

## SMART PRODUCTION



NEW ADDITIONS TO WIRELESS SWITCHGEAR RANGE

## REMOTE FOOT CONTROLS

They can be positioned wherever users like, and there is no risk of a person tripping over a cable on the shop floor. These are, in brief, the two key benefits of foot switches actuated via remote control rather than cable. The steute business division Controltec has now developed new wireless foot switch solutions for this growing niche market of human-machine interfaces: a universal series and a robust "specialist" designed specifically for the needs of a customer in the metalworking sector.

**W**ireless has benefits: this is true for many switch types, but especially for foot switches. Cables are detrimental to occupational safety (tripping hazard), as well as to switch functionality or durability when the cable

jacket is damaged, for example by weld splatter or mechanical wear and tear. An additional benefit is the ability to position a switch freely without the restriction of cables, improving ergonomic comfort at the human-machine interface.



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**02** The new wireless foot switch series is available in different variants. It uses a new uniform wireless protocol with highly reliable transmission and considerably reduced power consumption.

**03** The transmitter is positioned at the back of the wireless foot switch and is well protected; LEDs display the current battery charge and connectivity status.

**04** These wireless foot switches were developed for use at welding stations and other heavy-duty applications; on the right, the receiver unit.

For these reasons, manufacturers of machines for e.g. metalworking (welding, stamping, folding) are increasingly turning to wireless foot switches. And this is precisely why foot switches now have a firm position within the steute Controltec range of wireless switchgear for industry.

## » WIRELESS FOOT SWITCHES PROMOTE ERGONOMIC COMFORT AND OCCUPATIONAL SAFETY AT THE HUMAN-MACHINE INTERFACE

This range has recently been expanded – and now includes a new series of wireless foot switches for universal use in industrial production. These RF GF SW2.4LE-IND switches are immediately recognisable in the new yellow and grey Controltec colours. Fundamental differences to the previous series include the new SW2.4LE-IND wireless system, adapted by steute for industrial use following its success in steute medical foot switches.

## HIGHLY RELIABLE TRANSMISSION

Features of this wireless system include a long range (up to 45 metres indoors) and the possibility to operate up to ten wireless pairings in parallel on one machine or in one production area. In addition, transmission is highly reliable, even in often adverse industrial environments (radiation and coexistence with other wireless systems). The quality of the connectivity, i.e. the wireless signal, is permanently monitored and displayed on the receiver unit.

An additional improvement in comparison to the previous series is a reduction in power consumption by as much as 50%. This enables long battery runtimes between charging cycles.

At the hardware level, the new wireless foot switch series is designed for durability, even in harsh environments. The aluminium enclosure is powder-coated, and the switches can be operated in damp conditions (protection classes IP65 and IP67), as well as temperatures between -20 and +60 °C. The one or two-pedal switches

are optionally available with a protective shield. The antenna is installed on the back of the switch enclosure and well protected.

## SUITABLE FOR RETROFITTING ON EXISTING MACHINES

The corresponding RF RxT SW2.4 LE-IND receiver is also new. As a slim 23 mm unit, it requires little space on the top hat rail and yet still features four NOC as output contacts and a validate relay, also an NOC, for the signal evaluation. Thanks to its redundant transmission, the wireless system is thus highly reliable. The pairing of the receiver with the foot switch is simple, and LEDs inform users about the relevant operating states. In combination with this receiver unit, the wireless foot switches can also be retrofitted on existing machines.

## ALSO NEW: A SPECIALIST FOR HEAVY-DUTY APPLICATIONS

The steute Wireless range has thus been expanded to include a series of wireless foot switches which are suitable for use in adverse industrial conditions, while significantly promoting ergonomic comfort and occupational safety at the human-machine interface. Whereas this series covers a wide range of applications, a second new wireless foot switch range caters to a more specialised target group.

The impulse for this development came from a customer that produces welding machines and plants. It makes sense to deploy wireless foot switches at welding stations because the durability of cabled foot switches is limited due to weld splatter causing cable damage. However, conventional foot switches are not suitable for this use case because their protective shields

are not large enough to accommodate the necessarily thick safety shoes worn by weld operators.

## LARGE PROTECTIVE SHIELD FOR OPERATION WITH SAFETY SHOES

For this and other similar heavy-duty applications, steute has designed a robust and oversized protective shield made from powder-coated steel. It is connected to the wireless foot switch and provides enough space for operating both pedals, even with the thick safety shoes necessary for protection against weld splatter. At the same time, the protective shield prevents unintentional actuation of the pedals. A carrying handle makes the foot switch easy and flexible to position.

## WIRELESS TRANSMITTER INTEGRATED IN PROTECTIVE SHIELD

The recently developed protective shield for the RF GF 2 series reliably protects the complete wireless foot switch – including all pedals and the integrated wireless transmitter – from mechanical wear and tear, as well as weld splatter. Unlike the GFS series, where protection focuses on the pedals, the XL protective shield provides comprehensive protection for the complete unit, while the wireless signals still reliably reach the antenna of the paired receiver. This variant also uses the latest SW2.4LE-IND wireless technology.

The new wireless foot switch was initially developed as a customised project for a manufacturer of welding machines. Now that it has been successfully tried and tested for this specific application, it is ready for inclusion in the steute Wireless standard range.

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