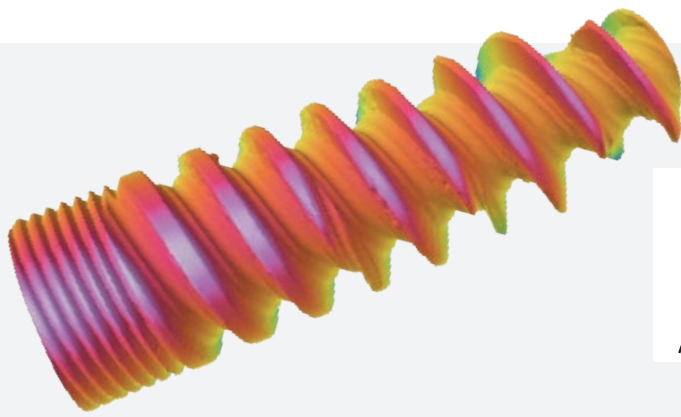


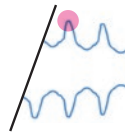


Medical devices

Medical devices must meet rigorous standards of safety, precision, and reliability. To support these requirements, Sensofar has developed advanced optical metrology solutions that provide detailed surface characterization.



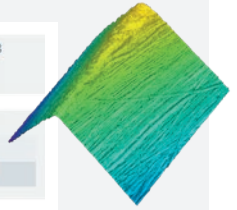
Peak



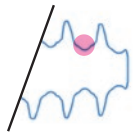
F-operator: Polynomial of degree 3
S-filter λs: 0.00036 mm

ISO 25178 / Height

Sa 0.1553 μm
Sz 4.6450 μm



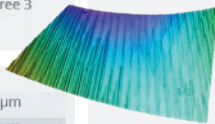
Valley



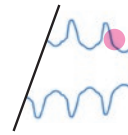
F-operator: Polynomial of degree 3
S-filter λs: 0.00036 mm

ISO 25178 / Height

Sa 0.1325 μm
Sz 1.5236 μm



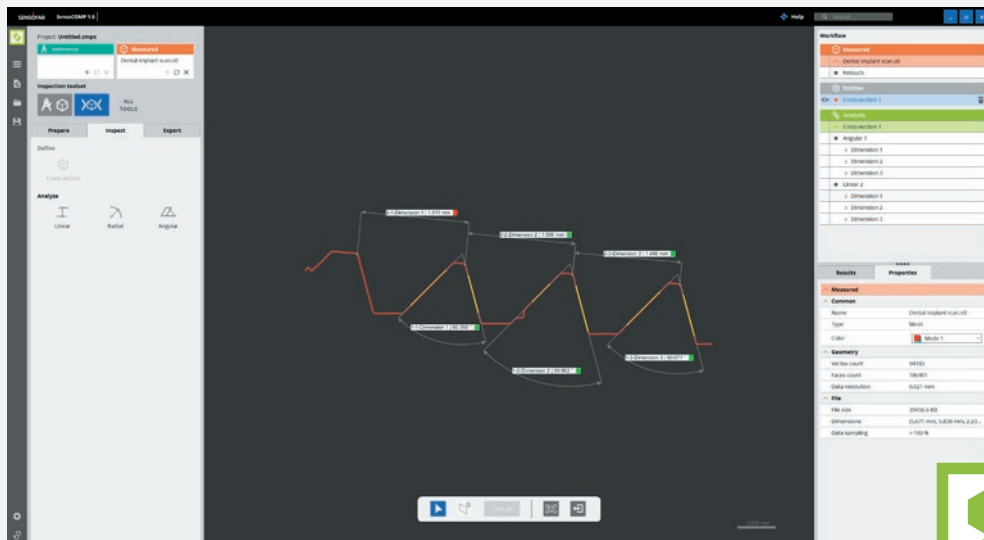
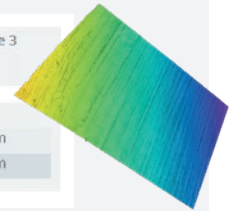
Flank



F-operator: Polynomial of degree 3
S-filter λs: 0.00036 mm

ISO 25178 / Height

Sa 0.4957 μm
Sz 12.7326 μm



SensoCOMP

Dental implants

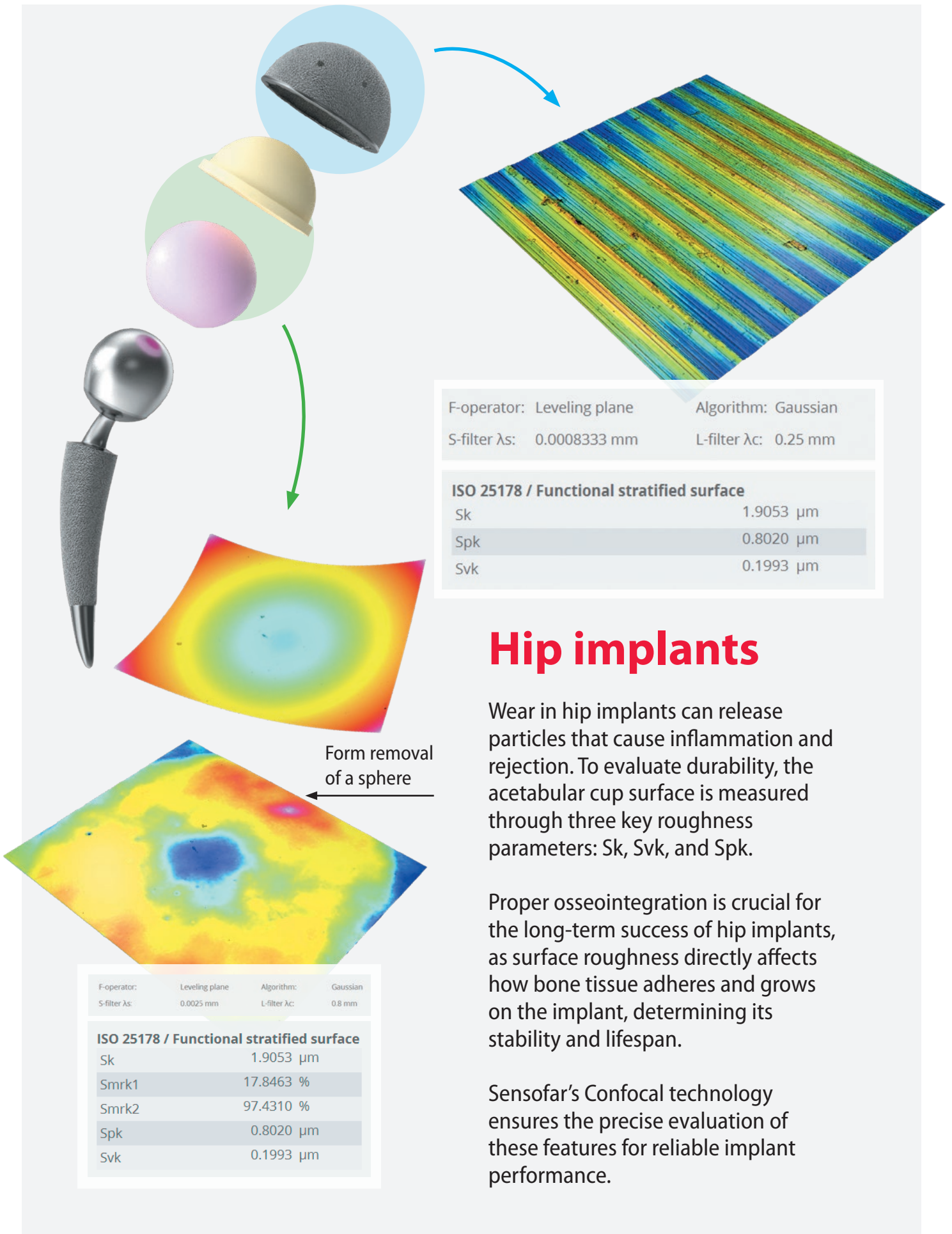
Threaded surfaces are key to the stability of dental implants.

To ensure proper performance and osseointegration, roughness is measured in three key regions: the peak, the flank, and the valley.

With the S neox Five Axis and Active Illumination Focus Variation, Sensofar captures the complete 3D geometry of the implant.

SensoMAP extracts critical dimensions, offering insights into how design and materials affect implant integration and durability.

Additionally, Sensocomp, Sensofar's 3D inspection software, offers advanced flexibility for dimensional evaluation of challenging geometries such as dental implants, allowing users to inspect what matters most.

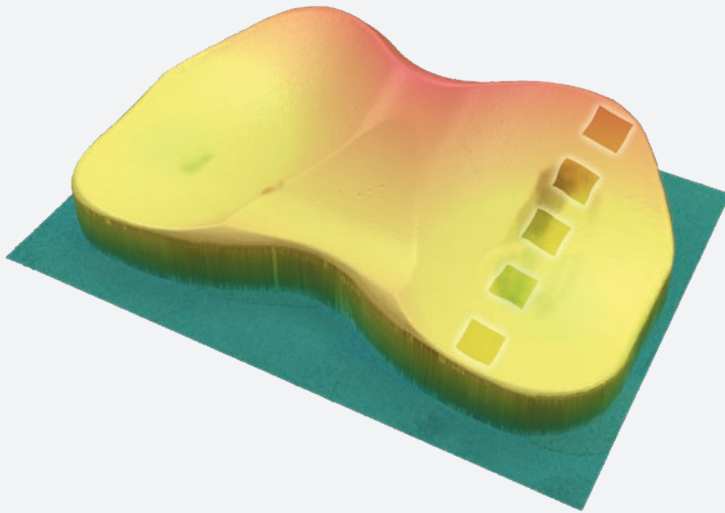


Hip implants

Wear in hip implants can release particles that cause inflammation and rejection. To evaluate durability, the acetabular cup surface is measured through three key roughness parameters: Sk, Svk, and Spk.

Proper osseointegration is crucial for the long-term success of hip implants, as surface roughness directly affects how bone tissue adheres and grows on the implant, determining its stability and lifespan.

Sensofar's Confocal technology ensures the precise evaluation of these features for reliable implant performance.

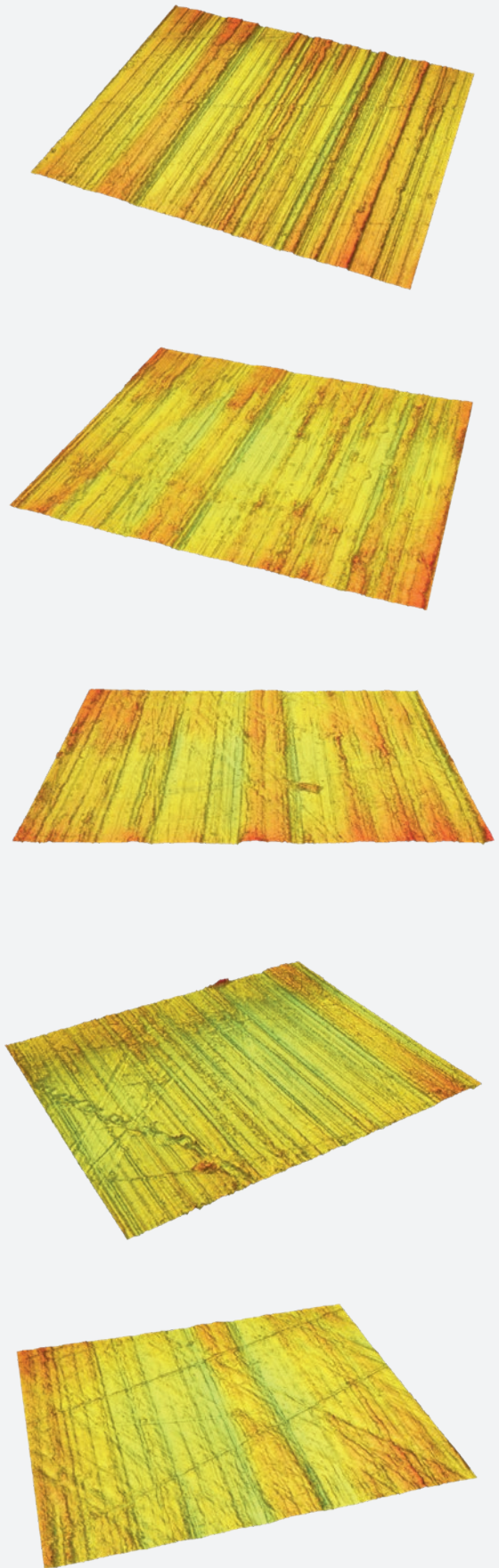


Knee implants

Knee implants require measurements at multiple positions; however, tilted or curved surfaces can reduce accuracy and complicate data collection.

Consistent surface quality is crucial for achieving proper osseointegration, as it facilitates enhanced bone attachment and prolongs implant longevity.

Sensofar's S neox Five Axis solves these challenges by combining Confocal and Interferometry with rotation and elevation, ensuring precise characterization of complex geometries.





Sensofar's non-contact optical profilers combine **Confocal, Interferometry, and Focus Variation technologies** to deliver the accuracy and versatility required for analyzing surface texture, coatings, and geometry in medical implants.

Explore **more resources** and **training materials** at **my SENSOFAR**



**EXPERT SUPPORT,
EVERY STEP OF THE WAY**

Guidance and care before, during, and long after your purchase.



**BUILT BY METROLOGISTS,
MADE FOR YOU**

Scientific accuracy and precision to give you confidence in every result.



**TAILORED SOLUTIONS,
DELIVERED FAST**

Custom configurations designed for your needs, ready in 2 weeks.

Precision. Partnership. Performance.
That's the Sensofar experience.



SENSOFAR is a leading-edge technology company that has the highest quality standards within the field of surface metrology

Sensofar provides high-accuracy optical profilers based on confocal, interferometry, and focus variation techniques, from standard setups for R&D and quality inspection laboratories to complete non-contact metrology solutions for in-line production processes. The Sensofar Group has its headquarters in Barcelona, a European technology and innovation hub. The Group is represented in over 30 countries through a global network of partners and has its own offices in Asia, Germany, and the United States.