

Press release: **Ballscrews by A. MANNESMANN**

AM Ballscrews increase the long-term productivity of highly dynamically-operated machine tools

In cooperation with the SCHNEEBERGER Group, A. MANNESMANN has been selling maximum-precision ballscrews since the beginning of 2018. Many discriminating machine tool users throughout the world benefit from the high level of performance, productivity and long-term precision featured by AM ballscrews. Their advantageous structural design and 100% quality control in production account for their success.

AM ballscrews reach maximum speeds of 150 m/min, maximum accelerations of 20 m/s² and rotational speeds (n x d) of 200,000 and more. These performance data, which are at the worldwide technological forefront, make it possible to operate extremely efficient, long-lasting machine tools. The performance limits of AM ballscrews have been steadily expanded through continuous development over many years.

The principles are a design structure that has been developed and perfected over many years, as well as the in-depth knowledge and experience of the AM specialists in practical use under a wide variety of operating conditions. The high-quality, deep-nitrided, polished spindles with a surface hardness of 67 HRC have an exceptionally high level of wear resistance. As a result, AM ballscrews are able to maintain the set preload force on the nuts for a very long time which, in practical terms, results in a long service life.

Low friction, minimal heat generation and the slightest torque fluctuations, paired with maximum smoothness, are additional technical parameters that exert a significant advantageous influence on the running properties and on the success of many tasks.

AM offers an extensive range of standard designs with preloaded double nuts in standard series with nominal diameters of 25 to 160 mm and spindle lengths of up to 15,000 mm and more. AM develops special designs precisely tailored to specific application scenarios in close cooperation with customers for exceptional applications.

For example, AM high-load ballscrews are used in vertical axes to move very high masses at peak loads of up to 500 kN. Compact, space-saving AM telescopic ballscrews for innovative applications are another type of special structure.

AM ballscrews sustainably contribute to the high availability and productivity of machine tools while minimizing life cycle costs. Endless performance which also pays off in economic terms.



63 x 15 x 1190 mm AM ballscrew with spindle mounted on one side



AM telescopic two-stage ballscrew, minimum height 554 mm, stroke 500 mm, maximum force 2,500 N and positioning accuracy of less than 0.05 mm



The SCHNEEBERGER Group

SCHNEEBERGER® serves original equipment manufacturers operating (OEM) in various industries worldwide – from machine tool, solar technology and semiconductor technology to electrical engineering and medical engineering and others. Linear bearings, profiled linear guideways, measuring systems, gear racks, slides, positioning systems and mineral casting are all part of SCHNEEBERGER's product and manufacturing range. **A.MANNESMANN** has been part of the SCHNEEBERGER Group since October 2017. A.MANNESMANN is a leading supplier for the production of ballscrew drives, telescopic actuators and drill spindles. A further expansion of the SCHNEEBERGER Group, an additional site was founded in Poland. The new company SCHNEEBERGER Components Poland (SPO) officially started on November 19, 2020 and has already commenced operations, producing precision parts for the entire Group. The core competence lies in the production of rolling bearing rollers. Also as part of its strategic development, the Business Unit Systems has established the company "SCHNEEBERGER Precision Motion Systems (Shenzhen)". With the establishment of the new technology center for systems in Shenzhen with development, production, sales and service, SCHNEEBERGER will be closer to its Asian customers and thus be able to serve them even better with high-precision single and multi-axis systems.