Technical Data Sheet

FMB Berlin

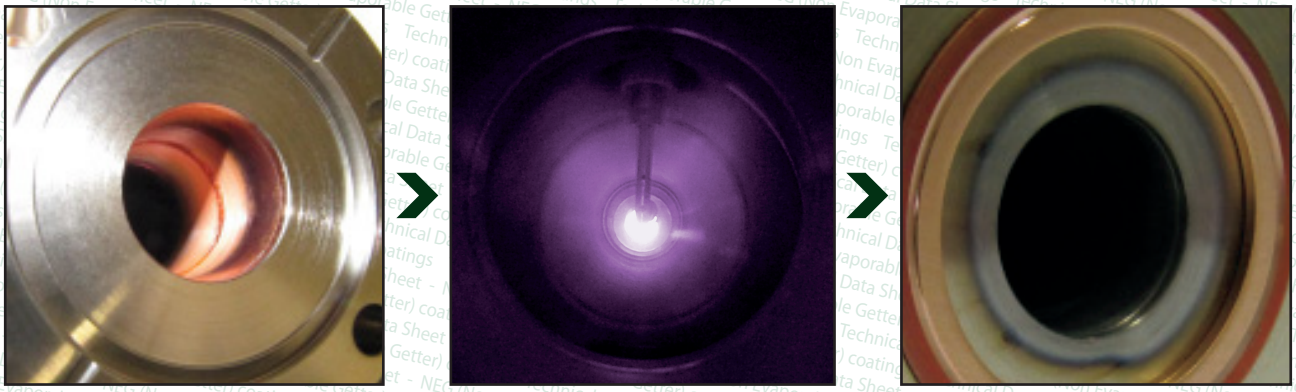
NEG (Non Evaporable Getter) coatings

The use of NEG (Non Evaporable Getter) coatings is an elegant and most sophisticated way to improve vacuum at pressures below the 10^{-9} mbar range for chambers where intermediate pumping can't be applied.

NEG coated vacuum chambers are widely used in accelerators, synchrotron ring systems and other devices all around the world.

FMB offers NEG coating for in-house manufactured chambers as well as contract coating of customer supplied chambers.

cleaned chamber | coating process | coated chamber

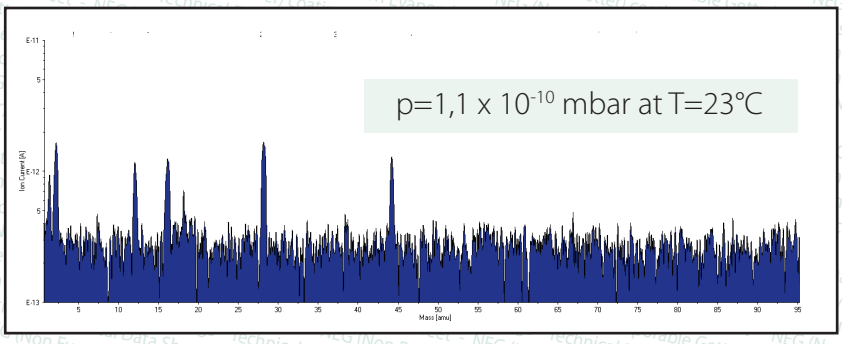


FMB holds a license to use the NEG coating technology for vacuum chambers. NEG films deposited with this technology have been shown to deliver suitable sticking coefficients and gas capacities in several applications.

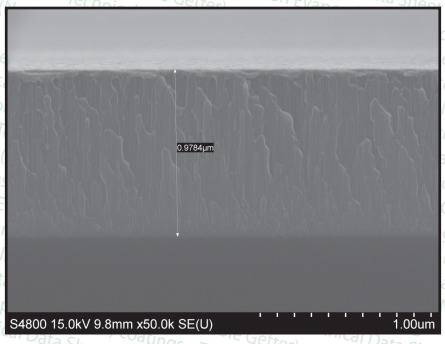
FMB offers the full manufacturing process for NEG coated vacuum chambers all from one single source:

Mechanical fabrication > Cleaning > NEG coating > Testing

Vacuum 20 min after coating process, pressure still decreasing



NEG layer (SEM)



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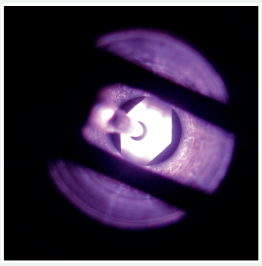
NEG coating services and technical details:



- Coating of straight and bent chambers:
  - **5.5 m** maximum length
  - **8 mm** minimum chamber inner diameter / distance (lower values need specific evaluation)
  - Chamber material stainless steel, aluminium or copper
- Use of single or multiple cathodes according to chamber profile
- All main plasma and substrate parameters are logged for documentation
- Coating qualification
  - Standard: Thickness, morphology and composition
  - On request: Sticking coefficient and full endoscopic visual inspection
- NEG first activation on customer request.

FMB Berlin

ISO 9001:2008 DEKRA Certification DEKRA zertifiziert Qualitätsmanagement Wir sind zertifiziert Regelmäßige freiwillige Überwachung nach ISO 9001:2008

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FMB Berlin operates a Quality Management System which complies with the requirements of **DIN ISO 9001**. FMB Berlin reserves the right to change product specifications without notice, in line with our policy of constant product improvements.

EUROPÄISCHE UNION Europäischer Fonds für regionale Entwicklung Investition in Ihre Zukunft EFRE „eine Chance durch Europa"