

# Broiler houses face hot summers in Greece

With its ancient monuments surrounded by turquoise blue waters, Greece has always been a mythological majesty. Over ten-million citizens enjoy its temperate climate with mild, wet winters but hot, dry summers lending good growing conditions for its agriculture industry. Agriculture is of major socio-economic importance to Greece (8% of GDP), with approximately 11 percent of the population employed in the sector. The main agricultural products are sugar, wheat, cotton, tobacco, olives and olive oil.

Dairy products have relatively small percentage of the total agricultural output. Greece exported 3.4 million live chickens in 2003, accounting for 0.5% of world live chicken exports. Over 90% of the live chickens went to Bulgaria, Macedonia, Belgium, and the Netherlands. Europe's poultry sector has a turnover of around 20 billion euros a year. (The 25 member states of the European Union produce 11 million tons of poultry meat a year.)

Greece slaughters 130 million chickens annually. This keeps around 50 large and mid-sized firms, as well as countless small producers, in business. "Production is a cycle that takes 45 days to produce", says Spyros Nonikas, general director of the association of Greek poultry companies. "So far, in the first half of 2006, we have been producing around 300,000 units a day."

At least one broiler farm located in Katerini, Greece, close to Thessalonki, is producing quite a bit of chicken. The company AMVROSIADIS S.A. was founded in 1964 and today it is the biggest poultry integrator in central and northern Greece. They work mainly with contract farmers but they also have their own broiler farms where they grow approximately two-million birds per year. They have their own feed mill plant and broiler slaughtering and processing plant.

## Why Munters?

Greece is a sub-tropical country and temperatures in the summertime can exceed 42 °C. Under these conditions, the only way to maintain a constant and profitable production is to have an efficient ventilation and cooling system. And Munters provide just this. With their Climate Control System es-



## FACTS

With Climate Control System, AMVROSIADIS broiler farm achieved:

- Improved farm productivity
- Lower mortality
- Full capacity production all year round (no summer gaps)



*Euroemme® EM50 exhaust fans with shutters closed at AMVROSIADIS farm.*



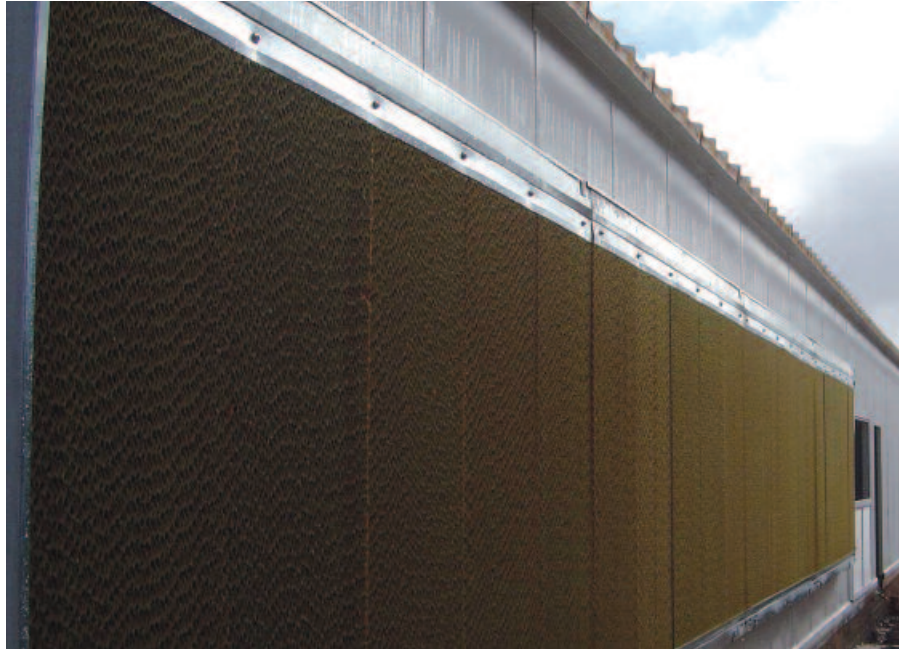
pecially suited for live stock buildings, chickens stay cool under pressure.

## Results

“Apart from the obvious lower mortality rates, most of the production figures were improved as a result of Munters’ Climate Control System installed in the houses”, says Yannis Amvrosiadis, vice president. “And we are not considering the payback time at all. Because if we weren’t using a decent cooling system, we wouldn’t be able to grow the number of birds we need at all during the summer. And as an integrator, this would cause major problems.”

## Munters’ equipment installed:

Euroemme® fans EM30, 0.5 hp; EM36, 0.75 hp and EM50, 1 hp and 1.5 hp and CELdek® 7090 evaporative cooling pads.



CELdek® evaporative cooling pads with WDP water distribution system.

## Climate Control System from Munters

At the heart of Munters’ Climate Control System are two of the most trusted brands in the industry, CELdek® evaporative cooling pads and Euroemme® fans.

The CELdek® evaporative cooling pads are used in systems where high efficiency cooling is required. It can be used for many different cooling purposes but is particularly suitable for cooling of live stock buildings and greenhouses.

The green stripe pad consists of specially impregnated and corrugated cel-

lulose paper sheets with different flute angles. This unique design yields a cooling pad with high evaporation efficiency while still operating with a very low pressure drop. In addition, scaling is kept to a minimum and no water carryover occurs since the water is directed to the air inlet side of the pad.

Euroemme® extraction fans are special because they need to close very tightly when they are not in operation. To meet this special requirement, the extraction fans are equipped with specially designed shutters which close tightly when the fan is not in operation. When the fan is operating, a unique

centrifugal mechanism opens the shutters and keeps them fully opened, even in dusty agricultural environments. This ensures efficient ventilation. It also helps to retain heat and eliminate drafts when no ventilation is required.

Euroemme fans are products of choice when it comes to supplying ventilation to agricultural structures. Whether the required ventilation need is air extraction, air circulation, distribution of heated air, or breaking up of stratified air, there is a suitable fan in the Euroemme range.



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