

CASE STUDY: WELDING MACHINES

Solution: Embedded solutions
Country: France
Company: ARO Welding Technologies
Summary: Anybus CompactCom enables communication between ARO's devices and ProfiNet + EtherNet/IP.



The effects

- ✓ Focus on core business.
- ✓ One development project enables connectivity to all major networks.
- ✓ Faster time to market.
- ✓ Reduced costs.



Industrial Ethernet, Fieldbus and Fiber Optic connectivity with just one development

ARO Welding Technologies boost connectivity with Anybus CompactCom and Anybus-S.

Application Overview:

An effective and easy to use control system is an integral part of any efficient and reliable welding process. The Adaptive and iBox control systems complements ARO's extensive range of welding guns and delivers substantial benefits over existing systems.

These new systems delivers a combination of power and process control that will benefit any client who demands cost savings without compromising quality.

Connectivity Problem:

Until recently, ARO handled its own range of sequencers with integrated fieldbus connectivity. Due to market demand however, ARO were looking into different connectivity requirements for their controllers.

ARO wanted to integrate industrial Ethernet technology, firstly, with Profinet-IO Fiber Optics to meet the AIDA (German Automotive Manufacturers) requirements, secondly provide EtherNet/IP connectivity and finally how to integrate their existing fieldbus solutions.

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Jérôme Journot, Operation Marketing Manager, ARO Welding, France.

Solution:

ARO decided to partner with HMS who provided embedded Anybus solutions and solved Industrial Ethernet, Fieldbus and Fiber Optic connectivity with just one development.

After a short development, ARO integrated both Anybus-S and Anybus-CC platforms on their AW and iBox cards.

Benefits

ARO solved all three connectivity problems and at the same time. ARO could now offer Profinet and EtherNet/IP solutions, Profinet Fiber Optic solutions to meet AIDA requirements and at the same time integrate options for fieldbus connectivity. Since Anybus supports over 20 different industrial networks, industrial communication connectivity never needs to be a problem in the future. Through Anybus, ARO controllers are future proofed for future industrial Ethernet technology advancements and market opportunities.

“The integration of HMS products (Anybus-S and ABCC) gave us easy access to protocols such as Profinet IO and EtherNet/IP. Not only were we able to meet market demands with industrial Ethernet technology, but we also benefit from the continuous improvements of these standards such as, dual 2-port RJ45 with integrated switch technology for EtherNet/IP and with RJ45 fibre



optic connectors for Profinet. The free and included support of an HMS specialist for the active integration of fieldbus and Ethernet allows us to concentrate more on our workmanship (building trade) namely the welding by dragging”, says Mr Jérôme Journot, Operation Marketing Manager, ARO Welding, France.

About ARO

ARO Welding Technologies group is a world leader in welding equipment and systems to the automotive and other industries. The ARO Group is a specialist in resistance welding technology designing and supplying robotic guns, manual guns, stationary welding machines, MBR equipment and specialised resistance weld control equipment to the automotive and other manufacturing industries. Headquartered in Chateau du Loir, near Le Mans in France, and via its international subsidiaries and manufacturing facilities in Europe, the Americas and the Far East, ARO provides global presence to global clients.

Learn more on www.anybus.com or www.arotechnologies.com/

Anybus CompactCom

Anybus CompactCom is a range of embedded communication modules allowing communication with a specific industrial network. The modules are interchangeable which means that users can easily connect to any desired network. Anybus CompactCom works with all major fieldbus and Industrial Ethernet networks such as Profibus, DeviceNet, CC-Link, CANopen, Profinet, Ethernet/IP, EtherCAT and Modbus TCP.

Anybus CompactCom modules are used as communication interfaces in intelligent automation devices such as drives, HMIs, robots, inverters, instruments, and scales. By embedding Anybus CompactCom into a device, manufacturers get quicker time to market, decreased development costs by as much as 70%, and also the possibility to easily connect to another industrial network by simply switching Anybus module.

