

# INDUSTRY 4.0 AND ADDITIVE MANUFACTURING – VOCATIONAL TRAINING FOR THE FUTURE!



## Operationally safe 3D printer designed especially for vocational and advanced training

Today, additive manufacturing is already considered to be standard in modern industrial production. Ever shorter product lifecycles and ever greater varieties are a constant challenge for manufacturers: whether it be prototypes, low product volumes or mass production. This is where there is enormous potential for an industrial revolution right out of the printer.

In conjunction with fabmaker GmbH, Lucas-Nülle is offering an innovative, modular teaching and training concept including educational material on everything involving 3D printing applications.

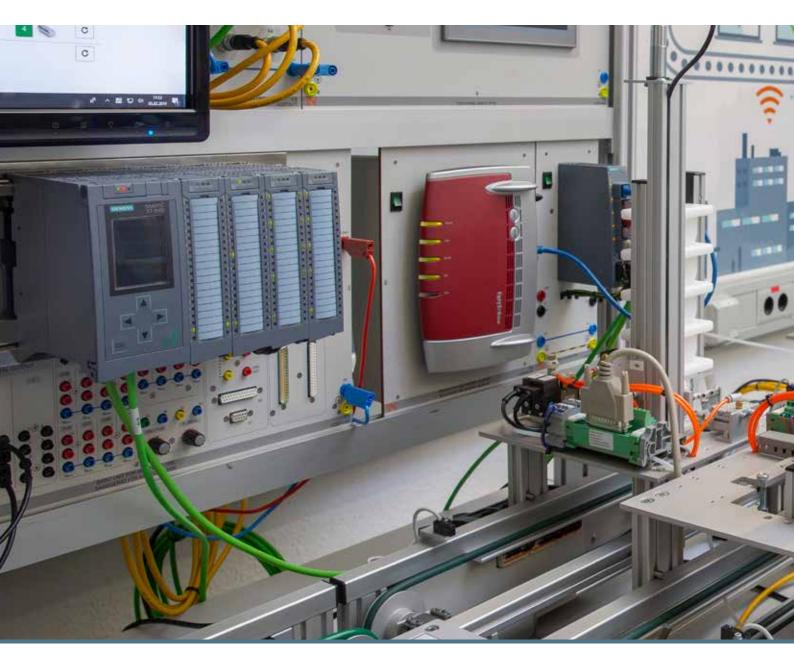
## BECOME 3D PRINTING EXPERTS AND SECURE THE WELL-TRAINED PROFESSIONALS OF TOMORROW



Our courses are designed to provide you with the opportunity to ideally position yourself professionally for the digital world of tomorrow. Thanks to a significant emphasis on hands-on training as well as phases for processing information and deepening understanding, you can master important content and learn about the demands posed by the new world of work.

They develop and produce. They do further processing and integration. They can easily solve technical problems that arise and know how to apply their tools efficiently. In conjunction with the LN training package, this course is the real deal.

# ERP-LAB – ESPECIALLY FOR TRAINING PURPOSES INCLUDING THE "ADDITIVE MANUFACTURING" WORKSTATION



#### Automation technology never comes to a standstill

The 3D printer is integrated into the ERP system as well as into the webshop as a new component in the Industry 4.0 system (smart factory). All you need is a browser to order from any mobile device. While shopping the customer directly sees how much is in the basket. The prices for individual products are also administered from the ERP system. Production and material costs are constantly monitored and assessed thanks to the unit prices stored in the system. Data export is also possible.

#### Benefits

- Monitoring the entire internal process of production
- SCADA function: malfunction alarms and problem localisation integrated into production
- Monitoring warehouse inventory: signalling whether orders can be filled
- Automated order procedure possible when inventory is too low

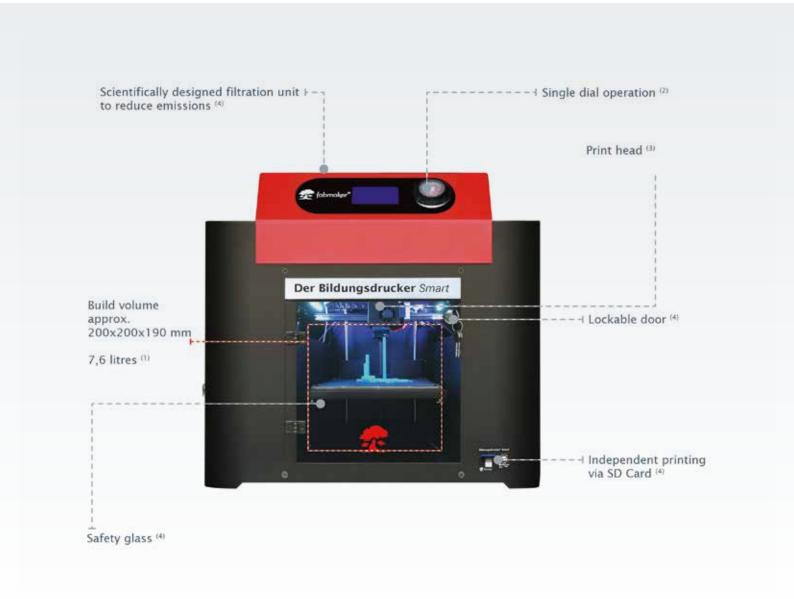


There is a host of statistics located in the backend of the ERP system - for example on production times, interruption times, number of versions manufactured and customer evaluations. The orders are depicted in detail. Filter functions make it easy to find a customer's orders in certain time frames. Delivery receipts and invoices can be created and printed out in addition to the orders.

#### Benefits

- Freely configurable webshop
- Order via Internet
- Personalised ordering
- Different prices for different versions
- Delivery times shown
- Live view of production process
- Live view of order lists

### **3D EDUCATION PRINTER SMART**



The 3D EDUCATION PRINTER SMART (Bildungsdrucker®) offers a compact and effective solution for 3D printing in an everyday educational environment. Its operational safety makes it far superior to its competitors on the market.

#### Benefits

- Thanks to its size and relatively light weight, the printer takes up very little space and is easy to reposition.
- Fully automatic printing process and semi-automatic set-up process make the printer very easy to operate by laypersons.
- Producing models of excellent quality thanks to a very thin coating (up to 0.06 mm).
- No risk of burns or crushing and no toxic fumes within the immediate work area.

### **3D EDUCATION PRINTER PRO**



The 3D EDUCATION PRINTER PRO (Bildungsdrucker®) stands out thanks to its bigger-than-average printing chamber and its patented interchangeable printing head with two printing nozzles. Using this printer a multitude of objects, in a variety of colors or materials can easily be realized.

#### Renefits

- The particularly large print volumes are made possible thanks to the printing of more than one object at the same time.
- The two printing nozzles permit a high degree of material variety and different colors and material combinations.
- Excellent quality for models thanks to a very thin coating (up to 0.02 mm).
- No risk of burns or crushing and no toxic fumes within the immediate work area.
- Automated set-up and printing process for maximum comfort so more time can be devoted to learning and projects.

