As the UK's biggest manufacturer of welding data logging systems, TVC will be taking the opportunity to launch a brand-new range of ALXIII welding data logging systems at Schweissen & Schneiden.

The ALXIII range of data loggers will feature options for parameter monitoring not available on any other systems. The range includes a portable unit (ALXIII Portable), a rack mounted system (ALXIIIRS), and a semi-permanent installation (ALXIII Workstation), all of which can be customised to suit project requirements.

The ALXIII Portable is battery powered, go-anywhere unit, which can monitor up to four independent welding power sources from a single unit when the additional input options are fitted. This makes the ALX III Portable one of the most versatile and user-friendly welding data logging systems available today. The unit is ideal for monitoring twin bug, twin torch pipeline welding processes (for procedure or production monitoring), or for monitoring hot wire current and welding current independently on GTAW hot wire welding systems.

Battery or mains powered, the ALXIII RS unit is ideal as a portable or semi-permanent installation system. Each unit can be networked to provide a complete factory wide welding data logging system which, with the robotic welding software package option, makes this the choice for high production areas. When operated with a standalone monitor and keyboard, the ALXIII RS makes for a truly portable unit which can be set up in minutes. The onboard battery allows for up to four hours of welding from a single charge, or the unit can be mains powered via the battery charging circuit to extend monitoring time.

Designed for more permanent installation, the ALXIII Workstation is available as a single-, dual-, or quad-channel monitoring system and, following its predecessor the ALXII Workstation, it is set to become the industry workhorse for the pipeline welding industry. The rugged unit can be wall-mounted and is mains powered for 24/7 operation. The ALXIII Workstation comes with dedicated pipeline monitoring software as standard, allowing the preprogramming of all welding parameters and consumables from root to cap.

All models of the ALXIII come with:

- HF protection from GTAW processes
- Non-intrusive probes
- Voltage and current probes as standard
- Options for wire feed, travel speed, temperature and gas flow monitoring
- Network connection and USB ports
- Wireless connectivity
- Complete WPS programming
- Dedicated pipeline welding programming
- Cladding and weld overlay specific software
- Pulse welding monitoring software and reporting conforming to ASME IX 2015. EEMUA Publication 158 (third edition) and PD ISO/TR 18491: 2015 for measurement and recording of instantaneous power for pulsed current and waveform controlled welding power sources.

Optional probes are available in several variants, both wired and wireless, to cater for all welding set ups and projects.

In addition, TVC will be showcasing the CALSIS, a camera and laser system for the visual inspection, and measurement, of internal root profile of pipeline welds. The CALSIS is currently in use on landlines inspecting, and measuring root profile in stainless steel and clad pipe welds. The interchangeable scanning heads and wheel sets allow the CALSIS to operate in pipe sizes from as small as 110mm I.D., making this the most versatile internal inspection tool of its kind.

The CALSIS can be deployed either as an independent unit driven by an electric crawler, on reach rods, or attached to the pipeline internal line up clamp (depending on project requirements). The 1-kilometre wireless transmission system makes the CALSIS the perfect tool for land line closing welds, allowing the inspector clear HD video, and root profile measurement down to 50 microns resolution.

TVC will also be exhibiting our field proven gas equipment for monitoring purge gas conditions, gas flow, and the GQM system for measuring the composition of bottled or bulk gas mixes.