



Evaluating EPICS as a replacement for IBA's SCADA Layer

EPICS collaboration meeting | Apr 20 – 24, 2026

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Life,
Science.

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IBA – Global leader in particle beam technology

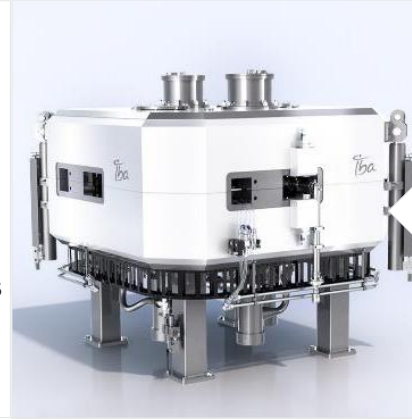


DOSIMETRY

#1

Quality Assurance Solutions

10k+ customers



RADIOPHARMA SOLUTIONS

#1

Radioisotopes production

380+ accelerators sold

PROTON THERAPY

#1

Proton Therapy Solutions

75+ systems sold



INDUSTRIAL SOLUTIONS

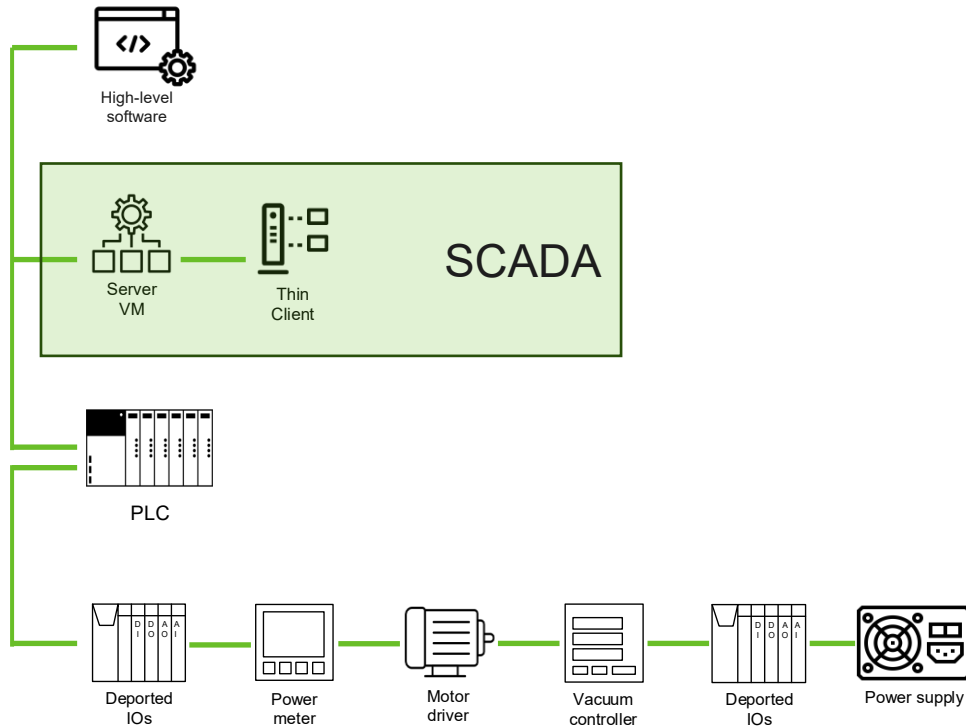
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E-Beam & X-ray Solutions

300+ accelerators sold



Strong **Market & Innovation** Synergies



■ SCADA capabilities

- 5k to 30k PVs
- 1k to 10k Historized PVs
- 1Hz to 40Hz PV update
- Up to 5 HMI concurrent sessions
- RBAC & Audit trail

■ SCADA current pains

- Proprietary, commercially licensed technology (VMWare, Windows, Aveva)
- Tightly coupled to vendor toolchain & license model
- Growing concerns: sustainability, cost & vendor lock-in

IBA – Our **evaluation** approach

EVALUATION FRAMEWORK



- Categories
- Weighted scoring

REQUIREMENTS



- Regulations
 - Medical
 - Industrial
 - Cybersecurity
- Quality attributes
 - 24/7 availability
 - Auditability & Role base access
 - Maintainability and system remotely updatable
 - ...

CANDIDATES EVALUATION



- EPICS + Web-HMI framework
- Open-source, royalty-free license
- OPC-UA & pvAccess for PLC comms
- Proven at large-scale facilities worldwide

DEMONSTRATOR



- A comprehensive overview
- Residual uncertainties
- Performances
- Based for the IBA product impact analysis

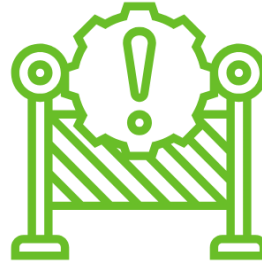
IBA – What we are seeking?

Operational Experience



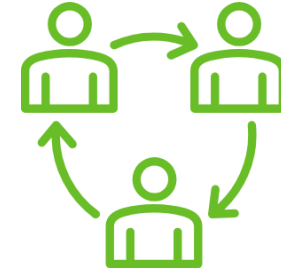
- REX in similar context
 - Configuration
 - Long term support
 - Regulated env.
- Cybersecurity hardening
“secure by design”

Know Limitations



- Scalability challenges
- Web-HMI capabilities

Community & Collaboration



- Support pathways
- Contributing back if evaluation is positive

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Protect, Enhance and Save Lives



Viggo Mommaerts, treated with Proton Therapy



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