













# POWER-TO-HEAT

# **GENERAL DESCRIPTION:**

In order to reach the climate goals, it is necessary to provide support in this transformation by implementation of electrification technologies to replace fossil fuel. The Fieldlab Industrial Electrification (FLIE) offers a place to testbed new technologies in a controlled environment. This allows you to understand how electricity can be used for sustainable heat supply for your specific industrial processes. An electric boiler and hot air generator will be available to provide more insights in the system-level performance of the technologies. This is especially interesting for

industrial end-users who want to implement power-2-heat and/or thermal storage systems. And want to know how that will affect their processes. The FLIE is also interesting for power-2-heat technology providers who want to demonstrate their technologies.

Validating a technology in the FLIE helps you to mitigate (technical and financial) risks and make informed decisions on how to make your industrial processes more sustainable and future proof.

# SCHEME OF THE SET-UPS: Air Customer technology Vent (Steam) Customer technology Treatment Boiler Customer technology

# **SOME EXAMPLE OPPORTUNITIES:**

- High temperature thermal storage technologies (TRL 5-7) for flexible power-to-heat
- Testing and validation of air-to-X heat exchangers
- Testing of heat-to-power and thermal storage technologies (Carnot batteries)
- Testing and objective validations of third-party technologies by FLIE



The Fieldlab is continuously developing. It is therefore possible that the specifications have changed in the meantime. Do you want to view the latest version? Scan the QR code or look at www.flie.nl/power2heat.

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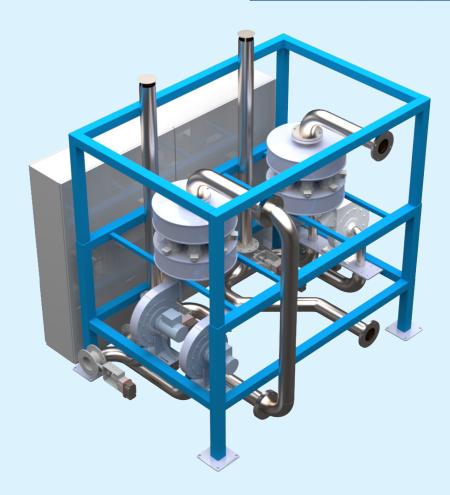
# **SPECIFICATIONS:**

## **HOT AIR GENERATOR**

Characteristics	#	Unit
Thermal power	200	kW
Airflow	150-1500	m³/hr
T-range	20-900	Degrees Celcius

## **BOILER**

Characteristics	#	Unit
Thermal power	350	kW
Steamflow	300	kg/hr
T-range	120-400	Degrees Celsius
P-range	1-40	Bar(a)
Steam superheat	150	Degrees Celsius



ARE YOU INTERESTED IN COLLABORATING WITH THE FIELDLAB?

Please contact our office via officemanager@flie.nl / +31 6 82065867





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