



## Southern Railway "Schools" Class

In the late 1920's, more powerful locomotives were needed to work heavier trains on the Hastings Line of the Southern Railway between Tonbridge Wells and St. Leonards. This portion of the line has steep grades, sharp curves and is also subject to loading and clearance restrictions in certain tunnels. The existing two cylinder Southern King Arthur class 4-6-0s, were not acceptable for use on this section, owing to structural clearance problems, so Chief Mechanical Engineer, R.E.L. Maunsell designed a three cylinder 4-4-0 which was based on the King Arthur class and even utilized some King Arthur parts. The boiler was shortened and the three cylinders gave a more effective balance which reduced the hammer action on the rails. Maunsell's new creation had 6 foot 7 inch diameter drivers and were the most powerful 4-4-0s in Europe.

They were so successful that additional units were built to serve on the Portsmouth line. When that line was eventually electrified, they were transferred to Bournemouth where they again demonstrated their capabilities by routinely accomplish work for greater than one would normally assume a locomotive of their size capable of doing. With an "all up" weight of 109.2 tons, including the tender, they pulled loads of 500 tons along the 79 mile run from Waterloo to Southampton in 87 minutes. Most of the 40 locomotives were built between the years 1930 and 1935 and were named after the well known public schools which were located along the Southern Railways line thus earning the generic name SCHOOLS class.



# Specifications

Scale, Gauge: 1/32, 45 mm

Weight: Engine 2.7 kg (6 lbs)

Weight: Tender: 1.2 kg ( 2 3/4 lbs)

Total Net Weight: 3.9 kg., (8 3/4 lbs)

Length: 570 mm (22 1/2 inches)

Width: 90 mm (3 9/16 inches)

Height: 127 mm (5 inches)

Wheel Arrangement: 2B (4-4-0, 220). American

Drivers: Dia. 62 mm

Cylinders: Twin Cylinders, Bore 13 mm x Stroke 20 mm

Valve Gears: Slip Return Crank

Boiler Type: Smithie's Type Boiler

Capacity: 170 ml (6 fl oz.)

Fittings: Safety Valves, regulator, blower valve, feed water check valve

Lubricator: Roscoe Displacement Lubricator

Tender: 75 ml (2 1/2 fl oz.) alcohol tank with needle valve, automatic feeding apparatus

