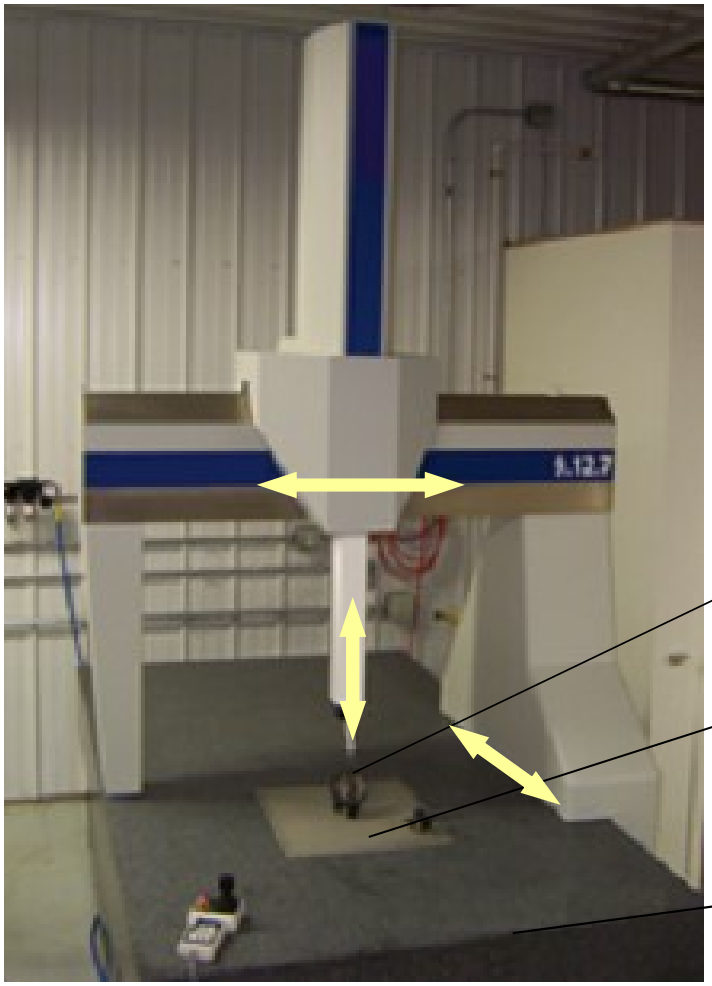
Máquina de Medição de Coordenadas



X	120.021
Y	92.453
Z	239.002

Ponta de prova

Objeto a ser medido

Mesa

Guias aerostáticos

Granito, cerâmica, alumínio, etc

Transmissão por cintas de aço

DYMCO

Réguas ópticas

HEIDENHAIN

1959 A CMM foi apresentado pela primeira vez no International Machine Tool em Paris,pela companhia inglesa Ferranti. O lançamento do modelo comercial ocorreu em 1951.

1965 A companhia americana Brown & Sharpe lança a primeira CMM a usar mancal aerostático: Check Mate.

1972 O ‘touch-trigger’ foi inventado por Sir David McMurtry, co-fundador da Renishaw. Permitiu a medição automática de componentes industriais.

Vertical CMMs

PMM-C and PMM-C Infinity

brown & sharpe

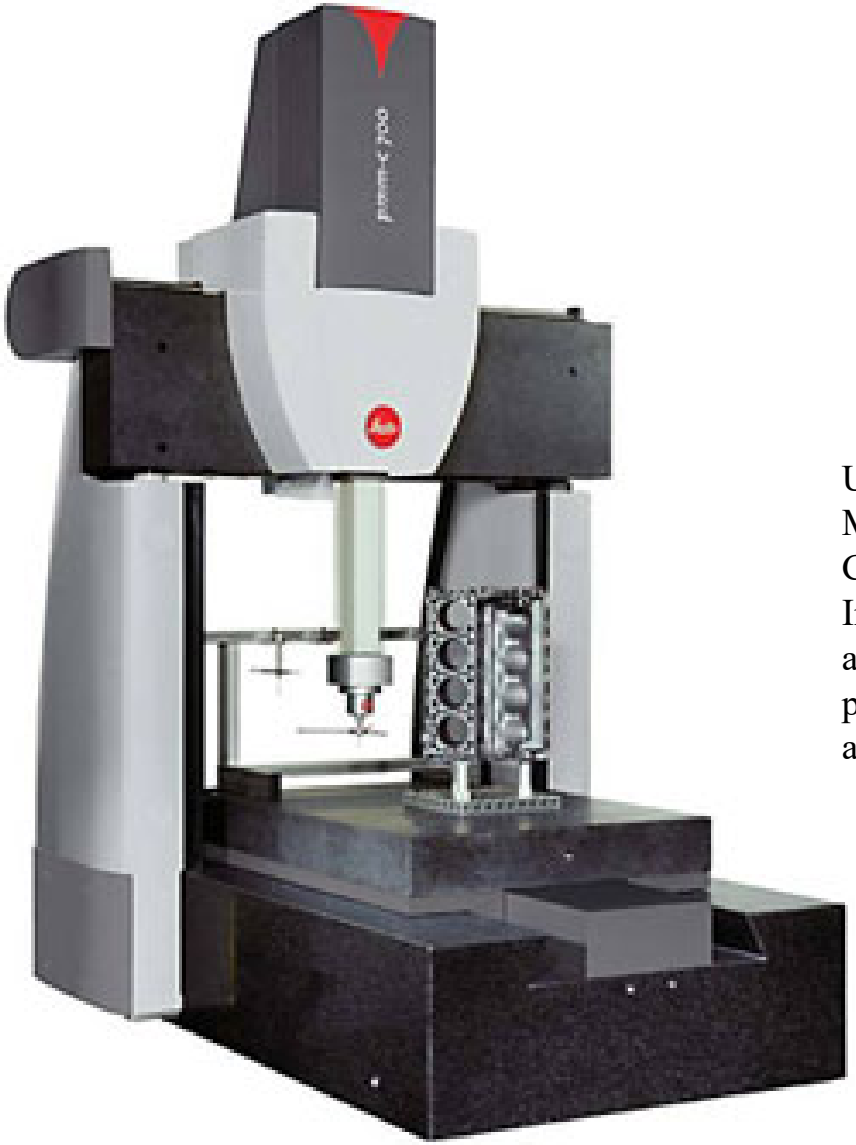
HEXAGON

PMM-F

High Speed and High Precision Leitz Coordinate Measuring Machines and Flexible Gages for the Shop Floor.
The PMM-F is designed for fast inspection within a harsh production environment eliminating the requirement for air conditioned housing or special foundation.
Leitz PMM-F design technology maintains accuracy specifications within a large temperature range of 15°C - 30°C.

brown & sharpe

HEXAGON



Ultra high precision Leitz Coordinate Measuring Machines and Gear Checkers, including the PMM-C Infinity edition, which is the most accurate CMM that Leitz has ever produced, with 0.3 micron accuracy and 0.1 micron repeatability

brown & sharpe

HEXAGON

Horizontal CMMs

Bravo HA CMM and
Bravo HP CMM

brown & sharpe

HEXAGON

Prima RI

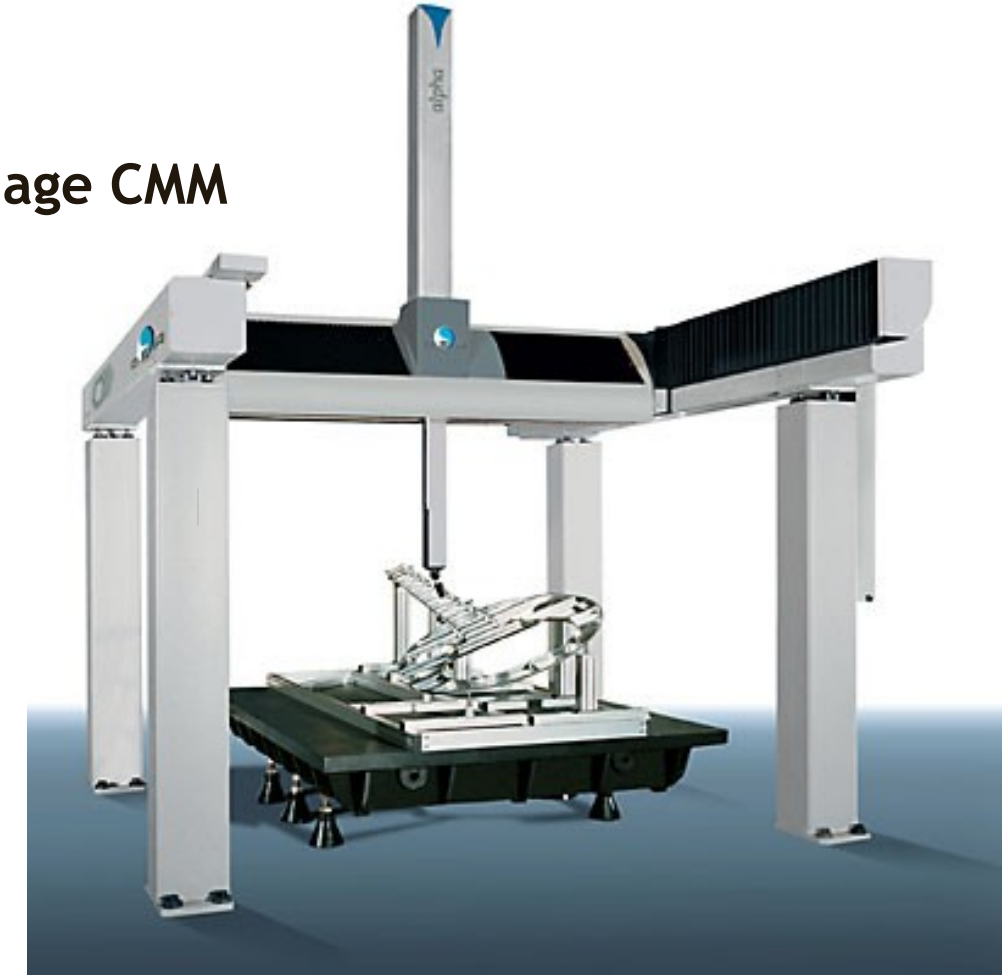
TORO Runway CMM

brown & sharpe®

HEXAGON

Gantry CMMs

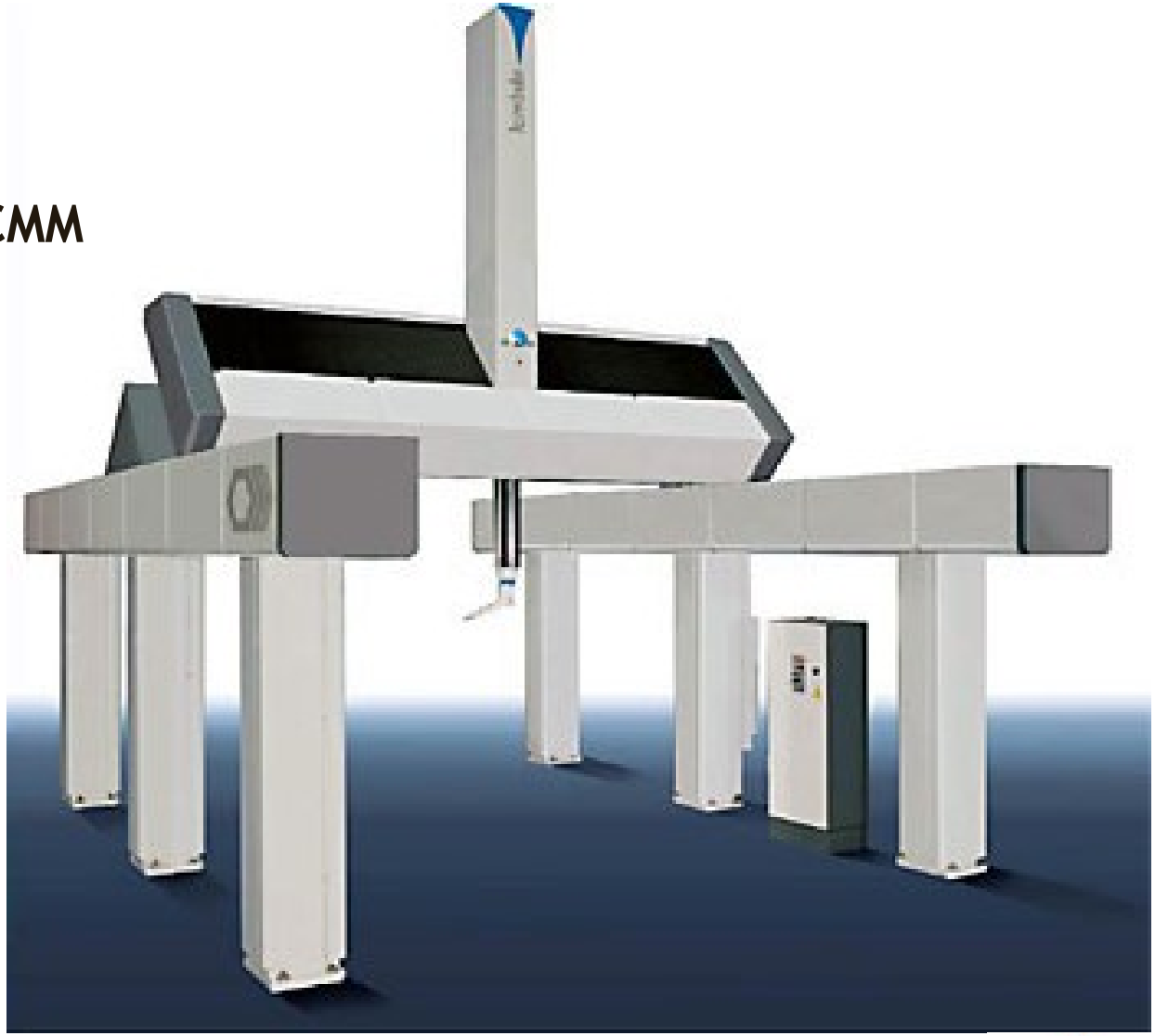
Alpha Image CMM



brown & sharpe

HEXAGON

Lambda SP CMM



brown & sharpe

HEXAGON

PMM-G

brown & sharpe®

HEXAGON

Manual CMMs

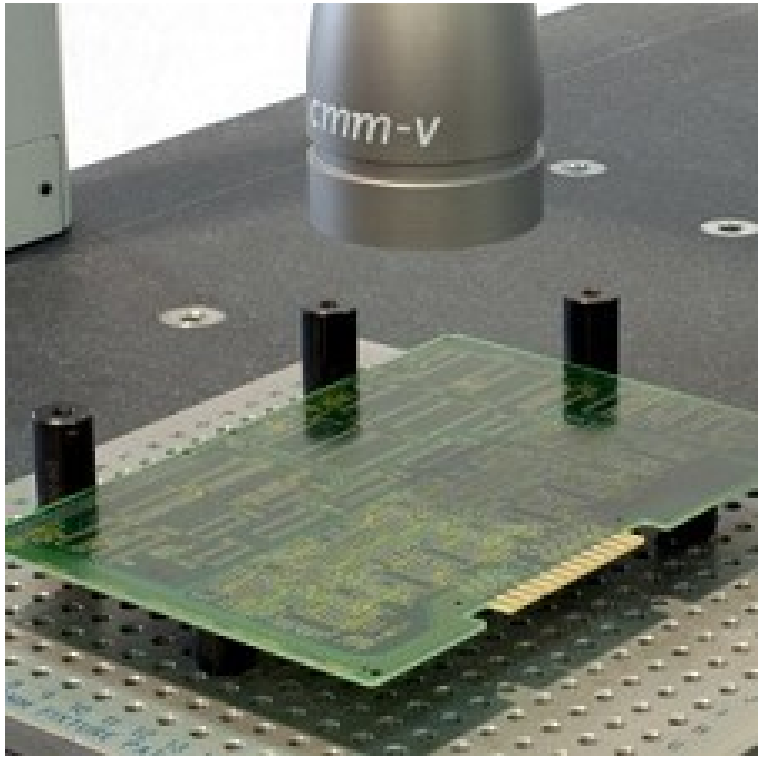
Micro-Hite 3D PC-DMIS

brown & sharpe

HEXAGON

Non-Contact Measurement

CMM-V Vision Probe



Laser Line Probe

brown & sharpe

HEXAGON

ROMER Absolute Arm 1.2m
The Absolute Arm 1.2m is a portable, precision CMM with a 1.2 m measuring volume.

The Leica Absolute Tracker AT402 allows extreme precision over ultra large distances.

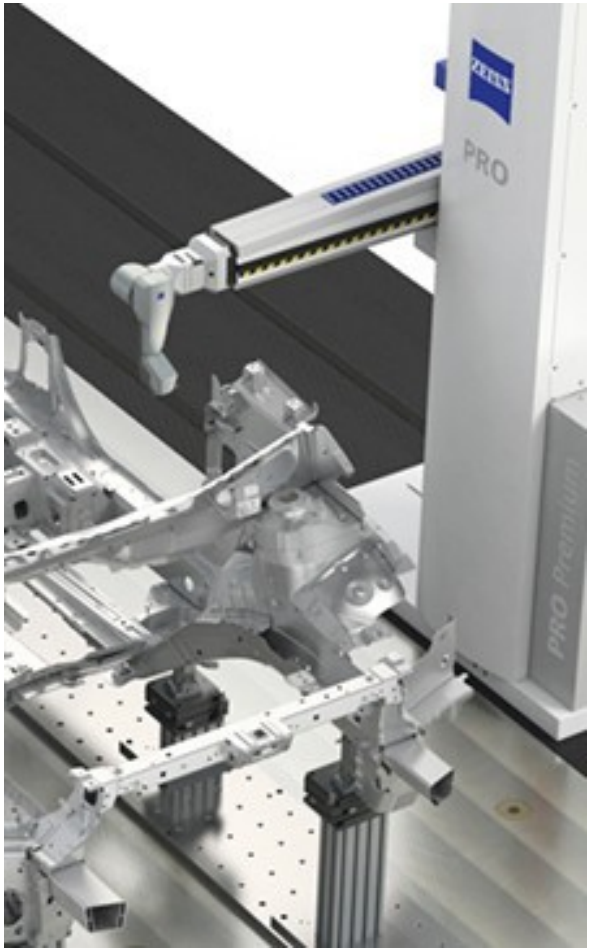
Take a look inside: (1) Invar carriers, (2) Bearing and scale covers, (3) Active anti-vibration system, (4) Dynamic and thermal damping thru TRF, (5) Liquids drainage, (6) Raised guideways, and the (7) Mineral cast.


CenterMax

ACCURA CMM with the mass system

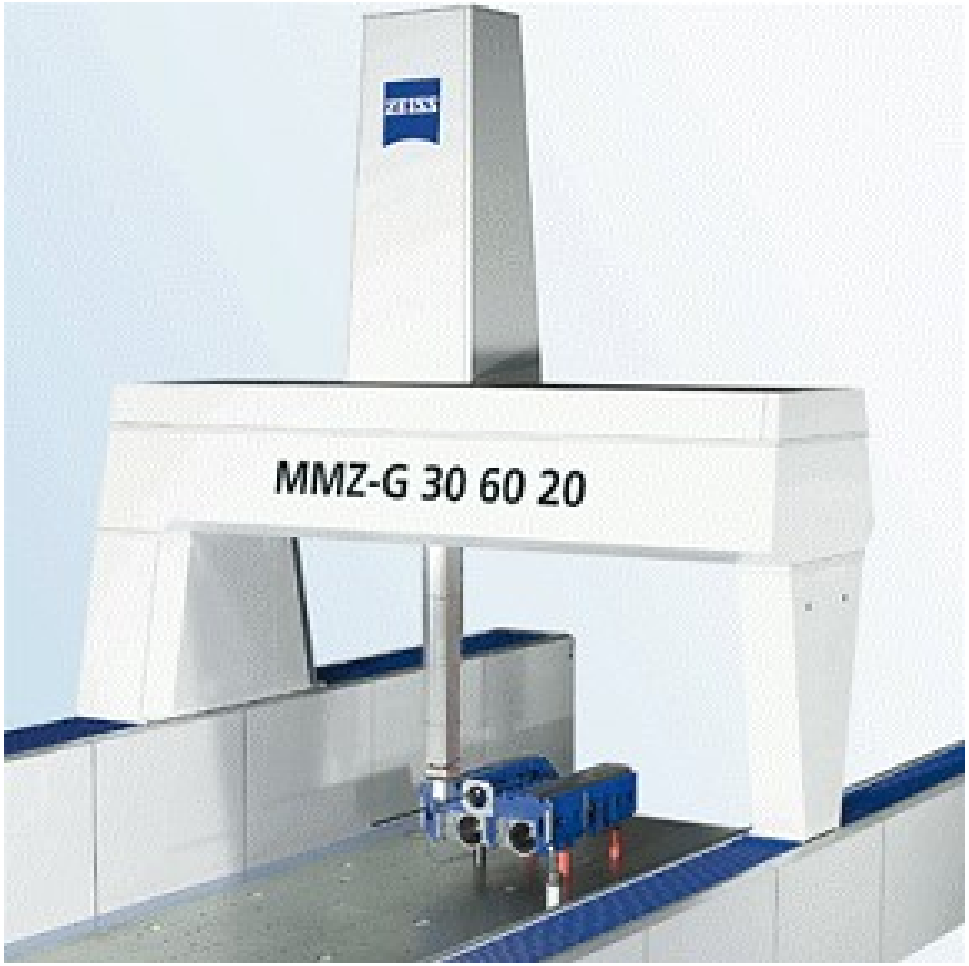
UPMC ultra meets the highest demands on precision.

DuraMax is a replacement for fixed gages, complex gages, and manual inspection equipment. Measuring can be that simple.



Maximum output and minimum costs for the entire product line are the result of the modular design of PRO and PRO T.

MMZ G and MMZ T



Reliable measurement of large parts over the long-term is easily possible with MMZ G and MMZ T.

Measuring Range (in mm)

MMZ G 2000:
2000 x 3000 – 5000 x 2000

MMZ G 2500:
2500 x 3000 – 6000 x 2000

MMZ G 3000:
3000 x 4000 – 6000 x 2000

MMZ T 12:
1600 x 2400 (3000) x 1200

MMZ T 16:
1600 x 2400 (3000) x 1600
2000 x 3000 x 1600

Contourecord and Surfcom are the experts for surfaces and contours – in the workshop, in production or in the measuring lab.

Surfcom 1500: The comfortable measuring station for surface measurements

Contourecord 1700/2700: The flexible measuring station for contour measurements

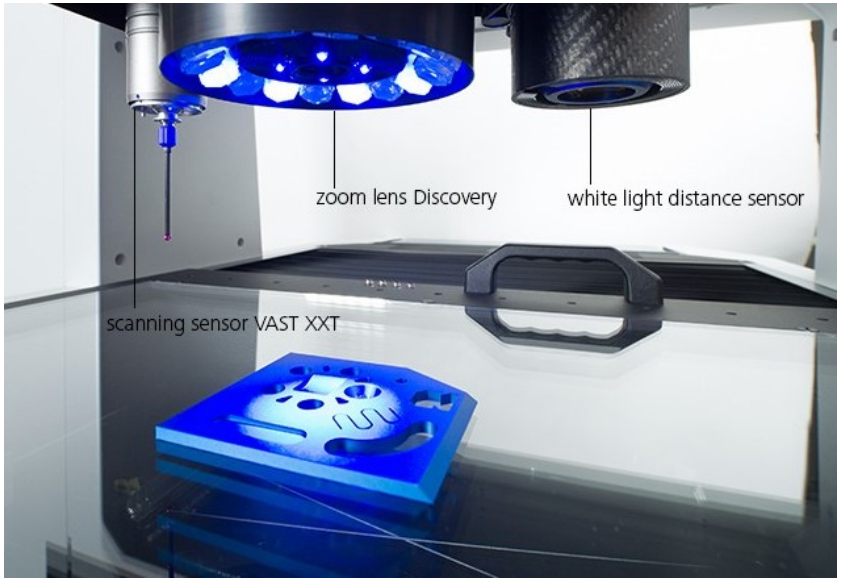
Handysurf E35A: The small, portable surface measuring unit.

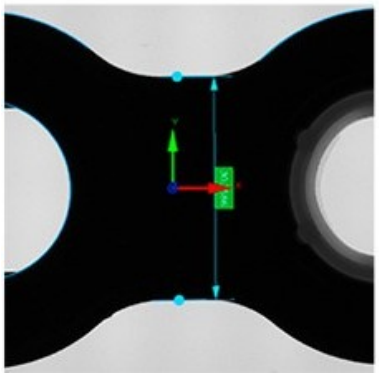
Surfcom 130: Compact Field Surface Texture Measuring Instrument.

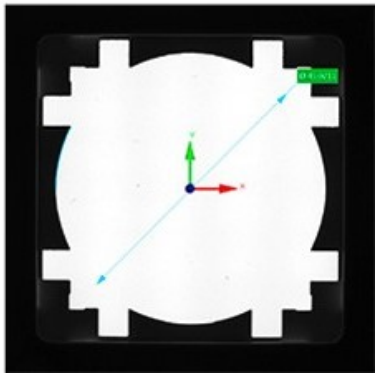
Rondcom 41: Compact desktop model with high-end analysis functions.

Rondcom 44/54: Accuracy for a range of applications. Easy upgrade to full CNC.

ZEISS COMET L3D 2 - ultra-compact 3D sensor







ZEISS O-SELECT

Mitutoyo U.S.A.