



Colorado & Southern Mogul



It was once stated that if all model railroads truly reflected their prototypes then at least one half of the total railway mileage in the United States must have been narrow gauge. In actual fact, less than 1% of US railroads were narrow gauge, but the spectacular beauty of both the railroads and the locomotives that operated over them has captured the imagination of railroad enthusiasts everywhere. No narrow gauge line has sparked more interest than three-foot gauge 'Little Giants' that conquered Colorado's Rocky Mountains.

Most of what was to become the Denver and Rio Grande Railroad was initially constructed by several small construction firms. With routes out of Denver, to the south, blocked by Santa Fe, these companies turned west toward the rugged Rocky Mountains. In order to traverse such

rough terrain, engineers implemented such innovations as spiraling loops, steep grades and extremely long tunnels. It was decided that three-foot gauge would provide the most economical solution to the construction problem since powerful yet compact engines could be built. The Union Pacific was supporting two Colorado narrow gauge lines during the 1870 - 1888 time period, the Colorado Central and the Denver, South Park & Pacific.

In the early 1880's the UP purchased sixteen identical 2-6-0's from the Brooks Locomotive Works of Dunkirk, NY, for use on these narrow gauge lines. The locomotives were fitted with Stephenson valve gear driving slide-valves and were coal-fired. In 1898, the UP returned the Denver, South Park & Pacific to independent status and, after some reshuffling, it emerged in 1902 as the Colorado and Southern. By then, all but two of the Brooks Moguls had been scrapped; South Park No. 35 was rebuilt into Colorado & Southern No. 22. Eventually, this locomotive was withdrawn from service in 1927 and scrapped.

ASTER modeled the C&S No. 22 as she appeared later in her career during the mid 1920's. A scale of 1/22.5 was chosen so that it would be compatible with G Scale rolling stock and accessories.

Specifications

Scale/Gauge 1/22.5, No. 1 (45 mm) Gauge

Weight 5.8 kg. (12.8 pounds)

Dimensions

Length – 643.6 mm (25.36 inches)

Width – 106 mm (4.17 inches)

Height – 206.8 mm (8.15 inches)

Wheel Arrangements 2-6-0 Mogul

Driving Wheel Dia. 45 mm (Eccentric Cam for axle pump mounted)

Pilot Truck Wheel Dia. 27 mm

Engine Two Cylinders

(Bore 12 mm x Stroke 18 mm)

Valve Gear Walschaert's

Boiler Type Center Flue Type

Water Capacity 180 cc at 80% full

Working Pressure 3-4 kg/cm

Fittings 2 Safety Valves (one in the dome and one in the cab)

Pressure Gauge, Water Gauge, Throttle Valve, Blower Valve,
Check Valve, Auxiliary Gas Reservoir

Fuel Butane Gas

Lubricator Roscoe Displacement Type

Tender Water Tank Capacity 200 cc (Hand Pump Fitted)

Gas Tank Capacity at 60 cc at 80% Full

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

Radio Control Provision Made for a Single Channel R.C Equipment

Coupler Open Jaw Knuckle Coupler

Electric Version

D.C. Motor x 1 Rated Voltage 12 V / Rated Ampere 2 A

Speed 5,200 rpm

Transmission System Spur Gear (Wheels Free To Rotate)

Gear Ratio 1/19 (From Motor to Driver)

Engine Speed Meter

Drawbar Pull 1.3 kg at Tender

Lights Rated Voltage 15 / Rated Ampere 0.9

Engine 1 x Head Light 1 x Cab Light

Tender 2 x Market Lights 2

