

BUILT TO TILT, THE ERGO MASTER POSITIONED THIS SEAT MANUFACTURER FOR SUCCESS

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Manually controlling the position and tilt of a heavy, awkwardly weighted object is a challenge at best. Add to that, the need to perform work on the object while maintaining its balance and position and the task becomes very unsafe and very inefficient.

A major seating manufacturing company located in Ohio, contacted Ergotronix to help them find a solution to their existing method of applying fabric to automobile seats that reduced production time, while also providing a safer and more ergonomic workplace.

THE CHALLENGE

Develop a method to safely and ergonomically lift and tilt the frame of an automobile seat in order to apply and secure cushioning and fabric, while eliminating the safety risks, back, and shoulder strain associated with manually moving and holding the seats in necessary work positions.

APPLICATION SCENARIO

Each day seat frames were brought into the finishing department for adhering cushioning and stretching seat fabric over the bare metal frame.

This finishing process, allotted only 25 seconds per seat. This tempo could not be sustained due to the multiple time consuming adjustments to position the frame into each necessary work position. The loss in production time was compounded by the need for each operator to hold the seat in place after it was placed in position while cushion and fabric was applied.

The used home-made work positioners further did not address the need for tilting and holding the seats towards the operator in order to see the upper-most portion of the seat, or allowing the operator to safely affix fabric into small, hard to reach locations.

This lack of safe tilt-and-hold action often lead to near-miss accidents and was a serious issue of operator safety along with a notable lag in production time and daily output.

THE ERGONOMIC SOLUTION

This challenging issue was solved by working closely with the onsite safety manager to develop an ergonomic solution.

The Ergo Master 3-axis work positioner was selected as it offers all three desired movements: up/down, rotation and tilt with safe lockable positions in any needed work position. Furthermore, ensuring adaptability to any worker and their unique work requirements. Using this 3-axis work-positioner, the operators were able reduce the time it took to set the seats into needed and proper placement, while ensuring a safe working environment. The hazard of manually tilting the seats into suitable work positions was totally eliminated, ultimately saving the company time and work-related health issues.



Ergo Master – A versatile manual work positioner with up/down, tilt and rotation.

A follow up with the seat manufacturer a few weeks after the first implementation demonstrated a decrease in production time, to the optimal 25 seconds per seat, and an elimination of wasted production time maneuvering the seats into suitable, ergonomic and safe work positions.