



CHP UNIT INSTALLATION at Mauro Benedetti, Italy

Mauro Benedetti S.P.A is a major company in the paper industry in Italy. It is significant for its originality and the creation of corrugated cardboard products, and also for its approach to the environment and strict compliance with energy directives. In cooperation with Gesco S.p.a Unipersonale, Mauro Benedetti S.P.A chose the Quanto CHP unit from TEDOM as its source of energy.

The installation was challenging from the engineering point of view because four different types of energy (electricity, diathermic oil, cooling, and hot water) had to be effectively combined. Although the CHP doesn't contain a flue gas exchanger, all the flue gases are well used in the steam generator which was installed instead of the flue gas exchanger. In the case of this combination, the CHP unit allows to cover 78 % of thermal energy at high temperature, 66 % of thermal energy at low temperature, 81 % of cooling energy, and 77 % of electricity absorption.

CHP unit type	TEDOM Quanto 1200
Fuel	Natural Gas
Electrical Output	1200 kW
Heat Output	637 kW
Commissioning Date	2019
Place of installation	Florence, Italy



Combined heat and power production, also known as cogeneration, is an electricity production method that utilizes the heat released by the electricity production process in a useful manner. In doing so, a high utilisation efficiency of the energy from fuel is attained when the fuel is mostly a natural gas, LPG or biogas. Cogeneration pays off where demands for higher supplies of heat or cold exist. The power generated in the CHP unit can be utilised for the plant's own consumption or it can be distributed to the power grid.