



SMART DETECTION

Identifying Potential for Optimization in Your Heating Networks



ALGORITHM-BASED RECOMMENDATIONS SHOW YOU HOW TO GET THE MOST OUT OF YOUR NETWORK

Digital heating stations:

- SMART DETECTION identifies which networks can be optimized.
- Targeted recommended action and possible sources of errors are shown.
- The smart system continuously monitors networks and their components.
- The unique software is specifically designed to optimize heating networks.
- Only one click is needed to start the analysis or obtain an overview.

Examples:

- Batteries in a utility meter running low and need replacing
- Risk of legionella
- Return flow temperature frequently above the limit
- Insufficient spreading: potential for optimization identified

NAME	RISK	PRIORITY	PROGRESSION	START TIME
01 Bau 15/19 - Heizung	⚠ Insufficient spreading	Medium	<div style="width: 100%; height: 10px; background-color: red;"></div>	20.02.2023 09:43
01 Bau 19 - BHKW Wärme	⚠ Insufficient spreading	Medium	<div style="width: 100%; height: 10px; background-color: red;"></div>	18.02.2023 04:10
01 Bau 19 - BHKW Wärme	⚠ Primary return flow lower than supply flow	Medium	<div style="width: 100%; height: 10px; background-color: yellow;"></div>	18.02.2023 21:01
01 Bau 24 - Heizung	⚠ Insufficient spreading	Medium	<div style="width: 100%; height: 10px; background-color: red;"></div>	18.02.2023 18:01
01 Bau 2 - Heizung	⚠ Insufficient spreading	Medium	<div style="width: 100%; height: 10px; background-color: yellow;"></div>	18.02.2023 18:49
01 Bau 30 - Heizung	⚠ Insufficient spreading	Medium	<div style="width: 100%; height: 10px; background-color: yellow;"></div>	18.02.2023 17:58
01 Bau 31/3 - Heizung	⚠ Insufficient spreading	Medium	<div style="width: 100%; height: 10px; background-color: yellow;"></div>	02.04.2023 09:00
01 Bau 38 - BHKW Wärme	⚠ Primary return flow lower than supply flow	Medium	<div style="width: 100%; height: 10px; background-color: red;"></div>	18.02.2023 09:20
01 Bau 38 - BHKW Wärme	⚠ Insufficient spreading	Medium	<div style="width: 100%; height: 10px; background-color: red;"></div>	17.02.2023 22:09
01 Bau 5/9 - Heizung	⚠ Insufficient spreading	Medium	<div style="width: 100%; height: 10px; background-color: yellow;"></div>	18.02.2023 18:14
01 Bau 41 - Fußbodenheizung	⚠ Primary flow temperature too low	Low	<div style="width: 100%; height: 10px; background-color: yellow;"></div>	18.02.2023 11:48
01 Bau 41 - Fußbodenheizung	⚠ Insufficient spreading	Medium	<div style="width: 100%; height: 10px; background-color: yellow;"></div>	20.02.2023 13:83
01 Bau 41 - Fußbodenheizung	⚠ Primary return flow lower than supply flow	Medium	<div style="width: 100%; height: 10px; background-color: red;"></div>	24.02.2023 13:83
01 Bau 4 - Heizung	⚠ Insufficient spreading	Medium	<div style="width: 100%; height: 10px; background-color: orange;"></div>	18.02.2023 10:10
01 Bau 4 - Heizung	⚠ Insufficient spreading	Medium	<div style="width: 100%; height: 10px; background-color: red;"></div>	18.02.2023 04:27
01 Bau 4 - Heizung	⚠ Insufficient spreading	Medium	<div style="width: 100%; height: 10px; background-color: red;"></div>	18.02.2023 00:24
01 Bau 4 - Heizung	⚠ Insufficient spreading	Medium	<div style="width: 100%; height: 10px; background-color: red;"></div>	18.02.2023 04:24
01 Bau 4 - Heizung	⚠ Insufficient spreading	Medium	<div style="width: 100%; height: 10px; background-color: red;"></div>	18.02.2023 04:24
01 Bau 4 - Heizung	⚠ Insufficient spreading	Medium	<div style="width: 100%; height: 10px; background-color: red;"></div>	18.02.2023 10:40
01 Bau 4 - Heizung	⚠ Insufficient spreading	Medium	<div style="width: 100%; height: 10px; background-color: red;"></div>	20.02.2023 14:46
01 Bau 4 - Heizung	⚠ Insufficient spreading	Medium	<div style="width: 100%; height: 10px; background-color: red;"></div>	21.02.2023 03:48
01 Bau 4 - Heizung	⚠ Insufficient spreading	Medium	<div style="width: 100%; height: 10px; background-color: red;"></div>	18.02.2023 07:25
01 Bau 12 - BHKW Wärme	⚠ Insufficient spreading	Medium	<div style="width: 100%; height: 10px; background-color: red;"></div>	18.02.2023 07:24
01 Bau 12 - Gebäude (Stahnd)	⚠ Primary return flow lower than supply flow	Medium	<div style="width: 100%; height: 10px; background-color: red;"></div>	24.02.2023 22:37
01 Bau 12 - Gebäude (Stahnd)	⚠ Insufficient spreading	Medium	<div style="width: 100%; height: 10px; background-color: yellow;"></div>	24.02.2023 22:37
01 Bau 12 - Gebäude (Stahnd)	⚠ Insufficient spreading	Medium	<div style="width: 100%; height: 10px; background-color: red;"></div>	18.02.2023 03:98
01 Bau 12 - Heizung (Stahnd)	⚠ Insufficient spreading	Medium	<div style="width: 100%; height: 10px; background-color: yellow;"></div>	21.02.2023 18:14
01 Bau 12 - Heizung (Stahnd)	⚠ Insufficient spreading	Medium	<div style="width: 100%; height: 10px; background-color: yellow;"></div>	18.04.2023 13:22
01 Bau 12 - BHKW Wärme	⚠ Insufficient spreading	Medium	<div style="width: 100%; height: 10px; background-color: yellow;"></div>	18.02.2023 01:11
01 Bau 9 - Heizung	⚠ Insufficient spreading	Medium	<div style="width: 100%; height: 10px; background-color: yellow;"></div>	21.02.2023 02:18
01 Bau 15 - Heizungsdrinking Wasser	⚠ Primary return flow lower than supply flow	Medium	<div style="width: 100%; height: 10px; background-color: red;"></div>	20.02.2023 14:11

⚠ Insufficient spreading

The temperature difference between primary flow and primary return is very small or negative. Reasons could be:

- no consumption
- system pushed off
- heat exchanger defective



SMART SOFTWARE TAILORED TO YOUR NETWORK

SMART DETECTION:

- Expert know-how that is easy to understand
- Machine learning based on algorithms created specifically for district heating systems
- Customer requirements and station specifications included in the analysis
- No configuration required: the system automatically learns right from the start.
- Substantial cost savings achieved through optimization support

OPTIMIZE YOUR NETWORK OPERATIONS

SAM DISTRICT ENERGY helps improve:

- Transparency
- Clarity
- Understanding
- Client support
- Security

SAMSON AT A GLANCE



STAFF

- Worldwide 4,500
- Europe 3,600
- Asia 600
- Americas 200
- Frankfurt am Main, Germany 1,900

INDUSTRIES AND APPLICATIONS

- Chemicals and petrochemicals
- Food and beverages
- Pharmaceuticals and biotechnology
- Oil and gas
- Liquefied Natural Gas (LNG)
- Marine equipment
- Power and energy
- Industrial gases
- Cryogenic applications
- District energy and building automation
- Metallurgy and mining
- Pulp and paper
- Water technology
- Other industries

PRODUCTS

- Valves
- Self-operated regulators
- Actuators
- Positioners and valve accessories
- Signal converters
- Controllers and automation systems
- Sensors and thermostats
- Digital solutions

SALES SITES

- More than 60 subsidiaries in over 40 countries
- More than 200 representatives

PRODUCTION SITES

- SAMSON Germany, Frankfurt, established in 1916
Total plot and production area: 150,000 m²
- SAMSON France, Lyon, established in 1962
Total plot and production area: 23,400 m²
- SAMSON Turkey, Istanbul, established in 1984
Total plot and production area: 11,100 m²
- SAMSON USA, Baytown, TX, established in 1992
Total plot and production area: 20,000 m²
- SAMSON China, Beijing, established in 1998
Total plot and production area: 47,000 m²
- SAMSON India, Pune district, established in 1999
Total plot and production area: 28,000 m²
- SAMSON AIR TORQUE, Bergamo, Italy
Total plot and production area: 27,000 m²
- SAMSON CERA SYSTEM, Hermsdorf, Germany
Total plot and production area: 14,700 m²
- SAMSON KT-ELEKTRONIK, Berlin, Germany
Total plot and production area: 1,100 m²
- SAMSON LEUSCH, Neuss, Germany
Total plot and production area: 18,400 m²
- SAMSON PFEIFFER, Kempen, Germany
Total plot and production area: 20,300 m²
- SAMSON RINGO, Zaragoza, Spain
Total plot and production area: 19,000 m²
- SAMSON SED, Bad Rappenau, Germany
Total plot and production area: 10,400 m²
- SAMSON STARLINE, Bergamo, Italy
Total plot and production area: 27,000 m²
- SAMSON VDH PRODUCTS, the Netherlands
Total plot and production area: 12,000 m²
- SAMSON VETEC, Speyer, Germany
Total plot and production area: 27,100 m²

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