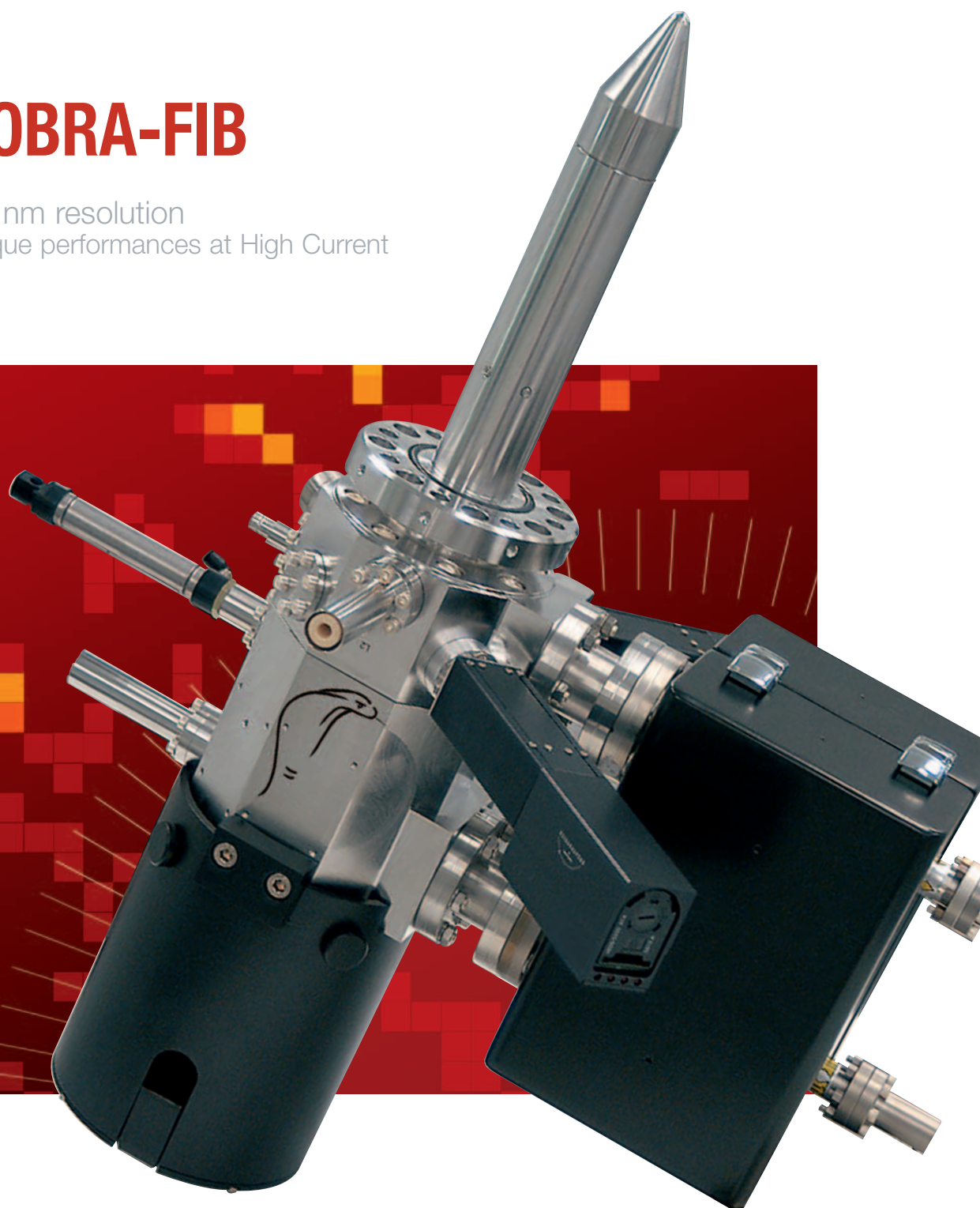


COBRA-FIB

2,5 nm resolution
Unique performances at High Current



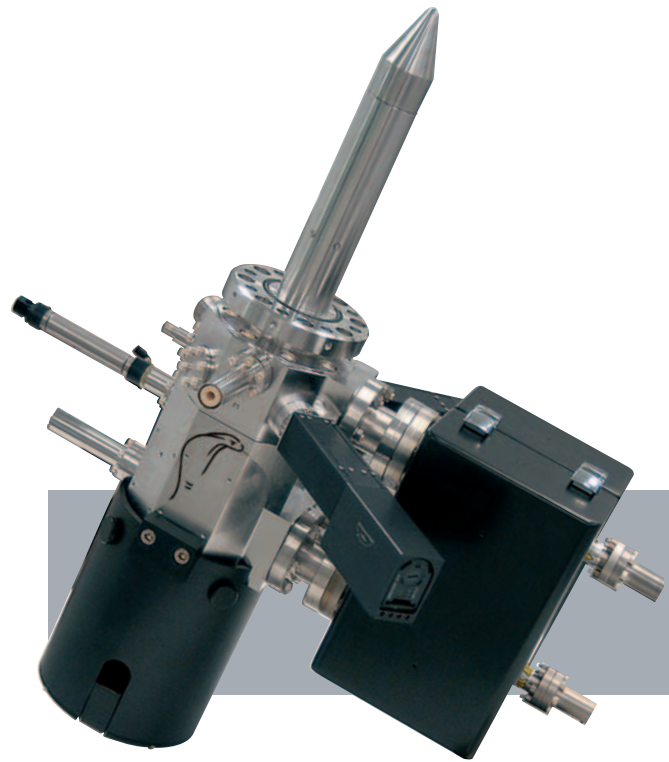
COBRA-FIB

COBRA-FIB is a ultra-high resolution FIB column. In addition to the unsurpassed resolution guaranteed at 2.5nm, sub-2nm images have been performed with gallium at 1pA. (*)

High current modes have also been optimized providing an extremely well defined beam shape with unique milling performances.

COBRA-FIB represents the top level technology in terms of resolution both for imaging and milling. This is the sharpest FIB instrument for nano-engineering.

(*) 20/80% SE image on platinum sample.



■ Spécifications :

- Cartridge with Ga Liquid Metal Ion Source
- Condensor lens
- Electrostatic Beam Blanker
- Faraday cup
- Pneumatic valve for the ion source isolation
- Differential pumping system
- Motorised aperture changer : 13 Aperture positions
- Double octupole for deflectors and stigmators
- Objective lens
- 63 CF flange

■ Some technical data :

- Accelerating voltage : 1 to 30 kV continuously
- Ion species : Standard : Ga
- Source lifetime : 1500 μ Ahours
- Beam resolution : < 2.5 nm
- Probe current : 1 pA to more than 50 nA
- Current density : > 20 A/cm²
- Acceptance apertures : Motorized, fully automatic
- Source vacuum : < 10⁻⁹ torr
- Beam Blanking : 20 ns
- Bakeout Temperature : 170°C (for UHV version)

COBRA-FIB represents the top level technology in terms of resolution both for imaging and milling. COBRA-FIB guarantees the shortest time to result for cross-sections and TEM sample preparations in FA processes, as well as circuit editing. Besides the optimization of the process time. COBRA-FIB represents the sharpest FIB instrument for nano-engineering.

COBRA-FIB is available for R&D laboratories as well as FIB equipment manufacturers, and is easily adaptable on many vacuum chambers. A UHV version has been developed with identical beam performances.

■ Guaranteed performances at 30 keV :

Beam current	1 pA	10 pA	50 pA	100 pA
Resolution	2.5 nm	5 nm	8 nm	12 nm

