

Dairy parlour controls protected with polycarbonate enclosures

08 August 2024

Electronic controls for dairy parlours demand protection from water and dust ingress, impact as well as corrosion. Spelsberg's industrial enclosure design, based on high strength, lightweight polycarbonate thermoplastic, provides Davlec with the protection the company needs. Supplying farms around the UK via distributors, rapid and reliable stock availability is also crucial for the company. A trusted partnership increases Davlec's confidence in the service the company can deliver to its own customers.

In a modern dairy farm setting, automation is crucial. Electronic control increases efficiency, reducing the dependence on human resources, and it also raises productivity by increasing the speed of the milking process. Automated systems can also improve animal welfare, reducing time spent in the parlour, while adding controls that prevent over milking.

Established in Welshpool, Mid Wales, Davlec has designed, manufactured and serviced electronic dairy parlour equipment since 1983. With electronics design and manufacturing onsite, the company's PCB assembly capability is central. The electronics designer supplies distributors, who install the company's systems on farms around Britain.

Among the range, the company produces automatic cluster removal systems, also known as detachers, that remove the milking attachments from the cow, ensuring sufficient yield without overmilking. Davlec also develops automated feed control

systems for use during milking, as well as remote parlour entry and exit gate controls.

While most of the company's products are stand-alone units, Davlec can supply larger parlours with a turn-key system. This can link capabilities such as an auto ID system that recognises the cow from an ear tag, and dispenses feed based on the individual cow's needs.

Ingress protection

Enabling fast and simple operator control, Davlec's equipment is installed inside the milking parlour. This is a rugged environment, and sensitive PCBs need protection from liquid and dirt. As the parlour is also subject to high pressure washdown, an IP66 rating is required, and the company has partnered with Spelsberg to provide enclosures that do the job.

Another substance prevalent within a dairy parlour that a sensitive PCB needs protection from, is manure. In an agricultural environment, manure, and particularly fertilisers, contain ammonia, which, combined with moisture, can be corrosive. Fortunately, an advantage of the Spelsberg approach to enclosure construction is its use of polycarbonate thermoplastic, which is immune to corrosion.

At the same time, polycarbonate also ensures high strength, vital in an agricultural environment with close proximity to livestock. Even though polycarbonate is six times lighter than stainless steel, Spelsberg's enclosures can still achieve up to IK09 impact resistance, a high industrial rating that gives protection against the equivalent of 5 kg dropped from 200 mm.

Ease of use

Durability and longevity are key selling points for Davlec's milking parlour controls, but on occasion, a repair is required. In these instances, even though the enclosures need to uphold high ingress protection, they must also be easy to access.

"We typically house the electronics within the lid of the enclosure, as we offer a repair service. Therefore, we can swap out the lid in a service exchange and get it back to the farm/distributor quickly to minimise downtime," explains Steve Clarkson, Davlec. "This is made easy with Spelsberg enclosures, as the lid can be easily removed and sent to us."

As well as consistency in product quality, and ease of use, reliable supply is also crucial. Davlec requires as many as 1,500 industrial enclosures per year, so stock availability and rapid supply are very important.

Reliable supply

"When creating new products, our design engineer tends to choose Spelsberg as we have had, supply issues with other manufacturers in the past," confirms Steve.

The dynamic nature of the market, with a high volume of farms that Davlec's distributors need to service, also means Spelsberg's order turnaround, which can be within just five working days, is important.

"Our purchasing is very reactive. Due to the nature of the orders we receive, we keep stock of all of our products on the shelf but we often receive 'out of the blue' orders for larger quantities," says Steve. "Spelsberg cope very well with that and let us know what they have in stock in the UK, and when we can expect the balance of the order. This helps with production and ensures we are not letting customers down."

As well as marketing the company's own Davlec-branded products, the electronic control specialist also provides a subcontracting service to several agricultural companies. Davlec also relies on Spelsberg for these projects, albeit with a different label.

Like the majority of Spelsberg's customers, this close relationship creates a partnership, rather than a transactional customer-supplier situation.

"I have always found Spelsberg excellent to deal with," Steve concludes.

Image captions:

Image 1: Spelsberg industrial enclosure design, based on a lightweight, high-strength polycarbonate thermoplastic, provides protection against water and dust ingress, impacts and corrosion.



Image 2: Spelsberg industrial enclosure design, based on a lightweight, high-strength polycarbonate thermoplastic, provides protection against water and dust ingress, impacts and corrosion.

About Spelsberg

Spelsberg is one of the largest manufacturers of electrical enclosures in the world. With over 4,000 enclosures available as standard and further customisation possible, it offers solutions for almost any application.

With the largest supply of non-metallic enclosures, ex-stock in the UK, its products are often available for delivery within 24 hours; customisation is possible on any product, including bespoke entries, engraved corporate logos or fitted terminals, within 48 hours. Products can be ordered direct from Spelsberg or from most leading supply specialists including RS, Rapid, Farnell and CPC.

The image(s) distributed with this press release may only be used to accompany this copy and are subject to copyright. Please contact DMA Europa if you wish to license the image for further use.

Press contact:**Spelsberg els UK Ltd.**

Chris Lloyd

Tel.: +44 (0)1952 605849

cll@spelsberg.co.uk

PR agency:**DMA Europa**

Elizabeth Patrick

Progress House, Great Western Avenue, Worcester, WR5 1AQ, UK

Tel.: +44 (0)1905 917477

liz@dmaeuropa.com

news.dmaeuropa.com