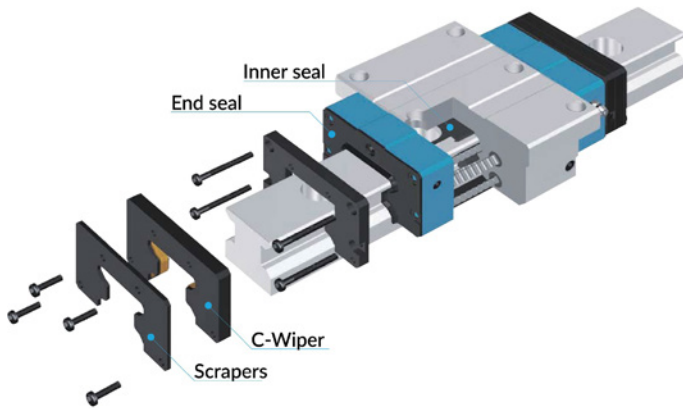


IKO

OFFERS LINEAR GUIDES FOR ROBOTICS COMPETITION

A team of middle- and high-school students in Gibsonton, Florida are showing off their math and science skills by designing, building and programming a competitive robot using IKO International linear guides. With IKO in their corner, the team is outscoring rivals and setting records along the way.

They call themselves Neutrinos 6433, and the team competes in the FIRST Tech Challenge at a Central Florida tournament held in Lakeland, Florida. FIRST (For Inspiration and Recognition of Science and Technology) inspires innovation and leadership in young people through engaging, team-based robotics challenges. The challenges are designed to demonstrate the accuracy, timing and precision of the robot. For example, one match pitted four robots against each other inside a ring. Competitors were given a task that tested their robots' ability to maneuver around the ring, and to grasp, arrange and stack Lego-like blocks.



IKO Guides and Guidance

The Neutrinos 6433 team discovered IKO while researching potential linear motion guides to design into the robot. IKO International sponsored the Neutrinos 6433 team and supplied the linear motion guides that helped lead the robot to victory. IKO was also available to mentor Neutrinos 6433, and the team tackled their challenges with little assistance, using the following IKO motion guides:

MX linear motion guide. One of the highest performing and dependable guides available. The MX Series guide features a slide unit that operates on a balanced set of four cylindrical rollers housed in a rigid casing, giving it high load capacity and exceptional stiffness and resistance to moment loads. This construction maximizes accuracy, produces a more compact design than ball-type units, and it gives the robot its streamlined size and excellent maneuverability. The MX Series is available in four different lengths — including an extra-long unit MXL that's 1.4 times the standard slide unit length — so the students were able to achieve long extensions to stack items with smoothness and precision. The MX Series also offers a high load capacity and C-Lube technology for long-term, maintenance-free operation — because when you're battling for robotic supremacy, you can't slow down to lubricate your guide.

LWL linear motion rolling guide. The LWL Series incorporates two rows of stainless-steel balls arranged in a four-point contact design with the raceways. Although small, it provides stable accuracy and rigidity due to its simple design even in operations under fluctuating loads with changing direction and size or complex loads.

LWF linear motion rolling guide. This series provides continuous linear motion thanks to a wide track rail and highly rigid slide unit. Two rows of large-diameter steel balls and a four-point contact design with the raceways ensure high stability and accuracy, even under fluctuating and complex loads. The wide rail also supports large moment loads in the axial direction.

The Neutrinos Come Up Big

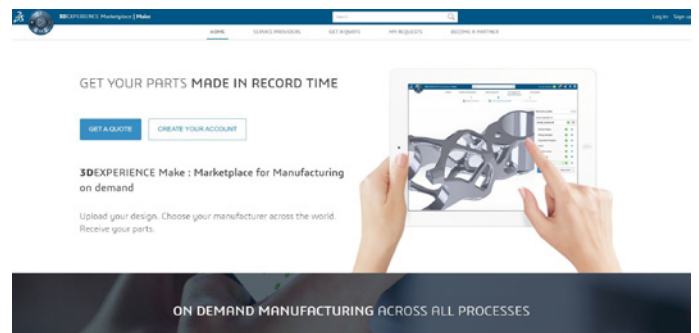
The results have been impressive! While Neutrinos teams have performed well in their previous eight years in the Challenge, this year's team made significant gains. Neutrinos 6433 achieved front-runner status, boasting the highest scores and highest average score among the other 20 participating teams. Not only did Neutrinos 6433 produce high scores, they also posted back-to-back world record scores before being eclipsed by another team. As of this writing, Neutrinos 6433 have the highest average score among teams from around the country. That's no small feat! Thanks to their hard work, skill and determination plus exceptional linear guides from IKO, Neutrinos 6433 is clearly the team to beat. (www.ikont.com)

Dassault Systèmes and Xometry

PARTNER TO OFFER INSTANT PART PRODUCTION IN DESIGN ENVIRONMENT

Dassault Systèmes and Xometry recently announced their partnership to provide customers with a seamless, integrated way to produce parts that accelerates the concept to manufacturing process. Engineers using Dassault Systèmes' Solidworks and Catia applications will have automatic and immediate access to Xometry price quotes on MAKE Marketplace for manufacturing parts, without leaving their design environment.

Engineers can now play a greater role in the design to manufacturing aspect of part production by focusing on the shape of a prototype as well as the cost to produce it. Whereas sourcing manufacturing price quotes from service providers



used to require a dozen clicks in a web interface, it now takes place instantaneously in a one-click immersive experience integrated with Solidworks and Catia. Engineers can view Xometry price quotes on their screen in the context of their design, and click to have it manufactured, all while retaining the option to get instant or manual quotes from other MAKE Marketplace suppliers.

“We launched the MAKE Marketplace in 2018 to make it easy for customers to design and manufacture. Our partnership with Xometry takes this a step further,” said Sébastien Massart, head of corporate strategy, Dassault Systèmes. “Customers can order high quality additive manufacturing or CNC machining parts in one click at the right price, thanks to Xometry instant quoting capabilities. This is all part of our vision to continuously reduce the friction that customers face going from design to manufacturing.”

Through this partnership, Xometry becomes the first “prime partner” of Dassault Systèmes’ MAKE Marketplace. This new category recognizes qualified service providers having industrial-grade quality certifications, and production capacities to answer demanding needs as well as high satisfaction rates. Dassault Systèmes plans to add other “prime partners” to the 3DEXPERIENCE Marketplace ecosystem.

“Engineers need the right tools to do their job successfully, and this includes working with a responsive, trusted manufacturing partner,” said Randy Altschuler, CEO, Xometry. “As the leader in 3D printing and on-demand manufacturing, we have served many customers in the MAKE Marketplace since its launch. Through our deeper partnership with Dassault Systèmes, we can directly connect with customers and make a commitment to provide a quote on every customer query. It’s all about faster manufacturing.” (www.3ds.com)

Siemens Digital Industries

MINDSPHERE NAMED IOT SOFTWARE LEADER

The Industrial Internet of Things (IIoT) has the potential to significantly improve global productivity and growth, with Accenture estimating that this latest wave of digital innovation will accelerate the reinvention of sectors that account for almost two-thirds of world output and add US \$14.2 trillion to the global economy by 2030. As companies around the world continue to develop IIoT strategies and implement solutions, they are increasingly partnering with Siemens and choosing *MindSphere*, the cloud-based, open Internet of Things (IoT) operating system, as the foundation of their IIoT programs. Recently, Siemens was among the select companies that Forrester invited to participate in The Forrester Wave: Industrial IoT Software Platforms, Q4 2019 evaluation. In this evaluation, Siemens’ *MindSphere* was cited as a Leader in Industrial IoT Software Platforms. Over the past year, *MindSphere* significantly grew its partner program, and announced major new customer wins and Siemens’ expansion of the *Mendix* platform to include cloud and app services for digital engineering and IoT powered by *MindSphere*, which is at the heart of its *Xcelerator* portfolio.



According to Forrester, “*MindSphere* builds on Siemens’ strength in industrial equipment and controllers but isn’t limited to interacting with Siemens hardware. The company continues to tell a strong story about the importance of digital twin, and *MindSphere* plays a key part in turning this vision into something pragmatic and implementable. *MindSphere* is well suited to customers with existing investments in the Siemens ecosystem but also deserves the attention of any industrial company interested in tapping Siemens’ deep domain knowledge and the experience it’s gained from its own internal digital transformation.”

MindSphere helps companies understand data by quickly and securely connecting products, plants, systems and machines to the digital world. By unlocking the wealth of data from every machine and system in a business, *MindSphere*

Quicksilver Controls SilverMax™ Integrated Hybrid Servos

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can transform this data into productive business results using powerful industrial applications with advanced analytics. *MindSphere* is a secure and scalable industrial end-to-end solution from asset connectivity to actionable business insights utilized to increase productivity and efficiency across the entire enterprise.

“MindSphere has continued to grow and strengthen over the past year, and we now have over 500 MindSphere partners including Microsoft, AWS, Arrow and Alibaba, which has helped fuel success in the Chinese market where we recently launched the partner program,” said Ray Kok, senior vice president and general manager, cloud application solutions at Siemens Digital Industries Software. “We are proud to be recognized as a Leader within the Forrester Wave report and will work to build on this momentum to continue to help our customers achieve their goals.” (www.sw.siemens.com)

BCA Bearings

AWARDED 2019 RISING STAR SUPPLIER OF THE YEAR

NTN, the parent company of BCA Bearings, is proud to be awarded the 2019 Rising Star Supplier of the Year award by the Auto-Wares Group of Companies. The award was announced and presented at the recent Auto-Wares Group annual sales meeting in Grand Rapids, MI.



“It is a great honor to be recognized by Auto-Wares with this award,” remarked Charles Harris, director of automotive aftermarket sales, “Supporting the needs of our distributor partners is the foundation of our automotive aftermarket business, so it is extra special knowing that this award was voted on by Auto-Wares’ leadership, sales team and store personnel. We are very proud to win this prestigious award.”

The Auto-Wares Rising Star Supplier of the Year Award is presented annually to recognize recently approved suppliers that show excellent sales growth potential and exhibit outstanding performance in distributor and store-level changeovers. (bcabearings.com)

Victrex

CREATES JOINT-VENTURE TO MANUFACTURE PEEK IN CHINA

Victrex recently announced the creation of a joint-venture between its subsidiary, Victrex Hong Kong Limited, and Yingkou Xingfu Chemical Company Limited, to build and operate a new PEEK polymer manufacturing facility in Liaoning, China, subject to certain performance conditions, including finalizing land purchase and permit applications.

Victrex, which will be the majority partner and lead the joint-venture, will benefit by further differentiating and complementing its portfolio of PEEK and PAEK grades, in anticipation of a range of significant long-term growth opportunities across several end markets in China, as well as aligning with China’s ‘Made in China 2025’ initiative, where specifying domestically produced PEEK in certain applications is expected to gain momentum.

Victrex already has an established relationship with its joint-venture partner through its monomer supply chain, with Yingkou Xingfu having significant experience of developing and operating chemical facilities in China which meet international quality, process and environmental standards.

This builds on Victrex’s recent appointment of a general manager for China and an increased commercial presence, as well as its strong technical service offering to customers, which includes its existing Technical Center in Shanghai. The investment sets the stage for Victrex to serve some of its regional customers from a local facility and in a more diverse way. Victrex will also oversee the management of process know-how and intellectual property during development of the polymerization process.

“While we already manufacture a range of PEEK and PAEK grades, this will enhance our portfolio, making us even better positioned in a region where we have seen strong growth in recent years and continue to see attractive opportunities, aligned to our know-how and strong technical and application development capabilities. Overall, we believe this is a good entry point to a China manufacturing operation, working with an established partner and offering an attractive returns profile,” said Jakob Sigurdsson, chief executive of Victrex. (www.victrex.com)

