# **EZ STACK**

## **BALL SCREW CENTERING DEVICE**

### THE NEXT GENERATION OF PLATE CONTROL FOR STACK MOLDS!

DME has deployed the same precise engineering concept used for years in CNC machining. The advanced patented design of the new DME Ball Screw Centering Device provides precise movement and reduced friction for a smooth open/close of your stack mold. This unit is easily custom fit to your application with off-theshelf availability. Each device is cut to length to your mold stack height. Our bolt-on features allow for quick and easy installation. EZ Stack is built for speed. With up to 2 meter per second open rate and a rolling coefficient of friction of less than 0.01, there will be no restrictions on cycle time with this centering device. Our EZ Stack has a precision ground case-hardened lead screw and a hardened ball screw nut and aluminum housings. The US Patent Pending bellow system has two functions: it wards off contamination in a clean-room environment and it protects the ball screw from dirt, dust, & debris. Maintenance is also a breeze with the "One Touch" bellow retainer system to provide easy access to lubricate the ball



- Easy to install
- Modular
- Long-lasting
- Simple adjust feature
- Cost effective
- Shafts options
  - 32 or 40mm diameters
  - Custom cut lengths up to 2,000mm

The bellows and stainless steel sleeve covers are a self-contained system to protect the performance of the ball screw and protect the molded plastic parts from contamination making it ideal for a clean room applications.



DME®

The ball return, is a bidirectional mechanism, that resides within the stainless steel caps/rubber coated fiber bellows that moves the balls from the beginning to the end of stroke.







or visit: www.dme.net/ezsgrf

ITEM NUMBER	ROD Ø X LENGTH (MM)
EZS32AS-1000CUT	32 X 1,000
EZS32AS-1500CUT	32 X 1,500
EZS40AS-1500CUT	40 X 1,500
EZS40AS-2000CUT	40 X 2,000



#### **OPTIMIZING EZ STACK FOR WIDE CENTER PORTION:**

#### ADAPTER PLATE ADD-ON

The EZ Stack Ball Screw Centering Device comes with a bearing housing floating plate that protects the lead screw from damage if the center section of the mold sags (2mm max). As an option, the **nut housing plates can be added.** These plates extend inwards from the ejector halves, repositioning the ball screw nuts closer to the center. This design increases the ejection stroke, providing more clearance for robotic part removal while maintaining stability and alignment. To avoid rubbing, a **relief cut** in the center portion of the mold is required for clearance. This add-on makes EZ Stack even more adaptable, optimizing performance for molds with larger center sections.



#### **Adapter Plate Mounting Options:**

The EZ Stack adapter plates can be mounted using two methods: direct mounting and flush mounting. In direct mounting, the adapter plates are screwed onto the mold surface, providing a simple and quick installation. In flush mounting, the plates are recessed into a pocket within the mold, creating a flush surface for the EZ Stack to be mounted on top, ensuring a more compact and integrated setup.



**Direct Mounting** 

Flush Mounting

#### **Ordering Information:**

To ensure compatibility with different EZ Stack configurations, adapter plates are available for both 32mm and 40mm ball screw assemblies. The table below provides the part numbers for nut housing and bearing housing adapter plates.



**Adapter Plate for Bearing Housing** 

ITEM NUMBER	ADAPTER PLATE FOR
EZS32NHADP	32 MM NUT HOUSING
EZS32BHADPAS	32 MM BEARING HOUSING ASSY
EZS40NHADP	40 MM NUT HOUSING
EZS40BHADPAS	40 MM BEARING HOUSING ASSY



#### **Innovative Floating Nut Design**



The bearing housing adapter plate includes floating nuts to prevent excessive load transfer to the ball screw shaft. In wider molds, the center portion's weight may cause sagging, which could stress the assembly. The floating nuts allow natural adjustment, ensuring smooth operation and extended system durability.

