

# A NEW “CO-WORKER” WHO NEVER SLEEPS

## the Toolboss automated warehouse system

Time and again, we hear our friends and acquaintances sigh that they’re always pressed for time on the job. Industrial production is no exception, as short delivery times have become the standard. Time is always a critical factor in manufacturing because missing a deadline has customers quickly switching to a new supplier.

**A real-life example.** An industrial enterprise has a standing order for parts milled from stainless steel. It’s 6pm but manufacturing has to be suspended because the standard ø 3 straight bits have run out. Mihkel from the last shift took the last one, and he managed to break it. Unfortunately, no one noticed that there were no spares and now, in the evening, there’s no other option but to wait for the morning when the tool supplier can deliver a new bit. It’s clear that a stoppage means loss of revenue and stress for the company. At worst, it could mean the loss of a regular customer.

|   | Downtime (h) | Price per hour | Total   |
|---|--------------|----------------|---------|
| Cost of replacing the tool (payroll fund)                 | 0,15         | 12.00 €        | 1,80 €  |
| Cost of 1 stopped machine                                 | 1            | 35.00 €        | 35,00 € |
| Cost of looking for a tool from a workshop (payroll fund) | 0,2          | 12.00 €        | 2,40 €  |

  

| Period: 1 week                  | Revenue forgone  |                  |                  |
|---------------------------------|------------------|------------------|------------------|
| Number of machines in the plant | in the 1st shift | in the 2nd shift | in the 3rd shift |
| 1                               | 187 €            | 374 €            | 561 €            |
| 5                               | 935 €            | 1870 €           | 5 610 €          |
| 10                              | 1870 €           | 3 740 €          | 11 220 €         |
| 20                              | 3 740 €          | 7 480 €          | 22 440 €         |

” An automated warehouse was in use in England at my former employer, which subcontracted for the oil industry. We were very happy with the system, as it meant significant savings on time and money and made the employees more disciplined in treating the tools more responsibly. I’m glad that the system will soon be introduced at my new employer in Tartu. It is a positive example of adoption of a contemporary technology

Oliver Cumbers, HANZA Mechanics Tartu AS

### A technical innovation that helps value profitability

The system? An automated tool warehouse, Toolboss being one quality example. An automated warehouse not only keeps tools from going missing, but it will also order new ones and help safeguard profitability.



510 x 545 x 2000 mm



### Security from several perspectives

There are several types of automated warehouse systems. Some are cloud-based where data are sent to the system developer’s server and the warehouse system developer has access to them. Another solution, which is the one used in Toolboss, is that the data are saved into the manufacturing enterprise’s own server and unauthorised people do not have access to the data. Along with data security, it should not be overlooked that it’s vitally important in several fields to keep tabs on tools and make sure they are returned to storage. A tool left in an aircraft engine or scalpel left in an abdominal cavity could lead to disaster. The wrong medication or dose can also lead to major problems for a patient in hospital. Therefore, the applications of automated warehouses go far beyond tools – the system is perfect for medicinal products and surgical instruments too. A scalpel will always be put back in storage until the next operation and potentially overworked nurses are supported by a machine when it comes to measuring dosage.

The greater the number of people who use tools every day at a company, the more complicated it is to ensure that they’re always at the right place at the right time. The automated warehouse keeps the tools and measuring instruments in locked drawers that can only be opened by password, magnetic key card or fingerprint authentication. Each opening of the drawer is logged: information on who took what tool at what time, for what project and for what piece of machinery. As a result, searching for missing tools is a thing of the past – even if the necessary item has left the warehouse, it’s clear where it is and who’s using it.

On the basis of the saved data, the automated warehouse generates reports on the use of tools and expenses – and that’s an irreplaceable resource for managers and helps keep track of the profitability of current and future projects. Querying the automated warehouse shows clearly how many tools were

needed to produce 1,000 dental implants, and it helps decide whether it is wise to accept this sort of order in the future or not.

The comprehensive reports generated by Toolboss also help to identify problems in the manufacturing process. If the overview shows that there is a threefold difference in tool expense between the night and morning shifts, or that three identical blades were needed to make several dozen small parts, something is wrong. Perhaps the wrong tool was selected or the employee’s knowledge was not up to par. Smart intervention can prevent such situations recurring in the future.

Based on the settings, the automated warehouse decides when to start replenishing the tool inventory. If the number of one specific spare tool has dropped to a critical level, the automated warehouse will send the supplier an e-mail, and the necessary replacements will soon be on the way to the plant.

### The TOOLBOSS automated warehouse system allows you to:

- store tools securely
- reduce tool expenses by up to 30%
- reduce tool administration costs by up to 90%
- have an overview of the use of tools
- budget tool expenses by each project
- always have the tools you need in the warehouse
- generate automatic reports on tool use
- improve manufacturing efficiency

The official importer  
of ToolBoss in Estonia

