



Integrated Cleanroom Technologies Pvt Ltd (ICLEAN) a group Company of Takasago Thermal Engineering (TTE), Japan is a leading Dryroom contracting company from India, providing total Dryroom solution in a reliable & energy saving manner on a turnkey basis. ICLEAN products include but not limited to Modular Cleanroom Partitions, AHUs, Ducting etc. **ICLEAN provides complete solution on the design to handover of dryroom** along with the responsibility of HVAC and the control system towards the operation of the same as per the design criteria. **We have successfully completed more than 150 Battery manufacturing facilities globally** and in India we have successfully completed three Dryroom facilities and few more are in progress



DRY ROOM TECHNOLOGY

Achieving low-cost and energy-efficient DRY ROOM facilities with appropriate equipment configuration & optimal operational control

Moisture in the air is an impediment to yield improvements in the manufacturing processes for the increasing production of rechargeable lithium-ion batteries and next-gen secondary batteries, which are expected to be widely used in the future. This manufacturing is therefore performed in a DRY ROOM®, which has the moisture in the air removed in a controlled low dew point environment.

The manufacturing cost for the dehumidified air used in the DRY ROOM® is higher than that for the conditioned air used in ordinary air conditioning. There are therefore increased demands for energy conservation in large-scale mass production factories.

In order to respond to these demands, we optimized the configuration of the dehumidification equipment to achieve reduced energy consumption and lower cost. In addition, we achieve further reductions in energy consumption by implementing optimal operation controls to deal with the periods when the dehumidification load is low, for example, during the winter months.

