



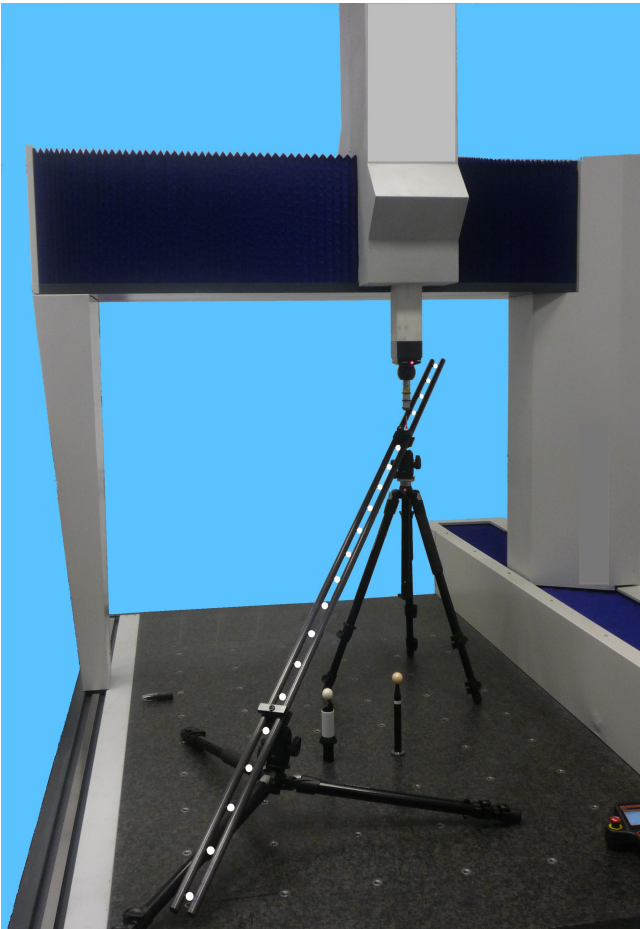
NEWLY manufactured by
Qopas GmbH, Germany

FORMERLY manufactured by
Trapet Precision Engineering

...wenn die μ 's Mühe machen...

ESCALON Ball Bars

Made in Germany



CMM with 2 m ESCALON



CMM with 2.7 m ESCALON



CMM checked with 1 m "Miniatur" ESCALON

ESCALON ball bars are length references for verifying CMMs.

The ESCALON ball bar concept takes into account the needs arising from ISO 10360-2 standard. The construction is easy to use, flexible and universal.

The ball bar consists of uni-directional carbon fibre composite, which has a thermal expansion close to zero. Thus reduces enormously the time to achieve thermal equilibrium after usage.

The neutral line design offers insensitivity towards non-idealities and modifications with respect to fixing.

Light weight CFK facilitates transport and handling.

ESCALON ball bars are suited for CMMs with tactile probe heads, video heads ("Mini" ball bars), laser scanning heads and tomography.

ESCALON ball bars are made in lengths from 50 mm to 3 m. Default ball diameters are 3 mm and 15 mm.

When applying the stitching technique, lengths of up to 10 m can be verified.

Ball bars are delivered with an easy to handle, universal open spreadsheet for evaluations according to ISO 10360-2 (2010) and -5 (2020).



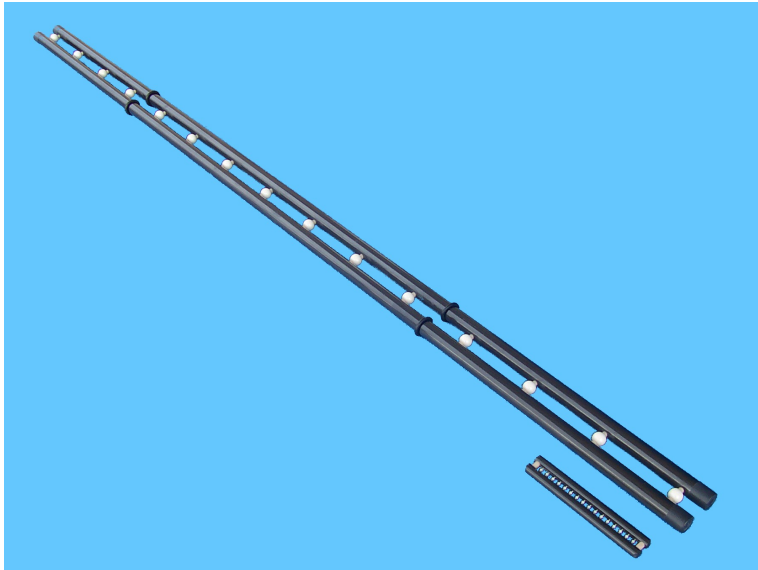
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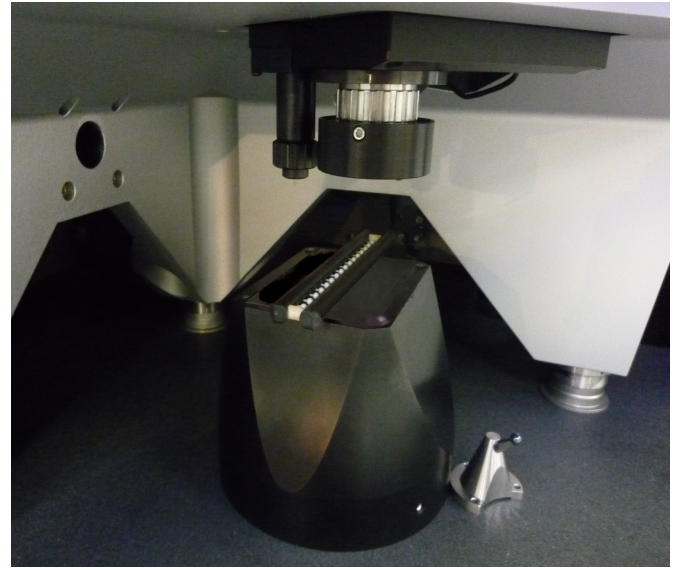
...wenn die μ 's Mühe machen...

ESCALON Ball Bars

Made in Germany



120 mm and 1400 mm ESCALON



120 mm ESCALON on an optical-tactile CMM



Ball bar holder with magnetic rods: any angle



ESCALON with magnetic clamps (available as option)

CERTIFICADO DE CALIBRACIÓN
Certificate of calibration

Número / ISM 2021-04-15-01
Number

Página 1 de 3 páginas
Page 1 of 3 pages

Nota: Los resultados que no están incluidos en el alcance acreditado por ENAC se marcan con asterisco *
Note: Results not contained in the accredited scope of calibration by ENAC are marked with an asterisk *

Ingeniería y Servicios Metrología | Truimetrologia S.L.
33203 Gijón Asturias
España
VAT No ESB3961200
Tel.: +34 984 194 467
www.ism3d.es
info@ism3d.es

OBJETO : Ball Beam
Item

MARCA : Trapet Precision
Mark

MODELO : Ball Beam of NEXCERA, 1500 mm, 76 balls of Ruby, 8 mm diameter

IDENTIFICACIÓN : 30-2015
Identification

SOLICITANTE : Qopas
Applicant
Driedorf
Germany

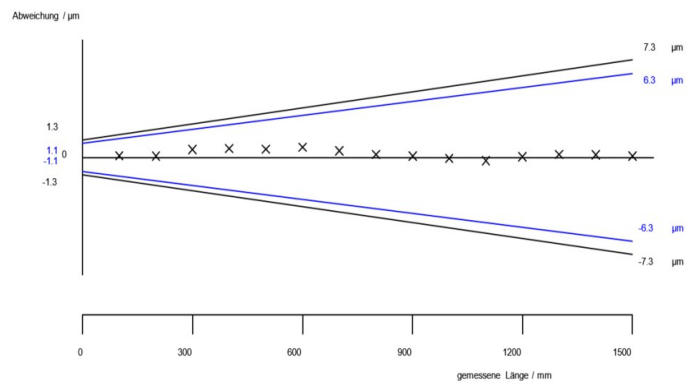
FECHA/S DE CALIBRACIÓN : 15.4.2021
Date/s of calibration

Signatario/s autorizado/s : TRAPET
Authorized signatory/ies
EUGEN
HERBERT
Dr.-Ing. Eugen Trapet
Jefe de Laboratorio
Head of Laboratory

Fecha de emisión : 15.4.2021
Date of issue

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Calibration Certificate (front page) of a ball bar



Measurement, evaluation and presentation of results according to ISO 10360-2