Hydroko successfully upscales smart water meter production

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Filiep Vincent

Hydroko, based in Kapelle-op-den-Bos, developed a smart water tap which makes it possible to regulate the water supply to individual taps via the Sigfox network and which can therefore reduce consumption, for example in the event of general water scarcity. This innovative smart tap, fitted with the necessary electronics, offers a number of interesting advantages over the existing market offer.

The SME expects to be able to market an increasing number of such systems in the near future and it recently managed to conclude contracts with a number of water for the delivery of a large number of meters over a period of approximately ten years. In order to continue to meet the increasing demand, a new assembly line and additional business area were required.

The smart taps were manufactured almost entirely in-house, with high quality techniques, in the original company buildings, from concept and assembly to delivery. However, the different process steps were not really streamlined, but took place in three separate rooms. This was no problem as long as customer numbers were low, but no longer suffices for the scale-up. That is why Hydroko rents a new, large space close to its current location, where it has enough space for a new assembly line and where the warehouse for incoming and outgoing goods can also be housed. Setting up a new assembly line should allow the smart taps to be assembled quickly enough without compromising quality.

U-shaped production cell

Hydroko called in Sirris to help develop the assembly line. They helped to define the specifications for the line and also helped to find a partner who could assist in building and implementing this production cell. Based on this analysis, it was decided to opt for a U-shaped production cell rather than a straight assembly line composed of several work cells. Input and output had to be provided for each cell. The number of components to be processed per day was determined per assembly station. In order to build the assembly cell, a long list of possible suppliers was drawn up, from which a shortlist was distilled with the three most suitable companies. Based on the specifications, each of these suppliers made a proposal for the construction of the cell.

Eventually Hydroko chose a ‘pipe & joint’ system as the basis for the assembly posts, supplied by Leanflow. This is because of the fast delivery and the flexibility of the system towards later adjustments. The installation of the assembly cells took place by the end of 2018 and Hydroko already made some adjustments, so that the assembly line is now operational.

In the future Hydroko will plans both a second, identical assembly line to double the production of the smart water tap, and the installation of quality controls on the line to take advantage of the full potential of the products and deliver optimal quality.

Authors

Filiep Vincent