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Icing intensity estimate – a step further from on/off to how much

Winterwind 2024 International Wind Energy Conference Åre, Sweden

Biography

Tiina Kuula

Tiina Kuula is the head of the business development at Labkotec, a company that provides industry-leading sustainable measurement solutions that help you protect people and environment.

Tiina Kuula is passionate about finding innovate and cost-effective solutions that meet needs and expectations of customers and stakeholders.



You will find me on LinkedIn



Labkotec Business Areas



Separator
alarms



Level switches
and monitoring



Remote
monitoring



Ice detection



Analysis and flow
measurements

Think Big!



SUSTAINABLE DEVELOPMENT GOALS

Labkotec
INDUTRADE GROUP

3 GOOD HEALTH AND WELL-BEING

7 AFFORDABLE AND CLEAN ENERGY

12 RESPONSIBLE CONSUMPTION AND PRODUCTION

Do you know your situation at the moment?



Icing intensity estimate

- a step further from on/off to how much



Light



Moderate



Severe



Extreme

Grams per meter per hour measured in the VTT icing test tunnel against to reference surface based on ISO 12494:2017 icing standard at $T = -5^{\circ}\text{C}$

With one view you know the icing intensity estimate



- Four step icing intensity scale for operational decisions
- Directions of changes of the icing event
- Trends for further analysis

Stay in Control

Prevent danger to life and property



Ice detection with icing intensity estimate

Base station receives an ice alarm from ice detector and triggers an alarm.

Mobile user interface for the field personnel.

Sub stations alert by activating flashing beacon.

Icing intensity estimate and ice growth rate

Self-diagnostics

Status of ice warning lights visualized on the map.

Parameters and configuration via web.

Remote control room



LabkoNet
COMPATIBLE

Stay ahead with Icing Intensity Estimate



Recognize
the beginning
icing event



Analyze
existing
icing events



Act
when
needed