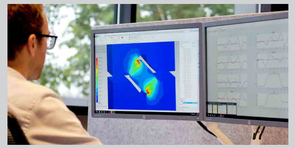
OVER 50 YEARS of success

DEDICATION TO CUSTOMER NEEDS

In all aspects of our business we are dedicated to our customer's specific needs through our unique ability to provide support during the lifetime of any of our products. From standard high precision linear bearings and slides to fully integrated positioning systems. From prototype to large volume production, all made in the Netherlands.

Expert advice and consulting

Design for specification



State-of-the-art milling

In-house heat treatment

High precision grinding

Full quality control

Assembly with the dedicated precision of watchmakers

Delivery as part of product performance

PM RESEARCH AND PRODUCTION FACILITY

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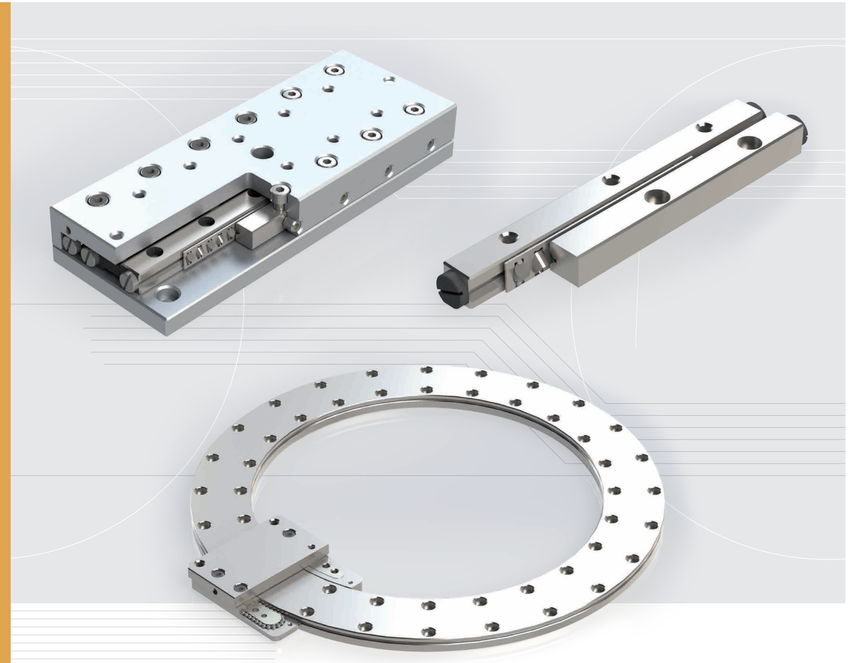
DISCOVER PRECISION

OVER 50 YEARS of success



PRODUCT OVERVIEW

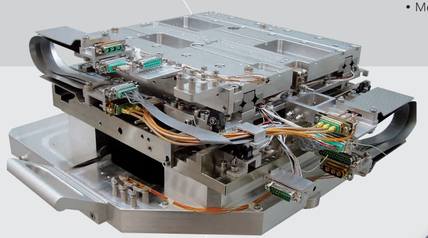
OVER 50 YEARS of success

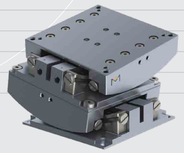
PM is an independent family-run Dutch company with over 50 years of experience in manufacturing of precision linear bearings and frictionless slides. Demanding industries continuously push us to find innovative solutions to our linear bearing systems and crossed roller configuration technologies. This core competence has paved the way for PM to develop its position as an architect of positioning systems and integrated solutions.

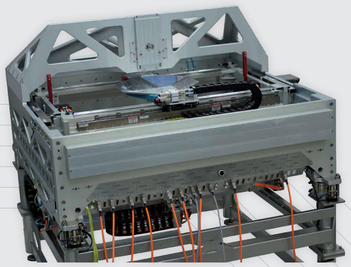
The combination of our manufacturing know how and mechatronic expertise together our with customers' application specific knowledge is the key in solving complex technological challenges.

The solutions developed by PM find their way to various industries. These include, but are not limited to:

- Semiconductor
- Analytical
- Medical science
- Optical
- Metrology







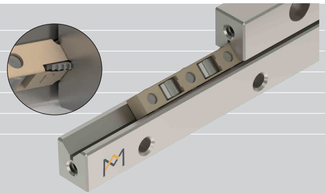
Linear Bearings

PM's linear bearings are suitable for applications where high precision, compact design and repeatability of motion are required. Mounted as a preloaded set, these bearings offer high stiffness in any constrained direction and a virtually friction free motion direction. A wide range of sizes is available, offering the design engineer maximum flexibility. The ACC option is available for high acceleration applications.

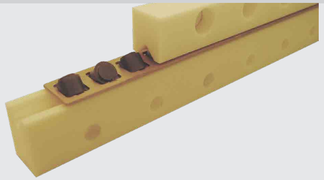
Specifications

Anti-friction rails are made from high quality bearing steel, through hardened at 58 – 62 Hrc. All rails can also be supplied in stainless steel or with various types of plating. The maximum length of a single rail is 1400 mm. When greater lengths are required, two or more rails can be ground to match. For specific purposes we offer cleanroom compatible packaging.

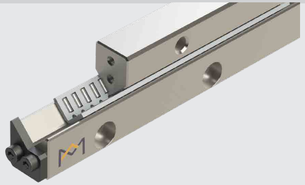
*The standard crossed roller bearing (**RSD**) is available with either cylindrical rollers or balls, ranging in sizes from 1.5 to 24 mm.*



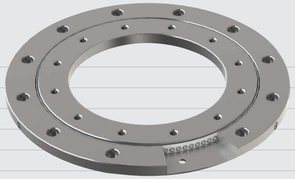
*The standard crossed roller bearing with increased contact surface (**RSDE** or **RNG**) is equipped with cylindrical rollers and POM or PEEK cages and has a load rating 3 times higher than the standard **RSD** bearing. Roller diameter sizes 3, 4, 6 and 9 mm are available. Options include anti cage creep technology (ACC).*



*Fully ceramic linear bearing (**CR**) for applications that require absence of magnetism, absence of lubrication or low mass in combination with high stiffness. Materials commonly used are Si_3N_4, ZrO_2 or Al_2O_3. Fields of use: electron microscopy, semiconductor and medical.*

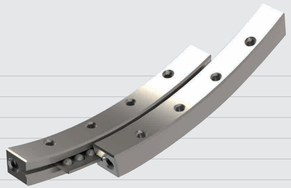


*The **N**/**O** and **M**/**V** type bearings offer increased stiffness and a significantly increased load rating compared to crossed roller bearings.*



Rotation Bearings

*The Flat Mounted table Bearing (**FMB**) is currently available in diameters up to 500 mm. This type of bearing combines high accuracy, repeatability and rigidity with a small footprint.*

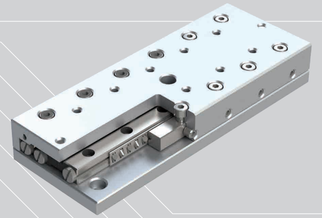


*The gonio bearing (**RGB**) is available with either cylindrical rollers or balls. These bearings allow the user to perform extremely accurate radial movement combined with virtually friction free motion. The maximum rotation is 10°.*

Frictionless Precision Slides

PM frictionless slides are ready-to-install single-axis components for precise limited linear movements. The crossed roller slides are factory pre-loaded, to assure high accuracy, an extremely low uniform coefficient of friction (<0.003) and a long operation lifetime.

Each slide comes with mounting holes already drilled in a standardized pattern to aid in easy assembly. The mounting surfaces are precision ground to achieve a superior degree of flatness in motion.



*A steel crossed roller slide (**RT**) and its lightweight aluminium variant **RTA**. Stroke range from 10 – 950 mm with a maximum load rating of 71.550 N.*

*A low profile steel crossed roller slide **RTS**. Stroke range from 12 – 130 mm with a maximum load rating of 3.672 N.*

*A crossed roller slide type **RTNG** offers protection against environmental contamination due to its narrow gap between table and base. Stroke range from 10 – 250 mm with a maximum load rating of 35.100 N.*

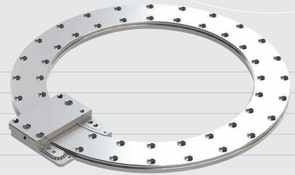
PMM

PMMR

*Micro slides of type **PMM** and **PMMR** are available with stroke lengths ranging from 5 to 70 mm in 3 different sizes. The weight specifications range from 2 to 80 grams. **PMMR** uses a crossed roller configuration for high stiffness and increased lifetime, intended for rapid and precise positioning in microscale applications.*

Recirculating bearings

*Recirculating linear bearings can be used for applications where unlimited travel is required. The complete bearing assembly consists of a base plate (**UT**), double-sided rail (**DS**) and slide type **US** for recirculating units type **UK** (balls) and type **UR** (rollers).*



Radial Bearing RPM

*These stainless steel bearings allow virtually frictionless radial positioning and come as a factory-preloaded set. **RPM** bearings are available as arc segment or full circular segment with 360° rotational freedom.*