



EMH Crane Custom Engineers --40°C GE Twin Jet Engine Test Site Hoists

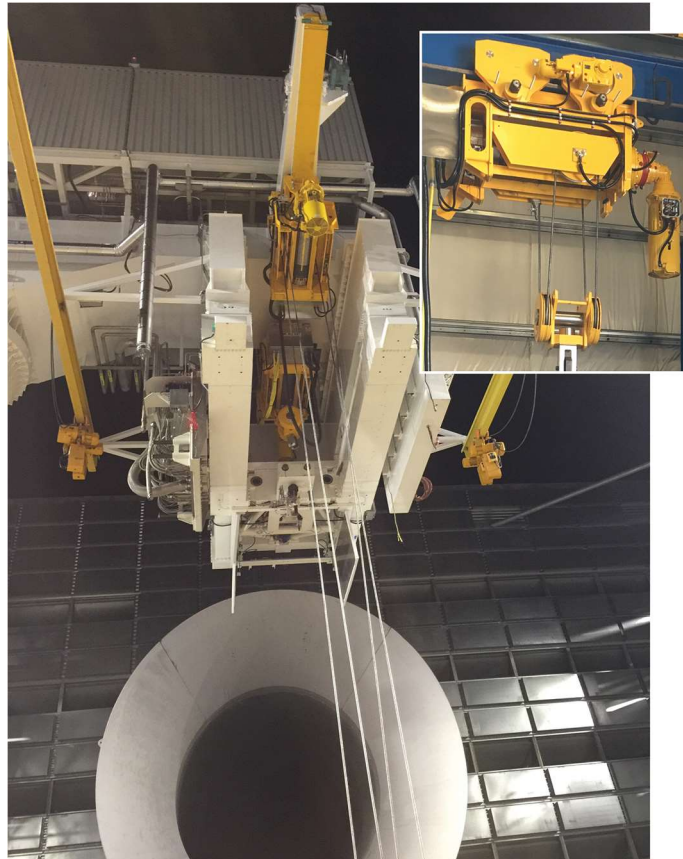
Features and Benefits:

- The hoist application had to be capable of precision operation in minus 40° centigrade temperatures.
- Special application engineering required special materials, specially designed heating for the motors and controls, special brakes, special fittings, special coatings, special seals and epoxy paint to protect it from intense cold and ice and snow build-up.
- All metals required Charpy testing to make sure the metals would not fracture in bitter cold temperatures.
- Two EMH Hoists were run in tandem and tested to 125% of their 50-ton capacity, 25-ton duty on each hoist.
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Industry Group:

MHI Member Company
Crane Manufacturers Association of
America (CMAA)
Material Handling Equipment Distributors
Association (MHEDA)

According to Standard Aero's Project Engineer, "We were extremely pleased how well EMH engineers collaborated with us on this very difficult one-of-a-kind custom installation."



Twin EMH Hoist application holding GE jet engines in place at its cold weather test facility in Winnipeg, Canada, in support of GE jet engine manufacturing.

When EMH was contacted by Standard Aero, an international aircraft-engineering firm to help develop a unique Jet Engine Test Stand for a GE cold weather test facility; it was just another day at the office for Engineered Material Handling and its custom engineering hoist specialists.

More specifically, EMH was asked to help custom design and engineer a twin EMH Hoist application to hold GE jet engines in place at its cold weather test facility in Winnipeg, Canada, in support of GE jet engine manufacturing. The hoist application had to be capable of precision operation in minus 40° centigrade temperatures. Special application engineering required special materials, specially designed heating for the motors and controls, special brakes, special fittings, special coatings, special seals and epoxy paint to protect it from

intense cold and ice and snow build-up. All metals required Charpy testing to make sure the metals would not fracture in bitter cold temperatures.

Two EMH Hoists were run in tandem and tested to 125% of their 50-ton capacity, 25-ton duty on each hoist. With intense cold, every facet of the hoist application had to be custom-engineered and required a factory 125% load test as well and witnessed by GE engineering. The motors were provided with VFD control and needed to operate at exceptionally slow speeds. The entire installation had to operate within very tight space constraints. According to Standard Aero's Project Engineer, "We were extremely pleased how well EMH engineers collaborated with us on this very difficult one-of-a-kind custom installation."



Engineered Material Handling (EMH)
550 Crane Drive, Valley City, OH 44280
1-330-220-8600
info@emhcranes.com
www.emhcranes.com

