

Innovative details, efficient when combined



With just 5-mm width, the WMF terminal blocks allow a high wiring density

US-based Spectra Energy relies upon Weidmüller's WMF multi-functional terminal blocks in its new natural gas plant.

Specially designed for process control systems in the North American market, the screw connection terminals impress with their compactness, safety and ease of use.

The US company Spectra Energy is one of the US's leading natural gas infrastructure companies. With a new natural gas processing plant with a capacity of over 5.5 million cubic meters, the company has reacted to the increased energy demand in the northeast of British Columbia, Canada. The first half of its processing capacity should be brought into service and operating at the end of the first phase of the project late in 2011. Phase 2 will follow until early 2013.

To connect and distribute signals from the field sensors and actuators into the plant's control systems terminal blocks are needed, often with built-in safety functions. This is the case with Spectra Energy's new natural gas plant. Weidmüller was able to convincingly demonstrate its multi-functional solution to this requirement.

All functionality in one module

„For the technical outfitting of the new natural gas plant we presented our new terminal block family ‚Weidmüller Multi Functional‘ (WMF) to Spectra Energy and WorleyParsons, the contractor responsible for this area. The solution was particularly impressive in terms of the considerable space savings offered when compared with traditional terminal blocks,“ recalls Terry Hodgson, National Sales Manager for Weidmüller Canada. Conventional field connections with fuses have required three different terminal blocks up to now: a feed

through terminal, a fuse or isolating terminal and a PE terminal or copper rail to connect the screening to. On the mounting rail that amounts to a width of around 18 mm in total. „Our WMF multi-functional terminal block series has been designed to that it can be installed with feed through, fused or isolating functions. In this single product concept and design, all the important functions are combined in a modular form,“ explains Hodgson. „With just 5 mm design width and 10 mm per signal circuit, the user benefits from a higher wiring density and makes significant savings in terms of installation space required on the mounting rail.“

Patch distribution with Plug & Play

Weidmüller's proven screw connection mechanism guarantees that the product will be exceptionally easy to recognise, operate and maintain error free. To make sure that you do not need to connect every signal between

the patch elements using a screw connection, it is possible to use pre-assembled cable sets with attached BLZ power connectors already attached. This optional patch distribution using Plug & Play reduces the error rate and saves valuable time when wiring on site.

„We were faced with space issues in our electrical cabinets and were looking for a suitable solution when Randy George and Shannon Gooden from Weidmüller presented us with the terminal blocks from the WMF series,“ recalls Mac Booth, Senior Automation Specialist with WorleyParsons, Spectra Energy's engineering partners. „Some applications need shielding on all lines and so the WMF connectors with the integrated shield or PE connectors met our needs exactly and made an additional shield connection devices or PE terminal block unnecessary. With the narrow WMF we achieve a significant space saving while ensuring that the shielding requirements are fully met.“



2011
ENGINEERS'
CHOICE
AWARDS

First place in the Engineers' Choice Awards

The US trade magazine „Control Engineering“ awards prizes annually for the best new products in the measurement, control and automation technology field and presents the „Engineer's Choice Award“ to mark this. For 2011, Weidmüller received this award in the „Network Integration: I/O Systems“ category for the WMF series. The multi-functional terminal block series particularly impressed in the areas of „technological advance“, „service for the industry“ and „market impact“.