WDS Components Help Desk

Spencer Franklin HydraClamp V Range: Integrated Vacuum Workholding Technology

2026-11-12 - Mark Moody - Sales and Marketing Director - New Products

WDS Launches Spencer Franklin HydraClamp V Range with Vacuum Workholding

WDS Components is pleased to announce the launch of the Spencer Franklin HydraClamp V Range,

an advanced series of workholding solutions combining proven HydraClamp clamping with integrated vacuum cup technology.

Sorry, video playback isn't supported by your browser.

Designed for secure, non-invasive gripping of non-porous materials such as glass and metal, the new range delivers precision positioning and improved productivity across manufacturing and assembly environments.

The HydraClamp V Range includes both manual and automatic vacuum-assisted clamping systems, alongside a selection of accessories including vacuum cups, generators, tubing, connectors, reducers, and conversion kits. Each system is engineered to provide reliable 360-degree positioning, enabling operators to orient workpieces at virtually any angle while maintaining consistent holding force.

“What makes this range unique is its ability to provide reliable vacuum-assisted holding alongside full 360-degree positioning, giving manufacturers greater flexibility when working with complex assemblies and challenging workpiece orientations” explained Sam Wilkinson, Technical Manager at WDS. “Whether users require manual or automated operation, the HydraClamp V Range delivers a level of adaptability, control and efficiency that is difficult to achieve with conventional workholding systems."

Expanded Product Offering

The new range includes several configurations tailored to varying load requirements and applications:

HydraClamp Woodworking Miniclamp (Manual Vacuum Cup)

A lightweight, mechanically operated work positioner with a maximum load capacity of 6kg (300mm from ball centre at 45°). Designed for light-duty assembly tasks, this miniclamp enables quick locking of components in any desired position using a single lever motion.

Powrlock HydraClamp Short Arm (Manual Vacuum Cup)

Offering increased capacity up to 13kg, this configuration combines the strength of the Powrlock system with manual vacuum functionality for enhanced versatility in fixture setups and panel handling.

HydraClamp Long Arm Senior Type (Automatic Vacuum Cup)

A hydraulically operated system with a maximum load capacity of 45kg. The unit features a pre-load mechanism using a locknut and sleeve, ensuring stable and repeatable clamping performance in demanding applications.

HydraClamp Long Ball Arm Senior Type with Safety Pedal (Automatic Vacuum Cup)

Designed for hands-free operation, this configuration incorporates a foot-operated hydraulic system with an air-hydraulic booster. It enables operators to manipulate workpieces safely while maintaining secure vacuum holding.

This new range joins our existing range of microclamps, boosters, hydraulic power sources, cylinders and other accessories such as foot pedals, pneumatic connectors and tube fittings to create an integrated clamping solution.

Advanced Vacuum Integration

The HydraClamp V Range utilises vacuum cup technology for non-marking, non-invasive clamping. In manual configurations, an integrated hand pump evacuates air beneath the suction pad, creating a secure vacuum without the need for external equipment. A visual red-line indicator provides real-time feedback on suction performance, allowing for immediate reactivation if required.

Automatic variants integrate seamlessly with standard vacuum generators and pneumatic systems via a robust steel coupling, supporting both standalone and fully automated production environments. This enables rapid setup, consistent holding force, and reduced cycle times, particularly in machining, fabrication, and assembly processes where traditional clamping methods may be impractical.

Versatility and Application

By combining mechanical clamping with vacuum holding in a single system, the HydraClamp V Range offers a highly adaptable solution for a wide range of applications, including woodworking, panel positioning, fixture setup, and precision assembly. The availability of multiple vacuum cup types allows users to tailor grip strength and contact area to specific requirements.

This hybrid approach ensures secure yet non-permanent holding, making it ideal for temporary fixturing and applications requiring frequent repositioning or delicate surface handling.

The HydraClamp is well-known for its durability and longevity. Many customers report that their HydraClamps are still working after constant use over decades! WDS carry a wide range of spare parts, and a refurbishment service is available upon request.

Availability and Support

Comprehensive technical documentation, including detailed specifications, dimensional data, and CAD models, is provided to support seamless integration into new and existing systems.

For more information, visit WDS Components or contact the technical sales team.