

## VSSPM ::

### PORTABLE SCANNING PROBE MICROSCOPE IN A UHV-SUITCASE

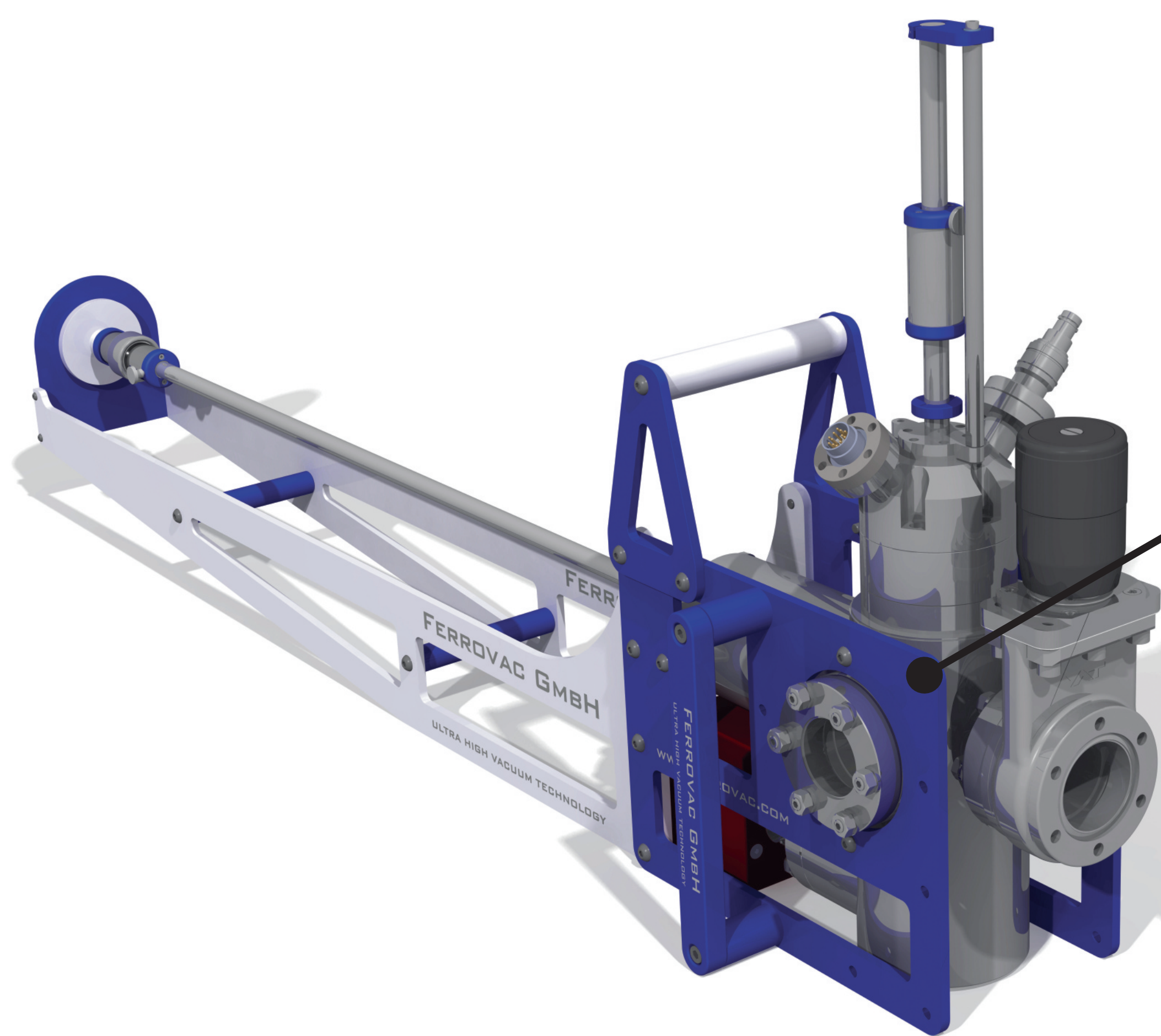
The VSSPM is a fully featured, minituarized Scanning Probe Microscope, implemented into a UHV-Suitcase. This novel and unique concept makes for a truly portable, robust, easy to use and economical ultra high vacuum SPM system.

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.

The modular portability of this SPM makes spectro-microscopy investigations highly economical compared to the installation of a dedicated SPM at every hosting system.

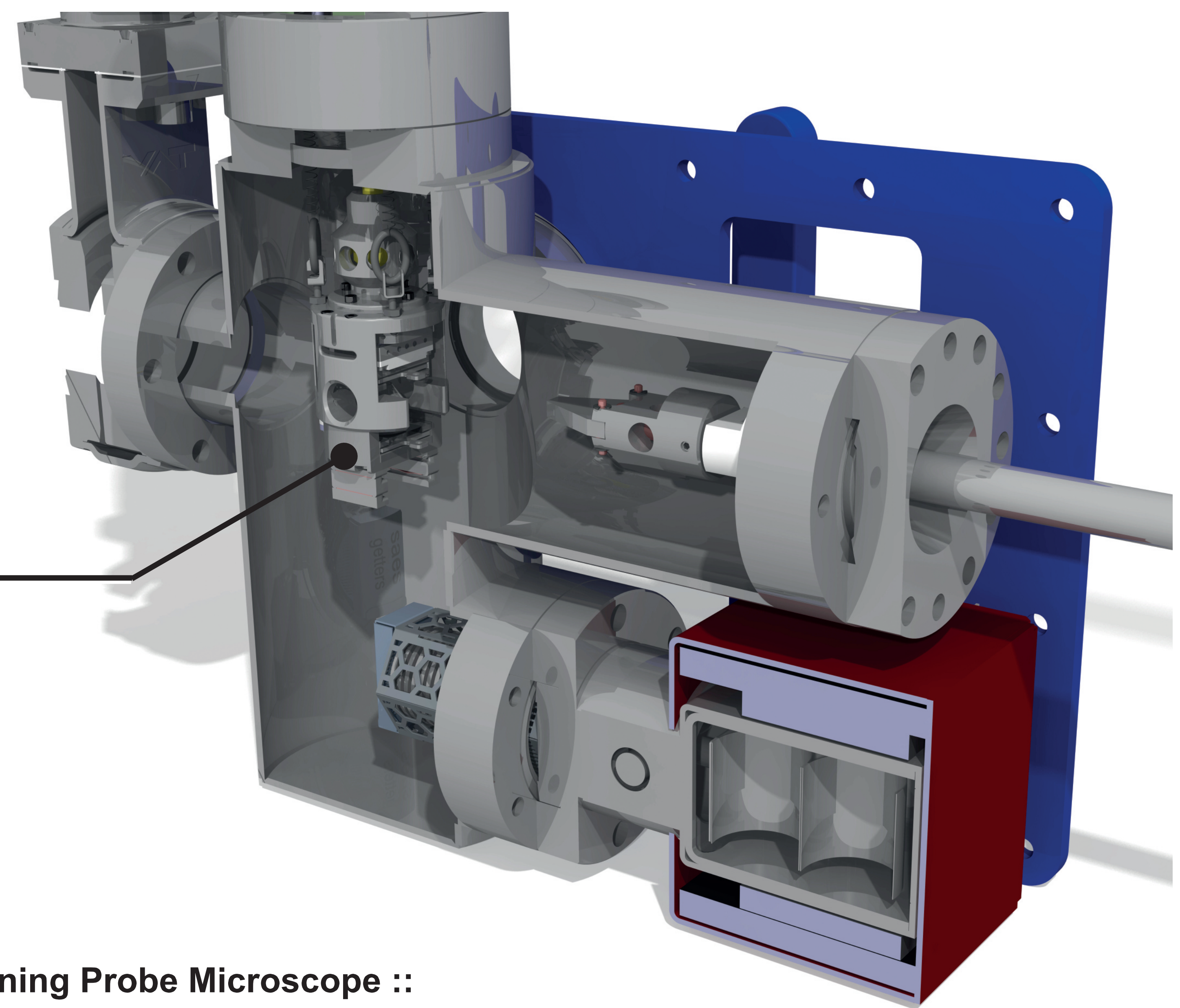
#### BENEFITS

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



#### VSN40S :: The UHV-Suitcase

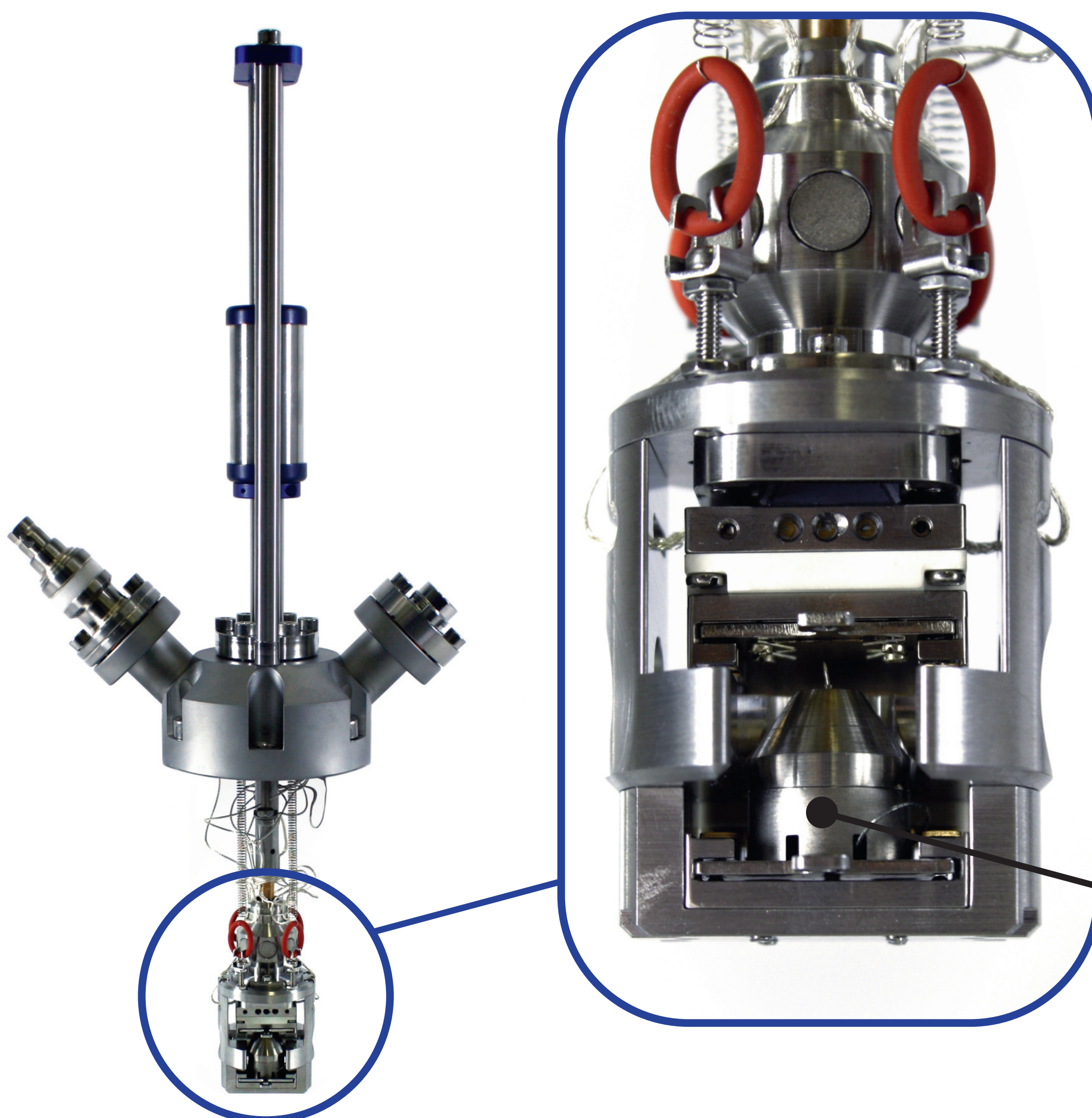
Ferrovac produces and sells the full range of extremely compact, lightweight UHV suitcases. Combined Non-Evaporable Getter (NEG) and Ion-Pump technology maintains base pressures down in the  $10^{-11}$  mbar range, even without a permanent power supply.



#### VSPROBE :: The Integrated SPM Instrument

The VSPROBE system includes both 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.



#### 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

#### 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](mailto:sales@ferrovac.com)