

Swedish Fusion & Fission Day 2025

2025-08-26

CoorsTek Sweden

CoorsTek WORLDWIDE



50 manufacturing sites
10,000 customers in 70 countries
Connect & collaborate worldwide

CoorsTek Sweden



Company history

ASEA High Pressure Laboratory (1965)

Applied R&D

- High-Speed Tool Steel
- NNS-"forging"-steel
- Ceramic turbine wheel
- Spent nuclear fuel

ABB Cerama AB (1984)

Licenses

- Process development
- Prototypes

AC Cerama AB (1993) (MBO)

Products

- Prototypes, pilot production
- Cermets
- Production development

Saint-Gobain Advanced Ceramics AB (1998)

Production

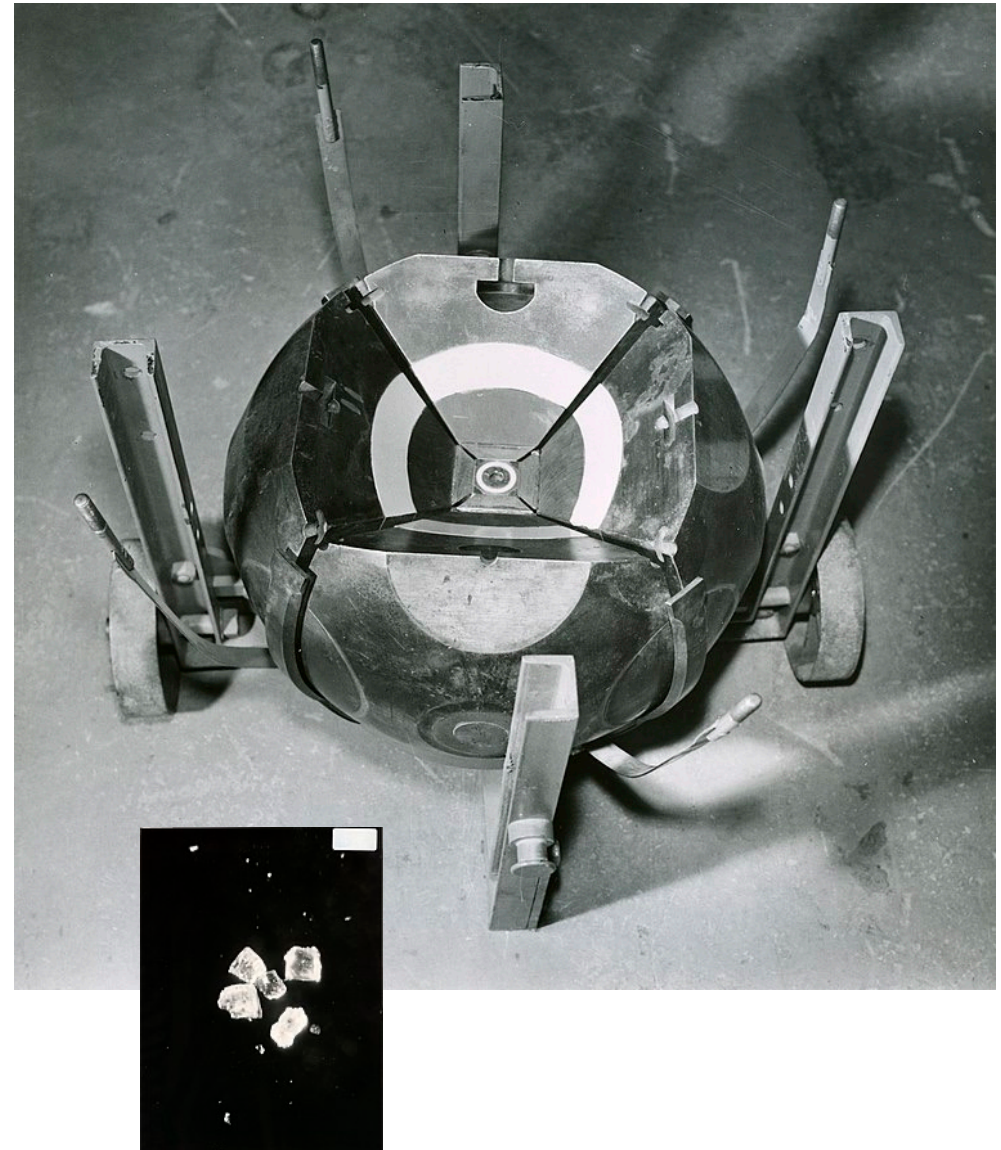
- Si₃N₄ ball blanks
- B₄C neutron absorbers
- Monolithic Windows
- New product development

CoorsTek Sweden AB (2011)

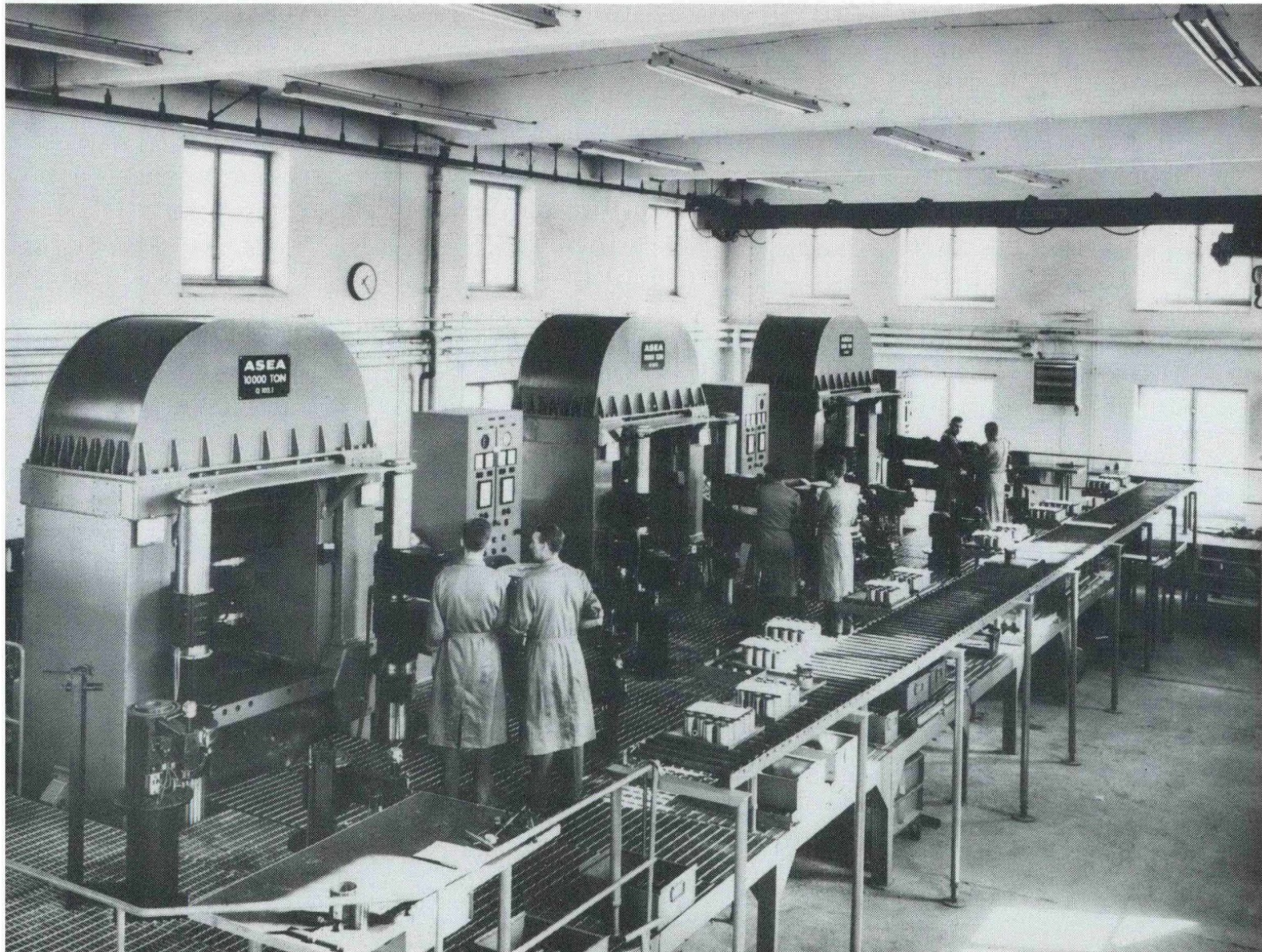
Production

- Si₃N₄ ball blanks
- B₄C neutron absorbers
- Monolithic Windows
- Roller Blanks
- New product development

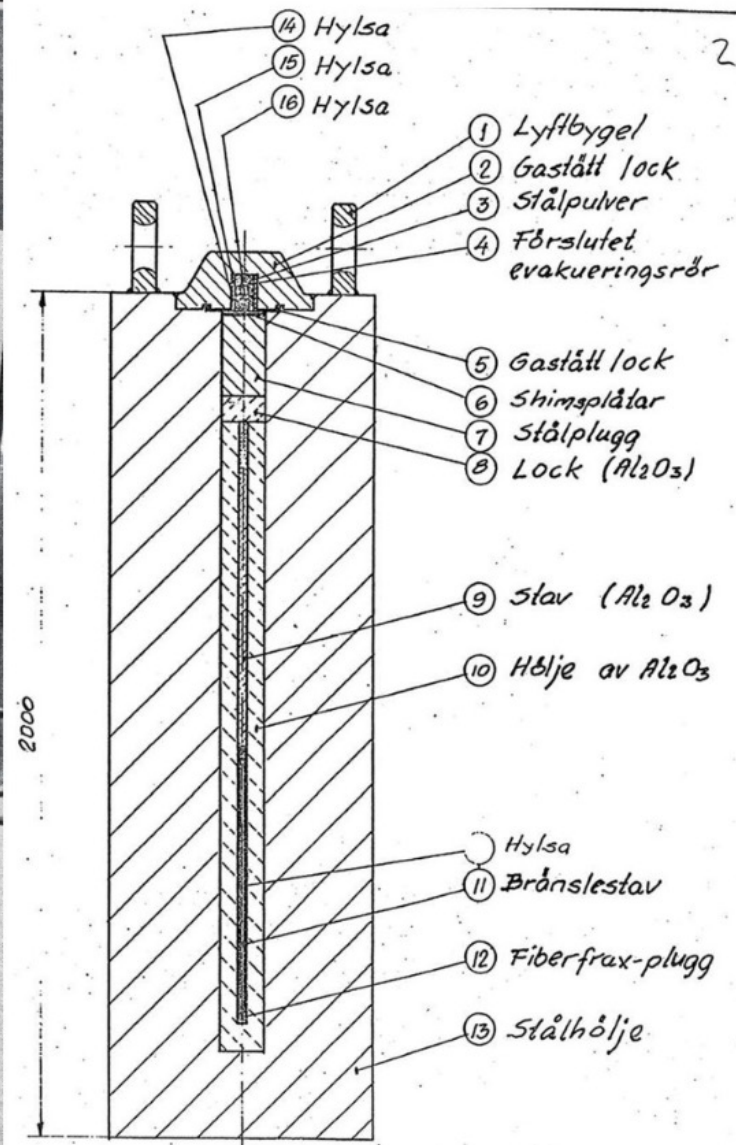
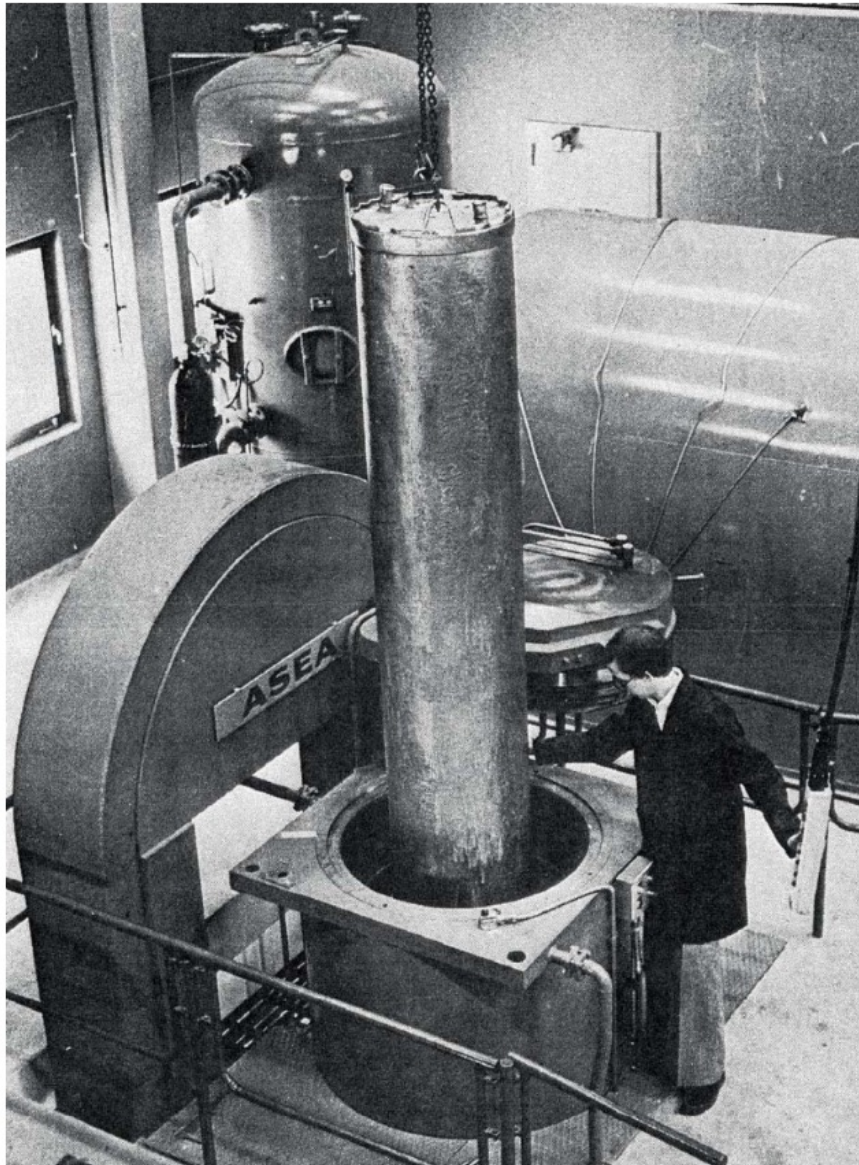
High Pressure History



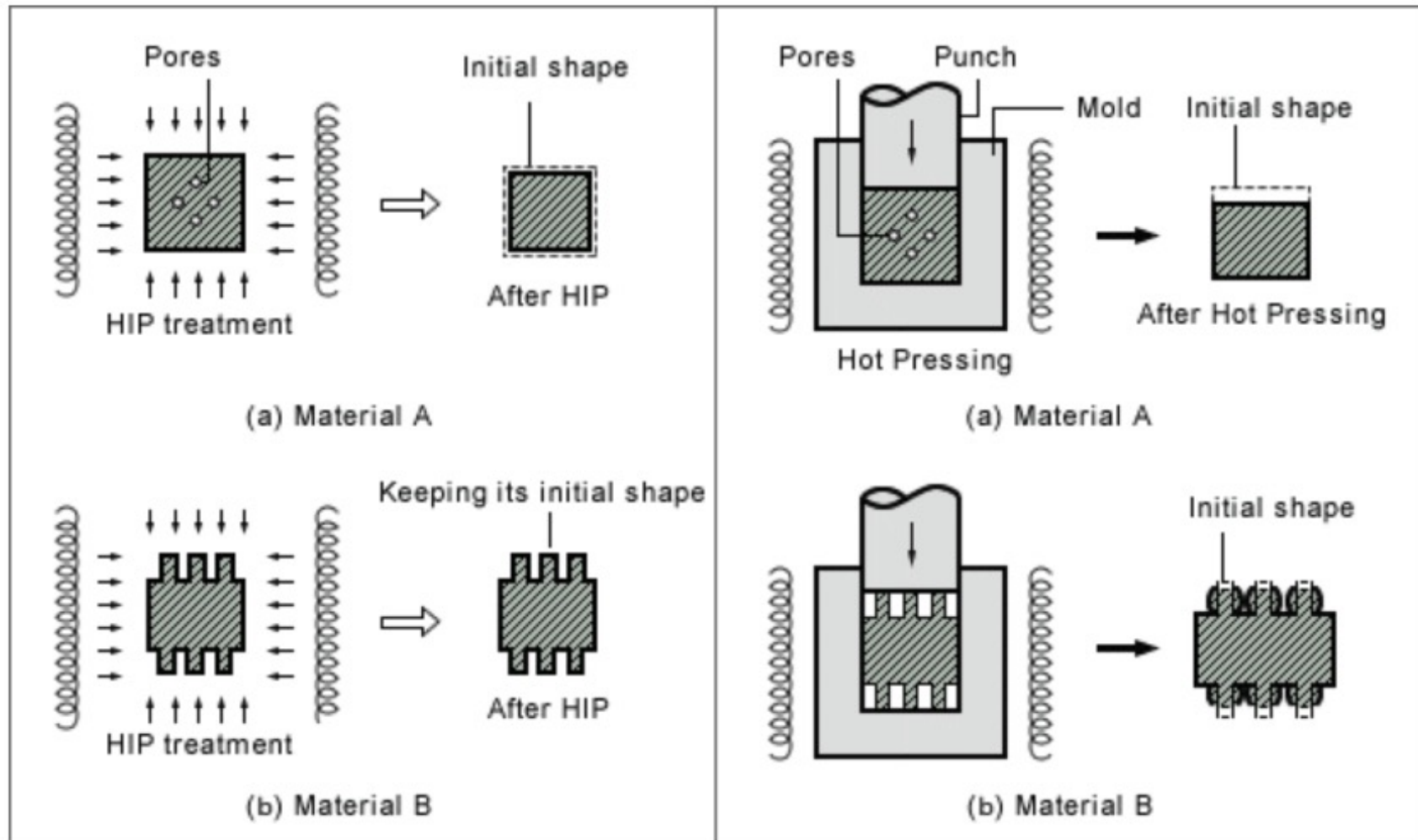
High Pressure History in Robertsfors (1963)



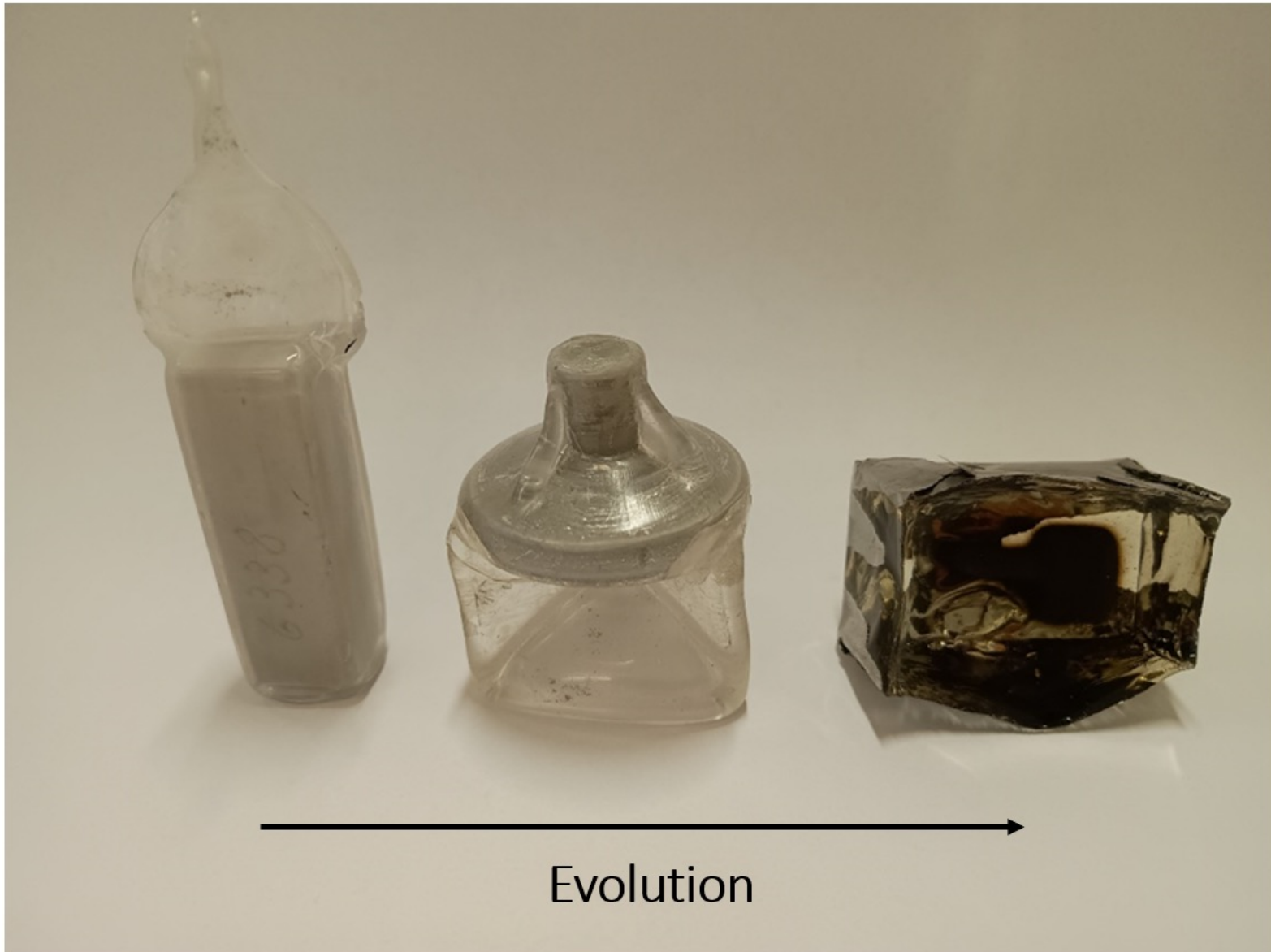
“Robertsforsbehållaren” for nuclear waste (1978)



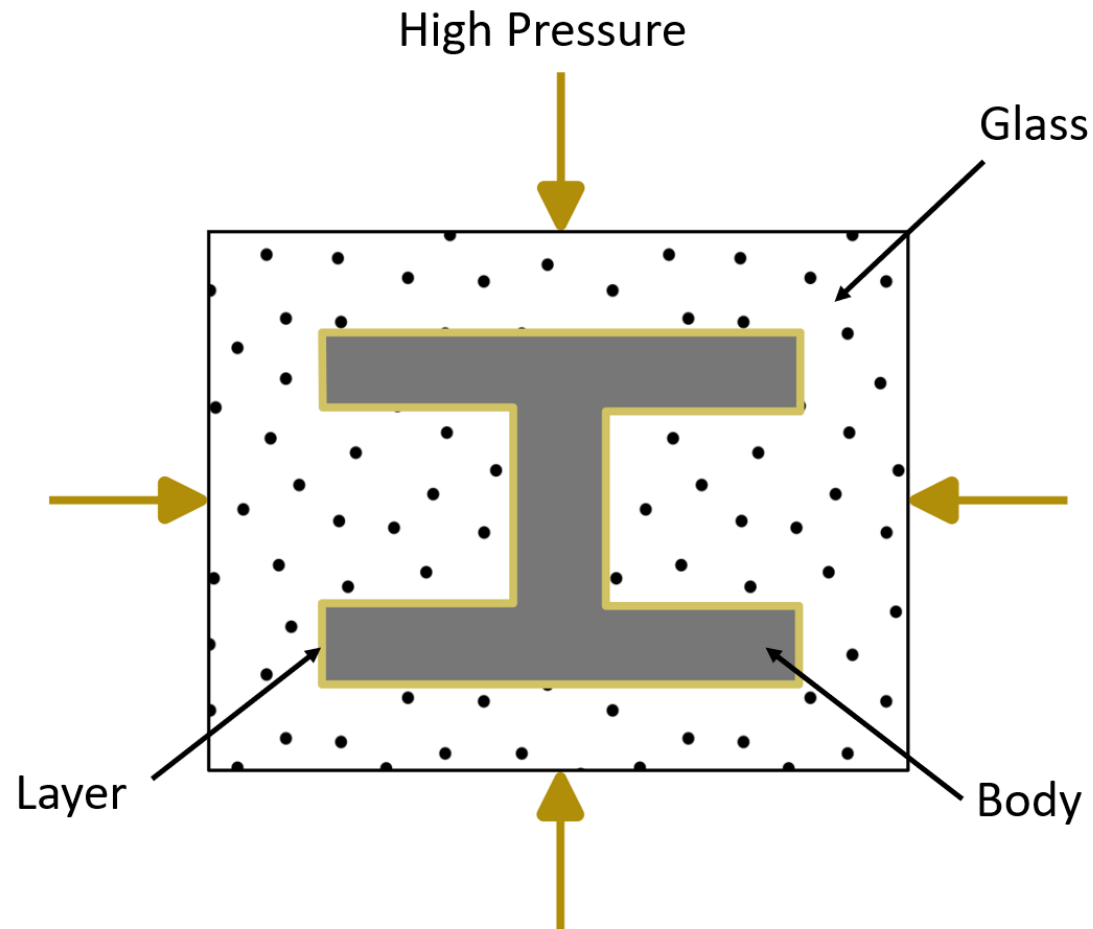
HIP Principles



Glass bed encapsulated HIP process



Glass bed encapsulated HIP process

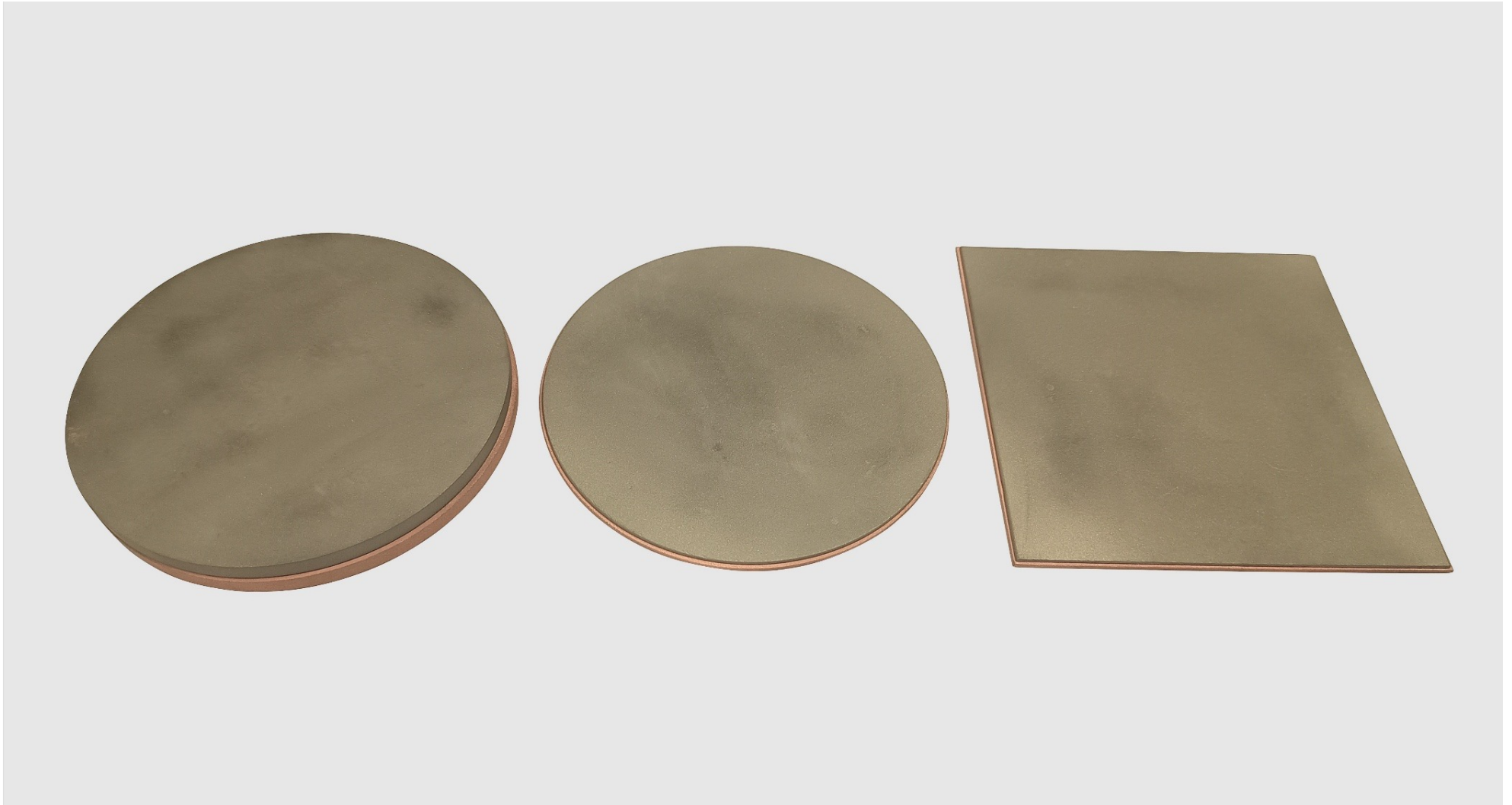


Enables Near Net shaping of complex shapes!

Glass bed encapsulated HIP process for Ceramics



Glass bed encapsulated HIP process for Solids



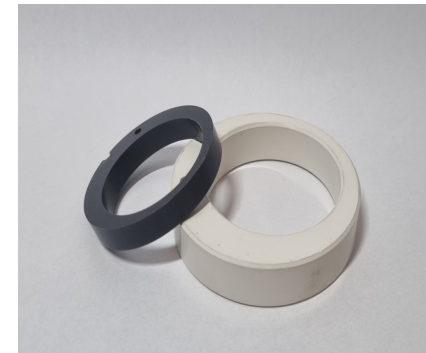
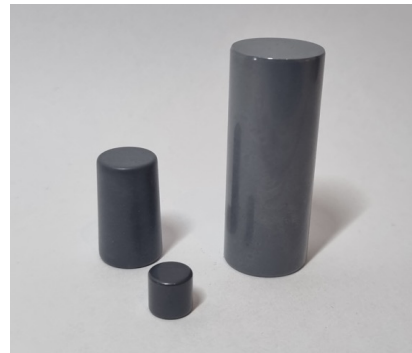
From pre-study project with CERN/LTU/Coorstek Sweden for Copper/Tungsten bonding

CoorsTek Sweden product examples

Boron Carbide B_4C (no sintering additives)



Silicon Nitride Si_3N_4



Application experience



Thank You