



## *Pennsylvania Railroad K4*



"The largest fleet of any passenger locomotive built" . . . a distinction held by the Pennsylvania Railroad (PRR) for their most famous class of Pacific locomotive, the K4s. As early as 1907, the PRR recognized the need to develop passenger locomotive with more power, capable of handling an all-steel car consist. The same year, the Pennsylvania Railroad purchased its first Pacific locomotive, known as the class K28, from the

American Locomotive Company (Alco) and formulated their own 4-6-2 design after testing. Another experimental locomotive Pacific (Class K29) was purchased in 1911 for further analysis. In the end, the K4 design was the result of the extensive tests of the experimental K29.

Aster's chosen prototype, locomotive no. 5475, was the first locomotive on the Pennsylvania Railroad to which a Keystone-shaped number plate was applied. She served on various divisions over the years and was finally disappeared from the PRR roster records on April 30, 1958.

The Pennsylvania and New York Central rails ran in parallel from Chicago, through Indiana and about half of Ohio, before going their separate ways. Now you can only imagine the thrill of seeing NYC Hudsons and PRR K4s running side-by-side.

## Specifications

**Weight:** Engine 5;2 kg; Tender 2.4 kg. Total 7.6 kg.

**Dimensions:** Length 831 mm; Width 98 mm; and Height 144 mm.

### **Wheels:**

**Drivers:** Dia. 62.6 mm spoked wheels, made of stainless steel with ball bearings, Equalized spring action.

**Pilot Truck:** Dia. 28 mm disc type, made of stainless steel, with bronze brushes, Equalized spring action.

**Trailer Truck:** Dia. 39 mm, spoked type, made of stainless steel.

**Tender Truck:** Dia. 28 mm disc type, made of stainless steel.

**Cylinders:** 2 cylinders made of gun metal, steam port paths crossed. Bore 13 mm x Stroke 20 mm.

**Pistons:** Phosphor bronze pistons with rulon piston rings.

**Valve Gears:** Walschaert's with D-slide valves. Valve Travel: 1.2 mm. Cut off 80%.

**Boiler Type:** Center Flue with 4 x fire tubes.

**Water Capacity:** 300 cc at 80% full.

**Fittings:** 2 x Safety Valves, Regulator Valve, Pressure Gauge, Water Gauge, Whistle Valve, Water Check Valve, By-Pass Valve, Water Plug, and Super Heater.

**Lubricator:** Roscoe Displacement Type.

**Feed Water System:**

1) Axle Driven Feed Water Pump mounted on the axle of center driver (Cylinder Bore 5 mm x Stroke 16 mm)

2) Hand Pump mounted on Tender (Pump Cylinder bore 10 mm x Stroke 16 mm)

Tender Water Tank: Capacity 700 cc at 80% full. Feed Water hand pump mounted.

**Gas Reservoir**

**Fuel:** Butane Gas

**Couplers:** Open Jay Knuckle Coupler

**Minimum Radius:** 3 meter (Switches negotiable more than No. 6)

**Drawbar Pull:** 900 g at tender. (Maximum 1.0 kg)

**Insulation:** Both sides insulated on all wheels.



