# ALM

### PRECISION LINEAR POSITIONING STAGES, TABLES AND COMPONENTS

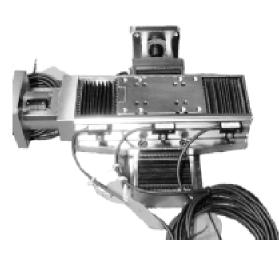
ALM is proud to introduce our new motor ready stages, tables and components product line. ALM stages feature **ALM EXCLUSIVE MADE IN THE USA** crossed roller linear bearings. ALM has created a variety of precision and standard grade configurations to offer designers off the shelf stages suitable to a wide range of applications. As with all ALM standard products, these stages are available with several application specific options, modifications and accessories. ALM remains unique in its ability to provide cost-effective, design, and manufacture for custom precision linear positioning requirements. ALM engineers are available to discuss your specific application.





ALM stages offer the following **STANDARD** features: Smooth travel and quiet operation

> Torsional stiffness and rigidity Precision accuracies (< .0001"/inch) and controllable runout Operation in any attitude without degradation of performance Minimal friction and starting torque requirements Precision grade ballscrews/leadscrews; preloaded anti-backlash nut assembly Minimal vibration and short settling times Long life expectancy & heavy payload capacity Precision Abec 7 angular contact spindle bearings NEMA standard motor mount and flexible coupling Minimal maintenance and lubrication requirements Cost effective pricing





#### **APPLICATION NOTES**



At **ALM**, we specialize in providing custom positioning stages utilizing crossed roller bearing technology. In addition to our diverse line of standard products, **ALM** offers extensive design and fabrication services to satisfy the most exacting requirements of OEM users. Utilizing our expert applications engineering staff and experienced product development resources, **ALM** has provided solutions for applications requiring precision linear bearing accuracy and superior reliability. **ALM** has developed an extensive line of custom linear bearings, slide mechanisms, and motor ready stages for use in:

- Vision Inspection Systems
- Chip Bonding
- Laser Scribing
- Laser Welding Equipment
- Gaging and Inspection Fixtures

Illustrated are a few examples:



Automated Fabrication



Disk Certification

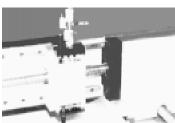
- Wafer Testing and Handling
- Disc Certifying
- Automated Production Line Fixtures
- Custom Tooling
- Automated Wheel Dressers



NEMA Motor Ready Precision Positioning



X-Y Positioning



3 Axis Laser Welding System

Dual Thrust

#### **OPTIONS AND ACCESSORIES**

Standard and Ultra-Precision Grades Custom Mounting Provisions Rotary Stage Integration X-Y Thru Hole, 2 Sided Access Stages Rotary Encoders Home/Limit Switch Assemblies Custom Motor Mounts Vacuum Environment Preparation Hard Coat Anodize Finish Bellows, Integral Way Wipers Precision Multiaxis Mounting X-Y-Z Gantry Systems Parallel Motor Mounts Servo Grade couplings Linear Encoders Laser Calibration Certification Electromechanical Brakes Corrosive Environment Protection Reflection Reducing Finish Mechanical Deceleration Devices

## CALL ALM ... WE HAVE THE SOLUTIONS