



Box "L" 624, Langhorne, PA 19047

High Capacity Flat Cars

History

In 1952 the Pennsylvania Railroad built a depressed center car with a capacity of 500,000 pounds. This car was based on four eight-wheel trucks from scrapped T-1 locomotive tenders. This car was classed FD-2, PRR 470245. A second body was built that used the same running gear, FW-1, PRR 470248. This car was successful but had an empty weight of 500,000 pounds.

In 1954 the PRR built three cars of the same capacity but much less empty weight. These were classed F-38 (two cars PRR 470246, 470247), and F-40 (PRR 470250). These cars used four six wheel trucks and cast steel bodies. This greatly reduced the empty weight to 165,000 pounds for the F-38, and 240,000 pounds for the F-40. Originally these cars were equipped with friction bearings, later when equipped with roller bearings (6 1/2 X 12) the F-38 capacity was increased to 580,000 pounds. These were the largest railroad owned cars until the Delaware and Hudson built a similar car in 1961. This car also used four six wheel trucks, but had 7 X 14 roller bearings and a capacity of 700,000 pounds. A number of railroads acquired cars of 500,000 to 600,000 pound capacity cars after this date. The F-38 had a 50 foot loading deck, the other cars had 36 foot loading decks.

PRR F-38



D&H



CONSTRUCTION

TRUCKS

For use on this model the ends of the side frame, with the brake shoe must be cut off at the inner side of the hole between the brake and the journal, and filed straight with a curve above the bearing. This is best done using a razor saw. The bolster is cut from the sprue and any flash removed. The bolster is glued to the side frame between the 'L' shaped marks. Make sure the it is tight against one side. When the glue is set, glue on the other side frame. Make sure the bolster is tight against the 'L' on the same end as the other side frame. This ensures that the axles will be square to the side frames. The end hole in the opposite end other bolster is enlarged to allow free movement of the truck on the bolster. The installation of the wheels completes the truck.

SPAN BOLSTER

The large deck is glued to the frame above the coupler pocket. The grab irons are glued to the studs molding on the end and side frames. This is easier if done before their removal from the sprue. The end frames are glued under the deck with the wide end against the coupler pocket. The side frames is glued to the side of the deck with the stirrup step at the end frame. The upper and lower air tanks and supports are glued together. The brake cylinder and triple valve are mounted on top of the air tank support on opposite sides of the bolster. The air tank assembly is glued to the center of the bolster the air tanks between the trucks. Make sure the assembly is perpendicular to the span bolster. Some filing of the brake cylinder may be needed to fit against the bolster. Test the truck clearance, the brake rod on the cylinder may interfere with the truck. The hand brake is glued to the left side of the deck, the wheel to the inside, toward the center of the car clear of the step.

If the 36 foot deck car is being modeled the small deck is cut to clear the deck and glued on top of the bolster. The 'U' shaped railings are glued to the inner end of the deck on either side of the bolster. The long railing is cut to length of the small deck and glued to the right side of the bolster. The trucks are mounted using the pins provided. They cut so as not to extend above the top of the span bolster. 2-56 screws may be used instead.

DECK

The deck for the F-38 needs only the top and bottom to be glued together, and the side frames added. Be sure the parts are centered before glue is applied. If any weight is desired it is fitted into the openings in the lower deck before the upper deck is glued on. The sides are glued against the lower deck to the bottom of the upper deck inside the edge tie down holes. The pins on the deck fit into the holes in the span bolster, there is no other attachment.

If the short deck is being modeled the upper deck is cut at the marks on its bottom to 36 feet. The lower deck is cut using the upper deck as a guide, it is cut shorter than the upper by the thickness of the two flat end plates are added and cut to the width of the lower deck. The side frames are added and cut to match the deck length.

CAR INFORMATION

Railroad	Car numbers	deck (feet)	Capacity (pounds)
P.R.R.	470246, 470247	50	580,000
PC	770114, 770115	50	580,000
Conrail	770114, 770115	50	580,000
D & H	16157	36	700,000
L & N	24955	36	600,000
MP	865000, 865001, 865002	36	600,000
SSW	80010, 11, 12, 13	36	600,000
Southern	50099	35	627,000
U.P.	50010, 50011	45	600,000
Babcock & Wilcox	100, 101, 102, 103	36	600,000

