

Customer Success Story



WeOS reduces the stress for ABB Force Measurement

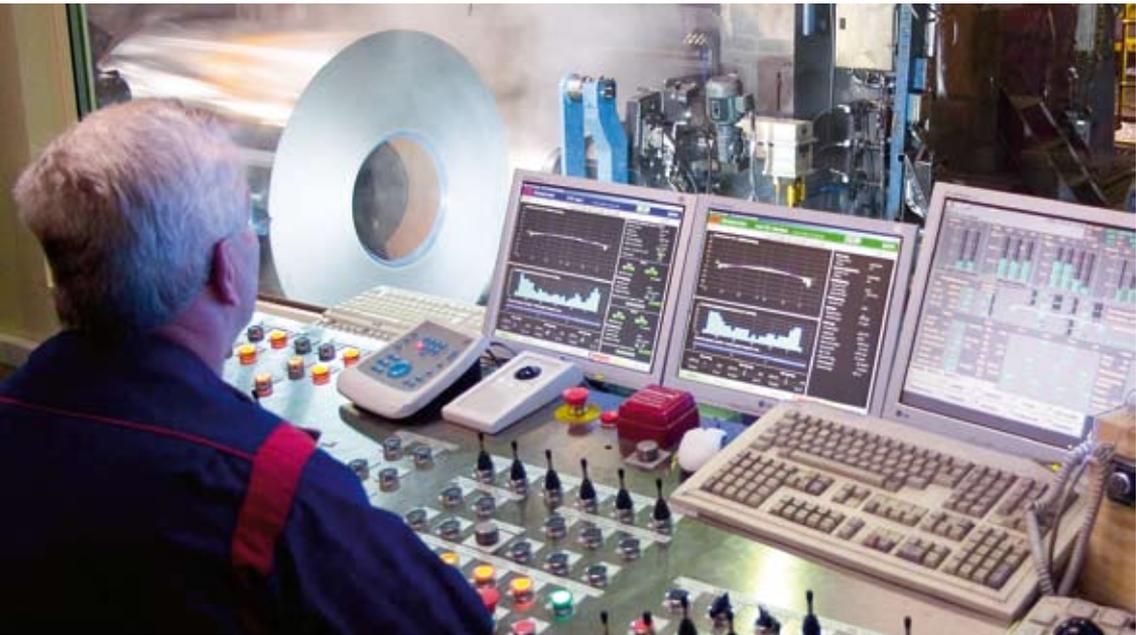


Photo: ABB

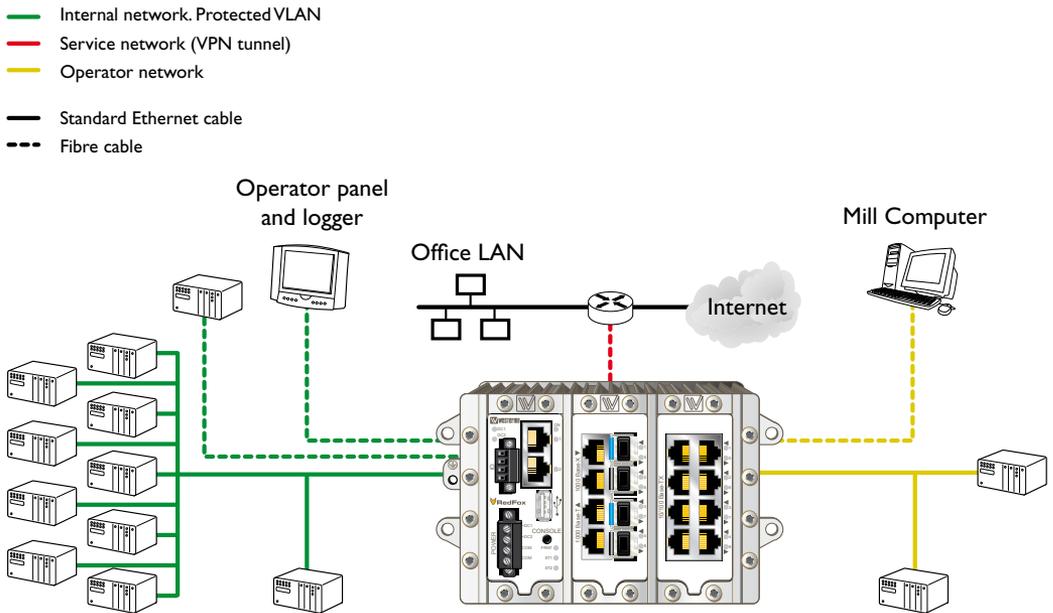
Westermo's WeOS reduces the stress for ABB Force Measurement



The Westermo Redfox, a WeOS (Westermo Operating System) industrial Ethernet switch, has helped ABB FM (Force Measurement) save money and simplify their systems. Their new Stressometer system is designed to replace an earlier solution which had to use up to six networking products to manage its data communications. The new solution requires just a single device – the Redfox.

ABB FM is a leading global supplier of control systems for rolling mills, which consist of a variety of measuring and control instruments, that precisely optimise the process to produce the highest quality rolled products. ABB FM has the same aim as Westermo in some respect, that is, to make complex tasks as easy and efficient as possible. In this application the two companies complement each other, generating a truly "Made Easy" solution.

In previous solutions, the rolling mill control network could consist



of a combination of up to six networking devices (switches, routers, converters, and firewalls) from different manufacturers. This resulted in compatibility issues and lack of critical networking functions. It also resulted in difficulties installing and maintaining these complex networks. This need for multiple products also contributed to a congested control cabinet which needed to be cooled. Cooling solutions in industrial environments often lead to increased maintenance requirements as fans become worn.

The new network solution for the Stressometer system comes completely preconfigured and installation is as simple as plugging in a few cables. Once in place, it is virtually maintenance free. If updates or service is required, ABB FM can access the protected part of the network over the Internet via an encrypted VPN tunnel – A function within WeOS. "We have delivered this solution since 2010, and during that time, we have had practically no trouble with the data communication in our system," says Christer Gustafsson, Data Communications Manager at ABB FM.

The network is built with only one RedFox Industrial (RFI-18-F4G-T4G), an 18 port layer 3 switch running Westermo's WeOS operating system. WeOS is available in a range of Westermo products now meaning that all the functions available in Redfox can be found in other Westermo products like the Lynx, Wolverine,



Photo: ABB

Falcon and Viper.

In this solution the network is subdivided into three VLANs: A protected VLAN that is not accessible to the client that connects all the measuring and control instruments, a second where the rolling mill control computer is connected and a third that connects to the customer's office network. Although the system is completely pre-configured, it is still flexible. In special cases where equipment is moved or plugged in, NAT rules can be applied without affecting the original configuration.

"There were several reasons why we upgraded our system, but mainly we wanted a more unified system. This solution gives us that and we avoid compatibility problems between different manufacturers, the system is easier for us to install and maintain and it costs less to deliver," Christer continues.

These systems are installed in tough industrial environments. RedFox Industrial is designed for just that kind of environment and will operate in high levels of electromagnetic interference and in extreme temperatures of between -40 to +70C. "We have tried many different industrial data communication products from different suppliers, but they have simply not been good enough. The new solution works very well with very few support issues." Concludes Christer.



RedFox Industrial Routing Switch for enterprise applications



For the most demanding applications, we offer our high end series of Ethernet Switches, RedFox Industrial. RedFox Industrial is available in six different designs. With its powerful hardware and high processing power; combined with up to 8 Gb ports and our extensive transceiver selection, the RedFox is unbeatable when it comes to delivering flexible high-speed Ethernet.

Regardless of which RedFox you choose, the units are always delivered with the latest version of WeOS. This means that your RedFox is equipped to meet the requirements of current and future industrial networks.

Product/Art. no	Description	Connectivity
RFI-18- F4G-T4G 3641-3300 	High performance industrial Ethernet switch with enhanced routing functionality. 10 x 10/100BaseT, 4 x 1000BaseT ports and 4 SFP slots with Gbit support.	10 x 10/100BaseT 4 x 1000BaseT 4 x Gbit SFP slots Digital I/O Console USB