Project profile

Project Description:	**New Low Humidity ISO Class 7 Cleanroom Production Area**
Location:	Stirling University Innovation Park
Client:	Stirling Medical Innovations Limited
Project Value:	£670K
Project Duration:	January 2009 – August 2009

Callidus Design Limited were appointed by Stirling Medical Innovations (now known as Alere Technologies Ltd) as lead designer to design a new Low Humidity, ISO Class 7 Cleanroom (Class 10K) facility within their existing building. The facility allowed SMI to commence prototype production of a new medical device which they had recently developed. The works involved the design of a new HVAC system which was capable of operating over a wide range of temperature and humidity setpoints. This flexibility essentially provided SMI with an environmental chamber, the conditions of which could be varied over a wide range in order to test the stability of their product in varying environmental conditions. Callidus Design Limited were responsible for the design and specification of the following services:

Supply and recirculation ventilation installation;
Fresh air ventilation installation;
Dedicated chilled water installation;
Dedicated LTHW heating installation;
RO Water installation;
Clean dry air installation;
Fume exhaust installation;
Domestic water installations;
Drainage installations;
Lighting installation;
Small power installation;
Fire alarm installation;
PA installation;
Security installation;
Controls installation.

Cleanroom Area:	205m^2
Cleanroom Classification:	ISO Class 7 (Class 10k)
Temperature Range:	17 to 23 DegC
Humidity Range:	10 to 70 %RH
Ancillary and Support Areas:	220m^2
Main Contractor:	ROK Group
Architect:	G1 Architects
Quantity Surveyor:	Turner Townsend
M&E Building Services Engineer:	Callidus Design Limited

In order to accommodate the plant associated with the new cleanroom, a new dedicated plantroom had to be carefully configured within the confines of a small site.