

NB Press Release

October 23, 2017

NB CORPORATION OF AMERICA

930 Muirfield Drive, Hanover Park, IL 60133

NB Corporation of America to showcase high-precision and innovative designs at MD&M

Contact: **Larry Hansen**
NB Corporation of America
Phone: 1-800-521-2045
Fax: (630) 295-8881
www.nbcorporation.com

With the growth of technology, increasingly precise motion control is always in demand and minimizing size and weight while providing superior performance is paramount. NB's crossed rollers and actuators provide a solution for high precision and high rigidity throughout the medical industry, while ball splines provide precise high-torque transmission for use in robotic surgery. Learn more about these products and how they can help improve your application's performance.

[Innovative Crossed Roller Way Ends Slippage](#)

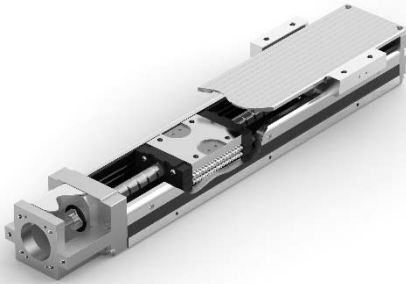
Recipient of "The Device Merit Award" from The Japan Society for The Advancement of Inventions, the NB STUDROLLER™ is perfect for motion control applications with **extremely high acceleration**



- Used in cancer cell sample positioning
- NV type STUDROLLER™ with Anti-Cage Creep Technology **guarantees zero slippage**.
- The STUDROLLER's machined Raceways track STUDROLLER's nodules, **preventing slippage in any position**.
- High Rigidity & High Load Capacity: The NV type has a load rating that is 1.4 to 2.3 times that of conventional types.
- Well suited for micro stroke operation and provides highly accurate linear movement
- Commonly used in optical and measuring equipment

High Load Capacity Actuator

The BG is a single axis actuator which has a unique “U” shaped integrated slide guide and ball screw. The guide rails positioned lower than the ball screw center increase rail rigidity and allow the block to carry heavier loads.



- Used for **precise positioning** such as medical labs and medical test machines
- 4 gothic arch ball circuits contained in its slide block deliver **High Load Capacity, Accuracy and Rigidity**

Ball Splines - High-Speed Motion and High-Speed Rotation

NB ball splines are used in a wide range of applications, including robotics, transport-type equipment and other machinery where it is necessary to sustain heavy loads while transferring torque smoothly.

- Used for robotic surgery
- **High load capacity** and long travel life are realized by large ball contact areas and machined grooves that maintain a close radius between shaft and nut components
- **Precise high torque transmission capability** with an effective contact angle between shaft and ball elements
- **Adjustable preloads** that can be configured to deliver higher rigidity and positioning accuracy
- **High-speed motion performance** is realized with a well-balanced, compact outer cylinder design



SEB miniature linear bearings - Reduced Size, Increased Functionality

The NB Slide Guide SEB series is an industry-leading miniature linear bearing design for your **smallest and most precise equipment**. Our compact NB Slide Guide SEB series is especially suitable for optical and measurement systems in which every fraction of an inch is counted and smooth, accurate movement is critical.



- For use in various medical fields that require precision and high load
- **Smooth movement:** Two-row, four-point contact design permits extremely low overall height.
- The ability to remove the block from the guide rail, thanks to integrated ball retainers that facilitate installation and maintenance.
- **Full stainless-steel construction:** Ideal for high-temperature and clean room applications.
- Resistance to deformation during assembly, thanks to an AD profile on our guide blocks that dissipates installation forces.

Crossed Roller Tables - High-Precision, Low-Friction Performance

NB crossed roller tables feature high-precision, low-friction performance that makes them suitable for applications such as electronics assembly machines, **optical measuring devices** and more. They feature the STUDROLLER™ system, a sophisticated mechanism unique to NB products that prevents cage creep and other damage that commonly occurs over time.



- **Improved accuracy** even in high-performance environments. Precision-machined and matched components deliver accurate linear motion with no slippage over time
- **Lower friction**, thanks to a non-recirculating mechanism that stabilizes performance across a wide spectrum of speeds.
- Smaller footprint, as it delivers **load capacities up to 2.3 times higher** than other products in its class, as well as improved rigidity characteristics.
- **Easy installation** with standardized mounting holes and no need for adjustment.
- SVTS crossed roller slide tables, feature aluminum tables and beds, as well as the anti-corrosion SVS roller bearing system.

About NB Corporation of America:

NB has been producing high precision linear systems that minimize size and weight while providing superior performance since 1939.

We understand that every customer and application have unique needs. If you would like to discuss your application and how we can help, [contact our engineering team](#), or visit us at **the MD&M Minneapolis Booth #1007** to see these products!

Detailed product drawings and tables that provide dimensions and mechanical information can be found on our online catalog at www.nbcorporation.com or through our [NB Linear Mobile™ App](#). NB products come in Inch Standard along with both Asian and Euro Metric Standards.