

Daxing International Airport, Beijing, China Innovation and Efficiency in the World's Largest Aircraft Hangar

Daxing International Airport, Beijing, China



MRO Aircraft Hangar - Daxing International Airport, Beijing, China

CLIENT: China Southern Airlines

SECTOR: Maintenance, Repair, and Overhaul (MRO)

LOCATION: Daxing International Airport, Beijing, China

Impresind: Climate Comfort Solutions
Tailored for Aerospace Hangars



Daxing International Airport, Beijing, China



- 390,000 m² surface area;
- 40 meters height.

The **Beijing-Daxing International Airport** is one of the most impressive airport infrastructures in the world, designed to alleviate air traffic congestion in the Chinese capital. China Southern Airlines and GAMECO also inaugurated an **aircraft** maintenance hangar at Daxing Airport.

With a surface area of nearly 40,000 m²- equivalent to about 5 football fieldsit is the largest hangar in Asia and it can simultaneously accommodate up to 12 aircraft (2 Airbus A380s, 3 Boeing 777s, 7 narrow-body aircraft like Airbus A320 or Boeing 737)



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THE CHALLENGE

The construction of this impressive hangar posed numerous technical and operational challenges. The extraordinary dimensions of the structure -covering 390,000 m², with a span of 405 meters and a height of 40 meters- presented significant difficulties in achieving:

- **Energy Efficiency:** Ensuring a heating system capable of maintaining comfortable working conditions in such a vast space without excessive energy consumption.
- Uniform Temperature Distribution: Reducing thermal stratification to ensure consistent heating where maintenance operations are performed.
- Operational Flexibility: Installing a solution that seamlessly integrates with hangar operations without interfering with daily maintenance activities

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THE SOLUTION

To address these challenges, **Impresind** supplied its modular gas-fired radiant strip heaters, TUB-ONE, tailored to meet the specific needs of the Daxing hangar. The system was designed to provide an efficient solution to the critical challenges of this massive structure:

ELIMINATING THERMAL STRATIFICATION

With TUB-ONE ensures
heat effectively reaches groundlevel work areas, reducing energy
waste caused by heat accumulating
in the upper sections of the hangar

ENHANCING ENERGY EFFICIENCY

Radiant heat targets specific areas, minimizing energy consumption and reducing heating costs compared to conventional systems

PROVIDING SCALABLE AND FLEXIBLE INSTALLATIONS

The modular design of TUB-ONE allowed for strategic and customized placement throughout the hangar, ensuring optimal coverage without interfering with aircraft maintenance operations



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The installation of TUB-ONE at Daxing International Airport led to:

- Improved Operational Comfort: Uniform temperatures throughout the hangar created a safer and more productive environment for maintenance personnel.
- **Significant Energy Savings**: By eliminating thermal stratification and focusing heat where it's needed, the system reduced energy costs by up to 30%.
- Enhanced Sustainability: Efficient energy usage aligns with China Southern Airlines' commitment to environmentally responsible operations, setting a benchmark for sustainable practices in aviation MRO facilities.

WATCH THE VIDEOS
HERE



Daxing International Airport, Beijing, China



The Daxing maintenance hangar is more than just a structure—it is a symbol of engineering innovation and sustainable design.

With the installation of **TUB-ONE**, Impresind demonstrated its ability to deliver cutting-edge climate solutions for the most demanding environments.

Discover how Impresind can transform your industrial climate control needs with innovative, efficient, and sustainable solutions.

www.impresind.com



Daxing International Airport, Beijing, China



Impresind - Italy

Sector: Sustainable heating, cooling and ventilation systems

www.impresind.com

IMPRESIND is a point of reference in sustainable industrial climate control, with exclusive solutions and patents for cooling, heating and advanced ventilation systems.

A long experience that makes the company a reliable partner with proven quality for the energy efficiency and climate comfort management needs of the industrial sector.

Efficient and sustainable technology, aimed at reducing energy consumption and improving operational comfort.





Looking to optimize energy costs and enjoy the perfect temperature?

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