



Most Innovative Machine

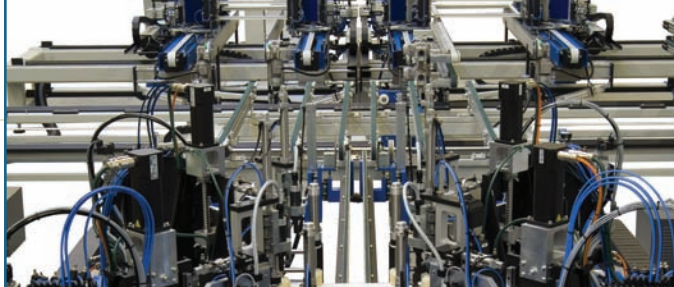
Frame/Sash Fabrication

Compact Welding and Cleaning Line for Sash Stürtz Machinery Inc., Solon, Ohio

The Stürtz sash line offers vinyl window manufacturers the highest productivity available in an automated welding and cleaning system, according to the company. Per-shift capacity is up to 900 welded and cleaned sash with a single operator. Several unique features allow for this level of production.

The Stürtz Model SMI-HSM-20/19CDS welder is ergonomically designed, with ease-of-loading being one of the major design criteria. Two of these machines are set up as mirror images of each other and configured to be loaded by a single operator with minimal movement. High-speed belts unload the welders. The belt unloads are integral to each welder, allowing them to be positioned automatically when the welding heads adjust for the size of sash. The belts unload each tier of the double-stack welder independently and then feed them onto a twin tier buffer and transport station. The twin tier buffer and transport separates the two sash and sequences them to be fed into the automated four-head cleaner. Once the sash are fed onto the cleaner infeed buffer, the transport unit can travel to the second welder and duplicate the process. This provides a seamless flow of welded sash from the two welders to the single cleaner.

Stürtz Machinery's compact welding and cleaning line for sash offers per-shift capacity of up to 900 welded and cleaned sash with a single operator.



Among other features, Stürtz has upgraded the software on the latest versions of its machines, allowing easy access to maintenance information right at the machine.

The fully programmable Stürtz Model SMI-CNC-H-4K-20/20 corner cleaner is designed specifically to process sash. This allows for a compact design minimizing tool travel and eliminating a significant portion of the cycle time required by larger frame/sash cleaners. All four corners of sash as small as 12 inches by 12 inches can be cleaned simultaneously. Maximum sash size is 72 inches by 72 inches. Cycle time to clean a complete sash is approximately 25 seconds. The cleaner also incorporates fabrication capability for tilt latch routing and pivot bar insertion drilling and can be customized for other fabrication steps such as vent latch routing and drilling for locks and keepers.

Finally, the line features upgraded software that provides access to maintenance information right at the machine. The latest control system also allows the machine to be assigned an IP address, which allows the Stürtz technical service group to access the machine over an Internet connection to perform true real time diagnostics and trouble shooting.

The close coupling of the welders, minimum length buffer and transport units designed specifically for the job, and the compact nature of the welders and cleaners facilitate a high level of productivity in a total space of less than 1,200 square feet. The small footprint allows the line to be incorporated into existing plants with minimal plant floor reconfiguration.

