

# EasyVeep

## 1. Introduction

### 1.1 This Manual

This Manual is intended to teach you how to use the EasyVeep (Easy Visualised Equipment Emulation Program) software package from Festo Didactic when getting started on PLC programming.

### 1.2 The EasyVeep concept

The range of instruction and further-training services in relation to PLC technology within the framework of the Automatic Technology Learning System of Festo Didactic is characterised by two essential factors.

- Use of an industrial PLC programming environment and PLC hardware
- Use of industry-oriented process hardware as the test environment

With EasyVeep, the Automatic Technology Learning System now offers the use of an additional component, i.e. the test environment of simulated processes which are presented by attractive 2-D animations.

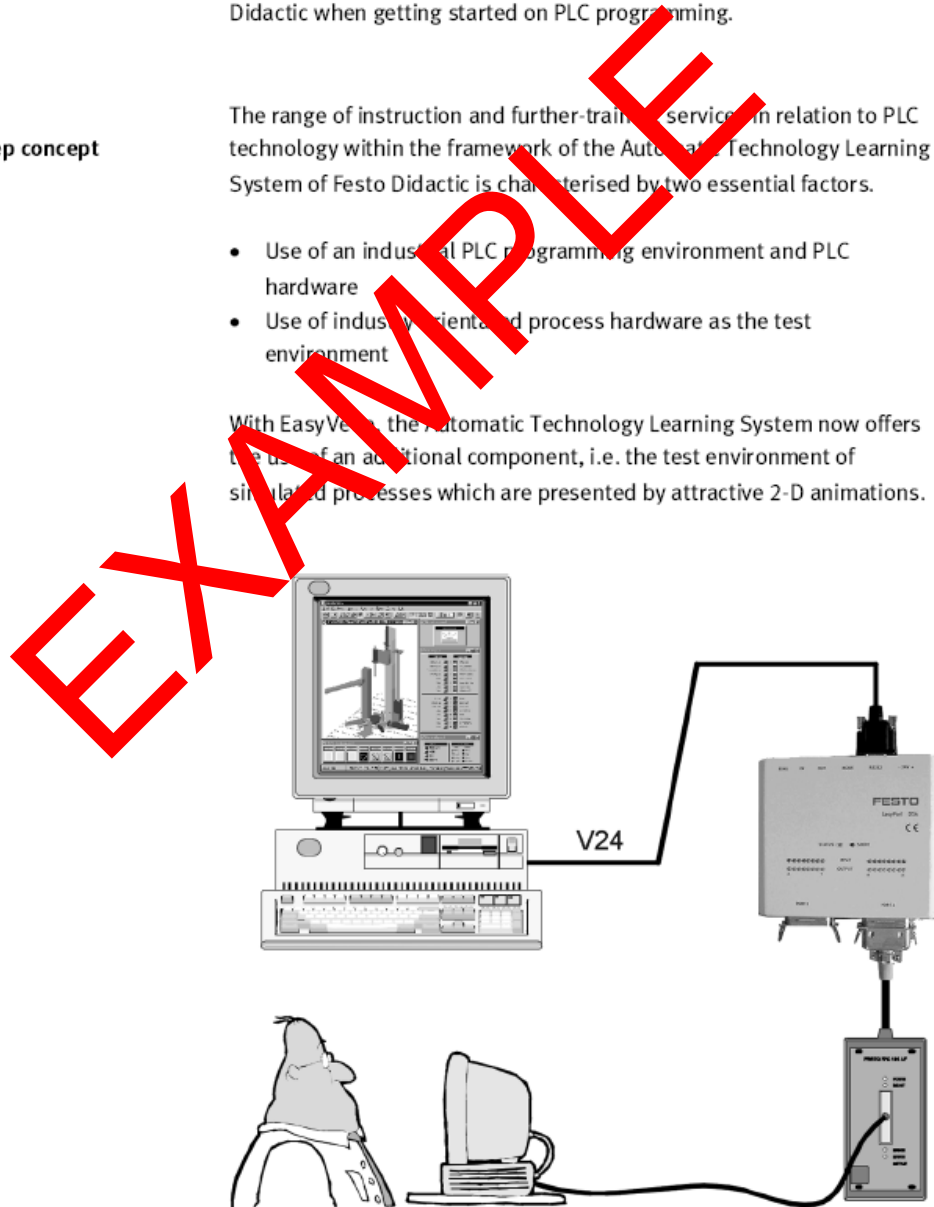


Fig. 1-2: EasyVeep concept

The function behaviour of the process hardware is replaced by emulated process models on a PC which exchange the control signals via the EasyPort input/output interface on the serial port of the PC with a PLC which you select. This means that the PLC working environment is identical to that in industrial practice through to the interface to the process.

The simulation box can also be used to test the functions of the **EasyPort**.

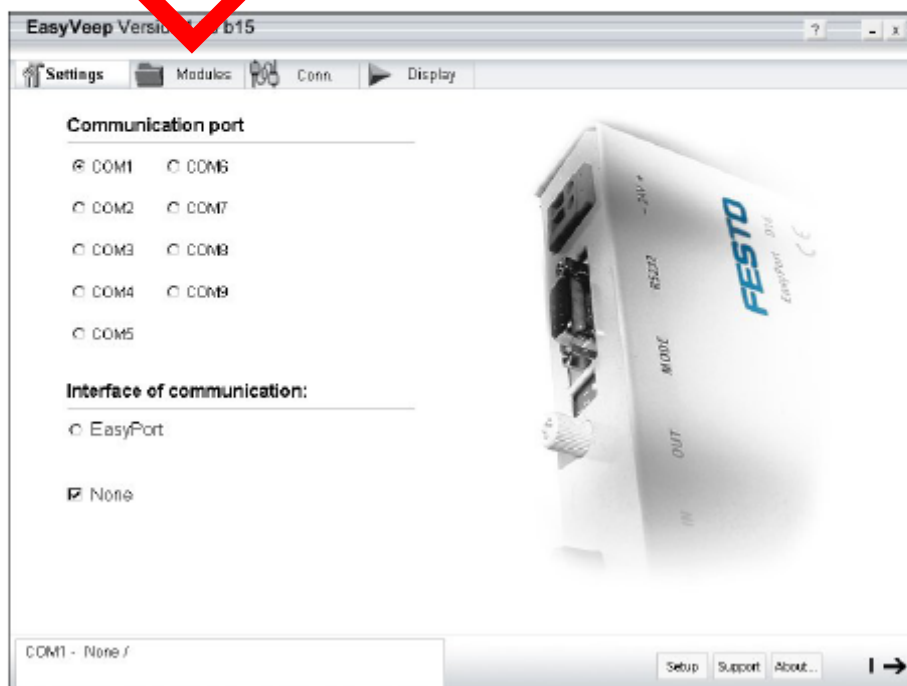
**EasyVeep** supplies you with an extensive library of interesting process models which emulate the functional behaviour of real processes in very simplified form.

You have the option of manually operating the actuator. This provides you with a process-orientated understanding of the model which is of fundamental importance for creation of a control sequence.

## 2. How to get started with EasyVeep.

Open "EasyVeep.exe" from the previously selected destination folder so as to start the program.

After the program has been started and you have made the appropriate settings in the Settings menu, you can click on the black arrow at the bottom right to access the menus.



## 3. Menus

### 3.1 Configuring the communication port

In the “Settings” menu, you define the port for the communication port for connection of the EasyPort. In order to work with the software, you must then also choose the communication unit “EasyPort” or “None”. If you do not choose the EasyPort, you then have the option of working without PLC with the process models.

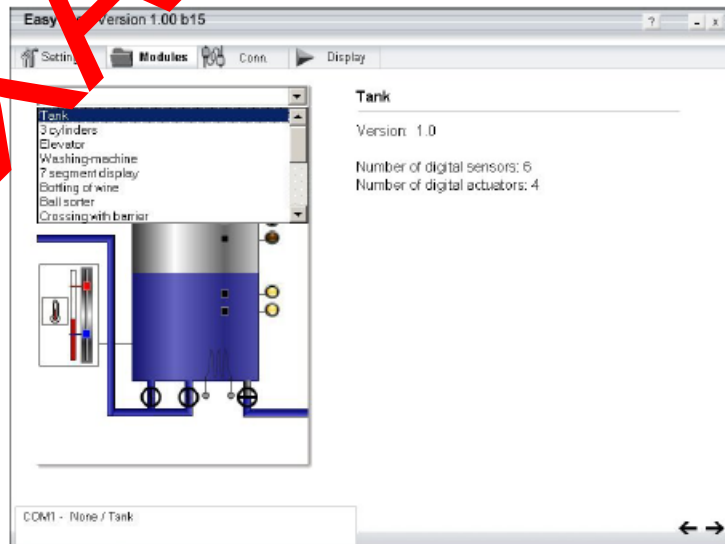
### 3.2 Example models

16 example models and a test model are available for selection in the “Modules” menu.

You can choose the required model whose mode of operation can be observed here in the animation using a list box.

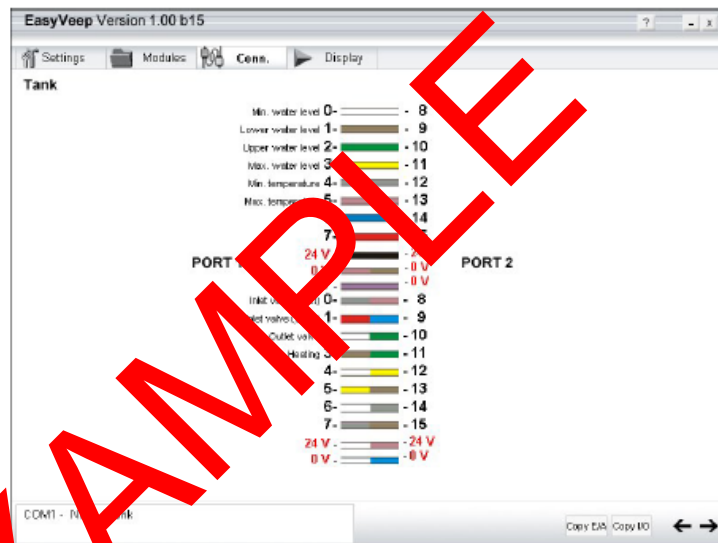
In the case of certain models, the animation is started automatically. Otherwise, the user must start the animation manually.

There is a brief description for each model and the number of digital/analogic sensors and actuators is shown.



### 3.3 Connection

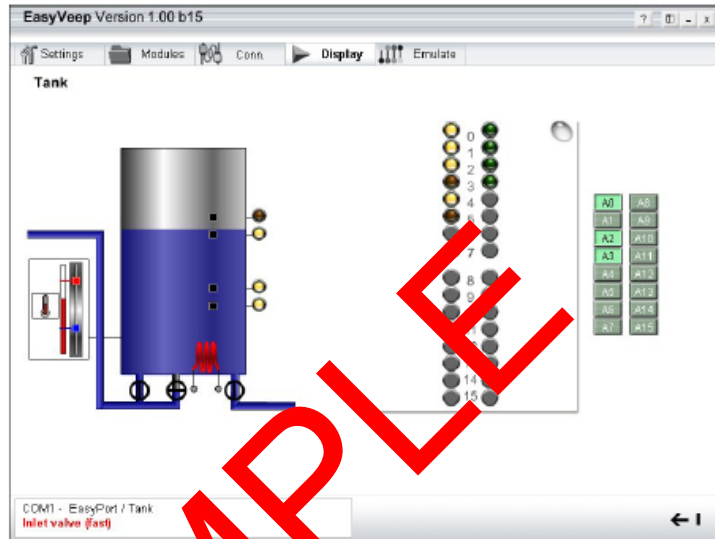
The “Connection” menu item shows the connections of the sensors and actuators of EasyVeep via EasyPort to the PLC.



EXAMPLE

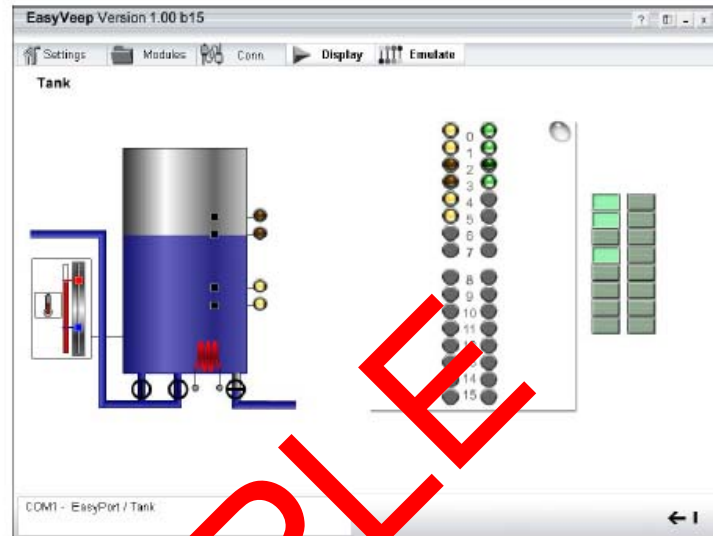
3.4  
Manual operating mode

In “Display” mode, you can simulate the model by manually actuating the outputs on the right-hand side.  
In this operating mode, you can best get to know the characteristics (outputs, inputs, events and interrelationships) of the model in an analytical way.



### 3.5 Emulation

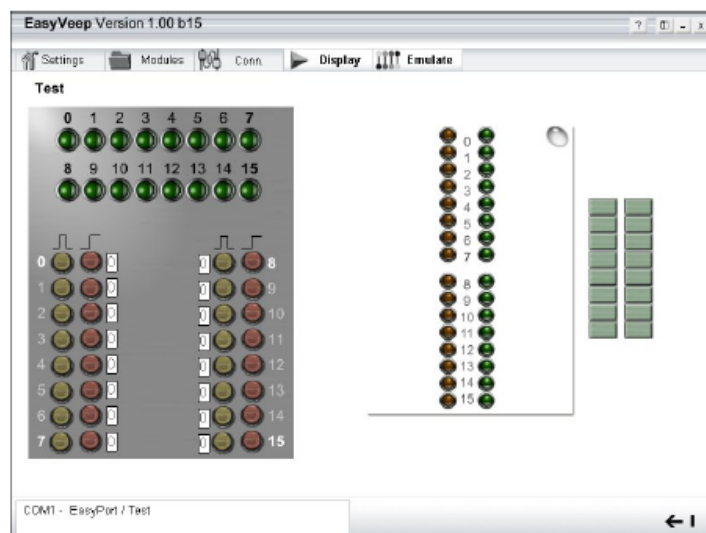
In “Emulate” mode (possible only with **EasyPort** connected), the outputs are switched not by clicking with the mouse but by 24 V DC from the existing PLC. You can test your PLC program in this mode. You can also use Festo’s simulation box to test the functions of the operating mode and the functions of **EasyPort**.



### 3.6 Function test/ commissioning test

After you have successfully performed commissioning, you can now test basic sequences of the overall configuration.

- Close all PC applications.
- Switch on the PLC.



Description

16 digital sensors and 16 digital actuators for testing the function of the system, the PLC and the **EasyPort**.