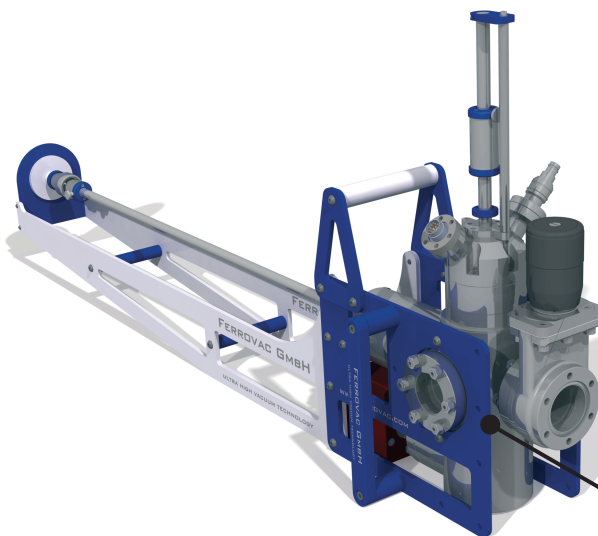


VSSPM :: PORTABLE SCANNING PROBE MICROSCOPE IN A UHV-SUITCASE

The VSSPM is a fully featured, miniturized Scanning Probe Microscope, implemented into a UHV-Suitcase. This novel and unique concept makes for a truly portable, robust, convenient and economical ultra high vacuum SPM system.

The incorporation of a Scanning Probe Microscope (SPM) into an ultra high vacuum suitcase allows for spectro-microscopy correlation experiments to be performed in the suitcase when it's attached to dedicated photon spectroscopy systems at synchrotron end-stations and in surface science laboratories.



VSN40S:: The UHV-Suitcase

Ferrovac produces and sells the full range of extremely compact, lightweight UHV suitcases.

Combined Non-Evaporable Getter (NEG) and Ion-Pump technology maintains base pressures down in the 10^{-11} mbar range, even without a permanent power supply.

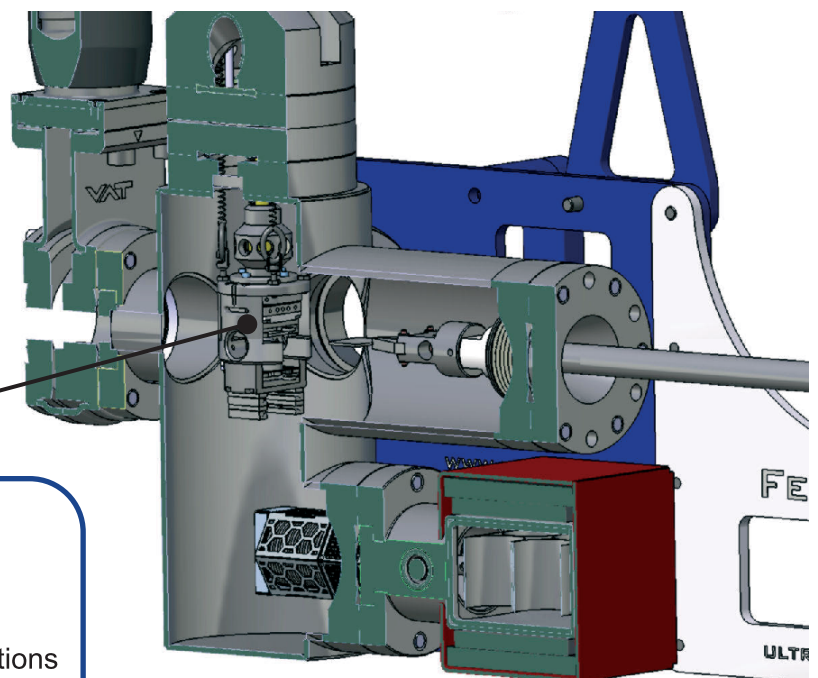
VSPROBE:: The Integrated SPM Instrument

The VSPROBE system includes a sample transfer manipulator and gate valve.

It can be bolted to any beamline endstation or other existing UHV system via a turbo-pumped T-piece or load lock.

Fetch the sample, place it into the SPM using the transfer manipulator of the suitcase and start taking SPM images.

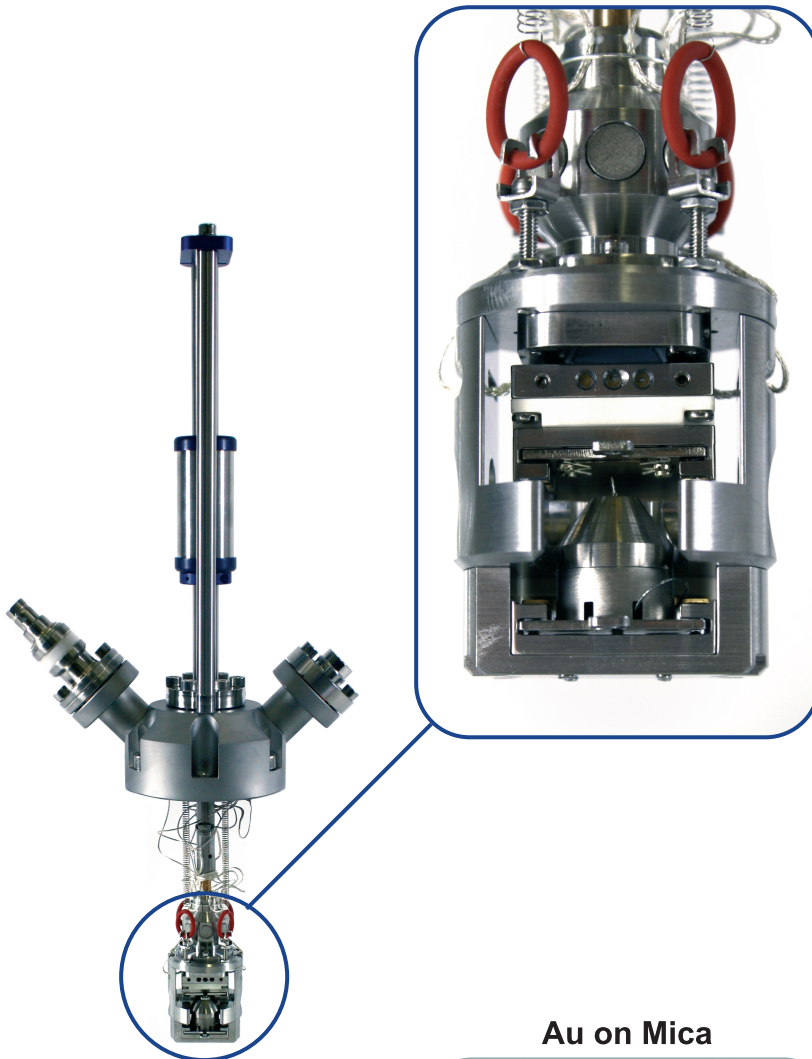
If the environment is noisy, debranch the suitcase and carry it to a quiet place.



BENEFITS

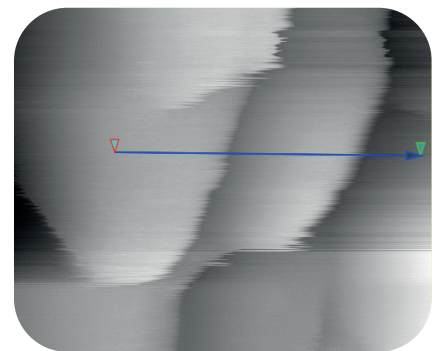
- Easily transportable
- Modular, configurable system
- Universally deployable at multiple end stations
- Exceptionally cost-efficient

The Scanning Probe Microscope::

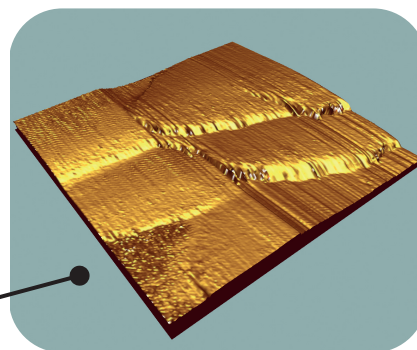


Key features:

- compact 34mm OD head
- flange DN40CF (2.75")
- spring suspension
- common flag style sample plates
- xy coarse positioning 5x10mm
- in-situ exchangeable scan unit
- in-situ exchangeable sensor
- 0.1 / 1 Å lateral / z resolution (in noisy synchrotron environment) up to 10x better in ideal conditions

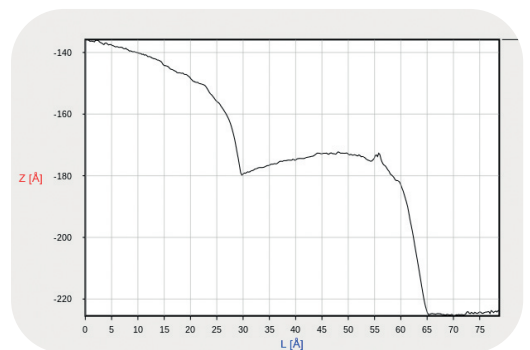


Au on Mica



Terrace height \approx 4nm
Image size \approx 11x11nm
 ΔZ \approx 9nm

Scale not yet confirmed



KEY CUSTOMERS WANTED!

Ferrovac is looking for customers who are interested in buying the first commercially available instruments at a reduced price and with extensive after sales support.

For detailed information please contact sales@ferrovac.com