

PLCs - hidden champions for industry 4.0?

Industry 4.0 – often called the "next industrial revolution"- is becoming reality.

And PLCs (**programmable logic controller**) have been at the nexus of industrial transformation ever since the introduction of the Modicon 084 in 1969.

A short look into history of automobile production: Before the PLC, control, sequencing, and safety interlock logic for manufacturing automobiles was mainly composed of <u>relays</u>, <u>cam</u> <u>timers</u>, <u>drum sequencers</u>, and dedicated closed-loop controllers. Since these could number in the hundreds or even thousands, the process for updating such facilities for the yearly model <u>change-over</u> was very time consuming and expensive, as <u>electricians</u> needed to individually rewire the relays to change their operational characteristics.

Back to the 21st century.

PLCs are not only delivering multiple benefits in regards to safety and reliability of production processes but start to unleash their full potential when "thought as part of a network".

Russ Fadel, CEO of Thingworxs, said recently at Automation World that "... historically, vendors tend to design products with complete end use in mind, but then discover later that end users want to do different things with the product than the vendor intended them for and so the products had to be updated or revised for future releases. By approaching product development from an **Internet of Things mentality**, products will increasingly "be built for unplanned alterations or connections later on."

Another key driver is the Ethernet. According to Scott Killian, director of connectivity at Sixnet, the "... **Ethernet is going everywhere** and will become the dominant network across manufacturing.

Business Case Thinking

With PLCs being the nexus of industrial transformation – the reason why we like to call them the "hidden champions" – it becomes evident that not technical features alone but the support and expertise of vendors are becoming more important than ever to help customers to make the best investment decisions.

This is the reason why we have developed for example our model EPLC-96 and call it "create your own device".

- ⇒ It obviously allows for Ethernet connection (next to many more)
- ⇒ And it is designed to be flexible to do what YOU want.



And this is the reason why we at EMKO Elektronik, since 1986, combine our technical skills with outstanding support for you: before, during and after installation of our products – in more than 100 countries worldwide.