

*Designing and building  
special purpose  
machines*



## Reliable, competent partner

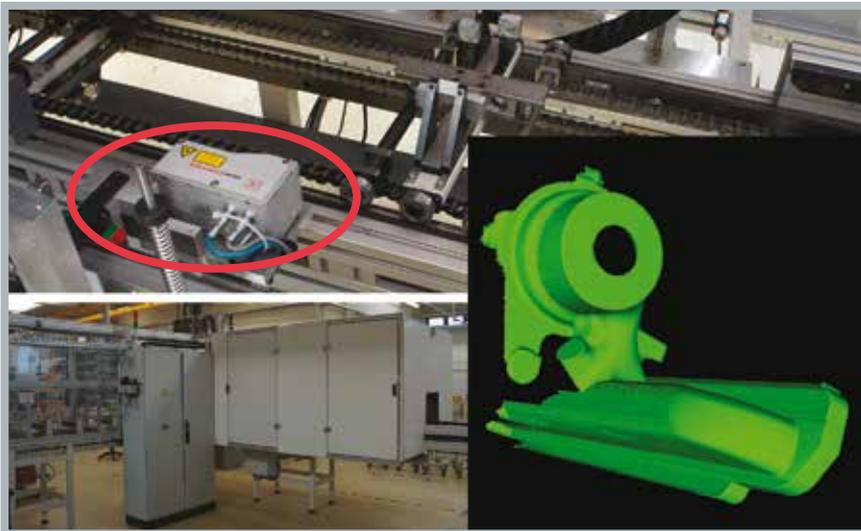
### Experience

The presence of Kvalix Automatika Kft. in the field of industrial automation has increased continuously since its establishment in 1990. We have achieved recognition and became the Hungarian distributor of leading manufacturers in the following specialist fields:

- image processing (vision systems)
- sensor technology (displacement, rotation, colour, etc.)
- control and display technology (PLC and HMI)

### Competence

In 2010 we extended our professional knowledge in the above mentioned fields by taking over the activities and competences of Ecotech Kft., which specialised in manufacturing special purpose machines. Based on this rich professional background, we design and manufacture special and single purpose machines, created by implementing forward looking solutions and following well regulated processes.



A 3D part control machine we made can be seen below, the encircled moveable profile scanner used for imaging in this is above this, while a cloud of points taken on a part can be seen in green. The part is qualified by means of examining the cloud of points with our 3D image processing software.

## Innovative, PLM-centred system

We aim at manufacturing machines meeting the highest quality, technological and safety standards at shorter notice than any other manufacturer. In order to achieve this we use innovative tools and operate well organized processes supported with a state-of-the-art information technology background.

### Meeting the deadline swiftly, well, and accurately

We use the Teamcenter PLM (Product Lifetime Management) system to support our product development processes. This ensures that the necessary product information is always accessible to authorised persons, which results not only in a better product but also in quicker and more efficient work.

The possibility of performing the work along several lines simultaneously also supports reducing production lead times. This is made possible by our special design method and the properly coordinated and managed team work, which is



*The submicrometer measurement tool of a cogwheel inspection equipment*

achieved by revision follow up, and the operation of workflow and project management systems, among other things.

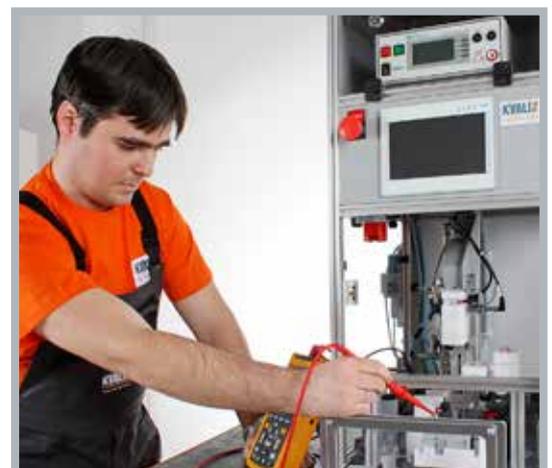
Based on the product data taken from Teamcenter, the material requirement planner of our ERP system, the SAP B1, controls procurements. This way the materials are procured precisely and by the necessary deadline, whereas, the production module supports to have the part manufacturing and assembly processes under control, while ensuring the traceability of the components.

Using an attested document management system we ensure the safe storage of documents and the possibility for authorized persons to retrieve these documents efficiently and retroactively even for a period of years, for example if a former project of the Customer is concerned.

### Guaranteed quality, time and cost-effectiveness

We have equipped our own part manufacturing workshop with new equipment from well-known European manufacturers, so we are in the possession of a properly equipped welding booth, semiautomatic sawing machine, a CNC milling center, lathe and traditional milling machines, among other things.

We shorten the path for certain parts, from the idea to implementation, by innovative solutions:





*Our own, well equipped part manufacturing workshop results in shorter deadlines and controlled quality and costs*

the CNC program generated from the 3D model by means of the CAM system, together with all the product data necessary for manufacturing, is also available from the PLM system in the production workshop, where the work item is manufactured using these - even leaving out the traditionally indispensable manufacturing drawings.

By means of this, the idea becomes a work piece in-house under the control of the Teamcenter workflow and project management system, resulting in a shorter lead time and practically error free production.

### **Creative, quick result**

We lay great emphasis on establishing a system plan with a mechatronics approach in our design processes, in which, based on our competences in mechanical engineering and electricity, we determine and specify the interfaces between certain disciplines so that the design work performed in the different engineering fields may be performed simultaneously, which results in the work being carried out in a smaller time-frame.

## **Cooperation**

### **Adaptability**

We also have licenses for other CAD systems in addition to the 3D CAD system we prefer for the mechanical engineering designs. This way - since our PLM system is CAD-independent - we may adapt ourselves to the design system required by our Customers, if necessary.

### **Teamwork**

We may provide our customers with access to our PLM system so that they may get an inside view of designing the machines manufactured for them, revise all the details of the mechanical engineering plans being made and by means of their observations they may contribute to achieving the common objective through the Internet.

We offer the opportunity of an even closer cooperation: we may grant remote users access to our engineering workstations which, owing to the most recent technologies, ensures a full value user experience even through the Internet, in spite of the intensive graphic demand. This way even the designers delegated by the Customer may also participate in the work - without geographical restrictions.

## **Excellence**

### **Ideas, solutions, professional help**

Our design and implementation team consists of highly trained and experienced experts - similarly to the colleagues ensuring the operational background - so that we can provide professional help in the solution of even the most difficult tasks.

### **Fulfilled expectations**

We ensure the high quality and continuous development of our activity by means of our constantly maintained quality management system attested according to the EN ISO 9001 standard, which covers all parts of our activities, guaranteeing the high level and error free management and product manufacturing, as a result of which our customers may receive the product in the agreed upon quality and by the deadline.

### **Responsibility**

Besides creating value for our customers and ourselves we do also place great emphasis on labor safety and environmental protection conditions.



*A camera image processing system in one of our machines, with a large dome illumination preventing glare on shiny surfaces*

## Safe products

The conformity to the requirements of the CE marking compulsory in Europe is guaranteed by the fact that the activities and control points the final result of which is the exceptionally safe product are integrated in our processes.

## Investment that holds its value

We build the quality parts of globally accessible manufacturers into our machines, so the spare part supply is also ensured for our Customers' machines delivered to a distant location.

The quarter of a century long experience of Kvalix Automatika Kft. in the field of industrial automation, together with the high level management of the product data, promises products that hold their value and are supported in the long term.

## A selection of our products



*Soldering station*



*Servo press machine*



*Cast leakage inspection equipment*



*Cylinder assembly station*



*Breakdown inspection machine*

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