Steinmeyer

optiSLITE-technology for best running features.

Miniature Ball Screws 3-16 mm.

Benefits:

- Improved running characteristics
- Low, uniform idling torque

Applications:

- Semiconductor
- Optics
- Medical Instrument
- Metrology

optiSLITE-technology –

Optimized spindle surfaces for superior operation.

Miniature ball screws are mainly used in the applications of semiconductor, optics, medical and metrology.

Our miniature ball screw product line consists of two spindle series, which can be combined with a total of six different nuts. The nuts can be preloaded or mounted with axial play. They can be combined with two predetermined spindle types or a customer-specific spindle shape.

Special versions, e.g. for clean room applications or in vacuum, are available on request.

All Steinmeyer miniature ball screws with optiSLITE technology are optimized with smoother spindle surfaces for superior operation.

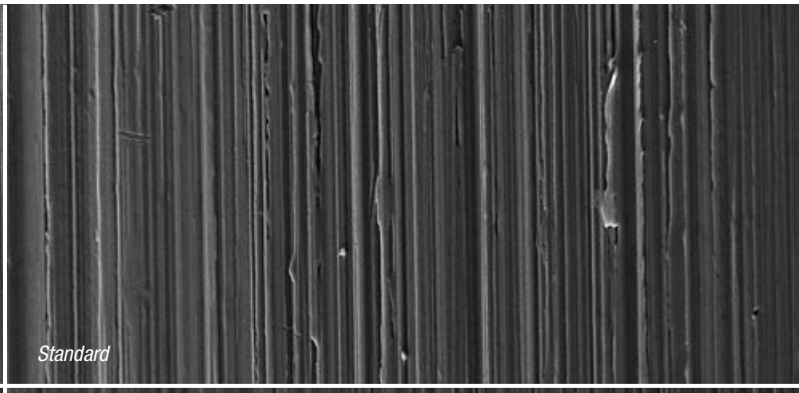
Standard Ball Screws:

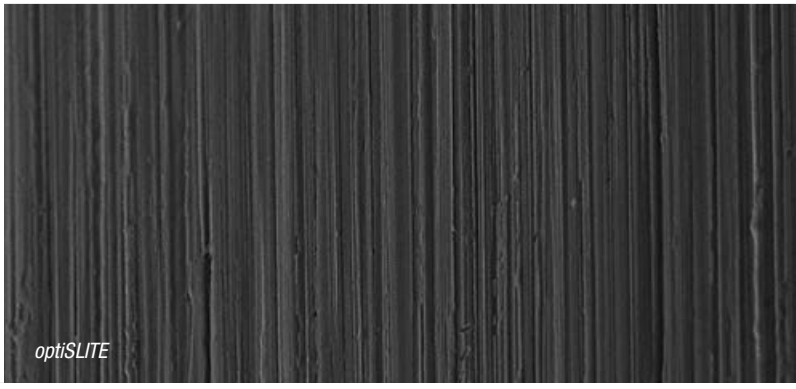
Through the use of innovative production technologies, the surface roughness of the raceways can be reduced significantly.

Comparative advantages:

Through the use of innovative production technologies, the surface roughness of the raceways can be reduced significantly. Irregularities are virtually eliminated.

optiSLITE ball screws show noticeable improvement in their running characteristics.





Surface - SEM image
(scanning electron micrograph)
100-fold magnification.

Surface - SEM image
(scanning electron micrograph)
1000-fold magnification.

Quiet and measurably smoother.

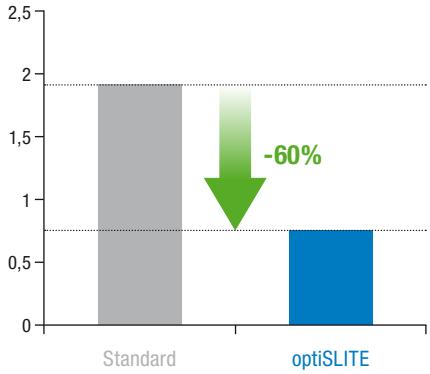
Improved running characteristics and low uniformity of idling torque.

The main advantages of optiSLITE include a noticeable improvement in running characteristics. Through the use of innovative production technologies, the surface roughness of the raceways can be reduced significantly.

optiSLITE benefits:

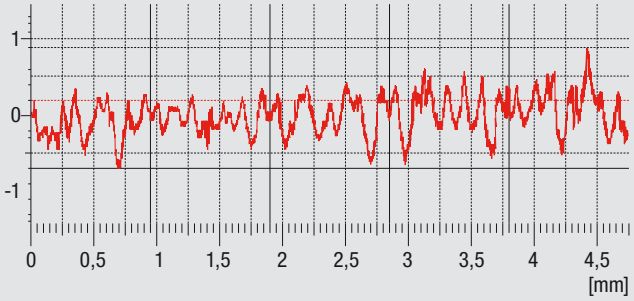
- Improved running characteristics
- Low, uniform idling torque

Surface quality Rz.



Roughness

[µm] vertical magnification: x 10,000 | lateral magnification: x 34,87

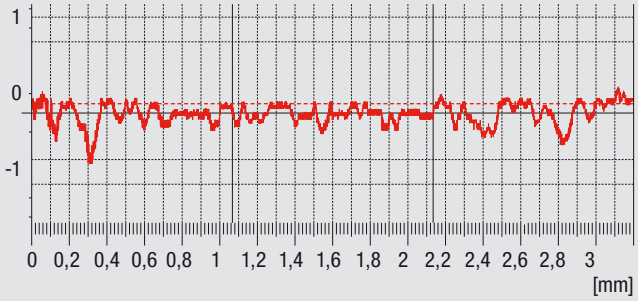


Standard

Ra	0,194 µm
Rz	1,053 µm
Rmr (0,5 µm)	20,22 %

Roughness

[µm] vertical magnification: x 10,000 | lateral magnification: x 51,38



optiSLITE

Ra	0,088 µm
Rz	0,533 µm
Rmr (0,5 µm)	96,86 %

Surface topographies compared.

Order our optiSLITE technology today.

Please specify your request.

Contact us for a quote.

**optiSlite technology is available for Positioning Ball Screws (with P-tolerance) with nominal diameter of 3-16 mm including.*

optiSLITE-technology –

Reduced noise, higher efficiency.

Other advantages.

Another advantage of the new product line is that it improves the running characteristics in the installed state and reduces the noise of the ball screws at high speeds by increased material contact.

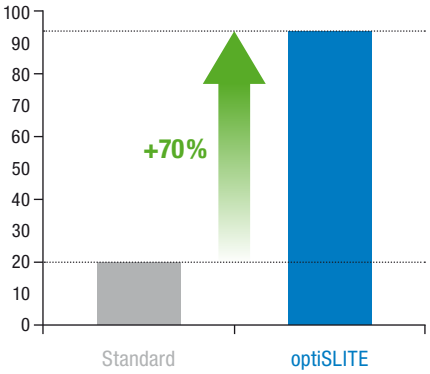
Material contact area ratio Rmr (c).

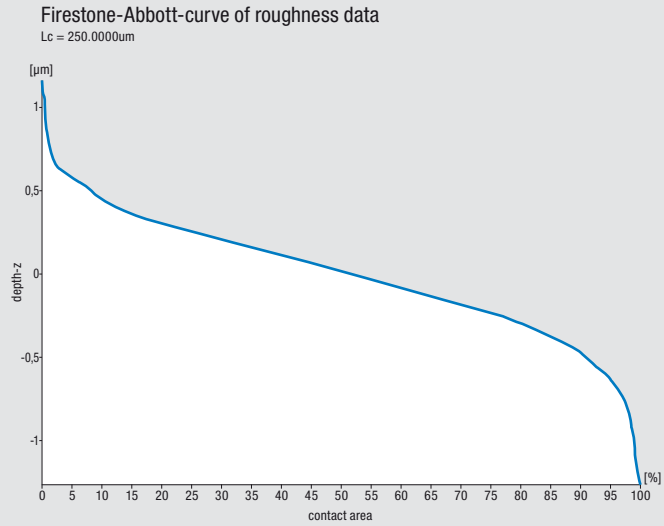
The material contact area Rmr (c) indicates the percentage of material filled path lengths depending on the depth of cut "c".

Through increased material contact the running characteristics of ball screws can be enormously improved. The plateau-like surface of the optiSLITE ball screws provides clean and smooth running, while offering improved lubricating properties.

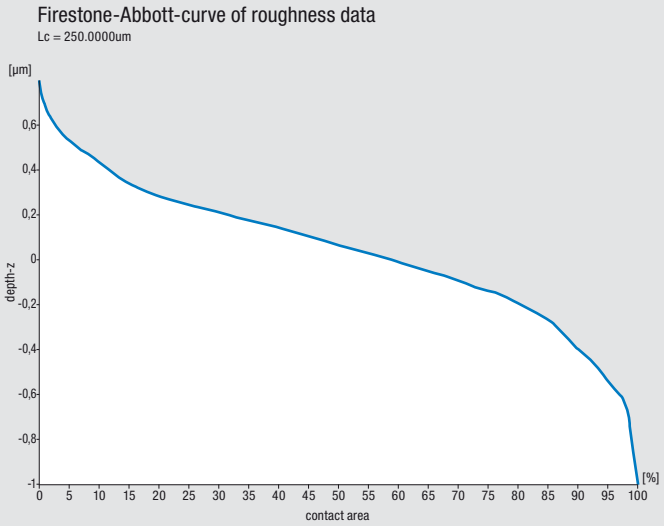
The markedly improved running characteristics allow the ball screw to achieve higher energy efficiency.

Measurable improvement.





Standard



optiSLITE

material contact area

Operating precision at the smallest detail.

High precision processing requires fine machining operations.

Steinmeyer miniature ball screws meet the criteria of various high precision requirements.

The new optiSLITE ball screws were developed especially for precision positioning in semiconductor, optics, medical instrument, and metrology applications.

In addition, through innovative manufacturing a smoother idle torque can be generated, which in turn offers the possibility to design more efficient drives.

Feel free to contact us.

Steinmeyer miniature ball screws can be obtained in reduced lengths, or even completely different special designs to the standard spindle shafts.

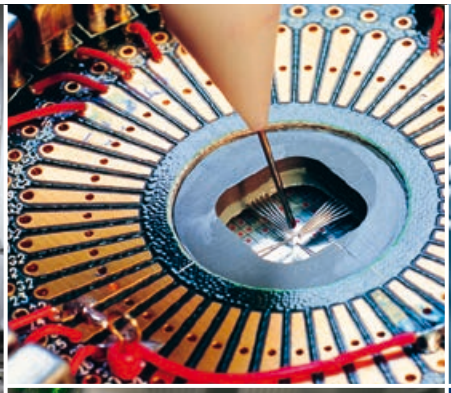
The spindle shafts can be combined with our standard nuts or with different versions.

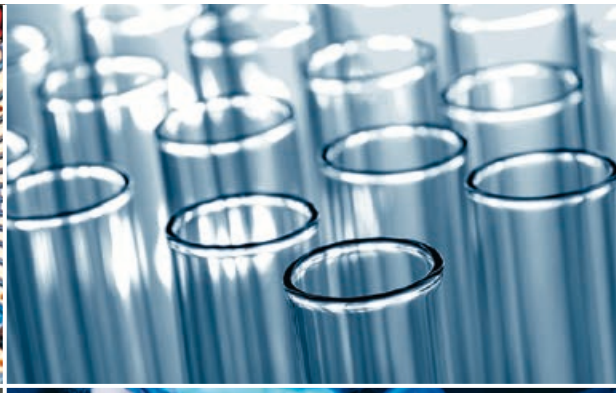
We will gladly give you a quote on price and delivery information.

Please provide simply a drawing or a sketch.

Contact:
Phone: **+49 (0) 7431 1288-0**
E-mail: **info@steinmeyer.com**

Modern production technologies at Steinmeyer.





Usage: Optical industry, microscopy, medical technology.

Welcome to where precision is.

Steinmeyer –

Your reliable partner for Ball Screws.

Ball screws in all sorts of designs.

Fulfilling your exact design requirements is our main focus. The expertise of our engineers combined with high standards enables us to provide custom ball screw solutions for your application.

Precision and quality.

Innovation, precision, quality, reliability, and durability have distinguished our ball screws for decades. We use sophisticated manufacturing technology and hand-select only first-class materials.

Reliable customer service.

Steinmeyer has reliable customer service representatives available at your disposal, before and after your purchase – whether it's for a comprehensive initial consultation or for a quick and simple repair after purchase.

Contact:
Phone: **+49 (0) 7431 1288-0**
E-mail: **info@steinmeyer.com**

Our aim is to find the right solution for you.
www.steinmeyer.com

High precision ball screw assemblies of 3 mm to 160 mm.

Ball screw assemblies are the central element of linear drives for general machinery and devices. We are a worldwide leader in ball screw assembly innovation for applications within mechatronics, optics, and aerospace.

Certified processes.

We provide high precision products through our high quality standards. Our processes are certified under quality management systems.

Our product range:

- Miniature Ball Screws 3 - 16 mm
- Large Ball Screws 16 - 125 mm
- Ultra Thrust Ball Screws 32 - 160 mm
- Aerospace Ball Screws
- Rotating Nuts
- Precision Lead Screws

With more than 460 employees, Steinmeyer is the leading competence center in Europe in the fully integrated manufacturing of ball screws.

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