Case Study
Larsen & Toubro (L&T)

L&T installs DuCool unit for fresh air treatment of its riverside facilities.

L&T's MFF & HED division needed a simple and cost-effective solution to manage huge amount of fresh air in paint booth, blast booth, welding booth and assembly booth areas.Ducool Systems provided that solution with its liquid desiccant dehumidification systems. As a result, the company has been able to control humidity, reduce energy consumption, and save money on operating expenses.

Background

Larsen & Toubro (L&T) is a technology-driven USD 13.5 billion company that infuses engineering with imagination. They provide state-of-the-art products & solutions to a large and diverse customer base. Since they are 4th in globalgreen rankings they needed dehumidification solutions with minimum energy consumptions for multiple facilities like Assembly shop, Paint booth, Blast booth and Welding booth in their Hazira plant.

MFF is one of the largest of its kind in South Asia and is capable of manufacturing several large modules simultaneously with an annual fabrication capacity of 50,000 Mega tonnes. It is part of L&T's Hazira works complex spread over 300 hectares incorporating several state-of-the-art units for manufacture of latest generation refinery, petrochemical, power, nuclear, aerospace and defence equipment and specialized vessels.Fabricated modules are tested and pre-commissioned on shore to ensure rapid and trouble-free hook-up at site

Challenge

L & T Hazira is located at Hazira in Gujarat, on the banks of river Tapi faces hot and humid conditions during summer and monsoon. L&T has many divisions in their Hazira plant two of them being Heavy Engineering Division (HED) and Modular Fabrication Facility (MFF). HED consists of an Assembly Shop where tasks such as assembly of LP Turbine, Generators, Super critical boilers, Shipbuilding equipment and assembly and integration of defence equipment are carried out. They needed to treat 6800 CFM of fresh air in order to maintain constant conditions of 23 -26 ºC and RH of 55-60% in the Assembly Shop to maintain corrosion free assembly operation as well as comfortable working conditions for its employees.

For more information
Email: sales@ducoolindia.com
Phone: +91 22 61-41-09-00
Website: www.ducool.in

DuCool an Advantix company systems

Case Study
L&T

MFF faced major quality issues in areas like the Paint booth, Blast booth, Welding booth etc.
L & T first incorporated a DuCool DT small unit to treat 800 CFM of fresh air in the Welding area to test the performance of our unit. After assessing the performance and being completely satisfied with it, L & T asked us to provide solutions for their Paint both and Blast booth areas.In the Paint booth due to high volatility, the concentraion of paint in air was high thus requiring huge amount of fresh air. The Paint booth required treating of 4400 CFM of fresh air to maintain 30 °C and 60% RH throughout the year.

DuCool Advantage

System Advantages

- Around 50% Energy cost savings
- Precise Humidity Control
- Minimal Maintenance
- Reduced drying time
- Optimised productivity

DuCool India Pvt. Ltd. provided highly efficient solutions for both HED and MFF areas. In the HED area, 2 DT Large units treated 6800 CFM of air more efficiently with precision, saving 50% of energy required for the same by existing AHU with DX coil. Furthemore, as the latent load was handled completely by our system, the efficiency of existing system also improved.
In the MFF, 1 DT small treated 800 CFM of Fresh Air in the Welding booth area after being completely satisfied, 2 DT large units one each were used to treat the high Fresh air requirement in the Paint booth and Blast Booth area respectively. Due to precise and highly efficient control of humidity all the quality issues were resolved setting up benchmarks synonymous with L & T's reputation as a true global leader, enabling them to provide high quality products to their customers as they always do.

For more information
Email: sales@ducoolindia.com
Phone: +91 22 61-41-09-00
Website: www.ducool.in