# ELISOF Engineering

Positioning in the Safety-Critical Mechatronics Landscape

# Who We Are

ELISOF Engineering is a Swiss specialist in systems engineering, functional safety, and mechatronics. We partner with companies to bring safety-critical mechatronic products from initial concept through validated prototype to full industrialisation.

As complexity and regulatory requirements in robotics, machinery, automation, and medical technology rise sharply, OEMs face critical shortages of senior systems and safety engineers. We position ourselves as "the engineering side of functional safety for complex mechatronic products."

# Market Context: Rising Complexity

### Autonomous & Interconnected

Mechatronic systems are becoming increasingly autonomous and interconnected, creating unprecedented technical challenges.

### Stricter Standards

ISO 26262, IEC 61508, IEC 61496, and CE Machinery Regulation demand rigorous compliance.

Full lifecycle traceability, architectural clarity, and audit-ready documentation are no longer optional. Companies need partners who can both build innovative solutions and navigate the certification landscape with confidence.

# The Talent Bottleneck

### Scarce Expertise

OEMs struggle to hire senior systems and functional safety engineers with niche expertise in architecture, formal methods, and FuSa.

### Overloaded Teams

Internal teams are stretched thin with sustaining engineering, leaving little capacity for new development.

### Need for Ownership

External partners must take complete ownership of system architecture, safety concepts, validation, and documentation.

# Our Core Service Lines

1

## Systems Engineering

Requirements management, system architecture, interface definition, and comprehensive verification and validation.

2

## Functional Safety

Safety concepts, detailed safety analyses, and complete safety cases aligned with ISO 26262 and IEC 61508.

3

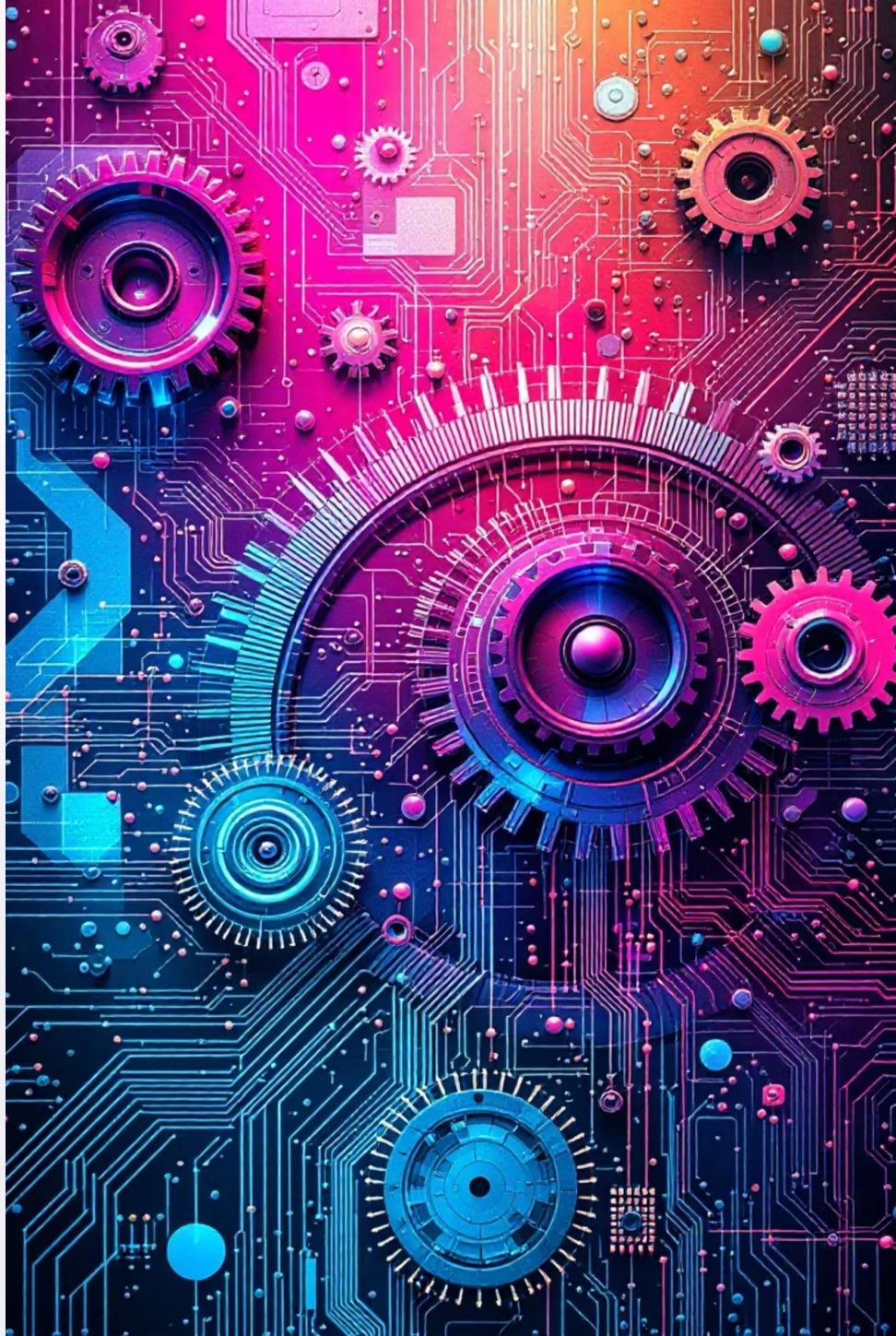
## Mechatronics & Prototyping

Integrated mechanics, electronics, actuation systems, and control integration from concept to working prototype.

4

## Product Development & Industrialisation

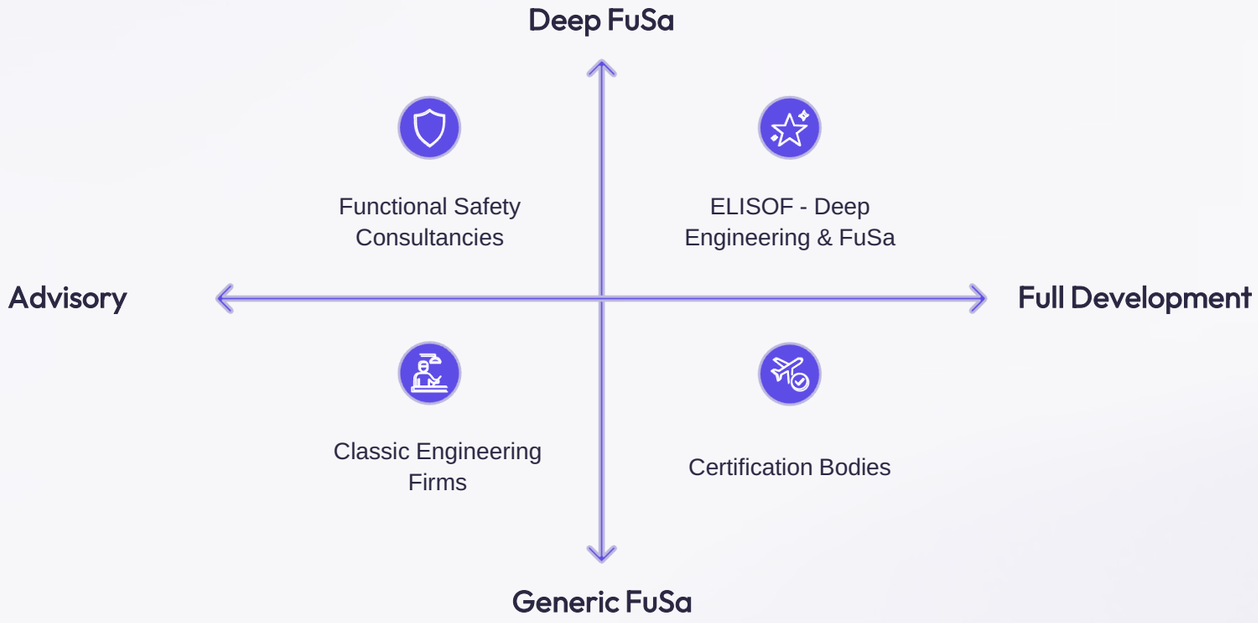
Design for compliance, manufacturability, reliability, and supplier alignment for seamless production scale-up.



# Our Positioning

"ELISOF Engineering is the Swiss partner for safety-critical mechatronic products. We combine systems engineering, functional safety, and hands-on product development to take your product from idea to industrialisation—fast, expert, and audit-ready."

# Where We Stand in the Market




Unlike pure consultancies or traditional engineering firms, ELISOF occupies the unique space where deep engineering capability meets comprehensive functional safety expertise.

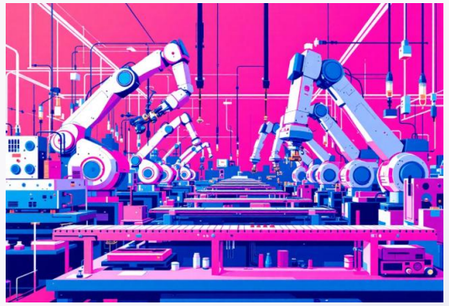
# Our Five Differentiators

### Integrated Systems & Safety

Architecture, requirements, and traceability from day one. Safety integrated into design, not bolted on. Clear linkage from hazards to verification.

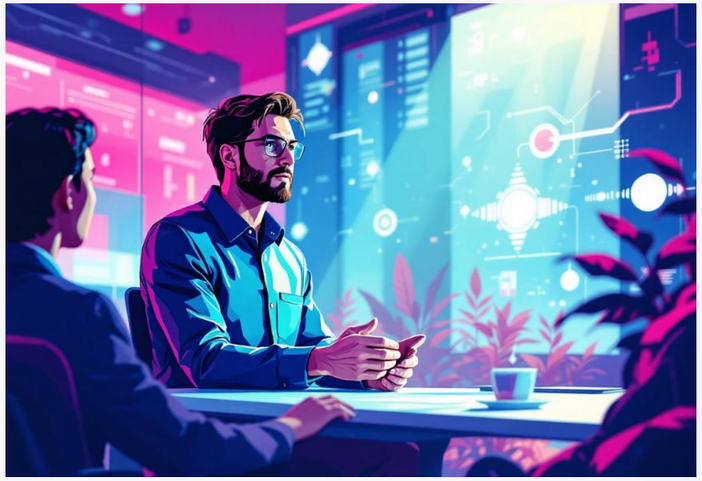
### Builder's Mindset

FuSa analyses that match real hardware and software. FMEA, FMEDA, FTA, and SIL/PL calculations prepared for auditors.



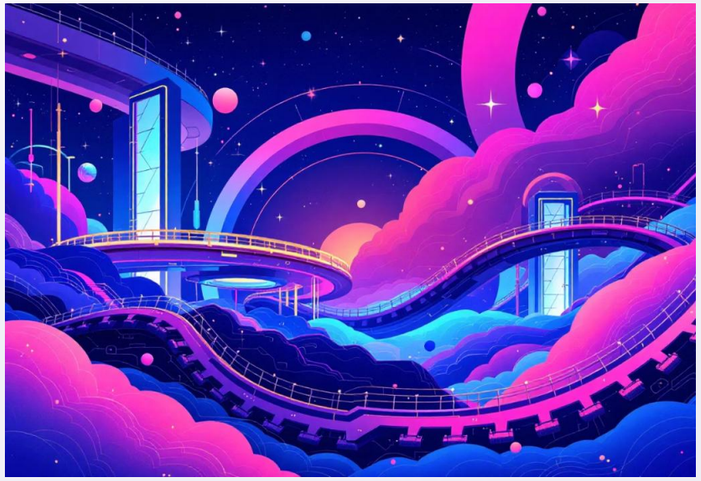
### Prototype to Production

Design for compliance, manufacturability, and reliability. Supplier coordination and validation planning for smooth industrialisation.



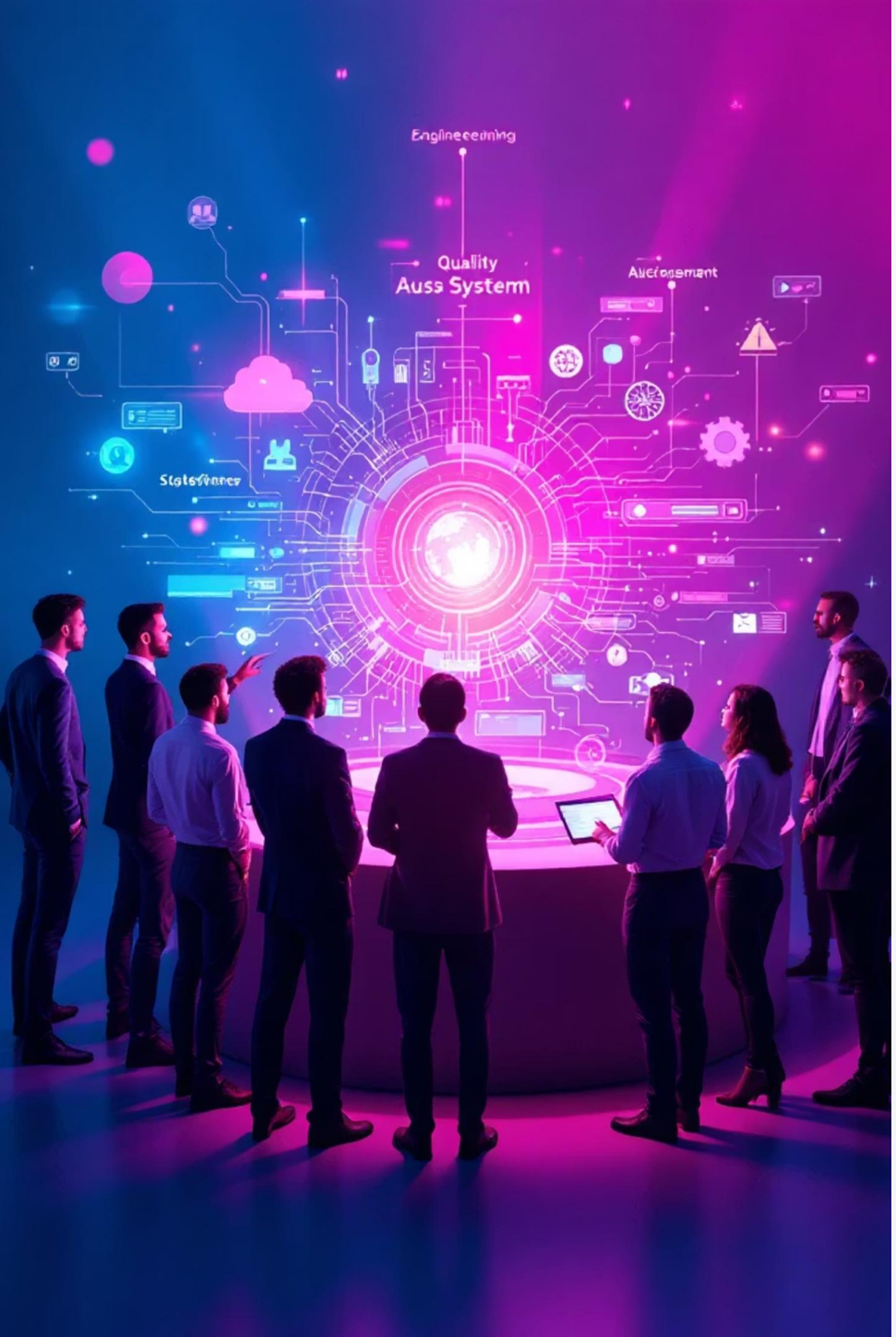
### Senior Engineering Access

Work directly with experienced engineers. Fast decisions, short communication lines, and no unnecessary overhead.



### Swiss Precision

High quality standards, rigorous documentation, and traceability. Cultural proximity to European OEMs for audit confidence.



# Tailored Messages for Key Stakeholders

1

## CTOs & Heads of Engineering

"Deliver complex safety-critical systems faster with less risk."

- Early stabilisation of system and safety architecture
- Audit-ready documentation
- Seamless integration into existing teams and toolchains

2

## Quality & Regulatory Managers

"Architectures and documentation that certifiers accept."

- Strong alignment with IEC 61508, ISO 26262, CE
- Safety integrated throughout development lifecycle
- Complete preparation for audits and notified bodies

3

## CEOs & Business Owners

"Build safer, more advanced products without a full in-house safety team."

- On-demand senior expertise when you need it
- Enhanced product credibility in the market
- Dramatically reduced risk of late-stage safety issues

# Ready to Start?

## Collaboration Models

- Assessment Workshop
- Concept & Architecture Review
- Safety Analysis Packages
- Prototype Development & Testing
- Full Work-Package Ownership
- Long-term Engineering Partnership

## Next Steps

Begin with a high-impact engagement:

- Request an Engineering Assessment
- Discuss your current system challenges
- Review your prototype or concept
- Plan a comprehensive Functional Safety Roadmap