

Peter Lysell from Industri-Teknik and Anders Dieterle from ABB in front of installation and service vehicles.

Pluto D45

Now Pluto D45 is here, more versatile than its predecessor B46, sharper then D20 and even monitoring analogue values like temperatures, levels, pressures and speeds in a safe way.

One company that has been waiting for Pluto D45 is Industri-Teknik Bengt Fridh AB in Arlöv outside Malmö, Sweden – a family business with around 25 employees.

"You could almost say that we were first in line," says Peter Lysell, who is electrical engineer at the company. Industri-Teknik manufactures burners and burner control systems for the process industry, and oil and gas boilers. The customer base is heavy industry including the petroleum and chemical industries. "Actually, we deal with all industries that use heat, as well as the municipal district heating plants", Peter Lysell continues.

Our customers are spread all over the world. We export to countries like India, China and Brazil.

"We usually use Pluto when a burner plant needs to be modernised, because of new requirements in the latest regulations for example."

"Pluto is ideal to use when there is a need for safety functions. We have been using Pluto for the past seven, eight years."



Peter Lysell from Industri-Teknik Bengt Fridh, André Strömberg from E.ON, Heleneholm plant and Anders Dieterle from ABB, in front of an equipment cabinet where Pluto is installed.



The Heleneholm plant in Malmö where E.ON has opted to use Pluto D45 for its safety solutions.

ABB Jokab Safety offers a whole family of Pluto Safety PLCs, some with networking functionality via safe bus, all with safe digital inputs, and some with safe analogue inputs. Pluto can communicate with other control systems via gateways. And the Pluto O2 output module facilitates the expansion of the safety outputs according to the highest level of safety.

Industri-Teknik previously used the B46, a model that was able to monitor three analogue signals safely, 0-27V, not the most common standard in the industry. "Because of this, we had to make adjustments in order to handle the applications", says Peter Lysell. "Since a digital signal only has two positions, ON or OFF, there was a need for an analogue signal."

Then came the Pluto D20, which is capable of monitoring safely 4 analogue inputs, 0-10V/4-20 mA, for example, flows, temperatures, pressures, speeds, etc. The Pluto D20 can not only monitor a target value but also a whole range of values.

"For us it was important that it arrived," says Peter Lysell. "We really needed it." Though, the Pluto D20 had only four safe analogue inputs and ABB felt the need for a larger model: the Pluto D45 has twice as many safe analogue inputs – eight in total.

"It includes everything you need," says Peter Lysell, "even inputs that can be used as counter inputs for incremental encoders, photoelectric cells, inductive sensors, etc."

All Pluto models feature dual processors that ensure that the process/machine stops as soon as a safe signal is missing, or when an analogue comparison exceeds the set limits for example.

"Pluto D45 function is to safely monitor analogue signals and to ensure that the processes are stopped before the plant is damaged or that people will never be involved in an accident," says Anders Dieterle, Area manager from ABB Jokab Safety.

E.ON

E.ON is one of Industri-Teknik's customers that opted to use Pluto D45 at the Heleneholm plant in Malmö.

The Heleneholm plant is a cogeneration plant, owned by E.ON, which began operating in 1966. The plant is designed to ensure that it has multiple operation options with combination boilers, turbines and heat exchangers. The principal fuel is natural gas. Full back-pressure production provides about 300 MWv and about 120 MWe. Maximum production is 400 MWv, which is obtained with reduced electricity production and heat exchangers in operation. Heleneholms Administration stands with SYSAV and Öresundsverket for most of the district heating in Malmö.

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Anders Dieterle from ABB and Peter Lysell from Industri-Teknik who are pleased with the solution featuring Pluto's safety PLC.