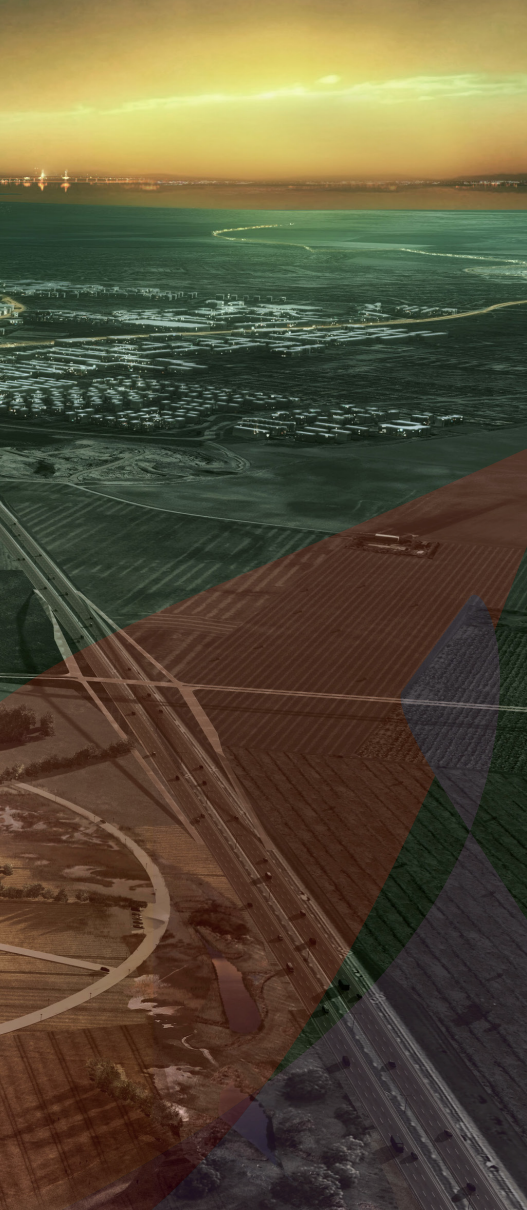




Advancing humanity.  
Engineering remarkable.



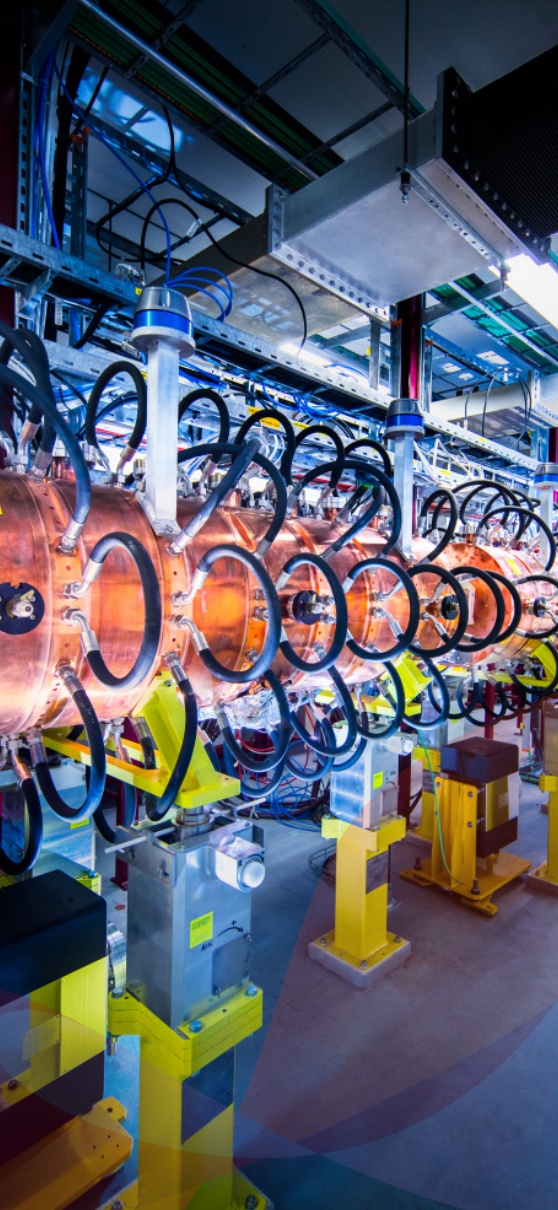


## Tailored Collaboration and Solutions for Accelerator Projects

### We Understand Your Unique Challenges

Every accelerator project, either scientific or commercial, has unique challenges, such as uncertainty in scope and timelines, complexity of the technology stack, transitioning from R&D into fully operational or commercial use. Our mission is to turn these complexities into clarities, and our approach begins with a deep understanding of your needs to ensure our solutions perfectly align with your objectives.





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## How We Collaborate With You

### ■ Comprehensive Project Plan, Requirements and Scope Definition

We help you define the full scope of your project, transforming ideas into actionable plans.

### ■ Tailored System Study & Analysis

We evaluate your current systems, technology stack and associated risks to identify where our control system expertise brings the most value, whether through integration, optimisation of existing workflows, or full development.

### ■ Flexible Engagement Models

We find the collaboration model that best fits your project needs and challenges.

#### **Turnkey Control System Solutions**

Full-cycle delivery from design, coordination of contributing partners, implementation, and commissioning to long-term support—ensuring your control system is delivered on time and within budget.

#### **Subsystem and Device Integration**

If you're looking to upgrade or integrate a specific subsystem or device into your existing control system architecture, we assure seamless interfacing and upgrading and focus our efforts where you need us most.

#### **Expertise on Demand:**

Our skilled engineering teams can embed within your workflow, helping you adapt to evolving project requirements and bridge expertise gaps, eliminating the risk of resource onboarding and lengthy staffing processes.

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## Solving Your Problems

### ■ Relieving Complexity in Control Systems

We take ownership of the control system-related challenges, significantly reducing your total project risk and enabling your internal team to focus on innovation and scientific achievements.

### ■ The best of both worlds

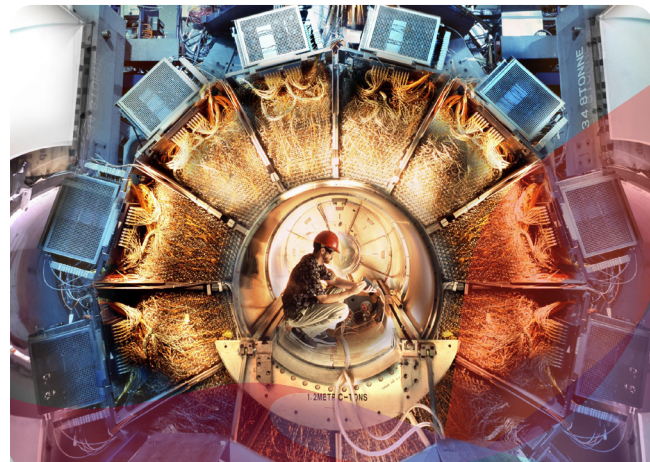
We have extensive experience working in both scientific and commercial environments, employing an exploratory mindset while applying systematic engineering practices.

### ■ Reliable Supply Chain for Control System Hardware

We manage sourcing, integration, and validation, reducing your dependency on fragmented vendor networks and the risk of outdated and unsupported technologies.

### ■ Custom Whitebox Solutions

Your custom solution remains yours. You retain full intellectual property rights at project completion.



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## Our Promise

### ■ Low-Risk, High-Impact

**Holistic project approach** to your particular challenges.

### Custom Solutions for Unique Challenges:

We offer comprehensive solutions from design to on-site installation and long-term support.

### Commitment to Excellence:

Our commitment extends through the complete project lifecycle, ensuring success and client satisfaction.

### ■ Transparent Collaboration

From initial study to final implementation, we ensure you are informed and involved at every step of the project.

### ■ Future-Proof Control Systems

Designed to evolve with your product and technology roadmap.



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## Key Expertise



### Technology-Agnostic Approach

We choose tools and technologies based on what's best for your application and fits your technological strategy, not vendor lock-ins, ensuring flexibility and longevity.



### Systems Engineering and Project Management

From use case analysis, requirements formalisation, system architecture, development, commissioning to detailed project planning, we integrate all project aspects with structured execution and adaptability to change.



### Specialized Systems and Custom Solutions

We deliver tailored solutions for specialised systems, from real-time systems like timing and MPS to ML-optimised controls. Our offerings range from custom FPGA firmware to complex SCADA framework integrations designed to meet the specific needs of advanced accelerator projects.



### Hardware Specification and Integration

We optimise hardware selection to enhance lifecycle cost-effectiveness, covering feasibility studies, specifications, procurement, and assembly. We assure proper integration of all HW devices into the control system. Our capabilities span both COTS and custom hardware developments.



### Control System Software and High-Level Application Development

We develop software for central control systems and high-level applications to boost operational efficiency and enhance machine performance. As part of the community, we can adapt open-source solutions or develop new ones according to your specific needs. Our solutions integrate seamlessly with existing systems, featuring intuitive user interfaces and robust back-ends.



“ Cosylab people are super dedicated - it's amazing how they come back with solutions and proposals to challenges that are not even part of their scope of work. Many times, we're in a meeting, and someone would say: "I was thinking about your challenge, and I think you could address it like this." I really respect this drive. ”

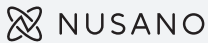
**Leo Szeto**, Director, Control Systems and Electronics Engineering, Nusano, an innovative medical technology company pioneering the production of rare radioisotopes to advance cancer diagnostics and treatment through its proprietary accelerator platform.



“ Our long-standing partnership with Cosylab has been instrumental in advancing our accelerator facility. Their expertise and initiative significantly enhanced our control systems, enabling the successful integration of, e.g., modern control system architecture and AI into daily operations. What truly sets them apart is their proactive mindset and deep system understanding. They consistently contributed beyond expectations with practical, forward-looking solutions. This collaboration also fostered the development of young talent, including students, engineers, and developers, who gained hands-on experience and adopted key principles such as a growth mindset and design thinking. It's a partnership that continues to shape innovation and excellence. ”

**dr. Ralf Gebel**, Managing Director, Institute for Nuclear Physics IKP, Forschungszentrum Jülich

## Trusted by science and innovation leaders



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## **About Cosylab**

Cosylab is the leading provider of software solutions for the world's most complex, precise and advanced control systems. Our expertise enables organisations to discover scientific breakthroughs, offer state-of-the-art cancer treatment and healthcare innovations, and bring clean fusion power to the future energy market. We provide software products and services to the largest medical device manufacturers and cancer centres worldwide.

We have contributed to the particle accelerator community in the scientific, medical and industrial sectors, working on complex, distributed and highly regulated projects. Our clients include the most innovative and cutting-edge accelerator applications such as FAIR, SLAC, DIAMOND, RIKEN, Nusano, AVO ADAM and many more. With our efficient support and up-to-date expertise, we enable organisations to keep their focus on their scientific and business objectives.

Through its headquarters in the EU and subsidiaries across Europe, North America and Asia, Cosylab has worked on hundreds of multi-year and multi-people projects worldwide.

