



Oil Mist Eliminators for Silkeborg Combined Heat and Power Plant

The Silkeborg CHP Plant is a Combined Heat and Power (CHP) plant supplying district heating and electricity to the Silkeborg region of Jutland, Denmark. It uses 2 GE LM6000DLE gas turbines to convert natural gas to power.

The lube oil system of these turbines previously vented to atmosphere on the roof of the building. The existing filtration system was inefficient and as a result large quantities of oil began to settle on the roof and guttering and ultimately distributing with rain water to the local lake.

The problem is that these fugitive oil emissions are difficult to eliminate because the majority of oil droplets fall in the range of less than 1 micron in diameter. The traditional control technologies while satisfactory for removing large oil droplets, are inadequate for removing sub-micronic emissions and therefore a visible oil plume remains. These oil emissions are subject to increasingly stringent environmental laws.

The high-efficiency, reliability and economy of the Dollinger Oil Mist Eliminator make it the ideal choice for removing virtually 100% of oil mist emissions. In addition the recovered oil may be returned to the lube oil reservoir and reused, which results in substantial savings.



Photo: Dollinger Oil Mist Eliminators
Model No. OE-298-GTS-060

Dollinger Oil Mist Eliminators (OMEs) have been fitted on the turbine vents at Silkeborg's CHP plant.

In the first five months after the OMEs were commissioned 400 litres of lube oil has been recovered per turbine. In this case the recovered oil is used in the incineration of hazardous wastes. However in many other applications around the world the lube oil is reused by the turbine in a continuous loop.

These high efficiency OMEs guarantee no visible plume and limit oil carryover to less than 5ppm.

The performance of Dollinger OMEs is unmatched and provides an economical and environmental solution to a problem faced by numerous Turbine and Compressor installations around the world.