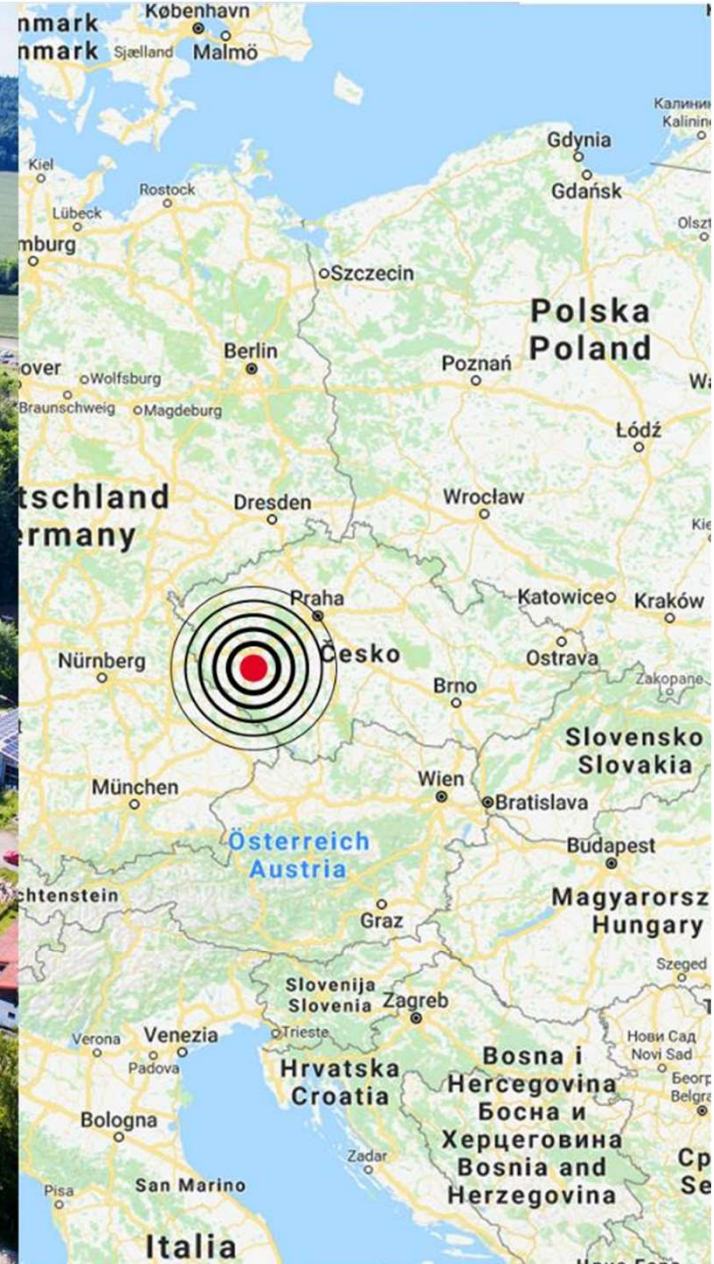




# SYSTHERM HEADQUARTERS AND PRODUCTION AREA



# SYSTHERM

Certifikovaný výrobce  
systémů předávání tepla

Výrobek SYMPATIK®  
je na trhu 23 let

Vyrobeno a instalováno  
56 000 modulů SYMPATIK®  
v zákaznickém řešení

# OUR CERTIFICATION

4x gold medals Aquatherm, 6x title ČEEP, glass chimney TS ČR



# NAŠE GARANCE KVALITY



JSME FIRMA SE SVÝM VÝVOJEM

HESCOnet®

HESCOpro®

HESCOgas®

TRACK®

HESCOpro®

HESCOgas®

TRACK®

WebHeatControl®





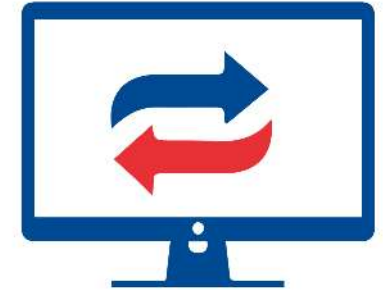
COMPACT HEATING  
UNITS



INDUSTRIAL APPLICATIONS



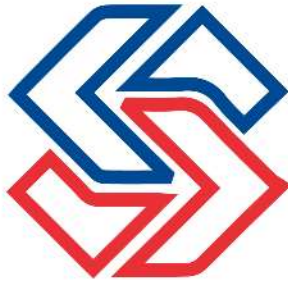
REALIZATION



CONTROL SYSTEMS



SERVICE



PRODUCTS AND  
COMPONENTS



ENERGY MANAGEMENT  
OF SCHOOLS



AQUAPONICS

# SYSTHERM – municipal energy



COMPACT HEATING  
UNITS

Heat transfer systems with the trade name SYMPATIK, a compact transfer units for heating and cooling - municipal energy.



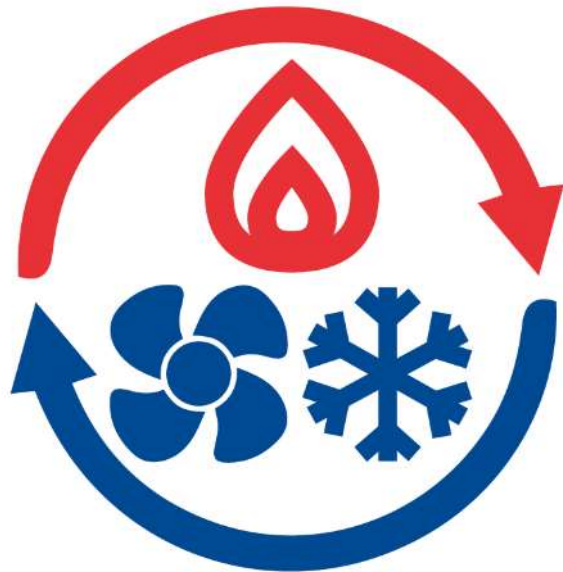
# SYSTHERM – industrial technologies



INDUSTRIAL  
APPLICATIONS

Heat transfer systems for industrial applications, including the use of residual heat in industrial technologies.

# SYSTHERM – realization

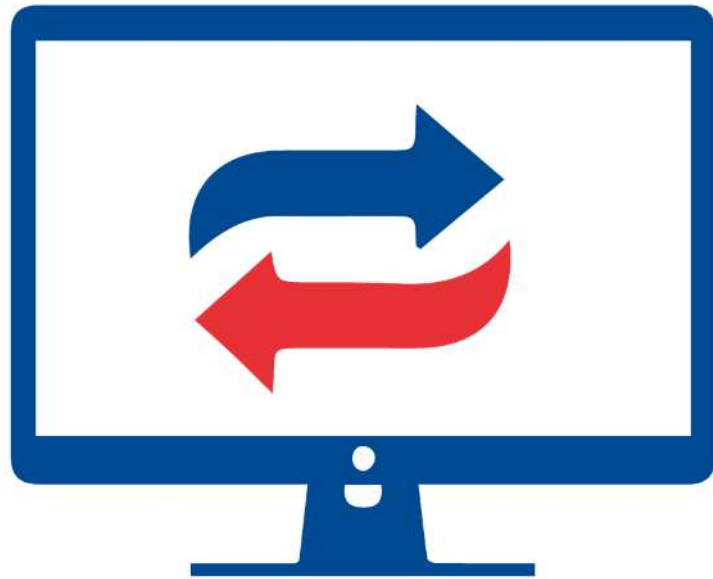


REALIZATION

Installation of heat sources for gaseous and liquid fuels, including biomass.  
Installation of heat distribution - heat pipes, steam pipes, cooling.

SYSTHERM has created its system of 3D models for the assembly schedule under the name Step by day.

# SYSTHERM – control systems



CONTROL SYSTEMS

Production, supply and installation of control systems, mainly in Siemens technology. With the support of our own designers and programmers.

# SYSTHERM – service



Non-stop emergency service for delivered SYMPATIK technologies and realized installations.



# EMERGENCY SERVICE SUPPORT

SYSTHERM provides an emergency service with the support of the following professions:

- Designer of CHU
- Programmer
- Plumber
- Welder
- Electrician
- Warehouseman

Technical documentation is available for customers at [www.systherm.com](http://www.systherm.com)

CHYTROST | TECHNOLOGIE | BUDOUCNOST



**SYSTHERM s.r.o.**  
**+420 377 241 177**  
E-mail: [info@systherm.com](mailto:info@systherm.com)



**NONSTOP SERVIS**  
**3 79 784 376**  
**SYSTHERM**  
E-mail: [servis@systherm.com](mailto:servis@systherm.com)

ZÁKAZNICKÝ ÚČET

STAV ONLINE VÝROBY

ÚVOD

O NÁS

SLUŽBY

REFERENCE

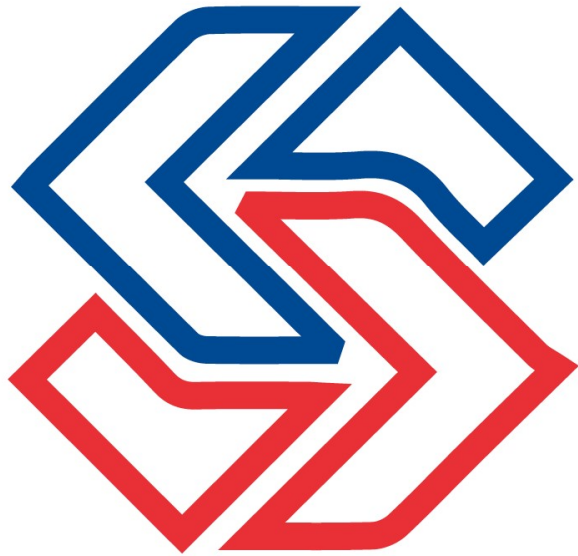
KARIÉRA

AKTUALITY

KONTAKTY



# SYSTHERM – products and components



PRODUCTS AND  
COMPONENTS

Provision of spare parts and sale of selected components for heat sources and distribution.

# SYSTHERM – energy management of schools



## ENERGY MANAGEMENT OF SCHOOLS

Own development of the recuperation unit and control system for automatic, safe and economical operation of heating and ventilation of school buildings.

# SYSTHERM – Aquaponics

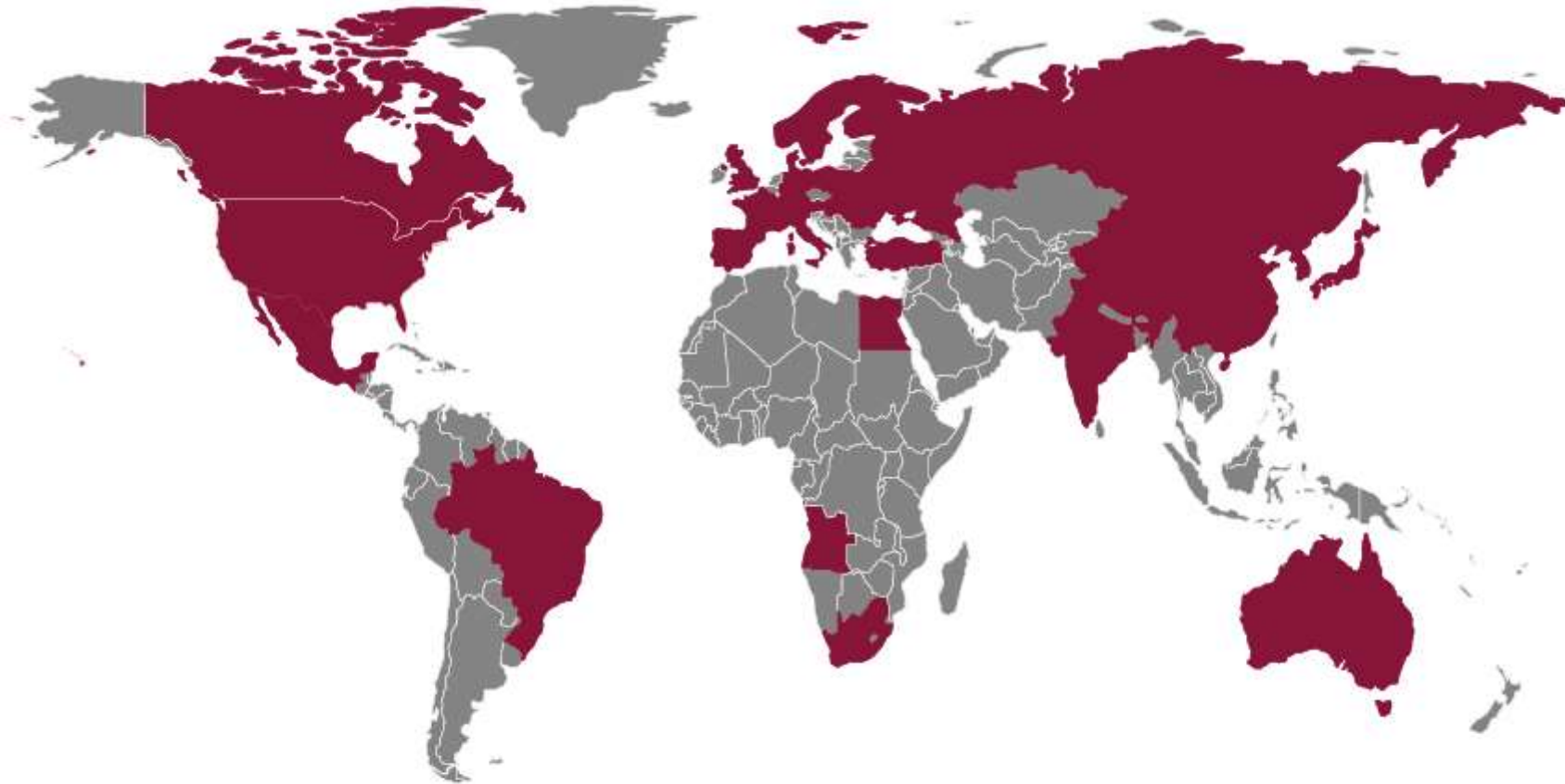


AQUAPONICS

Aquaponics is a unique technological system that combines fish farming with vegetable cultivation. The fish provide fertilizer for the plants, the beneficial bacteria will help make a nutrient solution from it, and the plants then clean the water for the fish.

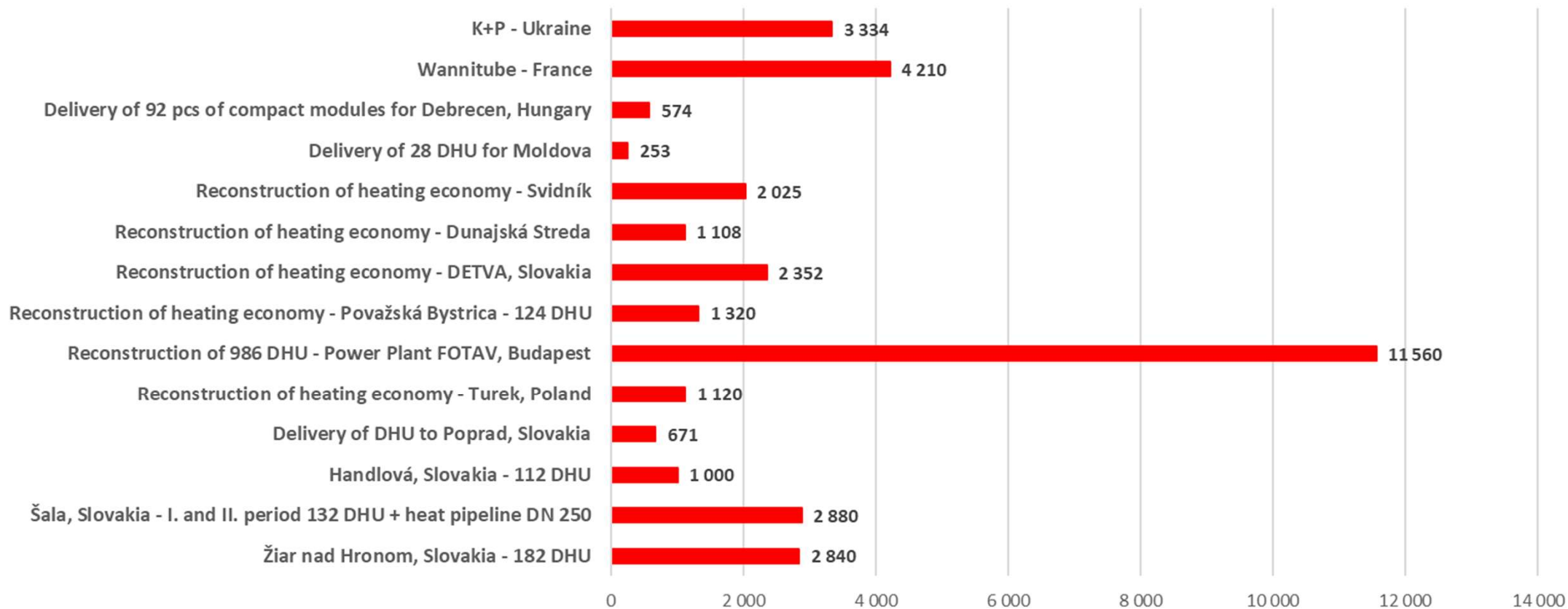


# SCOPE OF EXPORT OF SYMPATIK TECHNOLOGY



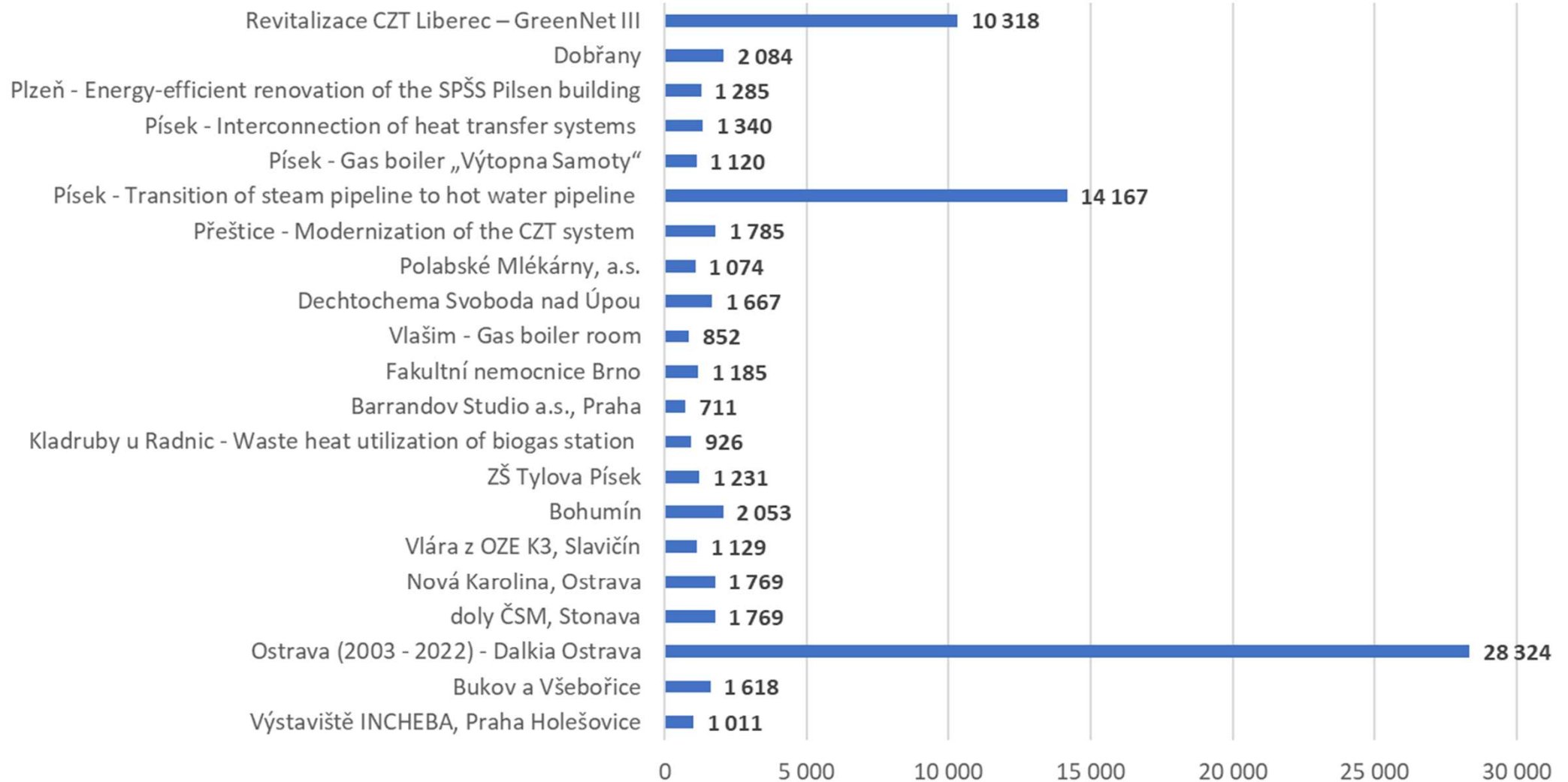
# REALIZATION - ABROAD

Turnovers of referential actions in abroad (in thousands EUR)



# REALIZATION – CZECH REPUBLIC

## Turnovers of referential actions in CZ (in thousands EUR)



# PORTFOLIO OF TYPE products and SW

Range	Name	Description
<b>SYSTHERM</b>	<b>Firma</b>	
<b>SYMPATIK TECHNOLOGY</b>	<b>SYMPATIK</b>	Product of heat transfer
	<b>PresStabil</b>	Product for ensuring stability in the distribution of pressure, a variant of the device for degassing
	<b>PresSmatik</b>	
	<b>SYKON</b>	Condensate economy
	<b>BJEQ</b>	Heat transfer station for flat
<b>SYMPATIK PRODUCTS</b>	<b>RSsinus</b>	Combinated distributor
	<b>VACYSOLAR</b>	Vacuum tube collector operating on the HEATPIPE principle
	<b>PreSolar</b>	Plate solar collector
<b>SYMPATIK COMPLEX SOLUTION</b>	<b>Termdes</b>	Equipment for thermal disinfection of hot water
	<b>AquaStorage</b>	The system enables the interconnection of several energy sources and intelligent control
	<b>ClimaSolution</b>	Equipment for complex solutions to achieve thermal comfort in buildings
	<b>IHRC</b> Individual heating room control	Equipment for controlling and regulating the temperature in individual rooms
	<b>AQUASUN</b>	Equipment for the use of solar energy for heating and hot water
	<b>GEM</b> Green Energy Management	Equipment for unconventional sources of heat

<b>SYMPTIK INSULATION</b>	<b>DH-box H</b>	Removable thermal insulation
	<b>DH-box M</b>	Removable thermal insulation
	<b>DH-box L</b>	Removable thermal insulation
<b>WebHeatControl WHC</b>	<b>WebHeatControl WHC</b>	SW for dispatching center and collecting data
<b>SW HESCO</b>	<b>HESCOpro</b>	SW for design of heating systems
	<b>HESCOnet</b>	SW for design of heating systems
	<b>HESCOsun</b>	SW for design of solar systems
	<b>Rscal</b>	SW for design of combined distributors
	<b>GAS</b>	SW for design of gas boiler rooms
	<b>BJcal</b>	SW for design hot water piping with a heat source- BJEQ
<b>SW TRACK</b>	<b>TRACK</b>	SW for production control systems, heat transfer
<b>SERVICE EQUIPMENT</b>	<b>SYSMATIK</b>	Vending machine for pipe welding - TIG
	<b>Syclean</b>	Equipment for cleaning plate heat exchangers



The heat transfer unit must be designed to fully integrate into either an existing or new heating or cooling system. Therefore, her designs must be timeless. That is why we have a JAWA type 250 motorcycle installed in the staircase mirror, which is from 1961 and has **22 applied patents**. Why JAWA? So that every day our employees remember the legacy of our grandfathers and fathers, how creative they were, how technically proficient they were, and that's what I want from SYSTHERM employees as well. **At the same time, we also took a color from JAWA and we have registered this color for our SYMPATIK products.** So everyone in the field will recognize the product SYMPATIK from ST at first glance.

Sophisticated design and production by corporate SW

**LocalDPPipe** = **LocalDPPipe** + **TRACK**<sup>®</sup>  
**HESCOpro**<sup>®</sup>  
**HESCOnet**<sup>®</sup>  
**T-flex**<sup>®</sup>  
**WHC**<sup>®</sup>  
**BJcal**<sup>®</sup>  
**HESCOgas**<sup>®</sup>  
**HESCOtč**<sup>®</sup>  
**RScal**<sup>®</sup>



# SALES SUPPORT



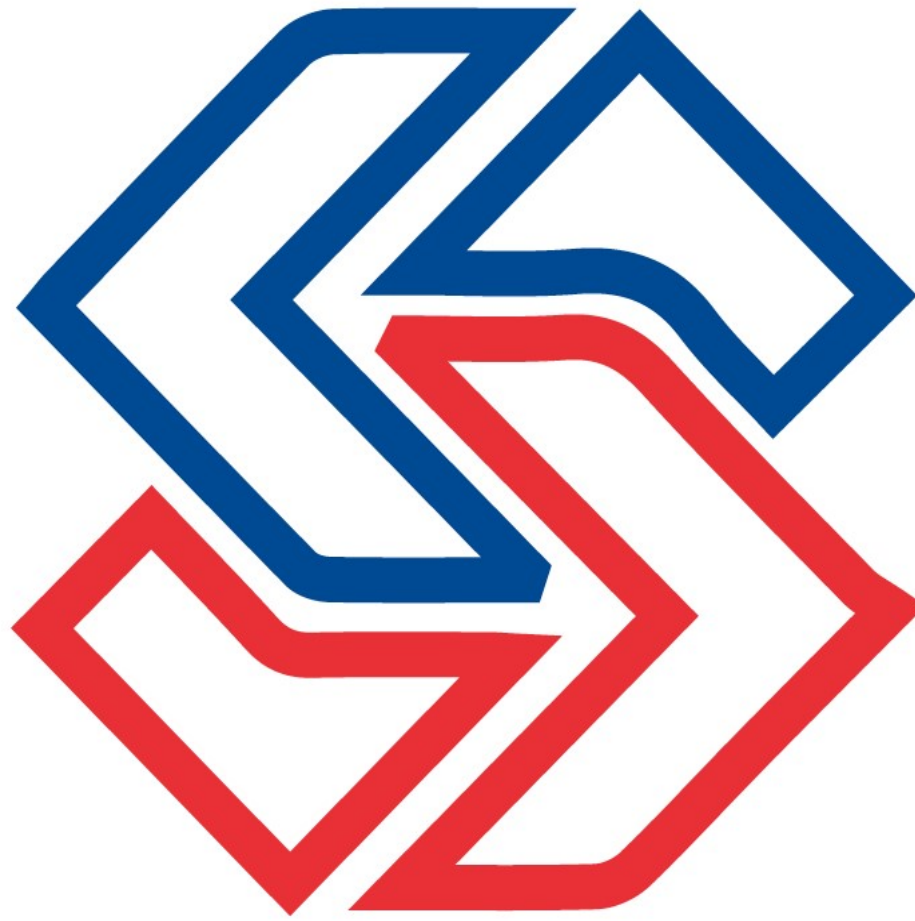
# PRESENTATION OF CHU DESIGN in SW HESCOpro online

# PRESENTATION of warm water and hot water networks DESIGN in SW HESCOnet online

PRESENTATION of BJEQ residential transfer stations DESIGN,  
including dimensioning of distribution systems and nominal  
power of the heat source  
in SW BJcal online

PRESENTATION of sophisticated production system  
SYMPATIK  
SW TRACK online

3D model  
Production drawings  
Project MaR  
SW  
Service



LOGISTICS

# LOGISTICS SUPPORT IN THE VOLUME OF 50 MIL.



# SYSTHERM COMPONENTS FOR THE SUSTAINABILITY OF THE SYMPATIK PRODUCT

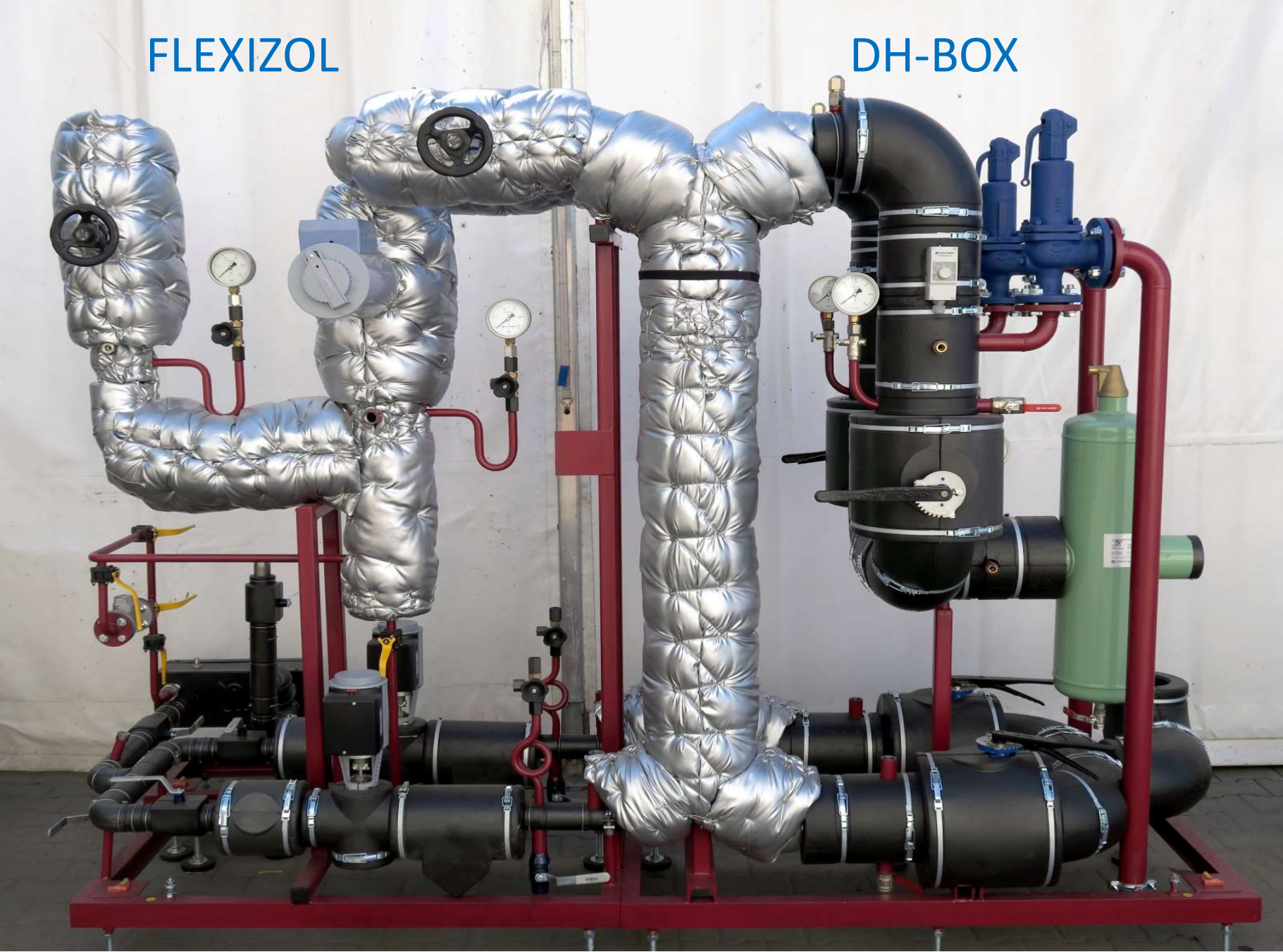




# Insulation

## DH-BOX and FLEXIZOL

# SYSTHERM HAS ITS OWN THERMAL INSULATION

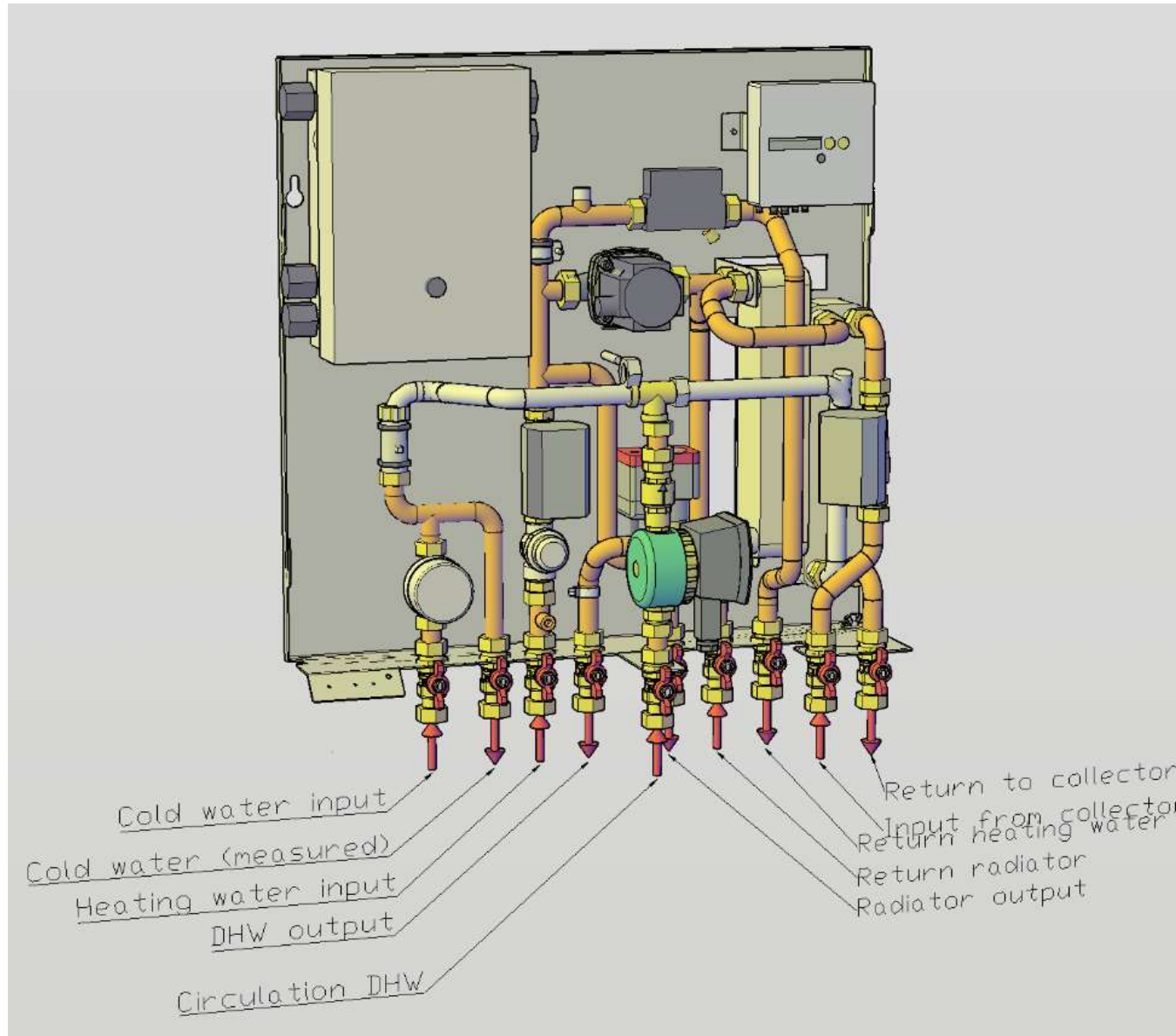




## COMPACT HEATING UNITS

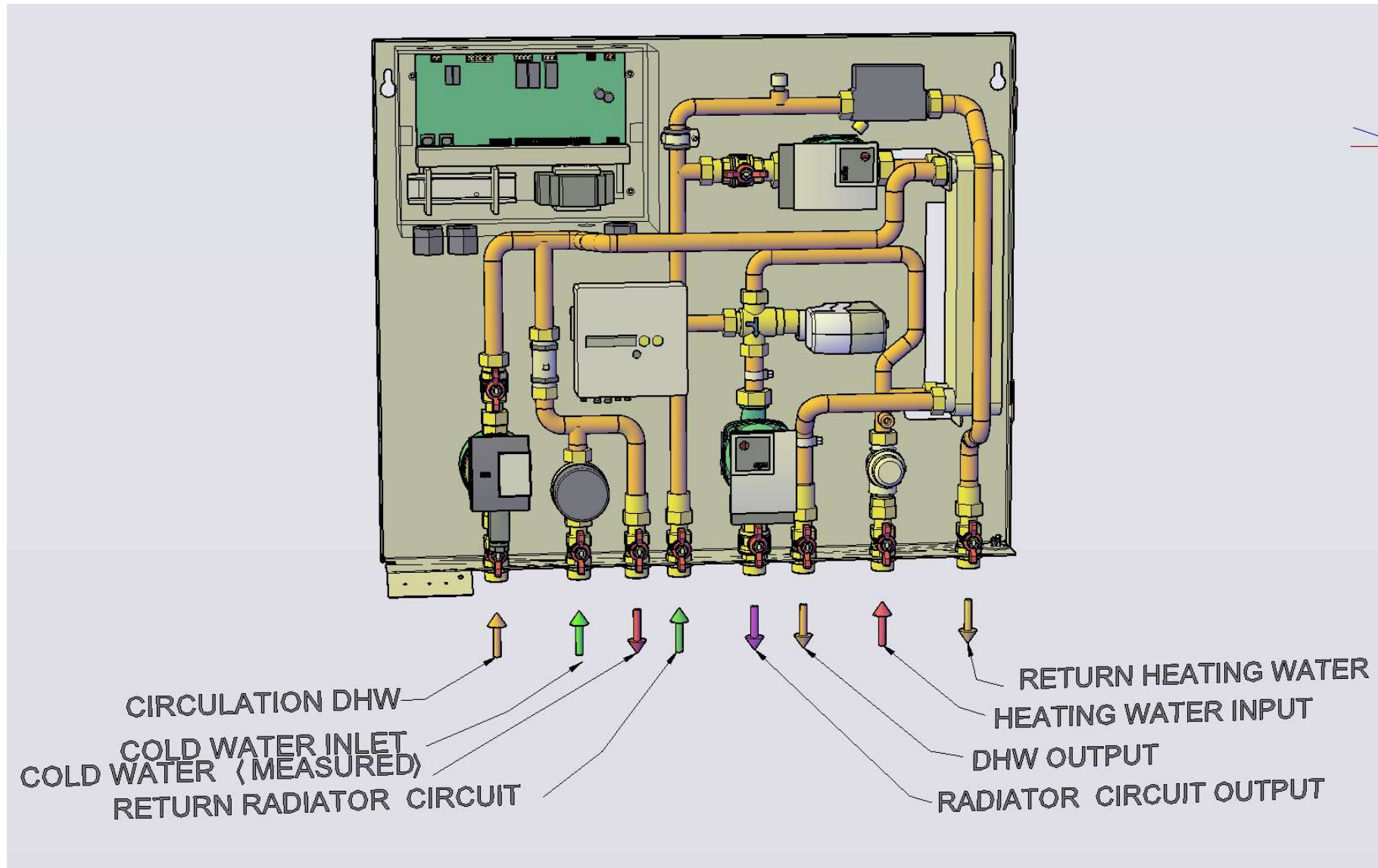
# Reference – SYMPATIK production

## SYMPATIK BJEQ – rad + floor + DHW



# Reference – SYMPATIK production

## SYMPATIK BJEQ – above Geberit version



# Reference – SYMPATIK production – Dobřany (Psychiatric hospital)



# Reference – SYMPATIK production – Žatec



# Reference – SYMPATIK production – Písek





## Reference – SYMPATIK production

Dictric cooling unit for administration center in Copenhagen Key Fiskar Plats



# Reference – SYMPATIK production

## Cooling unit for New State Museum Copenhagen



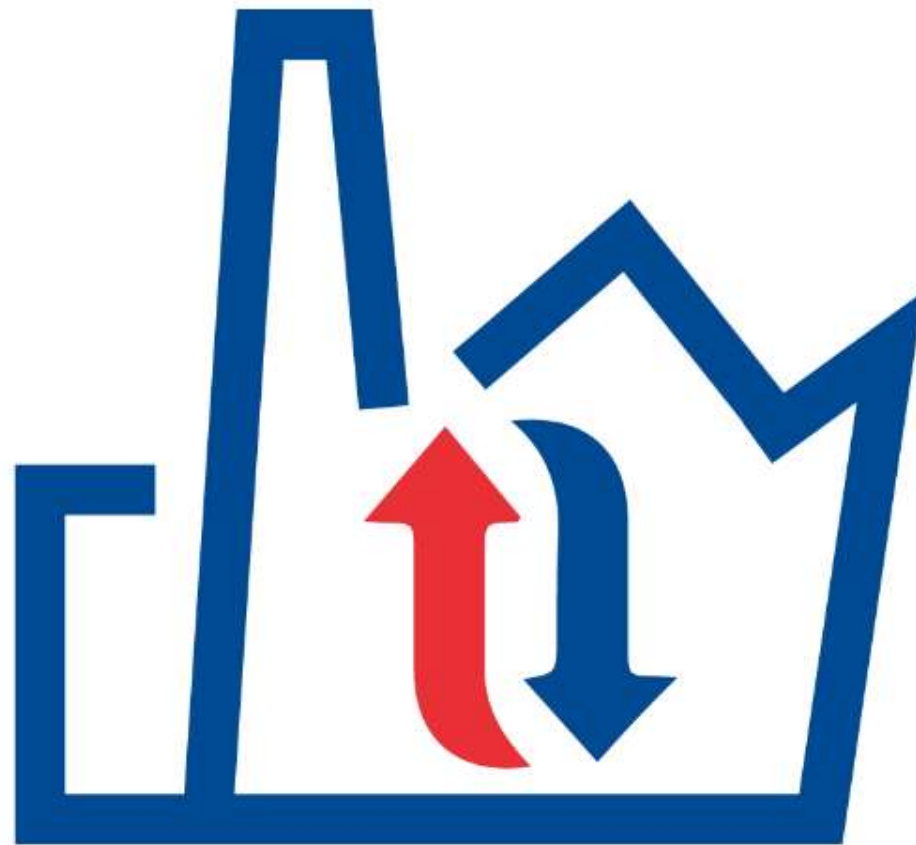
# Reference – SYMPATIK production

District cooling unit for new shopping center Hangar 5 in Stockholm



# Reference – SYMPATIK production - France

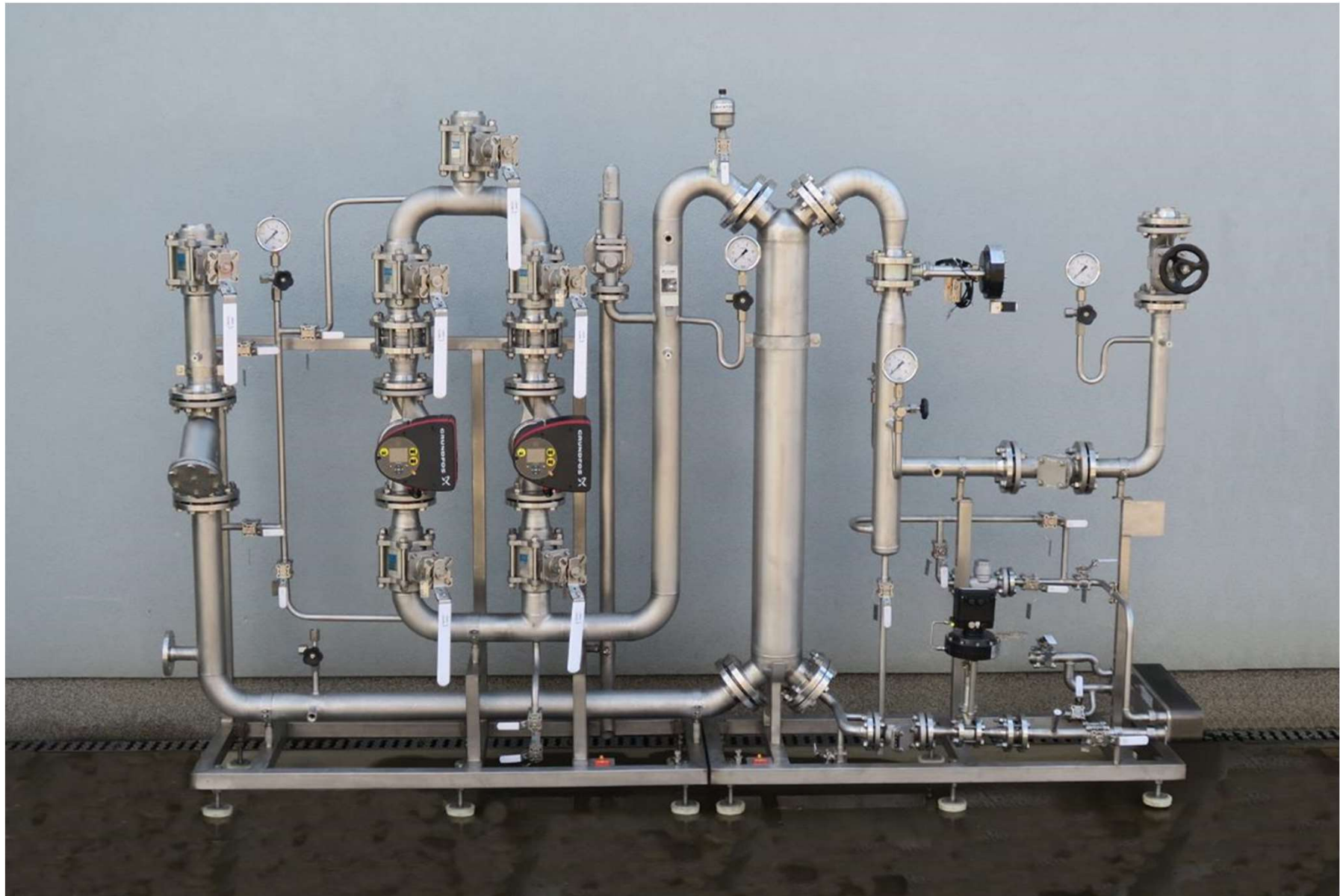




## INDUSTRIAL APPLICATIONS

# Reference – SYMPATIK production – Linde Gas

Steam unit – fill stainless steel solution



# Reference – SYMPATIK production – Linde Gas

Steam unit – removable insulation



# Reference – SYMPATIK production

Complete installation heating room, Sweden





## Reference – SYMPATIK production

Project WavePiston, container turbine unit to gain energy from sea waves, Gran Canaria



## Reference – SYMPATIK production

Project WavePiston, container turbine unit to gain energy from sea waves, Gran Canaria

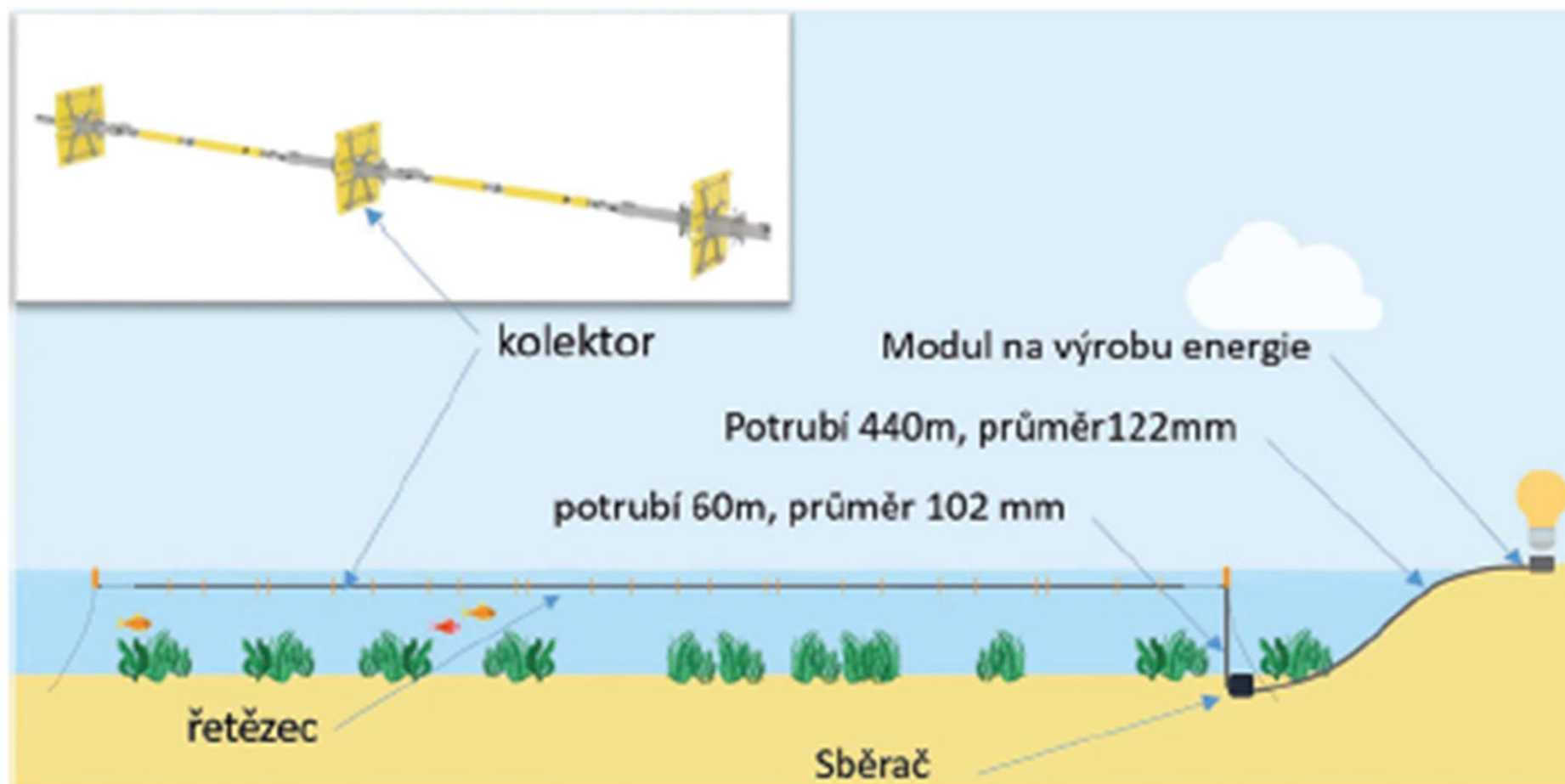
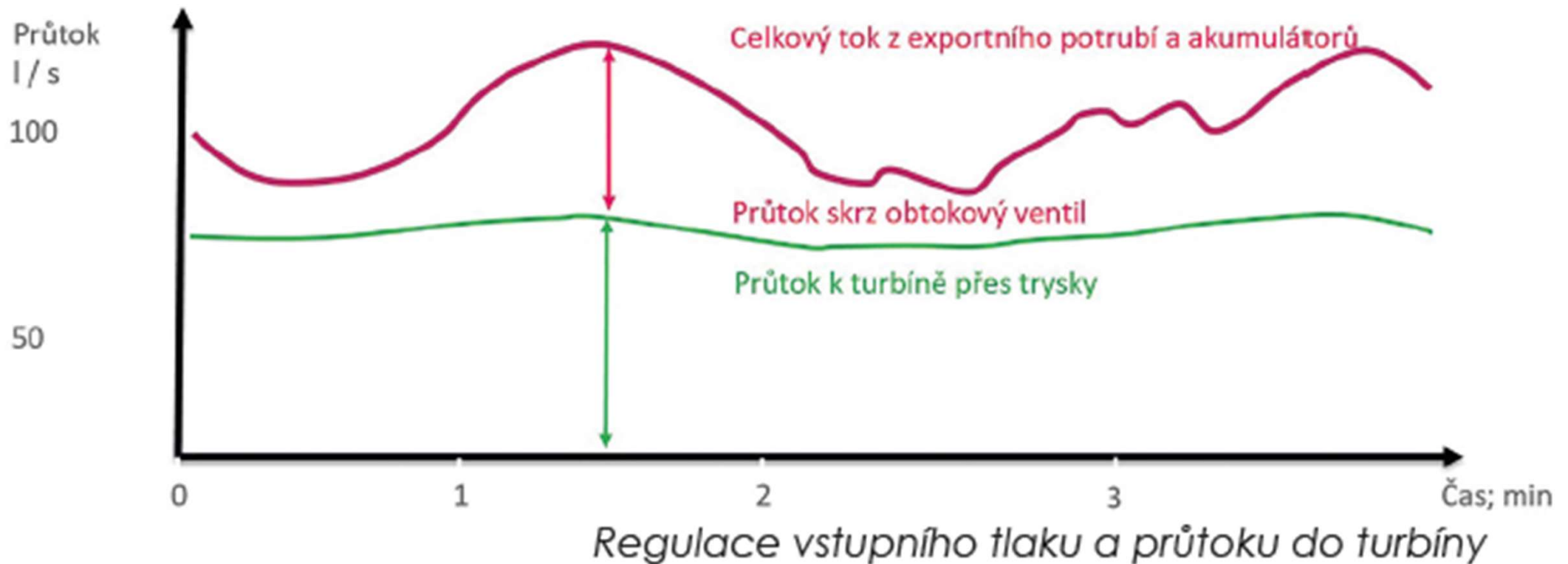


Schéma elektrárny

## Reference – SYMPATIK production

Project WavePiston, container turbine unit to gain energy from sea waves, Gran Canaria



## Reference – SYMPATIK production

### Medium voltage wind turbine converter

Cooling units for high-performance frequency converter

95 compact units for installation on wind farms, UK coast installation site



# Reference – SYMPATIK production

## Medium voltage wind turbine converter

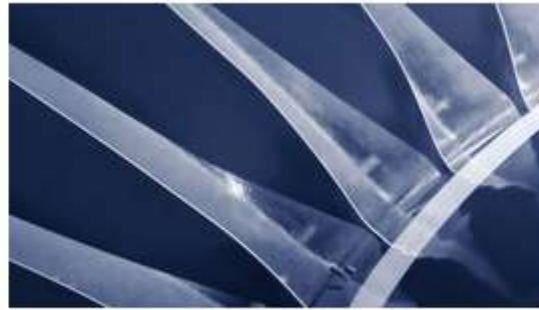
Cooling units for high-performance frequency converter

95 compact units for installation on wind farms, UK coast installation site



# Reference – SYMPATIK production

## Container cooling water unit for Hot Isostatic Press



## Reference – SYMPATIK production

### Container cooling water unit for Hot Isostatic Press



# Reference – SYMPATIK production

## Container cooling water unit for Hot Isostatic Press





## Reference – SYMPATIK production

Cooling unit for high power rectifier, rail, ABB-Hitachi, Switzerland



# Reference – SYMPATIK production

## Condensate collection tank and pump unit for Leo Pharma



## Reference – SYMPATIK production

Container unit for the use of solar energy for the generation of technological steam - Carlsberg, Greece



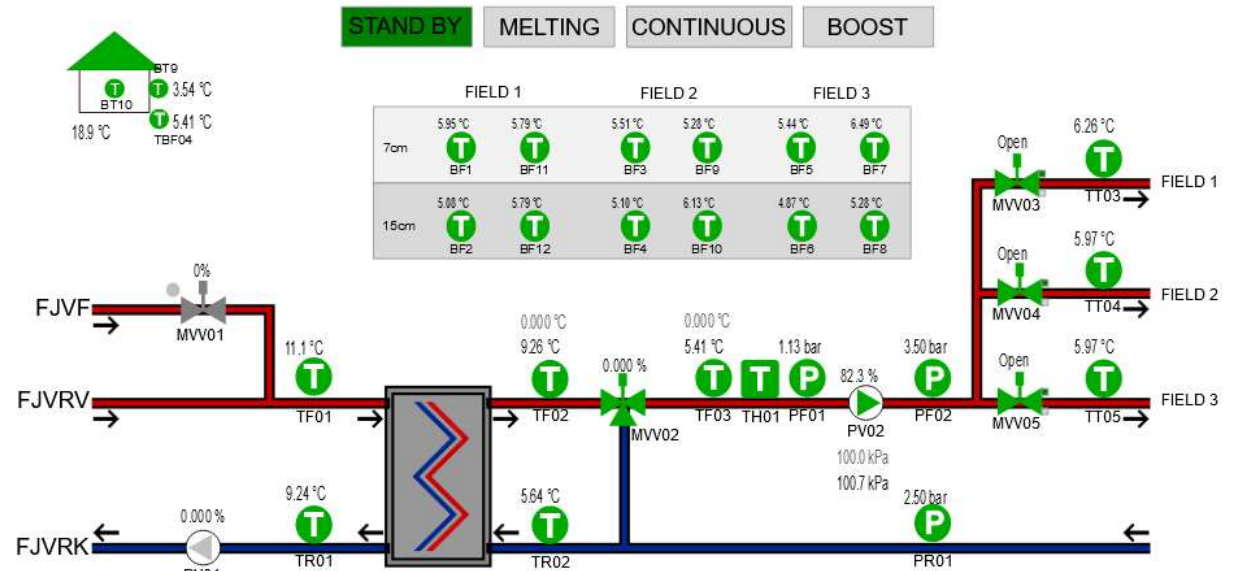
## Reference – SYMPATIK production

Container unit for the use of solar energy for the generation of technological steam - Carlsberg, Greece



# Reference – SYMPATIK production

Heating the football stadiums for the DK men's and women's national team



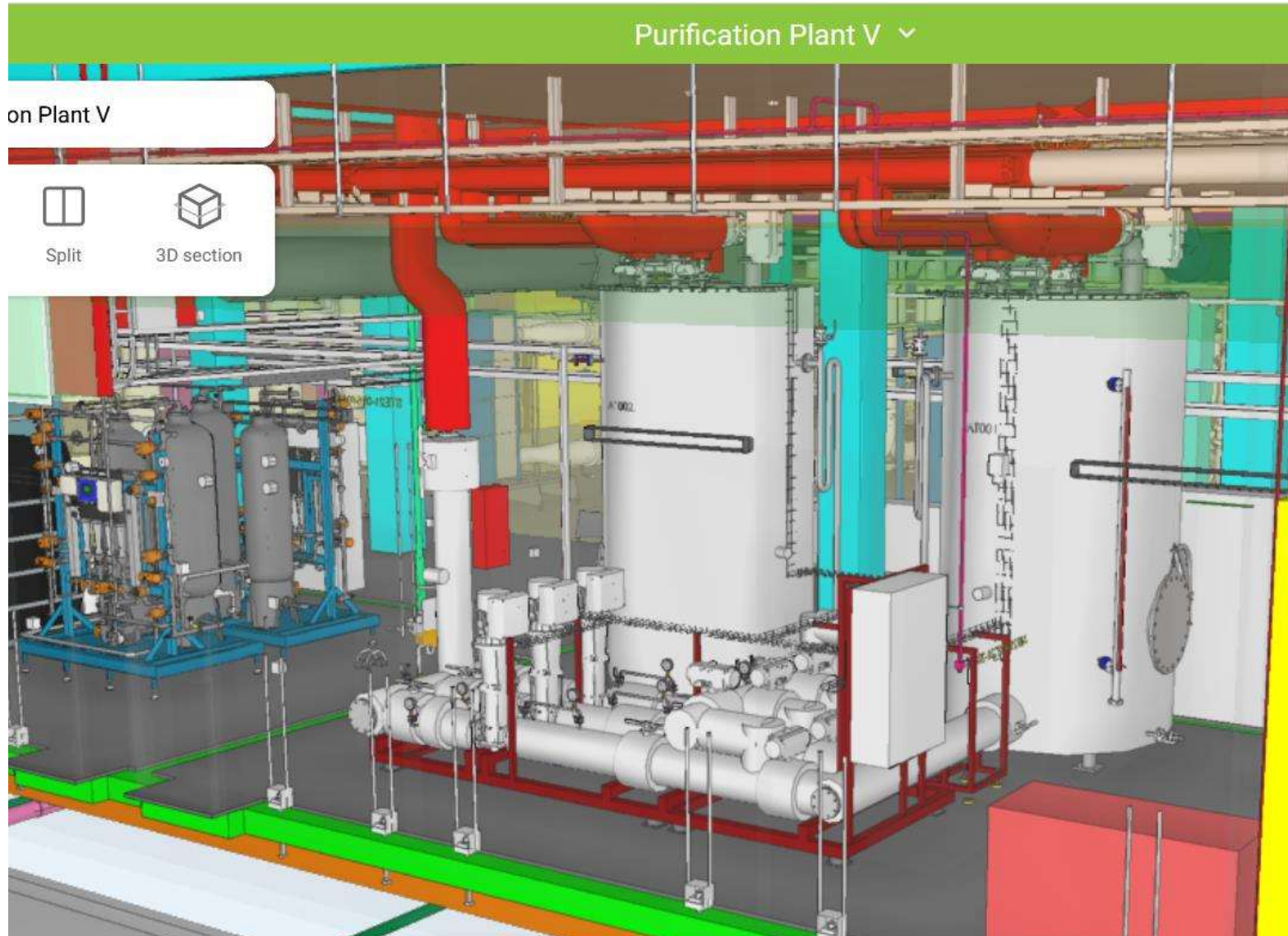
## Reference – SYMPATIK production

Heating the football stadiums for the DK men's and women's national



# Reference – SYMPATIK production

Condensate management of the newly built Purification Plant V production line of insuline, NovoNordisk, Kalunborg



## Reference – SYMPATIK production

Condensate management of the newly built Purification Plant V production line of insuline, NovoNordisk, Kalunborg





## Reference – SYMPATIK production

Condensate management of the newly built Purification Plant V production line of insuline, NovoNordisk, Kalunborg



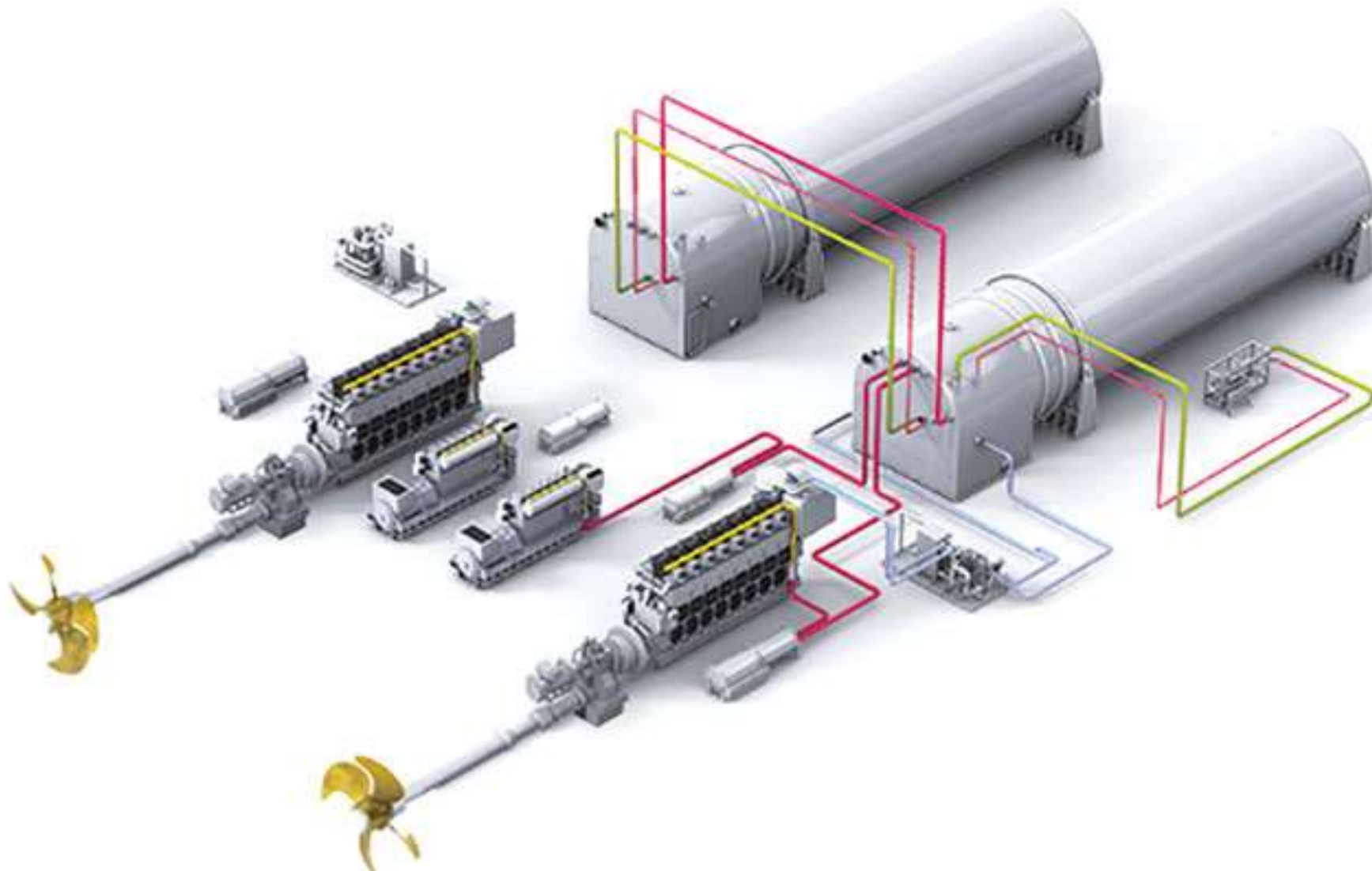
# Reference – SYMPATIK production

## Cooling unit of evaporation LNG system for marine transportation



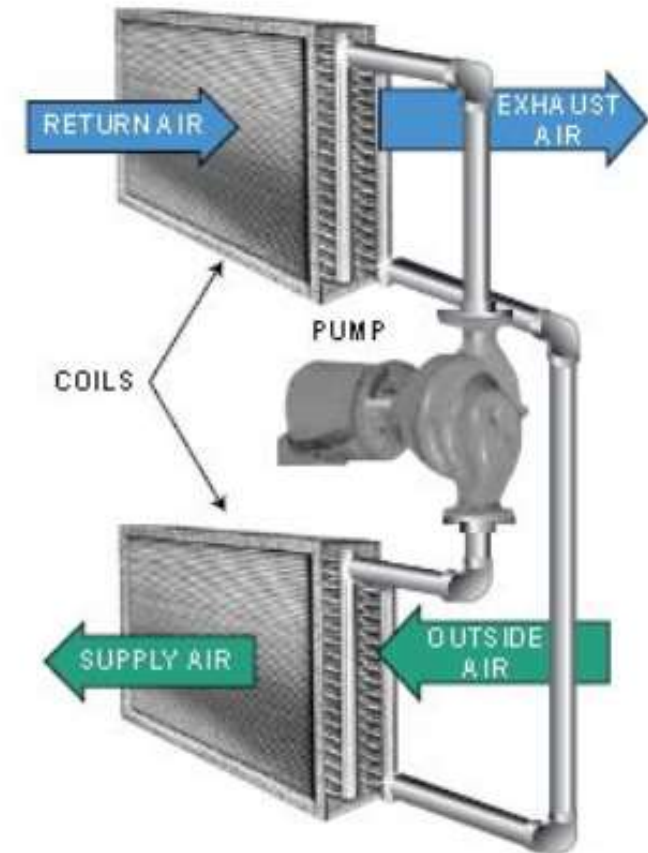
## Reference – SYMPATIK production

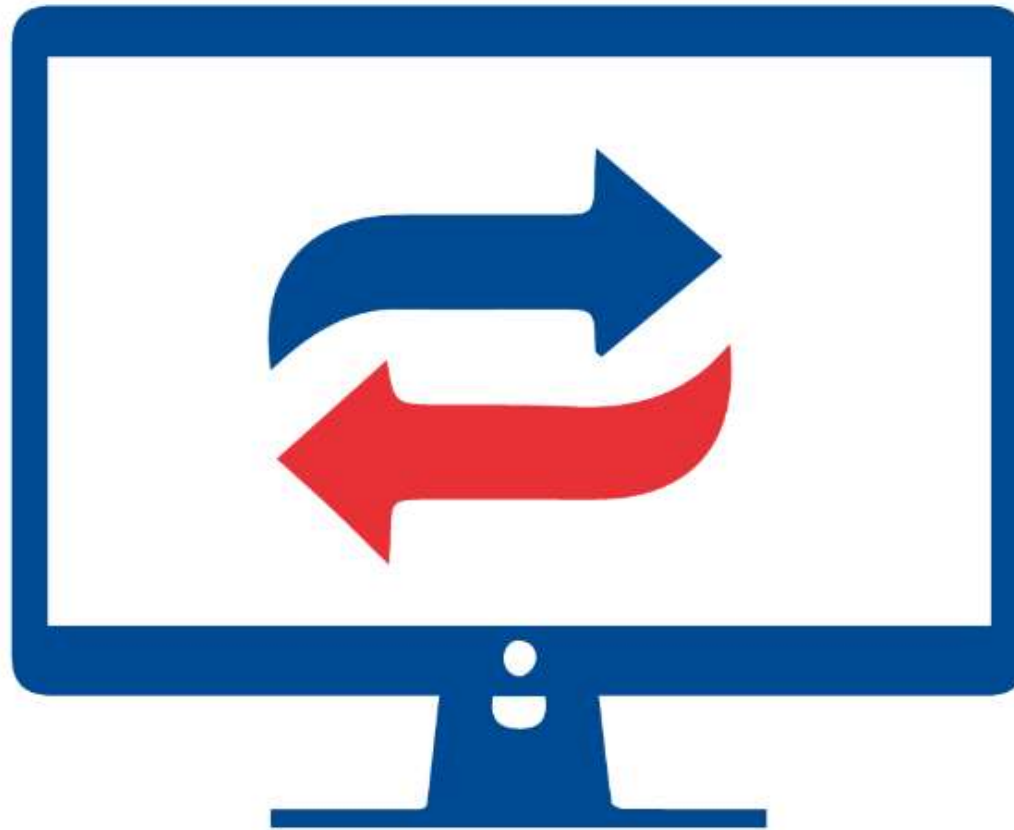
Cooling unit of evaporation LNG system for marine transportation



# Reference – SYMPATIK production

## Glycol recuperation unit for air conditioning units





## CONTROL SYSTEMS



WHC iQ

## CONTROL SYSTEMS SELECTION OF FUNCTIONS FOR ECONOMIC OPERATION

**Fatigue** – oscillation of the system

**UnderFlow** – valve leak

**Fouling** – monitoring the quality of the heat exchange surface

**LeakPerWeek** – high weekly water loss in the heating circuit

**ServisPeriod** – scheduled service

**PowerLimit** – monitoring the maximum consumed power/flow

Control of heat consumption

**CapacityCheck** – monitoring the consumption of cold and hot water

**HeatForecast** – heating according to the meteorological prediction of the course of the outdoor temperature

**HeatReduction** – heating restrictions

# Dispečerské pracoviště WHC online

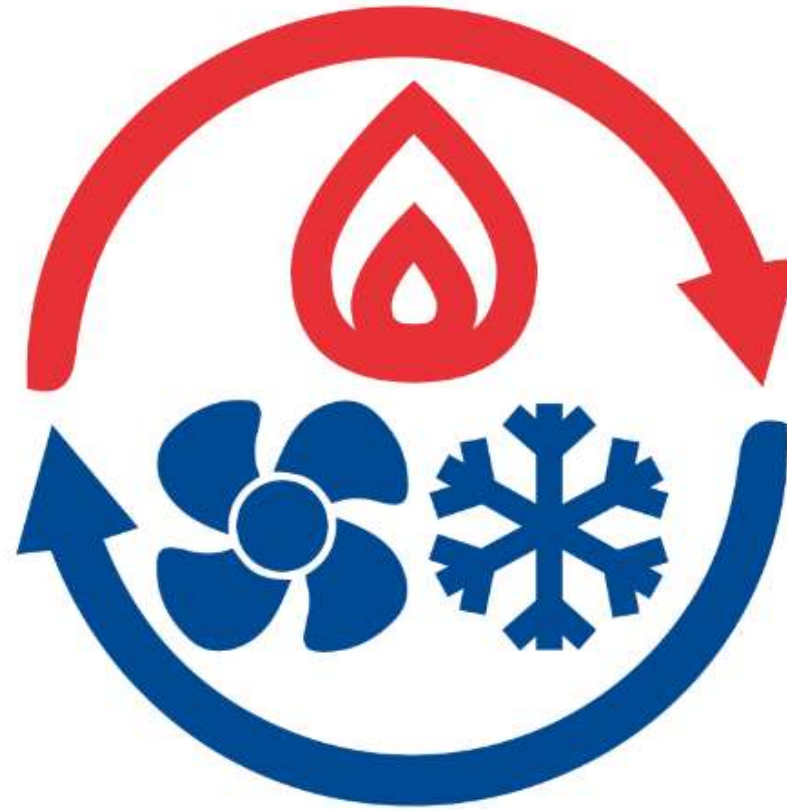
SPŠS

Fotbalové trávničky

ČSOB Ostrava

Přerov

Vlašim



## REALIZATION



# Waste heat utilization of biogas station Kladruby u Radnic



# Waste heat utilization of biogas station Kladruby u Radnic



# Modernization of the CZT system in the town of Přeštice



# Modernization of the CZT system in the town of Přeštice



# Modernization of the CZT system in the town of Přeštice



# Gas boiler „Výtopna Samoty“



# Gas boiler „Výtopna Samoty“



# Gas boiler „Výtopna Samoty“





# Gas boiler „Výtopna Samoty“



# Transition of steam pipeline to hot water pipeline - PÍSEK



# Transition of steam pipeline to hot water pipeline - PÍSEK



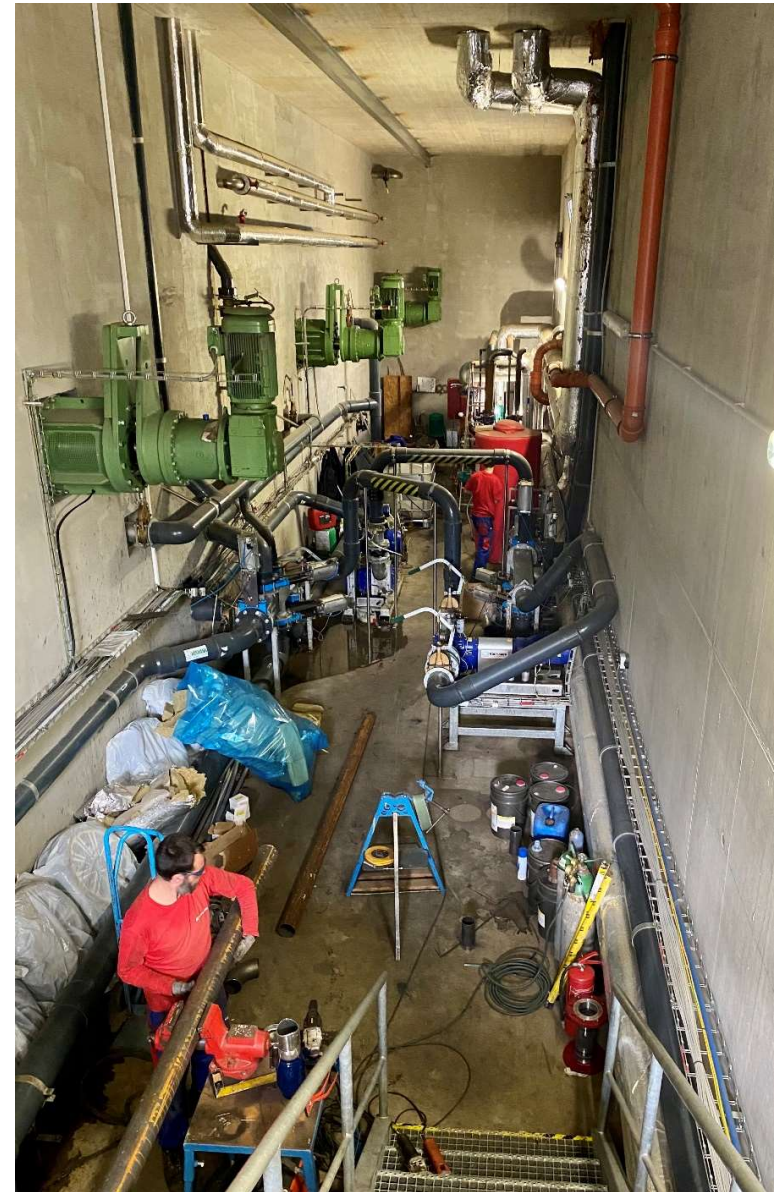
# Transition of steam pipeline to hot water pipeline - PÍSEK



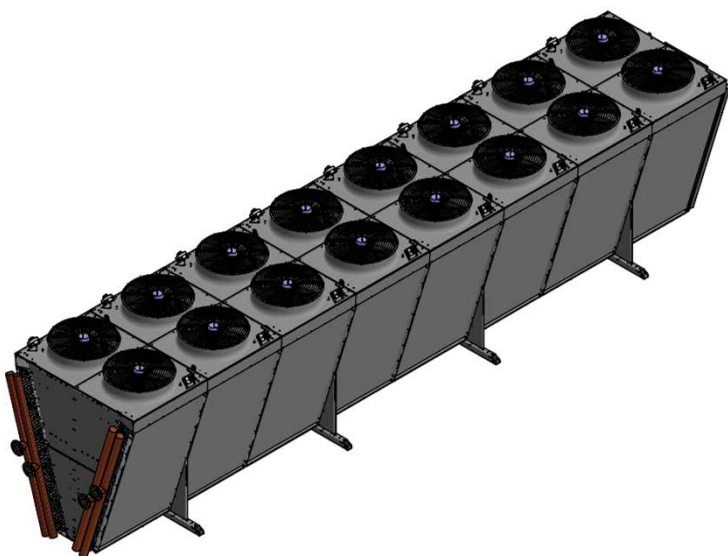
# Interconnection of heat transfer systems in Písek in order to save primary energy



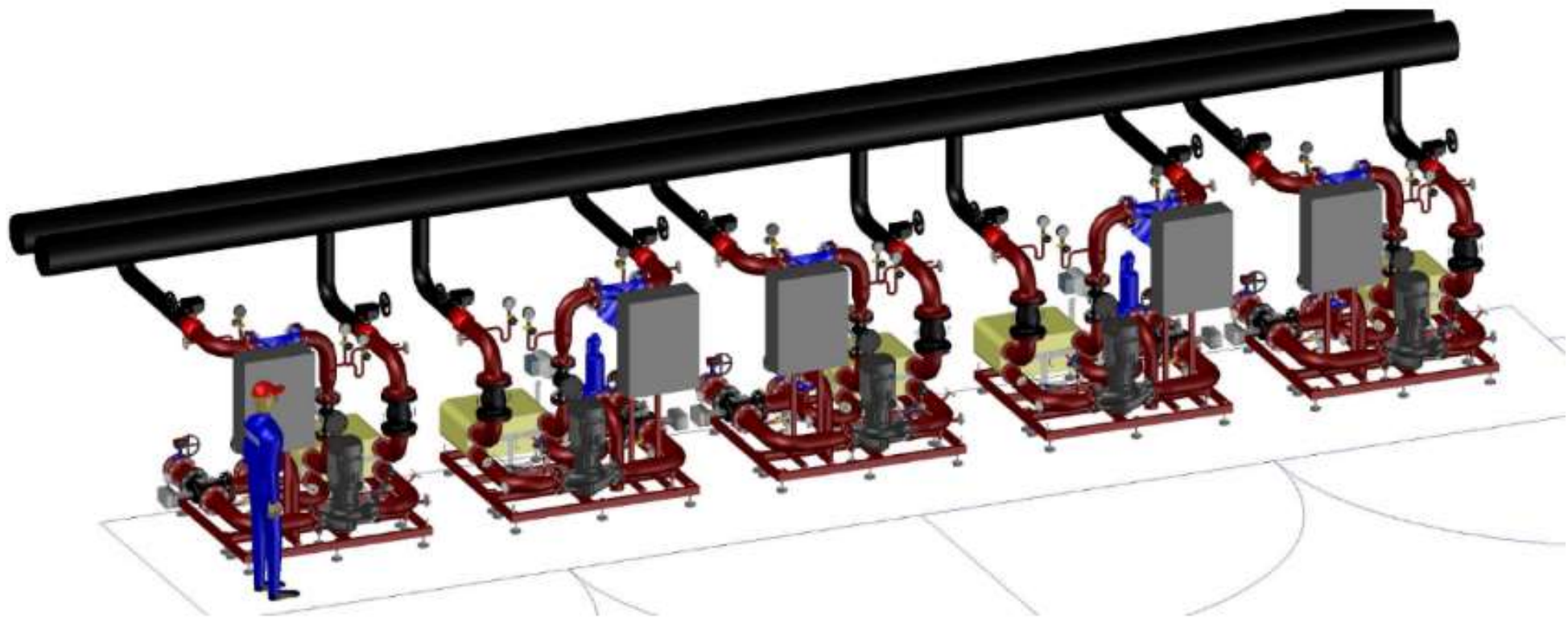
# Interconnection of heat transfer systems in Písek in order to save primary energy



# Ecologization of Teplárna Přerov – Change of cooling system



## Ecologization of Teplárna Přerov – Change of cooling system



- District heating cooling – regulation of power plant station
- Load 50 kW - 30 MW by outdoor temperature 35°C and district heating temperature 80 °C
- PN25, TS 130 °C
- Modular container solution
- With delivery of dry coolers



## Ecologization of Teplárna Přerov – Change of cooling system



## Reference implementation – gas boiler rooms - ČSM MINE



## Reference implementation – gas boiler rooms - Vlašim



# Reference implementation – gas boiler rooms - Vlašim



## Reference implementation – gas boiler rooms – Veolia Prague, Barrandov



## Reference implementation– gas boiler rooms – Veolia Prague, Petrohradská



# Reference implementation– gas boiler rooms – Veolia Prague, Stodůlky - G



# Reference implementation– gas boiler rooms – Veolia Prague, Stodůlky - H





## Reference implementation – gas boiler rooms – Winter stadium, Rokycany



# Reference implementation – gas boiler rooms – Riverpark Modřany, Prague



## Reference implementation – gas boiler rooms – Dobřany Municipal Office



# Reference implementation – gas boiler rooms – Dobřany (Psychiatric hospital)



# Reference implementation – gas boiler rooms – Dobřany (Psychiatric hospital)





## ENERGY MANAGEMENT OF SCHOOLS

# ENERGY MANAGEMENT OF SCHOOLS

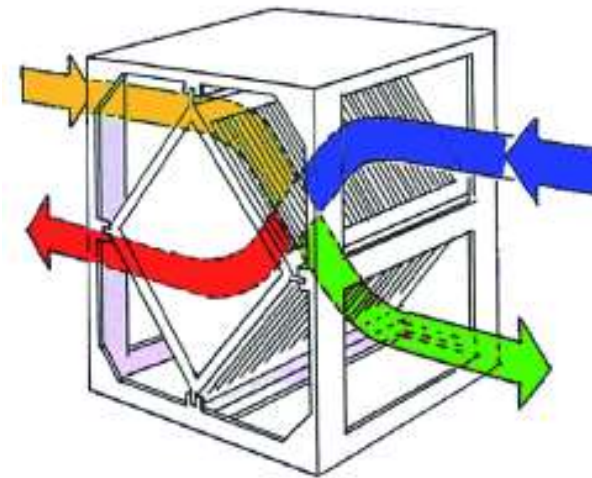
## EnOcean wireless technology

- ↳ no battery (maintenance-free)
- ↳ easy to install as no wiring is needed instalace
- ↳ flexibility of modernization
- ↳ direct mounting of the sensor to a suitable location



## Air recuperation

- ↳ adequate ventilation
- ↳ low dustiness and reduced incidence of allergens
- ↳ reduce moisture in insulated buildings
- ↳ saving energy by reducing thermal losses



# ZŠ a MŠ Bělá nad Radbuzou





# SOŠ a SOU Sušice



# Energy-efficient renovation of the SPŠS Pilsen building



1 000 m  
textile air distribution

69  
air handling units

454  
thermostatic valves

# Energy-efficient renovation of the SPŠS Pilsen building



# Energy-efficient renovation of the SPŠS Pilsen building



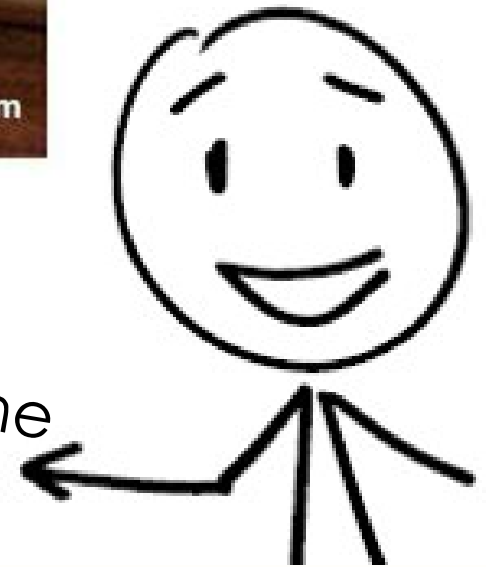
# Energy-efficient renovation of the SPŠS Pilsen building



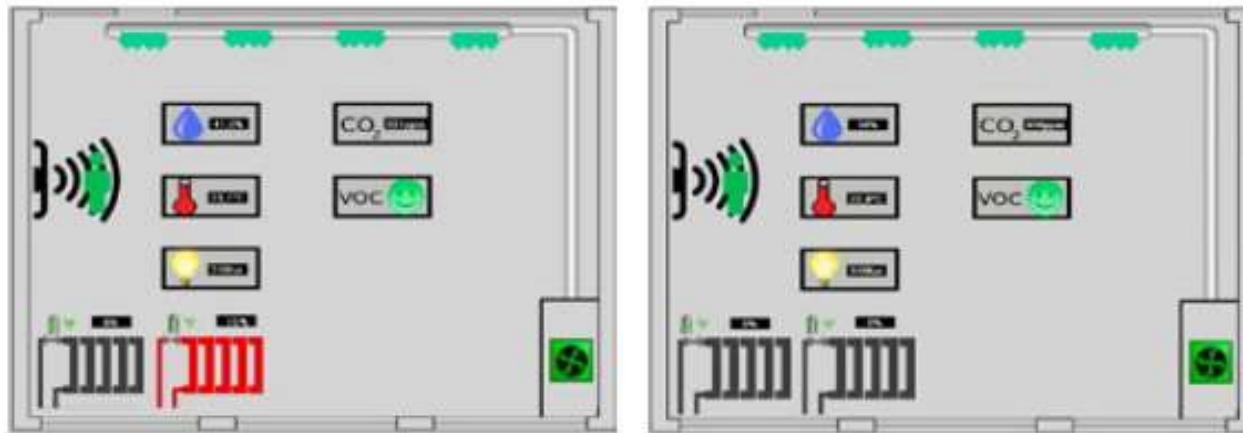
# Energy-efficient renovation of the SPŠS Pilsen building



Verify the QR on your phone



# Energy-efficient renovation of the SPŠS Pilsen building

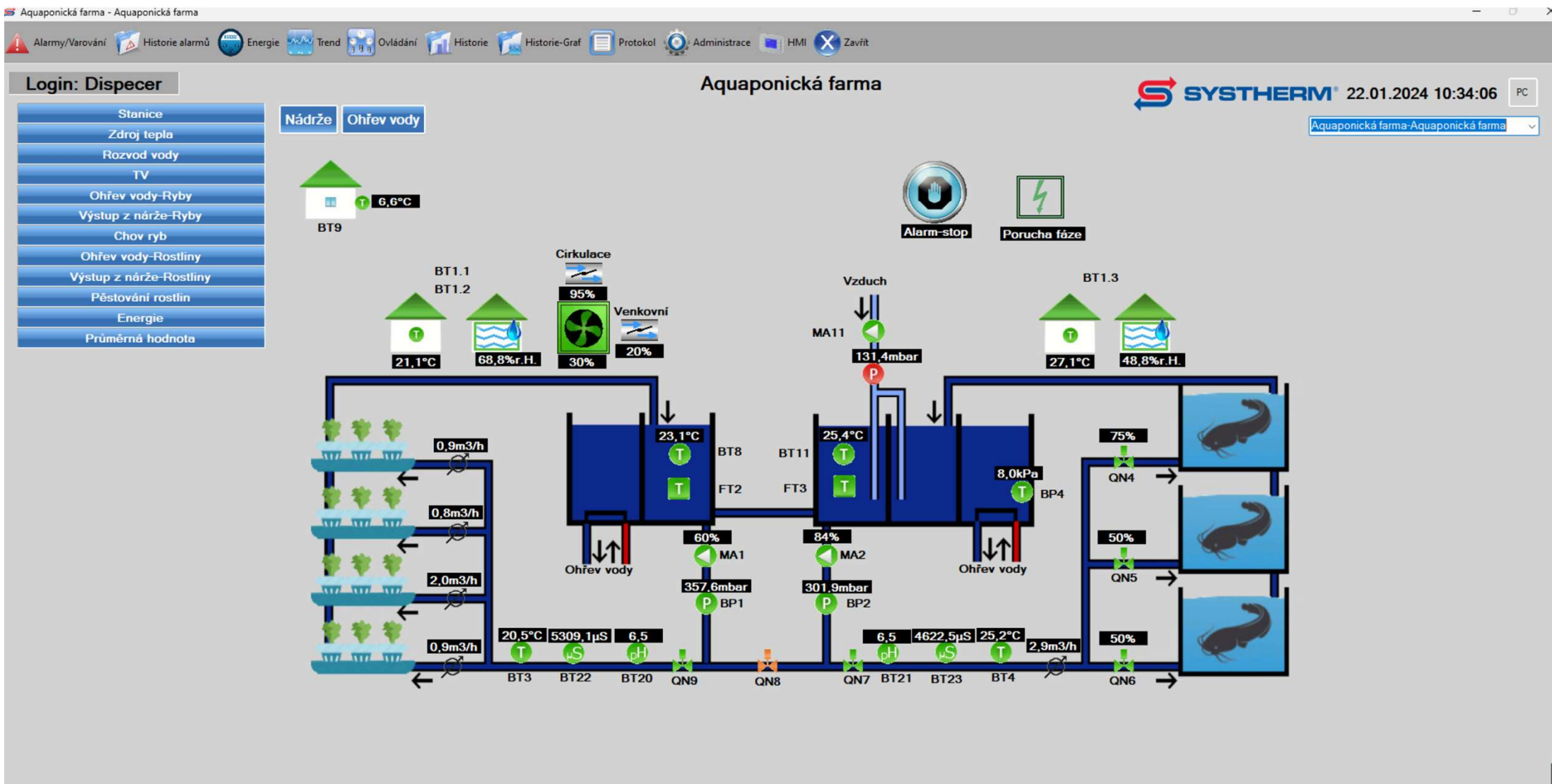




## AQUAPONICS



# Aquaponic farm - Šumava



# Aquaponic farm - Šumava

Hydroponie

Rozmístění Nastavení Rostlina Fáze růstu Položky regulace Uložit Zavřít

	Segment 1	Segment 2	Segment 3	Segment 4
Police 1	salát 10% Auto 16.11.2023 3 - zrání	salát 10% Auto 16.11.2023 3 - zrání	salát 50% Auto 12.06.2023 3 - zrání	1_salát Ručně 12.06.2023 0 - vypnuto
Police 2	salát 10% Auto 16.11.2023 3 - zrání	salát 10% Auto 16.11.2023 3 - zrání	salát 50% Auto 25.07.2023 3 - zrání	BonardaRZ Auto 12.06.2023 3 - zrání
Police 3	BonardaRZ Auto 16.11.2023 3 - zrání	salát 10% Auto 16.11.2023 3 - zrání	salát 50% Auto 12.06.2023 3 - zrání	1_salát Ručně 12.06.2023 3 - zrání
Police 4	salát 10% Auto 16.11.2023 3 - zrání	salát 50% Auto 16.11.2023 3 - zrání	salát 50% Auto 12.06.2023 3 - zrání	0_nic Ručně 12.06.2023 0 - vypnuto
Police 5	salát 10% Auto 16.11.2023 3 - zrání	salát 50% Ručně 16.11.2023 0 - vypnuto	1_salát Ručně 12.06.2023 0 - vypnuto	0_nic Ručně 12.06.2023 0 - vypnuto

# Aquaponic farm - Šumava

