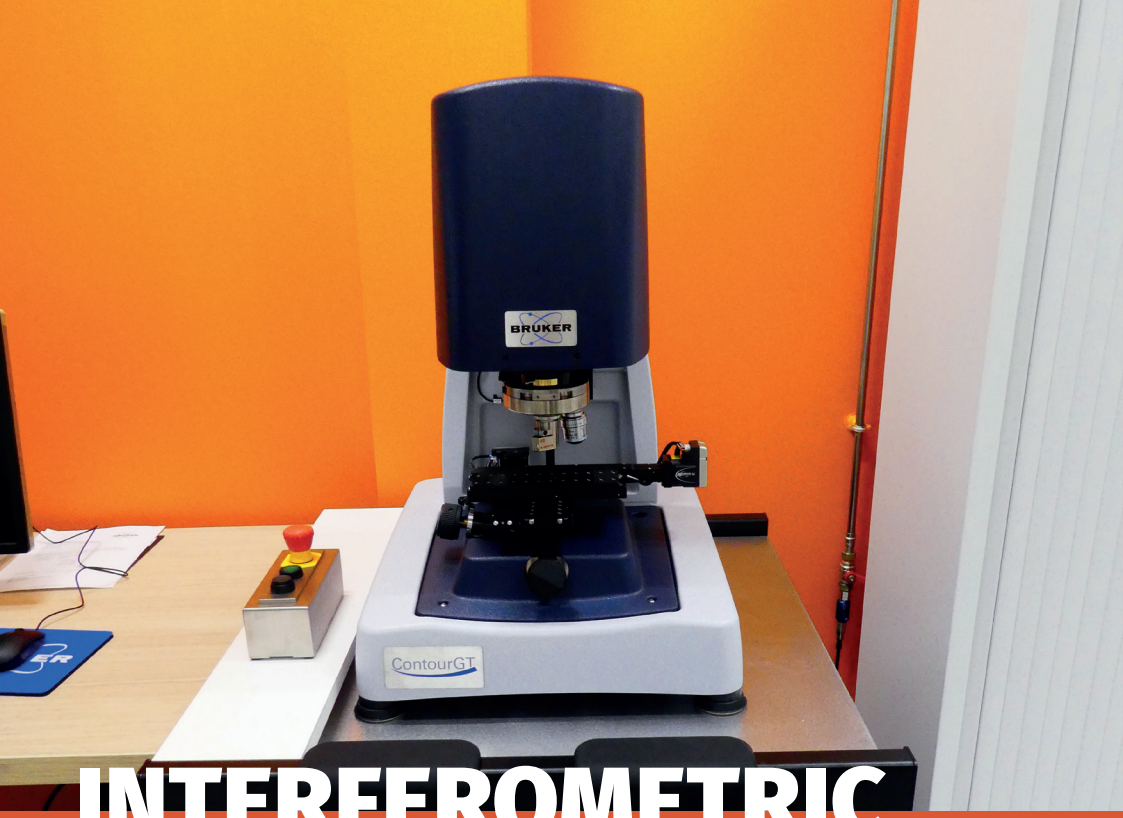


INTERFEROMETRIC MICROSCOPE

[ContourGT-K 3D]

Metrology of surfaces without contact until the nm !

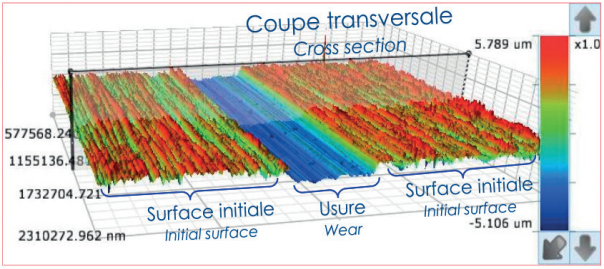
Optical -interferometry technology is the benchmark technology for metrology and measurement of roughness (ripples and other surface defects). It is essential for the study of tribology which is the science of friction, wear and lubrication.

Margaux Marnier
Laboratory Manager of the Materials collaborative platform
ced-materiaux@normandie.cci.fr
00 33 6 01 59 08 43

Centre d'Essais Dynamiques

Un équipement

CCI OUEST NORMANDIE



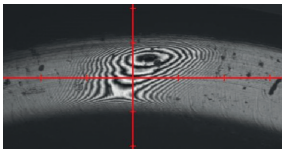
The interferometric microscope is a non-contact measuring device for the geometric characteristics of surfaces (eg roughness, curvature, angle, etc).

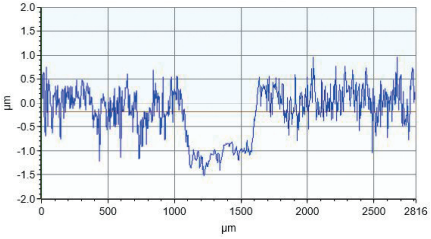
Its main applications are the characterization of a wear trace and the measurement of roughness parameters.

Applications for all types of materials

- Surface observation (2D/3D imaging)
  - 3D topography
  - dimensional measurements
- Characteristics of a wear trace
- Wear volume
- Surface roughness parameters (Sa, Sz, Sq...)
- Measurement of surface profiles (curvature, radius, inclination...)
- Stitching of images

Labe	Value	Units
Sa	293	nm
Sku	3	
Sp	1869	nm
Sq	375	nm
Ssk	0	
Sv	-2203	nm
Sz	4072	nm





Technical characteristics

The interferometric microscope is a non-contact measuring device for the geometric characteristics of surfaces (eg roughness, curvature, angle...).

It uses optical interferometry technology which gives it very good precision in distance measurement. Its vertical precision of the order of a nanometer makes it the best equipment compared to confocal or optical microscopies.

Conception : CCI Ouest Normandie / Service communication 06-2021
Crédit photos : Centre d'Essais Dynamiques