

TEDOM COGENERATION UNITS IN HOSPITALS AND SPAS

Hospitals and spas are suitable for the installation of CHP units. These facilities consume a lot of energy and, at the same time, there are many ways they can consume heat. In addition, they can use CHP units as emergency power sources in the event of power outage.

HOSPITAL DOMAŽLICE, CZECH REPUBLIC



The TEDOM CHP unit of 260 kW electric power and 430 kW heat capacity has been installed in the facility's energy center since the hospital's establishment. An absorption heat exchanger was supplied in 2010, which utilizes the heat from the CHP unit in the summer season (it is so-called trigeneration). At the time of its installation, the CHP unit's operation in the summer months was limited due to low consumption of heat. It is not economical for the hospital to waste any of the heat produced in the CHP unit and generate power only.

Basic Information on the Installed Unit

CHP unit type	Quanto 260 SPE
Number of units	1
Fuel	Natural gas
Electrical output	260 kW
Heat output	430 kW
Year of installation	2005
Place of installation	Domažlice
Investor	West-Bohemian Region

Benefits of TEDOM cogeneration unit

Combined heat and power production enabled the hospital to produce its own electricity. The heat from CHP unit is utilized from absorption unit for cooling in summer.

Main benefits:

- Savings for the power purchased from the grid
- Improved utilization of primary energy – natural gas
- Optional utilization in the island operation mode in case of grid failure

SELECTED REFERENCES FROM HOSPITALS AND SPAS



Hospital Hustopeče, CZ

CHP unit type: Premi 22
Electrical output: 22 kW
Year of installation: 2003



Spa Aurora, Třeboň, CZ

CHP unit type: MT 140 SPE
Electrical output: 140 kW
Year of installation: 2001



Hospital Nové Město na Moravě, CZ

CHP unit type: Cento T 200 SP
Electrical output: 200 kW
Year of installation: 2011



Hospital Ústí nad Orlicí, CZ

CHP unit type: Cento T150 SPE
Electrical output: 150 kW
Year of installation: 2006

Other references:

- Micro T30 AP, Bristol, England
- Quanto D770 NOC, Ankara, Turkey
- Quanto C770 SP NOC, Istanbul, Turkey
- Quanto T2000 ZP + T1000 ZP, Samara, Russia
- Quanto C1000 SPE, Irano-Frankovsk, Ukraine
- Cento M44 SPE, Kjustendil, Bulgaria
- Premi Twin 22 AP, Chamont en Bezin, France
- MT 132 AP, Boskovice, CZ
- Quanto 190 SP, Košice, Slovakia
- Quanto 260 SPE, Repty, Poland
- MT 140 SP, Český Krumlov, CZ
- Quanto 500 AP, Watreloos, France
- Quanto 190 SP, Vranov nad Topľou, Slovakia
- MT 140 SPE, Brno, CZ