



USRA Light Mikado

On January 1st 1918, control of railroads in the United States was taken over by the United States Railway Administration (USRA). The USRA employed top locomotive designers from several locomotive manufacturers and railroads to develop a standard line of locomotives of various sizes, which would share certain basic parts to reduce production, maintenance and operating costs. Eventually, twelve standard designs were selected. These designs included wheel arrangements from 0-6-0 to 2-8-8-2. Three sizes of tenders were developed with 8,000, 10,000 and 12,000 gallon capacities.

Some locomotives were developed in both light and heavy versions such as the popular 2-8-2 Mikados. While the heavy Mikados ran on about 23 railroads, the light version was used by over 50 different railroads on both freight and passenger services. The first USRA locomotive rolled off the line in July 1918. Built by Baldwin for the Baltimore & Ohio Railroad, it was numbered 4500.

The light Mikados had 63 inch drivers, 26 x 30 inch cylinders, carried 200 lbs/sq inch boiler pressure and weighed 290,800 lbs. They developed a tractive effort of 54,600 lbs. and originally cost \$53,600. These locomotives were produced by several other builders including Alco, Lima and Baldwin. A total of 1,865 of all types of USRA locomotives were built and they proved to be so successful that, in later years, many copies were made, ending up in a total of 5,107 engines being built to USRA designs. In February 1920, the USRA was officially dissolved thus ending the greatest steam locomotive development program the world will

ever see.

Specifications

Scale/Gauge 1/32, No. 1 (45 mm) Gauge

Weight 7.1 kg. (15 ½ pounds)

Dimensions

Length - 770 mm (30 ¼ inches) (Engine 454 mm + Tender 304 mm)

Width – 102 mm (4 1/10 inches)

Height – 164.8 mm (6 ½ inches)

Wheel Arrangements 2-8-2 Mikado

Driving Wheel Dia. 50 mm (Eccentric Cam for axle pump mounted)

Pilot Truck Wheel Dia. 26 mm

Trailer Truck Wheel Dia. 34 mm

Tender Wheel Dia. 28 mm

Axle Driven Water Pump Not Mounted (Option)

Engine Two Cylinders with D-Slide Valve

(Bore 13 mm x Stroke 20 mm)

Valve Gear Walschaert's , Valve Travel 6 mm, Cut-Off 75%

Boiler Type Smoke Tube Boiler

Water Capacity 400 cc at 70% full

Working Pressure 3-4 kg/cm

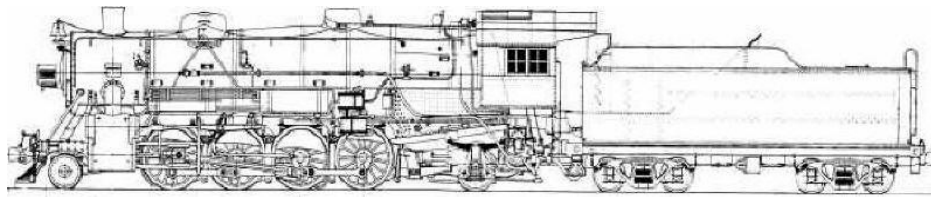
Fittings Regulator Valve, Blower valve, Check Valve, Gauge Glass,
Pressure Gauge

Burner Wick Fiber Glass Wicks

Alcohol Tank 200 cc.

Water Tank 340 cc (80% full, Hand Pump Monted) 8 mm x stroke 12
mm

Minimum Radius 2.0 m (6 ½ feet) dia. 4 m (13 feet)



Gary Herring's USRA Mikado "Magnolia Central" 2597