

ARA0208 HYDRAULIC CRANE FOR FLAT CAR



CRANE SHOWN IN REST/TRAVEL POSITION

SPECIFICATIONS

DESCRIPTION

The RT-20 electric powered rail car is for general purpose material handling applications. It has a cab at one end, and a model ARA0406 Arva Crane at the other end.

BOOM LIFT

The boom lift function is controlled by two (2) double acting cylinders, vertically positioned, to give maximum clearance when handling loads with fully retracted horizontal boom.

BOOM

The boom is 3 section telescopic full power hydraulic. The three (3) boom sections are fabricated utilizing a rectangular box section design. The steel used in fabrication is designed for operation in cold ambient temperature of -40°C. The boom extension cylinders are connected in a parallel circuit and are controlled by a single lever thereby eliminating the requirement for hose reels or feed festoons.

CONTROLS

The controls provide for either remote or manual operation. The weatherproof remote control console is carried by use of shoulder straps and is attached to a 25 ft lead. Console should be stored in work car operator's cab. Crane functions are controlled by joystick type controllers.



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SWING

The swing function utilizes a shear ball type swing bearing. A high torque motor driving through a self locking worm reduction provides smooth positive swing operation. The swing function is 360 degrees continuous.

POWER SOURCE

The power source required from the diesel drive pressure compensated pump is 17 gpm @ 2600 psi at crane functions. Due to the length of the hydraulic circuit, approximately 2600 psi will be required at the pump.

HOIST

The hoist is a Braden model BG-6 with planetary reductions and fail safe brake. The hoist has 6,000 lb single line pull @ 50 fpm line speed based on 17 gpm system flow. The crane will be reeved for 2 part reeving providing 12,000 lb hoisting capability from 0 to 25 fpm hook speed.

CAPACITY

This crane is able to telescope with a full load.

11,000 lbs to 18'-0" radius, longitudinally to front and rear with side and diagonal capacity limited due to wheel loading.

12,000 lbs to 16'-0" radius, longitudinally over car or to rear. Capacity is limited to 12,000 lbs based on hoist single line pull of 6,000 lbs and 2-part cable reeving.

A 360 degree capacity chart is supplied. Chart limits wheel pair loading to 65,000 lbs.

DIMENSIONAL/PERFORMANCE DATA

Boom horizontal;
Extended radius: 18' -0"
Retracted radius: 9'-6"
(from pivot to boom tip)

Height overall: 6' - 0"(Boom horizontal from car deck)

Length overall: 10'-4" (Boom retracted) permitting 180° swing within car width with load

Function speeds and times based on 17 GPM system flow :

Swing speed: 1 rpm
Boom luffing(-20° to +60°):20sec
Boom extension (min-max):45sec
Hook speed (2-part reeving): 25 fpm

Width 36"

Swing: 360 degrees continuous
Boom elevation: minus 20 to plus 60 degrees.
Boom tip height @ full extension:
Above car deck 20'-0"
Below base car deck 3'-0"

Weight (approx): 6,500 lbs