

# KAIRÓS<sup>®</sup>

Control Room Assistant

## Key Features

- Immediate detection of the root cause
- Consequence propagation of the abnormal situation
- Counteraction – fastest and safest return to normal situation
- Explainable AI Digital twin
- Use design knowledge
- Combine with operational experience
- Timeline scrubber for analysis support
- Desktop and/or large-screen display
- Cloud or on-premises installation.
- Process upset detection
- Suppress equipment out of service
- Stream process data from DCS, no additional sensors needed.
- Model built in a few months from process library models.



## Benefits

### Improved performance

Complex plants will have losses due to unplanned incidents. Situational awareness through root cause and consequence propagation enables operators to give accelerated and more targeted response avoiding losses.

### Increased insight

See the early stages of an upset. Alarms alone represents the symptoms, while with instant real-time analysis of incidents where the pattern of all sensors contribute to the analysis helps the operator to interact early and avoid upsets developing from incidents.

### Share knowledge

The design knowledge is combined with knowledge from operation in the model. This ensures that lessons learnt are distributed within a plant and may also be shared company wide. Available instantly as the situation develops.

### Increased safety

Less upsets = Less risk. Prevent the worst accidents from occurring by having a better overview of the process system. Failure modes are recognized and clear counteractions from operational procedures displayed.

### Reduced emissions

Be aware of the small and important abnormalities that may lead to a high-risk situations to prevent them from occurring. Once the production is within safe operation, the reasoning supports awareness for optimized energy consumption and reduced emissions.

### Explainable AI

The reasoning is based on explainable Artificial Intelligence. The system adds value from the day it is deployed, built-in domain knowledge. No need for data scientists. Refinement of digital twin is included in the SaaS (Software as a service) delivery model.