Reliable® controls

HEPTAGON ADVANCED MICRO OPTICS (LEVEL 5)

WOODLAND LOOP, SINGAPORE   **MANUFACTURING**

EFFICIENT CLEAN ROOM PRODUCTION

Heptagon Advanced Micro Optics (Level 5) houses a Class 10K and Class 100K clean room production area in which micro optics systems for smart devices are developed and manufactured (e.g.: the camera lens for iPhones).

PROJECT DETAILS

Reliable Controls Authorized Dealer, Vace Pte Ltd. completed this retrofit and new construction project for Heptagon Advanced Micro Optics (Level 5).

The mechanical equipment in this project includes a closed loop chilled water system to ensure availability of chilled water at the required temperature. Make-up air handling units serve tempered outside air to clean room air handling units, which in turn ensure the availability of sufficient tempered supply air to the clean room areas. Fan coil units and a general exhaust fan system for clean room production exhaust comprise the remainder of the mechanical systems.

The networked hardware includes a Reliable Controls MACH-ProSys™ coupled with a MACH-ProPoint™ I/O device to take care of failure alarm monitoring, header pressure, flow-rate and energy consumption monitoring for the chiller plant, as well as duct static control for the general exhaust system. MACH-ProCom™ controllers with MACH-ProPoint™ I/O expansion modules are used to control the make-up air handling units, fan coil units, dehumidifiers, and dionized water plant. Temperature, flow rate, pressure, conductivity, and resistivity of the DI water are monitored. The system also monitors pH levels of the wastewater and differential pressures in production areas, as well as electrical switch boards for power status. This sophisticated project was a complete success.

To learn more about projects using Reliable Controls® visit
www.reliablecontrols.com/projects/overview

PROJECT TYPE:
Retrofit & New Construction

INSTALLATION TYPE:
Chiller, Fan Coil Unit, Power Monitoring, DI Plant and Process Cooling

EQUIPMENT INSTALLED:
4 MACH-ProCom™
1 MACH-ProSys™
23 MACH-ProPoint I/O™

NETWORK:
Ethernet

INTEGRATION:
Modbus

TOTAL SYSTEM POINTS:
283 points

RELIABLE CONTROLS® DEALER:
Vace Pte Ltd.

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