JACK PRODUCTS

ACTIONJAC

www.nookindustries.com
Our Mission

Our mission is to be an innovative and responsive organization. Nook/Thomson knowledge and vast experience provides us with the flexibility to design, engineer and manufacture high quality linear motion systems and solutions.

Our Vision

Our vision is to be a global leader in providing linear motion system solutions by leveraging our engineering and manufacturing expertise.

Our Brand Promise

Our primary focus is on customer satisfaction. You can trust us to deliver world-class quality and reliability each and every day. This guiding principle has helped us to become one of the world’s leading full-service providers for linear motion solutions.

The Nook/Thomson Advantage

- The only manufacturer in the industry with onsite die design, manufacturing and control
- Affordable standard or custom engineered solutions
- Engineering support for design and application
- Vertically integrated manufacturing process located in the USA
- ISO 9001-2008 certified and AS9100 registered/certified
- Multi-touch, multi-level customer support teams
Applications

With Nook/Thomson’s high quality jack products, it’s easy to build a state-of-the-art jack system for any application. Our custom solutions are up to any challenge. Nook/Thomson jacks are made from the highest quality materials and are manufactured to stringent standards - for extreme dependability you can rely on.

Our high-quality, high-performance products can easily be configured into a multitude of different jack system arrangements.

Features
- Special Nook/Thomson bronze materials
- Larger bearings, travel nut, and drive sleeves
- 5 year warranty on all jacks up to 20 tons
- Tighter machining tolerances
- Press fit bearings
- Black oxide coating on lift shaft
- 4142 alloy steel link shafts

Benefits
- Long life
- Outstanding reliability
- Higher efficiencies
- Durability & Safety
- Highly flexible
- One source for complete systems

Applications

Industrial
Automation
Military & Defense
Aerospace & Transportation
Energy
And many more…
Jack Technology

ActionJac™ Jack systems are ruggedly designed and produced in standard models with load handling capacities from 1/4 ton to 100 tons. They may be used individually or in multiple arrangements.

**ACME Screw**
- Self Locking
- Anti-Backlash

**Ball Screw**
- High Efficiency
- High speeds/duty cycles
- Low input torque

**Stainless Steel**
- Demanding environments
- Corrosion resistant
- 300 Stainless steel

**Cubic**
- Versatile mounting
- trunnion

### Series Screw Jack Type Gear Ratio Screw Diameter Lead Max Input Capacity

<table>
<thead>
<tr>
<th>Series</th>
<th>Screw Jack Type</th>
<th>Gear Ratio</th>
<th>Screw Diameter (in)</th>
<th>Lead (in)</th>
<th>Max Input (hp)</th>
<th>Capacity (tons)</th>
</tr>
</thead>
<tbody>
<tr>
<td>BSJ</td>
<td>Ball Screw</td>
<td>5:1 to 32:1</td>
<td>5/8 to 4</td>
<td>0.200 to 1.00</td>
<td>1/6 to 32</td>
<td>0.5 to 100</td>
</tr>
<tr>
<td>MSJ</td>
<td>Machine Screw</td>
<td>5:1 to 32:1</td>
<td>3/4 to 6</td>
<td>0.100 to 0.667</td>
<td>1/8 to 32</td>
<td>1 to 100</td>
</tr>
<tr>
<td>SS-MSJ</td>
<td>Stainless Steel</td>
<td>6:1 to 32:1</td>
<td>1 to 3-3/4</td>
<td>0.250 to 0.667</td>
<td>1/2 to 11</td>
<td>0.66 to 11.66</td>
</tr>
<tr>
<td>C-BSJ</td>
<td>Cubic</td>
<td>5:1 to 20:1</td>
<td>5/8 to 3/4</td>
<td>0.100 to 0.500</td>
<td>1/6 to 1/2</td>
<td>0.66 to 11.66</td>
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</tbody>
</table>

- **Bevel Gear**
  - ACME Screw -1 to 20 ton
  - Ball Screw - 1 to 7.6 ton
  - High lift speed
  - Greater duty cycle

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**Jack Applications**

**Translating Jacks**
A translating jack has a lifting shaft that moves through the gear box. A nut is integrated with the worm gear such that the worm gear nut rotate together. When the lift shaft is held to prevent rotation, the lift shaft will move linearly through the gear box to move the load.

**Rotating Jacks**
A rotating jack has a lift shaft that moves a nut as it turns. The lift shaft is fixed to the worm gear. This causes the load, which is attached to the travel nut, to move along the lift shaft.

**Anti-Backlash Jacks**
Anti-backlash Machine Screw Jacks are used wherever reversible load conditions require precision positioning control. Adjustable backlash Machine Screw Jack models are available to reduce backlash to approximately 0.003".

**Double Clevis Jacks**
Double Clevis Jacks are used when it is necessary to move a load through an arc, such as tracking antennas, hinged doors or air dampers. Machine Screw and Ball Screw Jacks from 1 ton to 15 ton capacities can be supplied with double clevis mounts. One clevis is welded to a heavy duty stem cover, which is welded to the housing. Double clevis designs are available with optional accessories such as boots, motor mounts, right-angle reducers, motors, encoders and rotary limit switches.

**Keyed Jacks**
A feature can be added to a machine screen jack to prevent lift shaft rotation. This type of jack is referred to as a “keyed jack” and is available in upright and inverted models.

A keyed jack has a keyway machined along the length of the lifting screw. A matching key is fastened to the cover of the jack which will eliminate lift shaft rotation.
One Source for Complete Jack System Solutions

Nook/Thomson offers many ball screw and machine screw jack accessories to accommodate specific applications. Our accessories realize the linear motion needs of any application.

Start with our base jacks.
Then add a multitude of components to configure a complete jack system.

Hardware
- Line Shafting
- Gear Boxes
- Couplings
- Bellows
- Bevel Gears

Power
- Motor Mounts
- Motors
- Steppers
- Hand Wheels
- Reducer

Sensing & Control
- Sensors
- Limit Switch
- Counters
- Encoders
- Control Panels

Finish with a complete system.
Technical Support

Nook/Thomson provides outstanding technical support with dedicated subject matter experts and a variety of online tools to lower your development costs by simplifying the design process. We collaborate with customers to put your unique designs into motion by providing engineering expertise and state-of-the-art technology. Available in different drive configurations, including screw, rack and pinion, and belt.

How to contact us

> **Contact form and contact information**
  This link includes a Contact Us form that you can use to contact our customer support team. It also has all of our contact information as well as a map to our facilities.

> **Information Request Form**
  If you have a general idea about the type of product you need but you are unable to configure your product completely or have some specific questions, submitting this form is the best method of contacting us.

> **Live Chat**
  Live Chat is a great way to get the answers you need while you are browsing our website. Our Product Specialists can answer your questions and direct you to pages on our site in real time. We offer Live Chat during normal business hours which are Monday through Friday 8 AM to 5 PM EDT.

> **Ask An Expert**
  Expertise comes standard with all Nook/Thomson Linear Motion Solutions! If you’ve got some technical questions regarding our products and how they might be used specific to your particular application, then this is just the place for you to have those questions answered. Our Application Engineers are standing by to assist you.

> **Application Data Forms**
  We have designed some Application Data Forms that will assist you in conveying the specifics of your application to our Application Engineers. Simply select the appropriate form, fill in some details and submit it to one of our experts.

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