PRODUCT OVERVIEW

acme & ball screws • actuators • linear motion drive components • engineering ingenuity
**Ball Spline Products**

Ball Splines are convenient and efficient devices that allow friction free linear motion while transmitting torque. Because of their reliability and high efficiency, they are utilized to replace conventional splines. In a ball spline assembly, recirculating bearing balls carry the load between the rotating member (inner race) and the rotating/sliding member (outer race).

**CC™ Linear Actuators**

CC™ Linear Actuators are ball screw or acme screw linear actuators that provide a high performance solution.

**ND8 DC Linear Actuators**

The ND8 Linear Actuator is an economical, general purpose DC actuator designed for relatively light load applications. It is designed for intermittent duty applications and has a maximum load of 7000N. It comes equipped with either a ball screw or an acme screw. The ball screw version is equipped with a brake to prevent backdriving. Options are available including potentiometer and adjustable limit switches.

**Nia5 AC Linear Actuators**

The Nia5 Linear Actuator is an economical, general purpose AC actuator designed for relatively light load applications. It is designed for intermittent duty applications and has a maximum load of 7000N. It comes equipped with either a ball screw or an acme screw. The ball screw version is equipped with a brake to prevent backdriving. Options are available including potentiometer and adjustable limit switches.

**Automation Technology and Controls**

Automation Technology and Controls (ATC) featuring integrated stepper motors, drives, controls, and power supplies. ATC also features servo motors.
**PRECISION METRIC BALL SCREWS**

The PMBS™ product line offers linear lead accuracy classes of T10, T7, T5, and T3, which comply with the ISO 3408 ball screw standard. All ball nuts are precision ground and engineered to operate with precision rolled ball screws or precision ground (T3) ball screws. Nook offers both preloaded and non-preloaded ball nuts in multiple configurations; Flanged, V-Threaded, and Cylindrical Keyed mounting options are able to satisfy virtually all applications.

**PRECISION INCH BALL SCREWS**

Nook Precision Ball Screw Assemblies are manufactured in standard rolled, precision rolled, and ground screw accuracies. This product is able to provide efficient means of turning rotary motion to linear motion while maintaining high accuracy and repeatable movement.

**WORM GEAR SCREW JACKS**

Nook offers a complete line of standard and custom engineered ball screw and machine screw actuators for applications from ¼ ton up to 100 tons. Actuators can be used individually or in multiple jack arrangements for a larger mechanical system.

**ELECTRIC CYLINDERS**

Electric Cylinders are ruggedly designed and produced in standard models with thrust capacities from 500 lbs. to 40,000 lbs. They are supplied in a Single Reduction, Double Reduction, or In-Line Configurations. Electric Cylinders are driven by either ball screws or ball screws and can be supplied for outdoor applications.

**PRECISION ACME AND LEAD SCREW ASSEMBLIES**

Nook Industries manufactures precision acme screws by thread rolling, thread milling, or thread grinding processes. Nook acme screw products feature centralizing thread forms for long lasting smooth, no-wedging performance.
LINEAR EXCELLENCE PRODUCTS

MINIATURE BALL SCREWS
Nook’s Miniature Metric Ball Screws are designed for light load applications that deliver fast speed and close tolerance positioning.

MODULAR LINEAR ACTUATORS
Nook Modular Linear Actuators are flexible positioning systems made of self-supporting and wear resistant aluminum profiles. Modular linear actuators can be used as a single axis solution or assembled for a multitude of gantry XY and XYZ positioning duties including inspection, pick-and-place, assembly or dispensing applications.

PROFILE RAILS AND GUIDES
Nook Precision Profile Rail Linear Guide Systems provide stable and efficient linear motion guidance under variable speeds and high load conditions. The profile rail is offered in many sizes as well as Caged Ball Technology.

LINEAR SYSTEMS AND SLIDE TABLES
A Nook Slide Assembly Series is truly a "System" not just a "Component." The matched components used in Nook Slides result in better system performance. When they are used as sub-assemblies, set-up and alignment is reduced.

LINEAR SHAFTING, BEARINGS, AND PILLOW BLOCKS
Nook HG hardened and ground shafting is manufactured for use with precision linear bearings and other applications requiring an accurate, round hardened shaft or guide rod. All linear shafting can be machined by Nook Industries, Inc. to any of the configuration.

Nook Industries manufactures a full range of linear slide systems and slide systems components. Nook’s line of linear components includes solid shell LBB linear bearings, self-aligning linear bearings, HG Hardened and Ground Shafting, Pillow Blocks and complete slide systems.
EZZE-MOUNT™ BEARING SUPPORTS

Nook Industries offers EZZE-MOUNT™ precision bearing blocks, which can be assembled to precision machined screws to provide a complete solution for any linear motion application.

PLANETARY ROLLER SCREWS

Nook Planetary Roller Screws are used in the most demanding and precise linear motion applications. With a greater number of contact points a roller screw provides stiffness and higher load ratings compared to a ball screw.

SERIES 500™ ACTUATORS

The Nook Industries Series 500™ offers an expanded range of performance by generating higher loads, longer life, increased duty cycles, higher speed and programmability. Series 500™ Actuators are available in both Parallel and In-Line versions.

∞INFINITY™ SERIES ACTUATORS

∞Infinity™ Series Actuators are industry leading actuators exceeding 1,000,000+ cycles of continuous duty (49 million inches of travel) at 2500 lbs of thrust and at a travel rate of 10 in/second. Additional sizes offer 4,000 lbs thrust at 10in/sec and travel rate.

VMD3™ SERIES ACTUATORS

Light duty 12/24V DC electric actuators for a wide variety of applications. 200N to 1,000N load capacity.
In 1969, Joseph H. Nook Jr. founded Nook Industries, Inc., intent on becoming a global supplier of Linear Motion products. Ball screws, both rolled and ground, were the cornerstone products in the early 1970’s, putting Nook Industries on the map as a successful business and a trusted company.

Through the years, Nook Industries has served as a leading manufacturer of engineered products. From the first ball screws to the latest technologies, Nook Industries strives to provide customers with high quality products and engineered solutions.

Companies around the world depend on the quality products provided by Nook Industries to ensure their success. Nook Industries provides a complete line of linear motion products, serving a wide range of industries.

**INDUSTRIES SERVED**

- Medical
- Automotive
- Tire Manufacturing
- Packaging
- Pulp & Paper
- Military & Defense
- Factory Automation
- Aerospace
- Transportation
- Electronics
- Semiconductor
- Chemical
- Steel
- Entertainment

4950 East 49th Street | Cleveland, OH 44125-1016 USA | 216.271.7900 | toll-free: 800.321.7800 | f: 216.271.7020 | email: nook@nookind.com

Also find us at: