

JET ENGINE DRESS BAY LIFTING SYSTEM FOR TEST FACILITY

SPECIALTY SOLUTION #210

AEROSPACE AND DEFENCE

Actuation:

- Bridge crane frame with east/west traverse movement - hydraulic
- Engine Carriage Frame with north/south traverse movement (+/- 4" of movement) - hydraulic
- Engine Hoist Frame with Bench Pin Assemblies and Vertical Compliance (36" travel)

Capacity:

- Dynamic 32,000 lbs (split 60/40 end to end)
- Static 42,000 lbs

Travel:

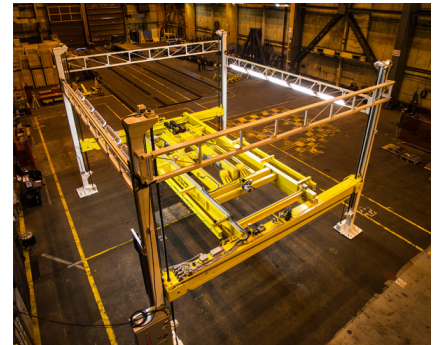
- Vertical 193"
- Side Shift +/- 4" (east/west and north/south)
- Engine hoist 36"

Travel Rate:

- Main Lift: Nominal speed: 16 in/min (fully loaded: 32,000 lbs)
- High Speed: 30 in/min (unloaded)
- Creep Speed: 3 in/min (fully loaded: 32,000 lbs)
- Engine Hoist: 36 in/min

Operator utilities (installed on lift):

- Two (2) personnel cooling fans
- Two (2) air hose reels
- Four (4) jet light reels
- Ten (10) duplex electrical outlets (120VAC, 20 amp)



Handling Specialty was approached by a returning aerospace client to custom engineer, manufacture and install a jet engine dress bay lifting system for their jet engine test facility.

The lift is used to lift and hold brand new 32,000 lb jet engines in preparation of being tested in a cold temperature facility.

The lifting system consists of the following components:

- Screw columns
- Column tie trusses
- Main lifting carriages
- Bridge crane frame with east/west traverse movement (+/- 4" of movement)
- Engine carriage frame with north/south traverse movement (+/- 4" of movement)
- Engine hoist frame with bench pin assemblies and vertical compliance (36" travel)
- Cable retention system



Handling Specialty's jet engine dress bay lifting system undergoing a weight test in our Plant 2 high bay facility.