Compact by Design

CAP Provides Solution for Electronic Wafer ManufacturerBall Slides Provide Custom Solution for Edge Grippers

Application Challenge

A wafer processing manufacturer in Montana was searching for an effective "edge gripper" for 300mm wafers on one of their new machines. The application required very rigid, accurate bearing guide, that had to be spring extended to prevent loss of the load if pressure was compromised during operation. It was critical that the spring forces be very light due to the limited space and to ensure the load would not be damaged. Realizing the need for a custom solution, our distributor informed them of CAP's capabilities for supplying specialized products.

Project Solution

To satisfy the "delicate" nature of the operation, it was necessary to provide a custom solution to the customer. Starting with the CAP BSC2000 Series Ball Slide (8mm bore, 10mm stroke), the unit was modified with a spring and specialized spacer arrangement to ensure the proper spring force and frame length. To guarantee the rigidity of the operation, CAP incorporated a dual carriage bearing system and customized the frame and tooling plate to accommodate the customer's desired mounting and alignment holes.

Customer Benefit

Pleased with the results of our ability to customize every aspect of this product, the customer has increased its business with CAP for both standard and special products. The success of this product's implementation has lead to better solutions for other similar application opportunities. As pneumatic gripping systems become more common within the industry, CAP will be well positioned to support any applications requiring space-efficient, customized actuators.







