's plant or at pester pac automation, Germany.

# Instruction

## Instruction during FAT – Included in machine price

Target group: New operators, Line-supervisors, Project Engineers, Validation staff etc.

**Objectives:**
During the FAT the participants will be given a basic instruction from our pester technician. Focus will primarily be on the safety aspects and the general machine functions. Our technician will explain the relationship of the packaging materials with the production process. One format changeover will be shown but not practiced. Maintenance/Service, Fine tuning and Trouble-shooting are not included in this instruction. This instruction will happen within the agreed upon FAT installation time.

Prerequisite: None
Training material: Local Operator manual
Group size: max. 6
Duration: 2 hours per machine

## Instruction after SAT

Target group: New operators, Line-supervisors, Project Engineers, Validation staff etc.

**Objectives:**
The participants will gain a deeper understanding of the machines production process and its relevant modules. Instruction will include the safe operation of the machine and its various operation controls including the HMI and its relevant parameters. Furthermore the participants will be instructed on how to solve simple mechanical faults. Depending on the participants needs instruction on Format changeover, Maintenance/Service and/or fine tuning will be provided. This instruction will happen within the agreed upon installation time.

Prerequisite: None
Training material: Local Operator manual
Group size: max. 4
Duration: dependent on participants needs

# Standard Module Training

## M1  Operator

Target group: New operators, Line-supervisors.

**Objectives:**
Participants will learn the product flow of the machine, its individual function modules and how to operate them in a safe and reliable manner. Operational elements and their functions as well as the HMI are explained.  Loading production materials, cleaning and simple operator trouble shooting issues are presented and practiced.

Prerequisite: None
Not included: Manuals/tests can be ordered separately
Group size: max 6
Duration: ½ day (4 Hours)

## M2  Advanced Operator

Target group: Skilled operators/mechanics entrusted with machine operation and format changeovers.

**Objectives:**
Included: **M1** Module.
Participants will be taught the different format changeover types and locations relevant to the machine as well as the necessary Pester operator panel functions pertaining to loading pre-programmed formats. Additionally the participants will be shown the preventative maintenance requirements and schedules to assist in preserving the machines top performance. Time will be given to practice format changeovers and troubleshooting plus going into more detail into the HMI functions available to the participants.

Prerequisite: M1 Module
Not included: Manuals/tests can be ordered separately
Group size: max 4
Duration: 1 day (8 Hours)

## M3  Technician

Target group: Experienced mechanics/technicians, maintenance personnel with electrical knowledge.

**Objectives:**
Included:**M2** Module.
Participants will be taught the requirements and locations of all relevant service parts as well as the necessary HMI functions that pertain to them. Electric and Pneumatic parts of the machine and their plans will be explained. There is training time given to practice Servicing as well as going into more detail into the HMI in regards to fine-tuning parameters for new formats and trouble-shooting.

Prerequisite: M2 Module
Not included: Manuals/tests can be ordered separately
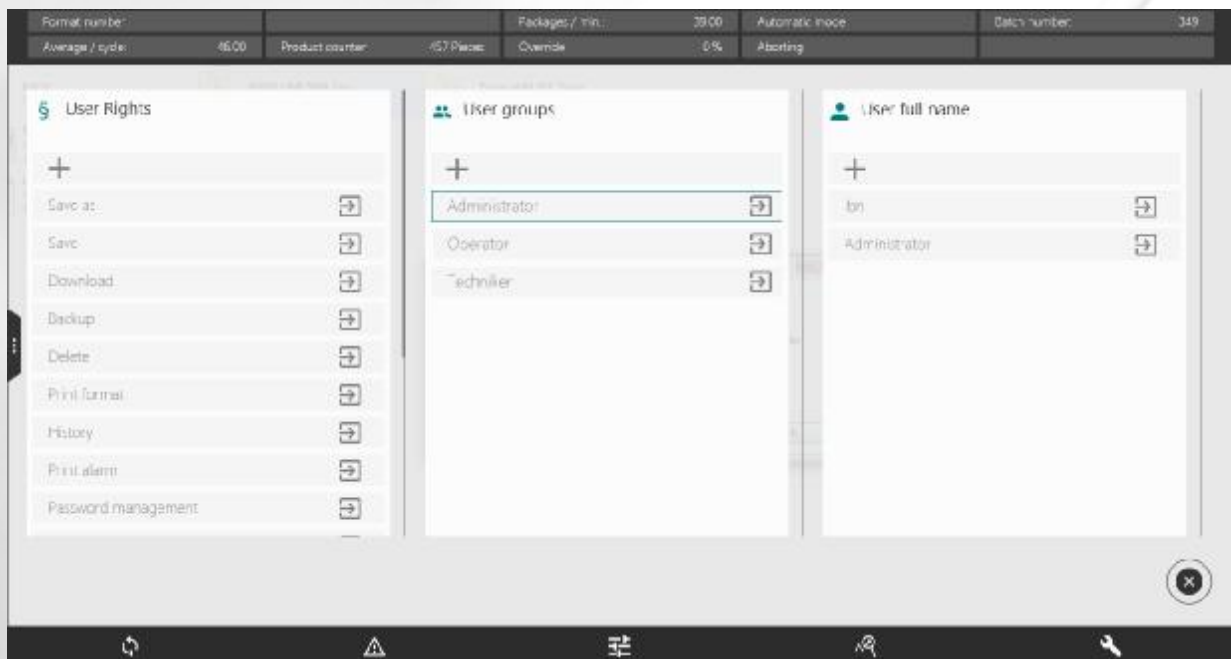Group size: max 4
Duration: 1½ day (12 Hours)

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# Custom Module Training

This following information must be provided in our Training Profile form before we can calculate a cost estimate.

In some cases a customization of the modules is required, when the trainees have previous experience on Pester equipment or their responsibilities overlap the standard pester modules.

Our new HMI Tangius 4.0 opens up new possibilities for a more productive and efficient operation experience of our machines. This advance in technology also allows us to provide trainings that are designed specifically around the individually pre-determined HMI group rights defined by the customer. This opportunity of utilizing the individual HMI group rights allows for a more relevant and concise training experience.

The content and duration of the trainings depend entirely on the rights given to the individual groups. Due to this new wide range of options a training duration can no longer be based entirely on the amount of participants and a standard target group (operator, technician) but also must now include the amount of HMI group rights the participants have access to. For this reason it is critical to know for which HMI group a training is to take place.

Tangius 4.0 User Rights

# Workshops



## W1  Kuka robot (KRC2 / KRC4)

Target group: Operators, technicians assigned with Robot operation.

**Objectives:**
This workshop introduces the Kuka robot and its relevant hardware/software components. Controlling the robot using the Kuka Control Panel (KCP) is practiced. Trainees will learn how to operate the Kuka robot in a safe and reliable manner as well as understand the basic relationship between the Kuka robot and pester PLC. Participants will receive training time on: Jogging and resetting the Kuka operating program, archive/restore the software as well as Mastering all robot axes' in relation to the pester machine.

Prerequisite: General computer skills
Included: Workshop manual
Group size: max 4
Duration: 1 day (8 hrs.)

## W2  pac robot (C40 / P15)

Target group: Operators, technicians assigned with Robot operation.

**Objectives:**
This workshop introduces the pac robot and its relevant hardware/software components. Controlling the robot using the pester operator control panel is practiced. Trainees will learn how to operate the pac robot in a safe and reliable manner as well as understand the basic relationship between the pac robot and pester PLC. Participants will receive training time on: Jogging, archive/restore the software as well as Mastering all robot axes' in relation to pester machine.

Prerequisite: General computer skills
Included: Workshop manual
Group size: max 4
Duration: 1 day  (8 Hours)

## W3  Pester Pattern – Multipick Multiplace (pallet optimizing program)

Target group: Programmers, skilled technicians entrusted with loading new palletizing formats.
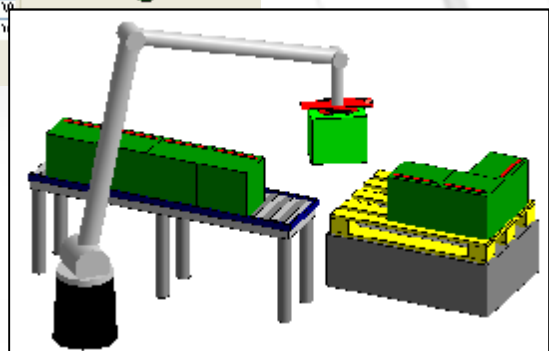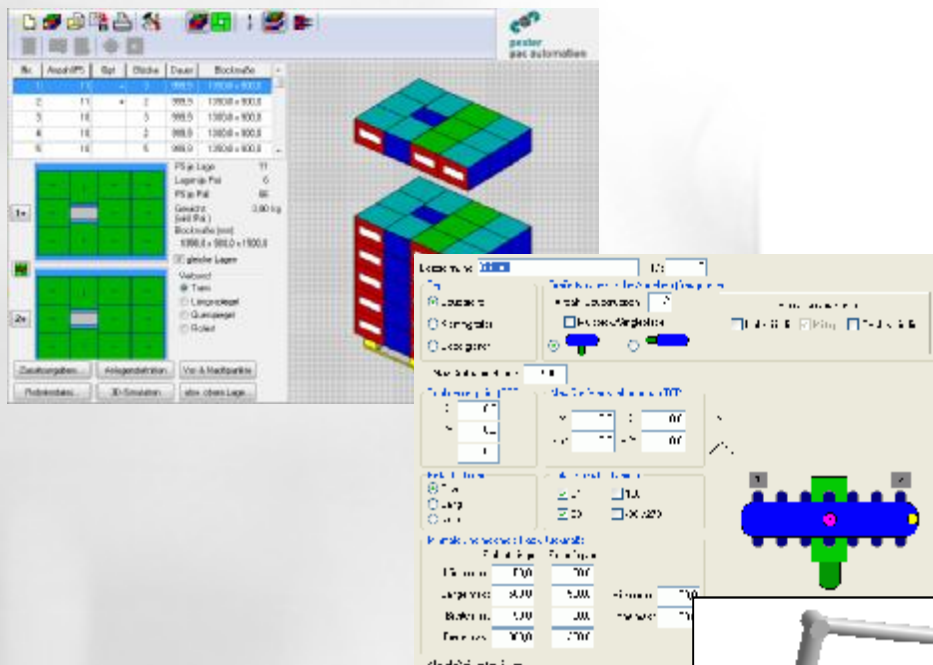
**Objectives:**
This workshop introduces the Pester Pattern pallet optimizing program and describes the many versatile functions available for editing and fine-tuning existing palletizing patterns to create new patterns.
Participants will gain practical experience performing what they have learned on a Pester palletizing machine.

Prerequisite: Experience with packaging robots
Included: Workshop manual
Group size: max 4
Duration: 1 day (8 Hours)

## W4  Intro Schneider Electric (PacDrive M or PacDrive 3)

Target group: Programmers, skilled technicians.

**Objectives:**
This workshop introduces the Schneider electric - PacDrive components used in your pester machines as well as the relevant software programs used to diagnose and Backup the PLC data. An explanation of the Pester SPS structure as well as diagnosing and performing Backups will be covered in theory and in practice.

Prerequisite: Computer skills, and experience with controlling systems, laptop
Included: Workshop manual
Group size: max 4
Duration: 1 day (8 Hours)

## W5  Advanced Schneider Electric (PacDrive M or PacDrive 3)

Target group: Programmers, skilled technicians.

**Objectives:**
This workshop includes our **W4** workshop. Here the Schneider electric - Software Toolkit EPAS-4 or SoMachine is introduced and the various program functions explained and taught in detail. Signal tracing as well as cross-referencing error codes for trouble shooting will be covered in theory and in practice.

Prerequisite: W4, Software licence EPAS-4 or SoMachine, laptop with admin rights.
Included: Workshop manual
Group size: max 4
Duration: 2 day (16 Hours)