



**HEAT PUMP PROJECT OF THE MONTH
OCTOBER 2011**

**MULTICLIMA GmbH
Yoakim Gruev str. 13
BG - 1505 Sofia**

**Heliotherm Water/Water Heat Pump - Cascade
2 x HP28S45W-WEB, R version
COP 8,4 at 14,5 °C Ground water temperature**

Langkampfen, October, 25th 2011

A handwritten signature in black ink, appearing to read "A. Bangheri".

Andreas Bangheri
CEO

Heliotherm Wärmepumpentechnik Ges.m.b.H.

Certificate



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Company **Multiclima Ltd., Bulgaria** | 2 x HP28S40W-WEB, R-VERSION

ABOUT MULTICLIMA

Mr. Mihail Ivanov owner and manager of the company „MULTICLIMA LTD“ returned end of 1991 from the U.S.A. During his stay in the U.S. he took a two year course specializing in pump systems for residential homes. In 1991 Mr. Ivanov opened a private company in Bulgaria under the name „Michael 91“ LTD, which mainly dealt with heating and air conditioning systems. Consequently, the company expanded in 2006 and registered under the name „MULTICLIMA LTD“.

Multiclima is focused on renewable energy such as heat pumps and solar systems. Early 2009 Multiclima became a Heliotherm Competence Partner with an exclusive partnership in Bulgaria.

Automatically, this made Multiclima a leading installing company in the field of heat pump heating systems of the largest Austrian manufacturer. Multiclima offers the highest level of Heliotherm heating installation products in Bulgaria.

The heat pump market first opened its doors in Bulgaria until the end of 2006. Unfortunately, the global financial crisis had extremely negative impact on the Bulgarian market in 2008. Most requests are focused on the Chinese manufacturers due to the extremely low prices; however fail to produce long term quality and performance.

Nevertheless, Multiclima sets the „HELIOTHERM“ brand forth in Bulgaria and obtains more and more the confidence of customers that seek high quality and new technologies in heat pump systems.

PROPERTY HISTORY - THE VALERII S&M GROUP

2010: The customer was informed about Heliotherm products > Start of negotiations for a highly efficient heat pump system in an administrative building with a total area of **2.500 m²**

The previously existing cooling and heating system, consisted of an electric boiler with 80 kW heating capacity and a chiller and storage tank of 80 kW cooling capacity, amounted to the annual heating and cooling cost of € 25,000.

Multiclima's offer: 2 ground water heat pumps in cascade with passive cooling (2 x HP28S40W-WEB, R version), thus reducing costs for heating and cooling by 70 %.

Early 2011: Ground water wells > Debit 5 L/s, ground water temperature of 14,8 °C.

February 2011: The old system was dismantled and the Heliotherm systems was installed.

March 2011: A COP of 8.4 was reached > therefore, the annual heating and cooling costs (80% passive cooling) do not exceed € 5000.

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MULTICLIMA INTERVIEW

Mr. Ivanov, how did you come about to this project?

We responded to the customer's request with a specific proposal, with the fact of the outdated and inefficient heating system. (80 kW electric boiler and an 80 kW water cooler, chiller)

What was so extraordinary about this project?

The complete new processing of the entire system without interrupting the heating in the building and creating no loss of employee productivity in the building.

How did you solve these challenges?

We invested much work and professionalism and thanks to our experienced team we successfully managed this task on time.

How satisfied is your customer?

The customer is very satisfied and is convinced of the highly efficient Heliotherm heating and cooling system. According to our calculations, the system has achieved a COP of 8,4 at 14,5 °C ground water temperatures within the drilling and 40 °C temperature in the storage buffer.



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MULTICLIMA PROJECT PHOTOS



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MULTICLIMA PROJECT PHOTOS > AFTER HELIO THERM INSTALLATION

