Safe, Standardised & Scalable Construction Robotics

Systematically closing the gap between construction reality, research, and engineering to deliver productive, site-ready solutions.

Operational Diagnostics:
Are You Facing These Challenges?

- Unable to identify clear operational pain points
- Cannot identify long-term economic viability
- Unclear technical or safety requirements
- Facing workforce adoption barriers on site
- Unable to pinpoint measurable productivity gains

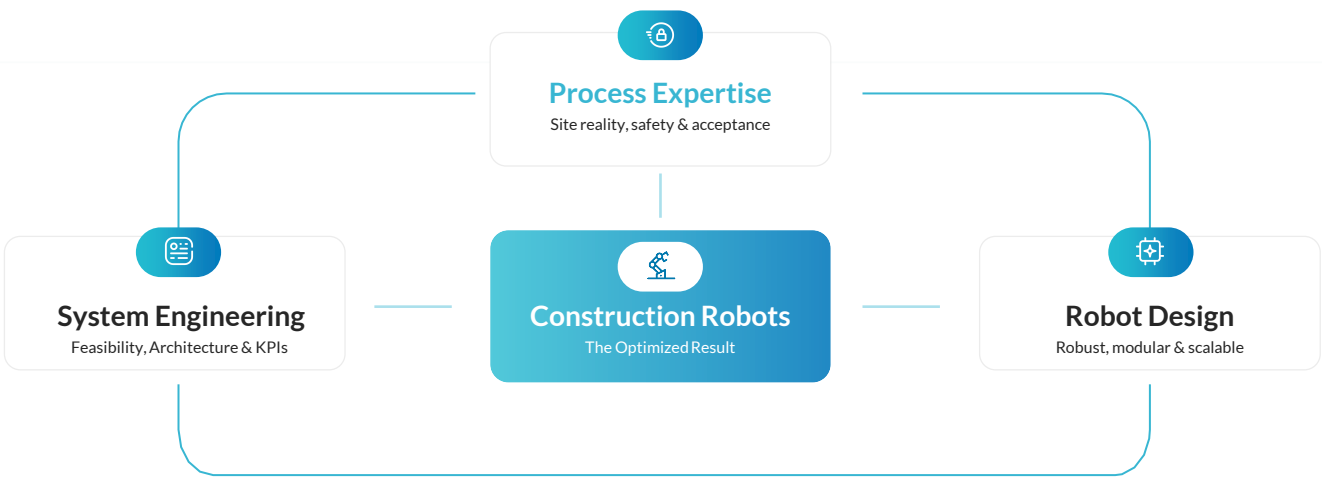
From Challenge to Prototype
Structured diagnostic & workflow analysis. Task-specific functional prototypes in 6–12 months.

Process-Driven & Measurable
Workflows benchmarked against baseline processes using harmonised KPIs for objective comparison.

Pragmatic Engineering
Simple, robust, task-adapted robots. Targeting piece costs of ~€30k for true economic scalability.

Business Logic from Day 1
Feasibility, ROI, & financing models (CapEx, OpEx, RaaS) tailored to your specific business strategy.

Our Unique Combination



Comprehensive End-to-end Service

We offer either a comprehensive end-to-end service or modular, tailored packages based on your resources and priorities.

PHASE 01
Strategy & Roadmapping

PHASE 02
Feasibility & ROI Modelling

PHASE 03
Robot Prototyping & Pilot

DELIVERY STREAMS

Stream A: Construction Companies

Identify & Scale Robot-Ready Use Cases

- Translate site realities into safe, compliant workflows
- Identify high-value robot-ready use cases
- Integrate into site logistics & takt planning
- Validate value with harmonised, measurable KPIs

Stream B: Technology Providers

Turn Prototypes into Scalable Products

- Align real site requirements with modular design
- Ensure CE conformity & responsibility early
- Execute comparative pilots & benchmarking
- Develop Go-to-Market strategies (Sales, RaaS)

HOW WE WORK

Analyse → Design → Pilot → Engineer → Scale

METHODOLOGY

Safety & HRC
ISO/TS 15066, ISO 12100, EU Machinery Reg 2023/1230

Robot-Oriented Sites
Process harmonization, logistics integration & site adaptation

Interoperability
Standardized common data environments & API standards

Testing & Certification
Validation protocols, CE conformity marking & governance

Teams & Skills

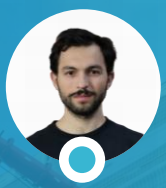
A unique mix of research rigor, industrial engineering, and site management experience.

Prof. Dr.-Ing Thomas Linner
Robot system architecture, standardization, robot validation

Prof. Dr.-Ing. Thomas Bock
Construction robotics strategy, robot-oriented design

M.A. Marc Schmailzl
Digital Pipelines for Construction Robots, BIM2Robot

Dr.-Ing. Wen Pan
Robot engineering & prototyping (Nova Spraytec)



Dipl. Ing. Soleman Haj Bakour
Construction Management & robot-oriented sites (AMARA Solutions)

Natalie Linner
Marketing approaches for construction robots

MBA Charlie Zhao
Business Models for Construction Robotics

M. Eng. Merve Karamara
Robotic 3d printing, technology management

Our Track Record

Decades of combined experience leading major initiatives worldwide. We combine deep expertise in research, real construction sites, industrial robotics

TRUSTED BY INDUSTRY LEADERS