

## **EXTRACTION AND AIR REPLACEMENT SYSTEM FOR NEW MEZZANINE FLOOR AND PRODUCTION AREA**

First Light Lamps are a major manufacture of specialist industrial lamps and produce over 1000 different lamp types and are able to offer lamps for most industrial and medical laser and IPL systems.



Their continued success has meant that they have had to expand their manufacturing facility in Ely Cambridgeshire to cater for demand.

When they were installing a new mezzanine floor they contacted Celsius to design and install a suitable extraction system to exhaust hot gasses from the 14 no. manufacturing points under the new mezzanine floor, where they use an Oxygen and hydrogen gas mixture to manufacture their specialist product.

This extracted air had to be replaced with filtered conditioned air to maintain comfortable conditions for the staff in the area, this was achieved by installing 2 no. above floor mounted filtered Celsius Inflow units to drawn pre-cooled or heated air from above the new mezzanine floor into the false ceiling void.

Two EcoCooling units keep the area above the new floor cool and this air is also filtered using the EcoCooling units. The area under the mezzanine floor is further cooled and heated using 2 no. Air conditioning units also installed by Celsius during the major refurbishment.



Celsius are now installing a third phase of the installation with a further EcoCooling unit on the mezzanine floor and a further Celsius extraction unit to cope with the increase in heatload from the expanded production area.



All works were undertaken during the factory's Christmas shutdown, within time and within budget with no problems.

Paul Walker, First Lights Managing Director said of the Celsius installation  
**“Celsius Design completed everything to a very high standard in the ten days over the Christmas period. They met the extremely tight deadlines and we were back making lamps on 2nd January - an incredible achievement. I would not hesitate in recommending them”**