



BRIDGE, WALL, GANTRY CRANE LOAD TEST REPORT

MANUFACTURE: _____ **SN.** _____

BLDG. # _____ **EQUIPMENT #** _____ **CAPACITY:** _____

LOAD TEST INSPECTION REPORT:

The following checklist identifies the items to be inspected before the load test. Any unusual conditions observed during the inspection should be noted in the Remarks section.

NOTE: 1. Qualified inspector must verify all steps before load test.

CRANE ITEM DEFECT, OK, SR, NA:

_____	1 Load Hook & Blocks	_____	18 Controllers
_____	2 Wire Rope and End Connections	_____	19 Relays and Coils
_____	3 Handrails, Walkways, and Ladders	_____	20 Conductors and Collectors
_____	4 Bridge and Trucks	_____	21 Panel Wiring
_____	5 Bridge Wheels and Bearings	_____	22 Resistors
_____	6 Trolley and Rails	_____	23 Bypass Switches
_____	7 Trolley Wheels and Bearings	_____	24 Limit Switches
_____	8 Crane Alignment	_____	25 Contactor (Electrical)
_____	9 Runway Rail & Clamps	_____	26 Motors
_____	10 Bumpers/End Stops	_____	27 Gauges
_____	11 Brake System	_____	28 Lighting System
_____	12 Drive Shafts, Gears, Couplings & Bearings	_____	29 Heater and Switches
_____	13 Pawls, Ratchets, Spuds, & Windlocks	_____	30 Operator's Cab
_____	14 Sheaves	_____	31 Safety
_____	15 Warning Devices	_____	32 Chain and Sprockets
_____	16 Capacity Signs	_____	33 Structural
_____	17 Main Disconnect	_____	34 Wire Rope Drum and Machinery Foundation

REMARKS (unusual conditions – noises, structural cracks, misalignment, etc).

BRIDGE CRANE AND FOLLOW-UP CHECKS

- NOTES:**
1. Qualified inspector must verify all steps below.
 2. Load test must be performed on all new, repaired, or modified cranes before initial use.
 3. Load test crane at 125% of rated capacity. In no case shall the load test exceed 125% of rated capacity. Test weights must be accurate to -5%, +0% of stipulated values.

INITIAL

- _____ 1. Set crane up for load test; qualified inspector verifies inspection is complete prior to load test.
- _____ 2. The trip setting of hoist-limit devices must be determined by tests, with an empty hook traveling at increasing speeds up to the maximum speed. The actuating mechanism of the limit device must be located so that it will trip the device under all conditions and in sufficient time to prevent contact of the hook or load block with any part of the trolley or crane.
- _____ 3. Rig test weight to hoist hook using appropriate slings.
- _____ 4. Hoist the test load a sufficient distance to ensure that the load is supported by the crane and held by the hoist brakes.
- _____ 5. Transport the test load by means of the trolley for the full length of the bridge. Ensure during operation that the trolley runs true on the bridge. Check trolley motor, brake, and gear case for overheating.
- _____ 6. Transport the test load by means of the bridge for the full length of the runway, first in one direction with the trolley as close to the extreme right-hand end of the crane as practical, and then in the other direction with the trolley as close to the extreme left-hand end of the crane as practical. Ensure that the bridge runs true on the runway rails and that no undue girder deflection occurs. Check for bridge motor, brake, and gear-case overheating.
- _____ 7. Move the test load back into the original position and lower the test load, stopping by the brakes. Hold the load for 10 minutes or the time required to check all primary load-bearing parts while under load for slippage, damage, or permanent deformation.
- _____ 8. Slowly lower the test load to the floor.
- _____ 9. At the completion of the load test, visually inspect the following load-bearing parts for signs of wear, deformation, and deterioration:

DEFECTIVE/OK/SRNA

- | | |
|-------------------------|--------------------------|
| _____ a. Bridge track | _____ e. Gears |
| _____ b. Bridge wheels | _____ f. Magnetic brakes |
| _____ c. Trolley track | _____ g. Blocks |
| _____ d. Trolley wheels | |

VISUALLY INSPECT ROPE

- _____ a. Rope diameter: (Previous) _____ (Present) _____
- _____ b. Wear
- _____ c. Kinks
- _____ d. Broken wires
- _____ e. Other signs of deterioration.

VISUALLY INSPECT ROPE DRUM

- _____ a. Wear
- _____ b. Deformation
- _____ c. Deterioration.

INITIAL

_____ 10. Qualified inspector must perform nondestructive tests on hook by visual examination, liquid penetrant examination or magnetic-particle examination. Acceptance: No cracks, linear indications, laps, or seams.

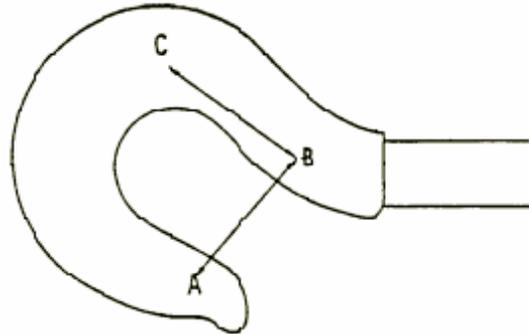
Hooks with any distortion causing an increase in the throat opening of 5% not to exceed 1/4" of original throat opening, hooks with any visible bend or twist from the original plane of the hook, and hooks having any wear exceeding 10% of original must be replaced. Lubricate hook bearing and latch pin, as applicable.

Establish three marks, A, B, and C, with center punch. For ease in measuring, set distances on an even number of inches.

BEFORE LOAD TEST
North #1

Length AB _____ in.

Length BC _____ in.



AFTER LOAD TEST

Length AB _____ in.

Length BC _____ in.

Check for:

- 1. Wear and deformation
- 2. Cracks and twisting
- 3. Signs of opening between Point A and Point B

Qualified Inspector: _____

Operated By: _____

Actual Load Test lbs. _____

Percent of Rated Capacity: _____

Load Test Insp. Date: _____

BNL Inspection Tag # _____

Remarks: