

Penny + Giles Helps McConnel Control the Revolution

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Penny + Giles, a business group of Curtiss-Wright Controls and designer and manufacturer of joystick controllers, solenoids and high precision sensing technology, has developed a new handle for its JC6000 joystick controller, which is being used on McConnel's new Revolution control system.

With more than 75 years experience in developing tractor-mounted attachments, **McConnel**, a European Division member of the Alamo Group (an American-owned company specializing in agricultural and industrial machinery), has always been highly regarded by farmers and contractors when it comes to the maintenance of hedges, verges and grassland. Today, the name is synonymous with quality, durability and reliability and for manufacturing cost-effective equipment for maintaining hedgerows, verges and ditches, forestry, parks and sports grounds.

McConnel's new Revolution control system has been designed for the company's range of hedge cutters and verge mowers and is targeted at contractors and heavy plant users with operational requirements up to 2,000 hours per year.

McConnel's hydraulics engineer Kris Perks explains: "Our products have to perform consistently well in the most challenging conditions and that's why we have created a control system that is robust, straightforward and easy to operate.

"Joystick controllers are a vital component and need to be engineered to the highest standards to ensure we provide our customers with precision and durability. The **JC6000 joystick** is particularly impressive because it has been designed for mobile applications and its rugged build quality is ideal for the environments we operate in.

"Overall, we have been really impressed with Penny + Giles' commitment to quality and the procedures it has put in place to ensure our control system is not only a market leader in innovation, but is also extremely reliable."

He reports that the first JC6000 specified, which featured a standard Type A Handle with thumbwheel controls, was a huge success and has been welcomed by users as a significant upgrade on previous models. Subsequent versions of the JC6000 supplied for new control systems feature handles with two thumbwheels and two switches.

McConnel now specifies Penny + Giles joystick controllers whenever they design new control systems. A recent example, the introduction of the XTC control system, is a value-engineered version of a McConnel flagship controller that has proved to be a volume seller. It features a Penny + Giles **JC2000** 'mini' joystick controller that replaced a competitor's model and has upgraded reliability.

Operators also appreciate the new joystick. It has three proportional controls operating the main functions, all of which can be activated simultaneously with just two fingers, so it is extremely easy and comfortable to use. Operational safety is also enhanced as lift and angle float are disabled on arm movements and automatically restarted on joystick release.

As McConnel machinery becomes more complex and the company needs to control additional hydraulic services such as diverter valves, Penny + Giles has responded with engineering innovation in joystick design.

For its latest control system – Revolution – McConnel engineers discussed the application in detail with Penny + Giles project engineers who responded with an innovative new Type A Handle design featuring two thumbwheels and four switches.

Says Kris Perks: "We're happy to specify a more expensive Penny + Giles joystick because the improvements it delivers in quality, reliability and performance makes the extra cost worthwhile."

The top-of-the-range Revolution model is a radical evolution of McConnel's existing control systems and is designed specifically for McConnel verge mowers and hedge cutters. Its CAN lever is fitted with the new bespoke JC6000 to make operation as easy as possible. A combination of 5.5 inch screen, membrane keypad and rotary controller enable operators to navigate a customizable menu as a more user-friendly way to change the joystick thumbwheel and switch functions, eliminating guesswork when operating the joystick.

Kris Perks says: "The partnership with Penny + Giles has helped further improve McConnel's reputation for reliability and customer service and we haven't seen a single Penny + Giles component fail." He says.