

MOBILE ROBOT SOLUTION IMPROVES PRODUCTION AT DANISH COMPANY



Improvement of lead time and resource management is a key focus area for companies around world.

This is also the case for Danish company TN Værktøjslibning ApS, who manufacture high quality cutting tools for the metal industry.

With continuous expansion and investment in new equipment, the company today is among the leaders in cutting technology development.

Manufacturing cutting tools includes many operations that each tool must pass through before it is finally sent to the customer.

Mobile robot solution

Increased flow

TN Værktøjslibning ApS

Until now the phased production and logistics process has meant that the tool has been manually moved around the company, so employees spent time moving the items around, whilst the CNC machine itself has stood still.

This inefficiency and downtime were identified as a place where improvements in flow and a reduction in lead time could be made.

TN Værktøjslibning wanted a mobile solution that could optimize processes and reduce the time wasted switching and moving items.



SOLUTION

Technicon developed a solution using the MiR250 autonomous mobile robot, with a ROEQ top module TML200. This solution can be simply programmed to pick up, transport and deliver components safely and accurately between different workstations.

Like all ROEQ top modules, the ROEQ TML200 comes with ROEQ safety and ROEQ Assist software, which is fully compatible with the software on the MiR robot. The ROEQ Assist builds standard missions for the robot and defines the robot's footprint, which makes the set up relatively straight forward and the robot can safely and seamlessly navigate the production floor.

EASY TO USE, INCREASED PRODUCTIVITY

TN Værktøjsslibning has adapted the solution to suit their own needs, by mounting a cage on the top module that fits the components that need transporting.



RESULT

TN Værktøjsslibning has reduced production lead time, since installing the ROEQ/MiR solution, with orders coming through about half a day faster. Over time, TN Værktøjsslibning plan to develop the system so that the robot drops off goods and automatically runs to the next station.

“ Adapting the solution was very straightforward to do, with the mounting holes on top of the ROEQ top module, and the individual employee chooses where the robot should go. ”

Steen Rasmussen, TN Værktøjsslibning ApS.