

Design Win

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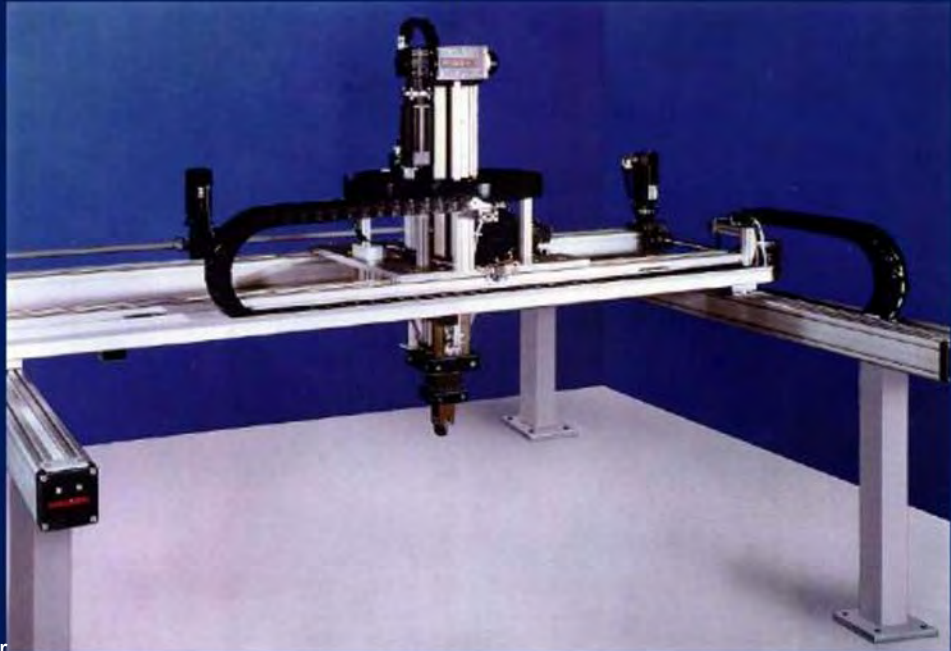
Problem

The machine builder was contracted by an automotive tier supplier to design several glue laying machines for automotive headliners. The first system was a Yamaha XXYZ ballscrew and linear motor solution, which lacked sufficient stiffness to make the necessary cycle times.

Solution

The gantry system used by the customer was made up of an XX'YY'Z system, with dual driven HPLA120 actuators on the XX' axes, a single drive and idler rail HPLA120 for the YY' axes, and an HD125 unit for the Z axis. Parker gearboxes, motors (MPP Series), cables, drives (Compax3 Series), controller (ACR9000 series), and I/O (PIO over CAN) were also used on the system. Additionally, Parker designed the Z axis brackets in the system to ensure high rigidity for dynamic acceleration in both the X and Y directions.

High speed glue laying application



Success Factors

- A detailed analysis of the customer's application was done, with key consideration paid to cycle time and stiffness.
- Parker's ability to supply the mechanics, motors, drives, controller, cable management, and custom bracket design.
- Ability to meet critical deflection criteria vital to the application.
- Ability to quote, design, manufacture, and deliver the system within a short lead time.
- Key distributor relationship with customer, and much past history and ability to solve problems.

Customer Value

- Saved time and money associated with redesign and manufacturing of support brackets for the first Yamaha system - approximately \$2000 savings. Lower system cost. The estimated Yamaha solution was 20% more expensive, which would be \$12,000. We improved the current design, which allows the machine builder to offer a faster cycle time and higher throughput to the customer. Improved the cycle time by 30+%.

FEATURED PRODUCTS: HPLA, MMP motors, Compax3 drives, ACR9000 controller, PIO

MARKET	Automotive
CUSTOMER	Confidential
COMPETITOR	Yamaha
DISTRIBUTOR	Confidential
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