



When technical systems do not function or perform as intended

Antranova helps companies and organisations investigate why complex technical systems do not function or perform as intended, identify underlying causes and opportunities for improvement, and provide a technical basis for decisions on optimisation, corrective actions and investments.

The analysis addresses the interaction between flow, pressure, heat, mechanics, electrical systems, automation, control and dynamics - the system as a whole, not its components in isolation. The work may cover everything from problem definition and analysis to selection of corrective actions, implementation support and verification. Modelling and simulation are used when the question requires them.

PROBLEMS ANTRANOVA WORKS WITH

- The process does not achieve its intended capacity or performance.
- Pressure, flow or temperature vary more than the process can tolerate.
- Operational disturbances recur despite previous corrective actions or require manual intervention.
- The components function individually, but the system as a whole does not.
- A modification, investment or supplier explanation requires an independent assessment.

WHY ANTRANOVA

Independent. Antranova does not sell components, contracting services or software and has no financial interest in the corrective action proposed.

System perspective. The cause is often found in the interaction between several subsystems - not in one individual component.

Direct access to senior expertise. You work directly with the same specialist throughout. Nearly 30 years of experience in industrial and safety-critical environments.

Clearly defined scope. Each stage has a clearly agreed scope and can be concluded without further commitment.

WORK PROCESS

PROBLEM DEFINITION > DATA AND MEASUREMENTS > ANALYSIS > SELECTION OF ACTIONS > VERIFICATION

The assignment is defined one stage at a time. Each stage has a clear question, an agreed deliverable and a defined scope.

FIRST STEP

A clearly defined first step

Clear question · agreed deliverable · agreed price

A short initial discussion clarifies the question, the information available and the decision the analysis is intended to support. The scope, deliverable, schedule and price are then agreed for a first paid step.

- A written technical assessment of the problem
- Ranked probable cause areas
- Identified requirements for data and measurements
- Recommended checks and tests
- A technical basis for the next decision
- A review of the findings

Further analysis, modelling, support for corrective actions and verification are scoped and quoted separately. Travel is charged outside a 50 km radius from Nyköping.

TO GET STARTED

- Drawings, operating data, observations or the possibility of carrying out measurements
- A technically responsible contact with access to the relevant information
- A clear decision or next step for the analysis to support

EXAMPLE FROM PREVIOUS INDUSTRIAL EXPERIENCE

The compressors operated as intended, but pressure was still too low at the flow required by production. An investment in additional compressor capacity was avoided when a system review identified excessive pressure loss in the pipework. A larger pipe diameter solved the problem.

Describe the situation at a general level in a few sentences. Within 1-2 working days, you will receive a proposal for how the question can be defined as a first paid step.

Technical information is shared only after confidentiality arrangements have been agreed. Assignments are accepted outside nuclear power and energy production.

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