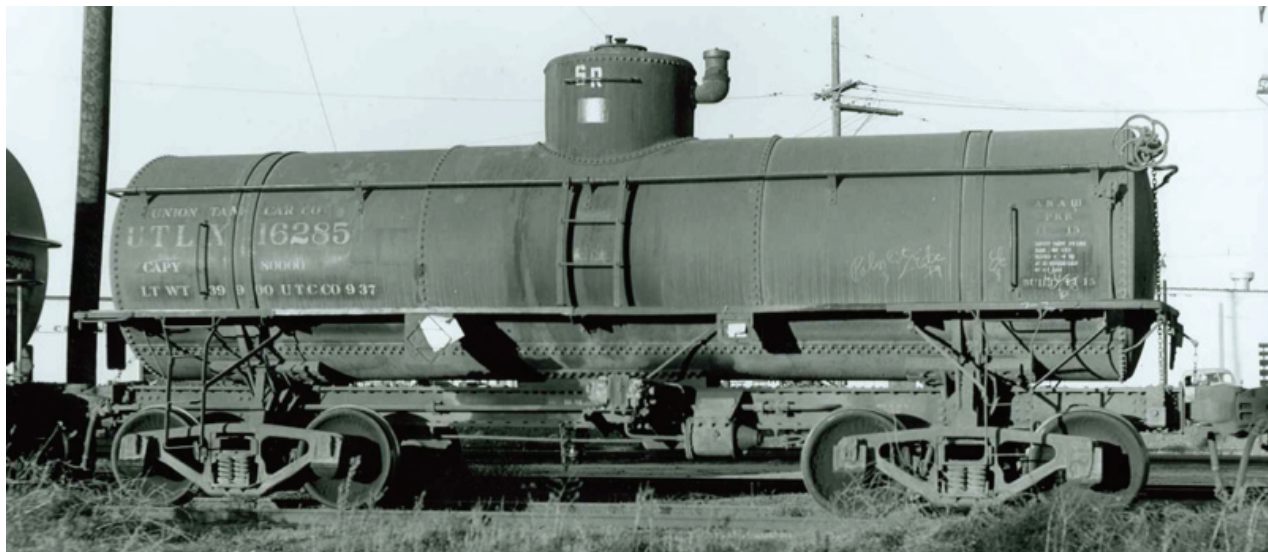


RESIN CAR WORKS
RCW

P.O. BOX 42
BYRON, IL 61010

Freight Cars of Every Description

UTLX Class X
6,500 Gallon
Tank Car



UTLX 16285 shows the appearance of one of these 6500 gallon Class X cars after the addition of AB brakes. It's original arch bar trucks have been replaced with cast steel side frame trucks. (Bob's Photo collection)

Introduction

Thank you for your interest in Resin Car Works and this kit. Resin Car Works is not a business in the traditional sense. Its purpose is to share in the fun of prototype railroad freight car modeling and their operations with others to provide unique and different equipment that isn't readily available. Several friends assist with various production phases so it's not quite a one-man operation. I thank these friends who helped produce this kit: Steve Hile for his research, data, plans, detail drawings and car history; Patrick Hodina for the 3D modeling of the underframe, bolsters and running board supports; Tom Madden for the gorgeous castings; Dave Campbell for the decal artwork; Ken Soroos for his help with formatting the instructions; and to Eric Hansmann the keeper of the website and blog.

This is a "CRAFTMANS" level resin kit and its construction should not be attempted by anyone who has not built similar types of models. The kit consists of a resin tank body, underframe and detail parts; Elgin Car Shops etched eye bolts and bar stock; Precision Scale Company brass stanchions, air hoses, plumping tee and corner ladders; Tichy KC brake set, grabs and wire; and decals. The modeler is to supply any small styrene and wire bits, trucks, couplers, weight small screws, and paint needed to complete the model.

Warranty

All sales are final. There will be no exchanges or returns. Resin Car Works will replace any part(s) found to be defective due to manufacturing or shipping to the original purchaser within the first 30 days after shipment. The damaged part(s) must be sent back with your request for replacement. As these are limited production kits don't ask for replacement of parts that you damage or lose after the 30-day period.

History

Despite the technical success of Van Dyke's 1903 patent frameless V car design tank cars, railroad men were reluctant to accept it. As a result, Van Dyke turned to a design with a more conventional center sill which was patented in 1904. This new design was dubbed the Class X and was extremely innovative. A center sill was created by two outwardly facing "C" Channels joined across their top and bottom by approximately 20 inch wide plates. The tank was mounted to the center sill with a riveted anchor in the center. This made it free to expand or contract along the axis of the car and eliminated the need for head blocks. The tank rested in cast saddles at the truck bolsters which had twin tank bands to hold the tank in place. The tank saddles were part of the bolster and, like the V cars, no side or end sills were provided. Coupler draft gear was mounted inside the center sill and the KC brake cylinder was cantilevered from the center sill. As on the V cars, the running boards and the hand brake were attached to the tank.

The innovative center anchor proved quite successful and became the industry standard throughout the steam era. The Class V cars continued to be built until 1912, but more Class X than Class V cars were built during the period through 1916. About half of the 7200 Class X cars were in the 6000 to 6500 gallon capacity range. Another 2100 had nominal capacities of 8000 gallons. 1500 cars with 10000 gallon capacity were built new and about 50 additional similar cars were created with new underframes for existing tanks.

6500 Gallon Cars

By far, the largest group of Class X cars was the nominal 6500 gallon capacity cars. After constructing a small number of Class X cars in 1904 and 06, larger orders were placed with three commercial builders, ACF, Pressed Steel Car, and Standard Steel Car Company in 1907 for 150 cars each. An additional 50 cars were built at the Standard Oil refinery, Atlas works, at Buffalo, NY. These cars used the early form where the truck bolster/tank casting was fitted to the shape of the tank and no wood blocks were used between the bolster and tank. Short wheel base (5'2") arch bar trucks with a 18'6" truck center supported the underframe. The tank had a 76" inside

diameter and was 28'1" over the tank heads. The dome was 42" in diameter and had a screw mounted hatch cover. A single safety valve was mounted on an elbow extending out from the dome.

As built, the cars were numbered:

12751 – 12800 Atlas (Buffalo)
12801 – 12950 Pressed Steel Car Company
12951 – 13100 Standard Steel Car Company
13101 – 13250 American Car and Foundry

At that time, UTL was part of the Standard Oil monopoly and the tanks were painted red, apparently, with black underframes, as is shown in the builder's photo of 13000 below.

Another 35 cars had been built by Atlas in 1912 with 6100 gallon capacity. 25 were general service cars numbered 13956-13972 and 13983-13990. Another 10 were equipped for acid service and numbered 17900-17909.

In 1915 and 16, nearly another 3000 6500 gallon Class X tank Cars were constructed by Standard Steel Car for the independent Union Tank Car Company. These cars were numbered and delivered as follows:

11750 – 12749	1915	1000 cars
11250 – 11749	1915	500 cars
16000 – 16487	1915	488 cars
16500 – 16999	1916	500 cars
18000 – 18491	1916	492 cars

As part of the same orders, 30 6400 gallon insulated tank cars for casing-head gasoline service were also purchased.

The 1915 cars are the ones represented by the latest Resin Car Work model kit. While the tank, itself, was the same length and diameter, the dome size was increased to 48". The use of standard truck axle spacing (5'6") caused the truck center spacing and overall frame length to increase by 7 inches to 19'1" and 29'4" respectively. The brake wheel now faces the side of the car, as is more typical for these cars. Probably the biggest change was made to the bolster/saddle combination casting which now has provision for wood blocks between the saddle and the tank, which probably made them more universal for use on various sized tanks.

Construction

It's recommended that before you start construction that you familiarize yourself with the additional information and photos on the Resin Car Works website www.resincarworks.com that pertain to this kit. Especially helpful are a series of prototype drawings that show the placement of the various car parts.

- First give the resin parts a good cleaning with Dawn and a toothbrush

to remove any mold releasing agents. A light sanding of joints also helps parts to bond.

- The cast parts are best attached with ACC. When the term “cement” is used in these instructions, it refers to ACC. ACC is a strong adhesive which dries quickly. It can easily attach a part where it is not supposed to be. It will glue skin. Be careful. Place a few drops on a plate of glass and use a wire or pin to transfer small amounts of ACC to the area to be joined. Always wear safety glasses. ACC debonder is a useful tool for removing smudges



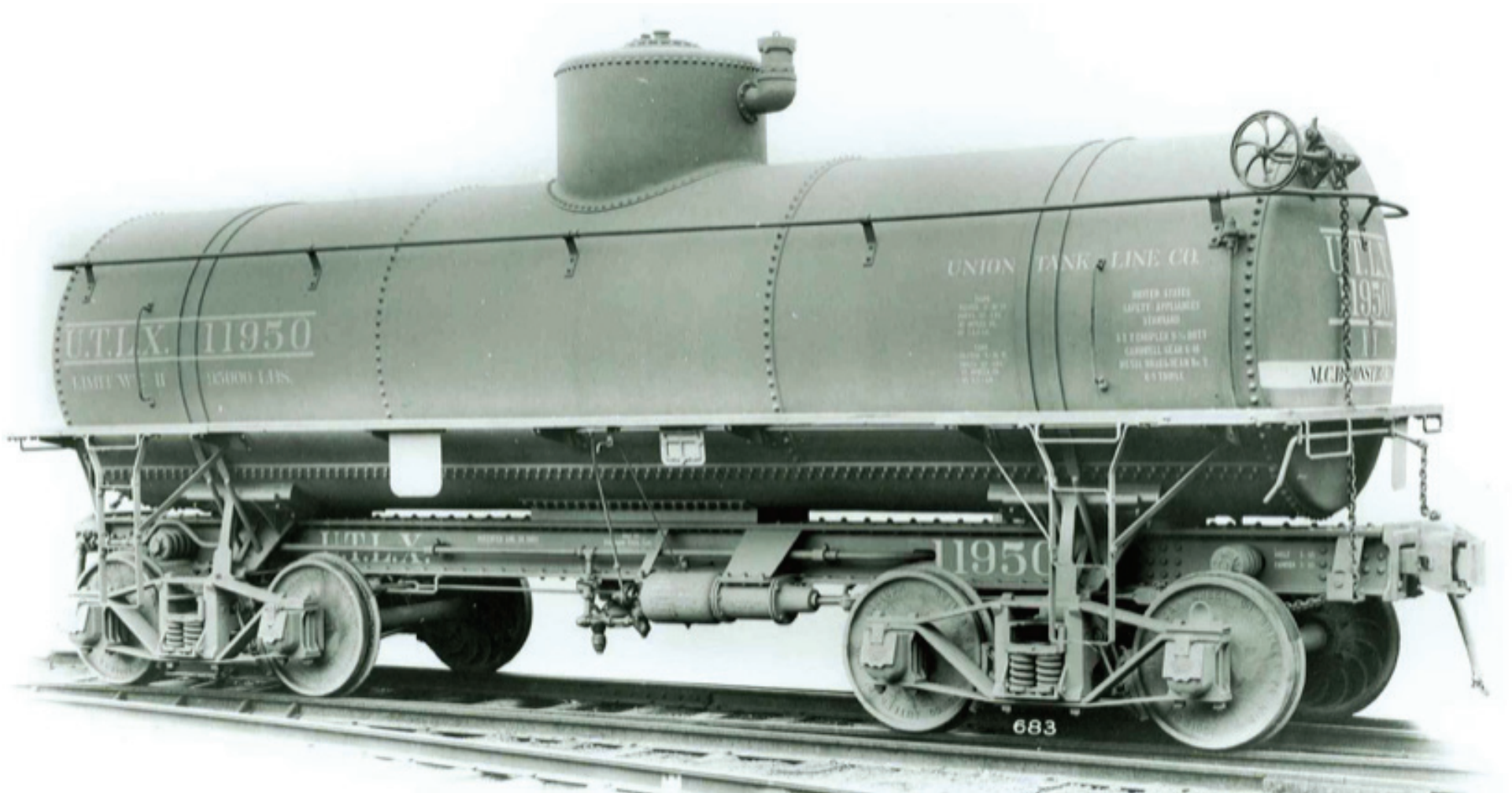
Builder's photo of UTL 13000 shows the typical 1907 vintage 6500 gallon car, with the tank mounted directly to the underframe at the bolster/saddle as well as the center anchor. The running board is riveted to the tank. Notice that the brake wheel is set to face the end of the car, rather than to the side. (Standard Steel Car Company photo from the Keith Retterer collection)

of ACC from surfaces where it shouldn't be. Place a drop on the offending spot and wipe up.

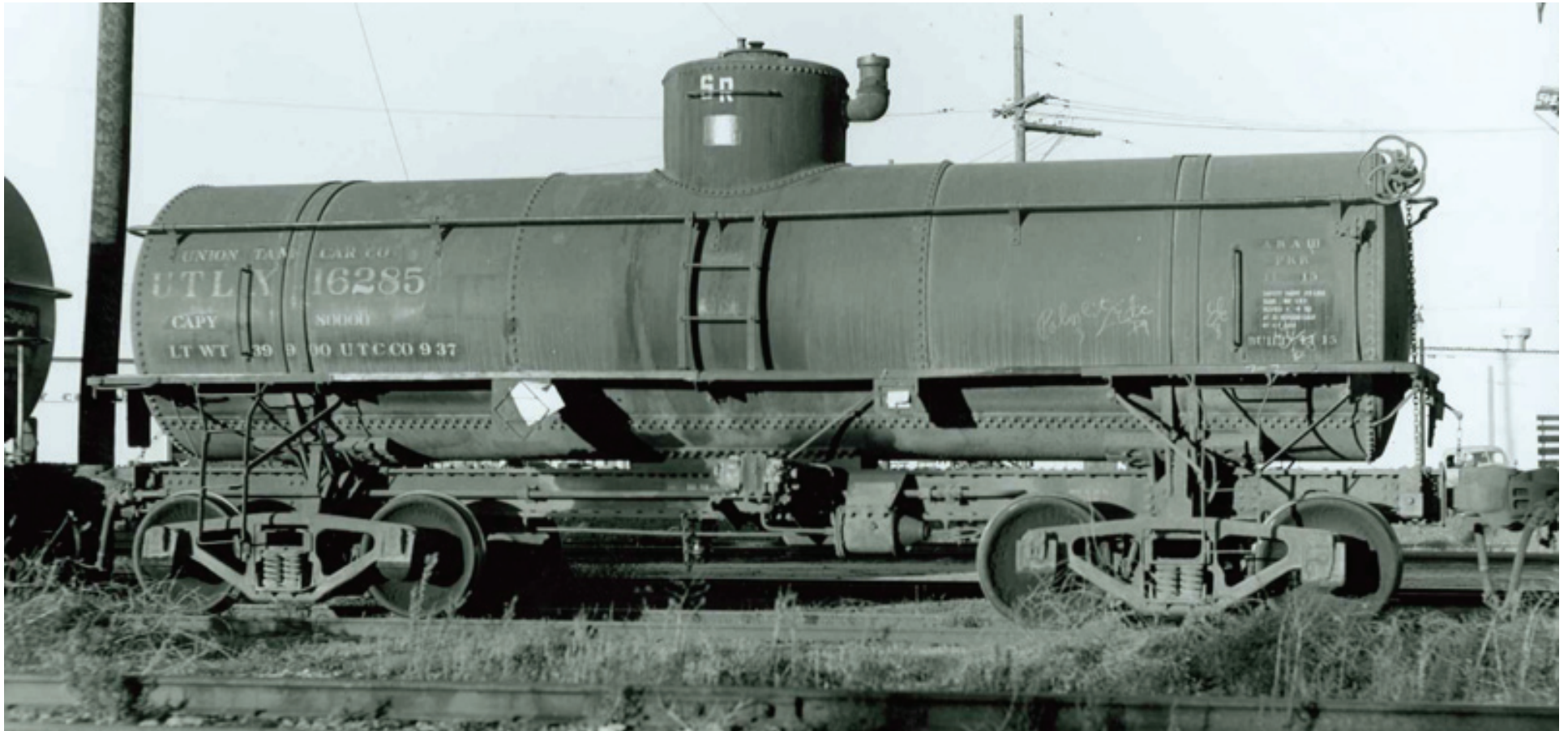
➤ GOO or other such products are not recommended for construction

except in small quantities as it will soften the casting material.

➤ Except for model wire sizes, when a measurement is given it's in prototype feet and inches.



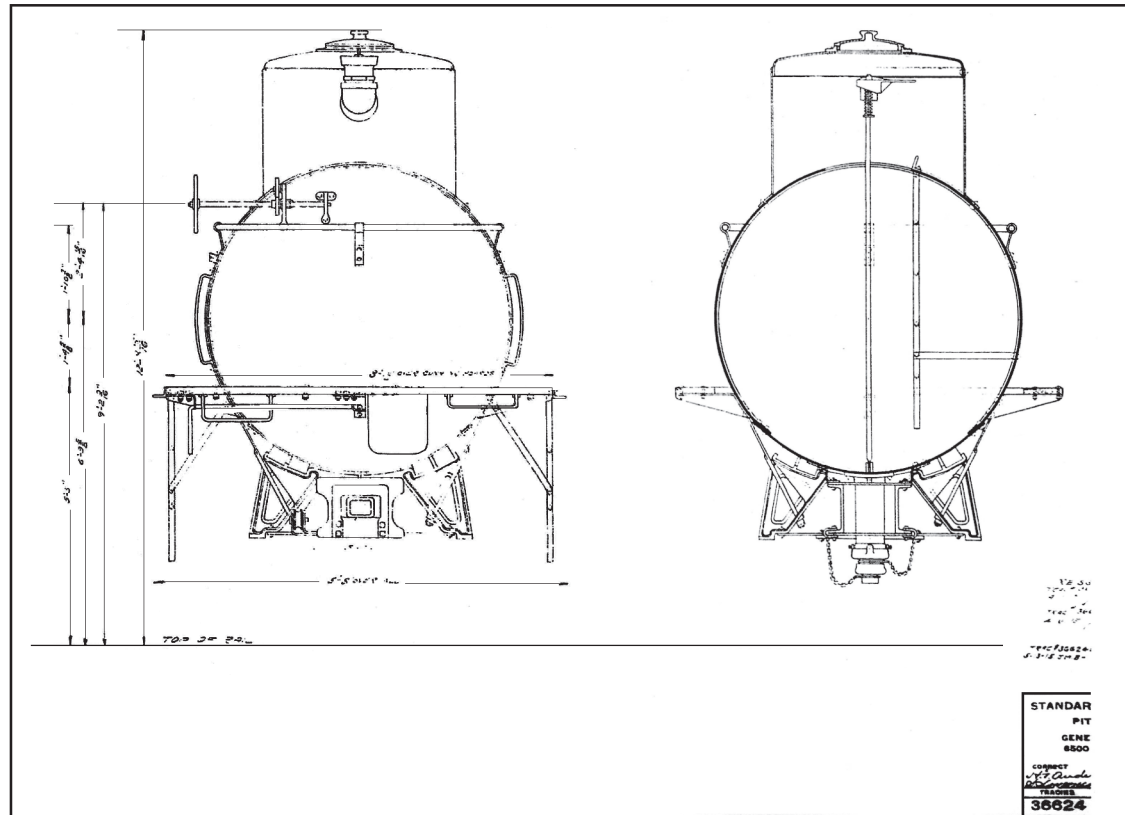
Standard Steel Car Company builder's photo of a car from the 1915 build of 6500 gallon Class X cars. Changes visible include the orientation of the brake wheel, the heavier duty bolster/saddles with wood blocks between them and the tank and the Cardwell draft gear springs on the sides of the center sill. Both a safety placard board and the defect card holder are now attached to the running board. The retainer valve is mounted to the side of the tank, rather than the end. *(Keith Retterer Collection)*



UTLX 16285 shows the appearance of one of these 6500 gallon Class X cars after the addition of AB brakes. The cylinder is in the exact same place as the KC on the original build, the AB valve is mounted on the same side of the car, while the reservoir is on the opposite side of the center sill. A ladder has now been provided (on this side of the car) up to the handrail as well as a hand grab on the side of the dome. Perhaps, the 1937 reweigh date indicates when this car was converted to AB brakes, or it could be when the arch bar trucks were replaced with cast steel side frame trucks. *(Bob's Photo collection)*



In the 1930's UTLX added internal heater coils to 600 of the 6500 gallon Class X cars, renumbering them to the 57800-58074, 58100-58249, 58250-58324 and 58500-58599 series. Externally the appearance is pretty much unchanged, as the pipes to circulate the steam through the interior protrude only slightly from below the center sill. Generally, there would be a small circular patch riveted to the tank head where the internal heater pipes were inserted into the car in the rebuilding process. *(Jim Sands photo, courtesy of Doug Harding)*



UTLX Class X 6,500 Gallon Tank Car GA Drawing April 22, 1915 Scale: 1/4 inch = 1 foot

Bending Jig for 6,500 Gallon UTLX Class X Tank Car

