

# IRT CURING, RAIL SYSTEM FOR AEROSPACE INDUSTRY



# IRT HEDSON INDUSTRIAL SOLUTIONS

We develop, manufacture and supply custombuilt IRT drying and curing solutions to all industrial sectors.

IRT is a trademark belonging to Hedson Technologies, an environmental engineering corporation and world leading supplier of cleaning, curing and lifting equipment.





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**Germany** Phone +49 561-589070 North America Phone +1 905-339 28 00 France Phone +33 3-44 26 87 76

### **PROJECT DESCRIPTION**

Type of industry: Adhesive/sealant curing application
Project number: 302020

#### **OBJECTIVE**

To cure sealants used in the construction of jet engines.

#### PROCESS

Parts, material and dimensions:

- Carbon fibre commercial jet engines
- Type of transport, static/dynamic, speed etc: Static assembly line stations

Material (wet-dry paint/other), max temp allowed etc: Adhesive/sealant material

### **IRT HEDSON SOLUTION**

Chosen heating method, cassette dimensions, time, temperature increase/min, effect etc:

A rail system with 3 different types of IR short-wave curing units installed in five crossrails. The rail system gives full accessibility to the assembly cells in the assembly line.

Thermal sensors monitor, alert and react to overheating and other deviations from the set process. Curing analyzers register the process, second by second and report in easy-to-use graphs. This helps to quickly isolate situations alerted by the thermal sensors and forms a great tool to track and prove energy consumption.

All info is logged and exported via bluetooth to a post data analyzing tool for report purposes.







# **CASE: ASSEMBLY LINE SEALANT CURING** 22 X 7 METER RAIL SYSTEM

This 22 x 7 m rail system is equipped with 3 different models of curing units for sealant curing. All heaters are equipped with a pyrometer which carefully controls temperature of the sealant. The computer does not only measure the maximum allowed temperature but also the temperature raise. It ensures that the programmed curing temperature is maintained, thereby achieving optimum curing, without risk for "over burning".

## **PROJECT GROUP FEEDBACK** "I would like to communicate my positive feedback concerning proposal, design and implementation, all fully in line with our needs. The installation, training & starting up was greatly appreciated in term of professionalism and deadline target. The workmanship of your delivered products is remarkable." Manager, Manufacturing Engineering & Innovations, Aerostructures Half circle heater, 15 kW, motorized vertical motion, used to cure sealants on the inside of engine to secure bolt joints. Vertical heater, 18 kW, motorized vertical motion, used to cure sealant on engine half joints. 424 DTP cassette heater, on balanced arm, 6 kW, for bracket joints.





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**Sweden G** Phone + 46 521 28 12 30 Pl

**Germany** Phone +49 561-589070 North America Phone +1 905-339 28 00 France Phone +33 3-44 26 87 76 industrialcuring@hedson.com www.hedson.com