

# Turbo Charged

Stuga Machinery has brought the Stürtz HSM 6-KV Turbo corner/transom welder to the UK. Ed Williams, managing director at Stuga reckons that it could increase your output by 163 frames per week. He writes

As the exclusive UK supplier of Stürtz machines; we have launched the Stürtz HSM 6-KV Turbo corner/transom welder into the UK market. It brings servo-driven, high-speed welding technology to the UK.

This machine offers manufacturers precise control, the flexibility to weld a full range of window frames, sashes and doors, plus a predicted 14% increase in productivity, or an additional 163 frames per week (at 100% OEE).

Traditional pneumatic-controlled welders rely on air cylinders for the linear movement, limiting control to speed and pressure. The Stürtz HSM 6-KV Turbo corner/transom welder replaces these pneumatic systems with servo-controlled axes, providing operators with complete control over each welding phase. By combining higher heater plate temperatures with gradual, pulsed fusion of the servo axis, Stürtz's Turbo corner/transom welder produces faster, consistent and durable welds.

The HSM 6-KV Turbo heats to 280°C and completes fusion in just 10-15 seconds – versus the conventional 240°C and 25-30 seconds of traditional pneumatic welders, with additional time savings during the pulsed fusion phase. This improved cycle reduces overall welding duration by 15-20 seconds, enhancing production rates by a predicted 14%, potentially upping output by 163 frames per week (based on an eight-hour working day, five days per week), without compromising joint strength.

The Stürtz HSM 6-KV corner/transom turbo welder features a user-friendly operator interface that simplifies the loading and welding sequence. Operators start the sequence, and the machine moves to the optimal loading position, allowing easy placement of the top frame, transom, sides, and bottom frame. Once loaded, the operator initiates the welding cycle, and the machine discharges the frame onto the corner cleaner line, ready for the next stage.

Enhanced precision and control servo-driven rear fences on all corners and transoms provide complete control during fusion and welding phases. Unlike conventional pneumatic systems with basic 'on-off' limitations, the servo-driven system allows for gradual torque adjustments, resulting in consistent and durable welds.

#### Reduced transom drop

The transom head design has been slimmed down, allowing for a smaller transom drop (reduced from 350mm to 230mm). This feature enables the production of smaller frame sizes.



Ed Williams

#### Improved efficiency

The turbo welding process shortens cycle times by 15-20 seconds per frame compared to traditional pneumatic-controlled welders. Over a week, this saving of time translates to a significantly higher output, of up to 14%.

#### Streamlined loading process

The HSM 6-KV Turbo corner/transom welder offers a loading sequence designed for efficiency. Rear corner heads move closer to the operator during the loading phase, which means easier and more accessible frame loading.

#### High-speed welding

The turbo welder combines higher heater plate temperatures and servo-controlled introductions of profiles, resulting in strong, high-quality joints suitable for high-stress applications, and full control via the central control system.

We are very excited to have the first Stürtz HSM 6-KV Turbo corner/transom welder already installed and proving its capability for a customer in the UK. We will be showing it at the FIT Show in April and can't wait to see the reaction this innovative machine gets. With the first servo-driven slimline turbo transom heads in the UK, we truly believe it outperforms all competition.

We are always striving to not only meet but exceed industry standards, and this machine gives manufacturers a valuable tool for increasing output, optimising production workflows and, ultimately, profitability.

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