



LMS Princess Coronation Class Pacific (Duchess Class 4-6-2)

HISTORY OF The Princess Coronation Class Duchess

The Princess Coronation Class, or as more commonly known Duchess class, is considered to be Sir William Stanier's 'Magnum Opus' for the former London Midland and Scottish Railway. Built in both Streamlined and un-streamlined versions they were designed to compete with Gresley's Class A3's and A4's on the LNER's East Coast route for the lucrative business between London and Scotland.

These massive and imposing locomotives were the most powerful express passenger steam locomotives to operate in the UK and monopolized top-link express train operation on the West Coast mainline out of the London Euston terminus for 25 years. A total of 38 members of the class were constructed and named after Royal personages, ladies of the British aristocracy and Cities in the United Kingdom. The penultimate member of the class was named most appropriately – Sir William A Stanier FRS.

The new Aster model represents the original non-streamlined version in the form of its most famous survivor - LMS 6233 'Duchess of Sutherland'. This example dates from 1938 and was one of the five original non-streamliners.

Withdrawn from regular service in 1964, it remained on static display for well over 30 years firstly at a holiday village in Scotland and then at the well-known

Bressingham Steam Museum in Norfolk.



'Duchess of Sutherland' was recently resurrected from its rural seclusion and overhauled for full main line service by the Princess Royal Class Locomotive Trust at their Midland Railway Centre base in Derbyshire. As restored it is representative of the finest LMS traditio

and practice and now modeled by Aster. Aster has also chosen to model the 46232 'Duchess of Montrose' as BR livery.



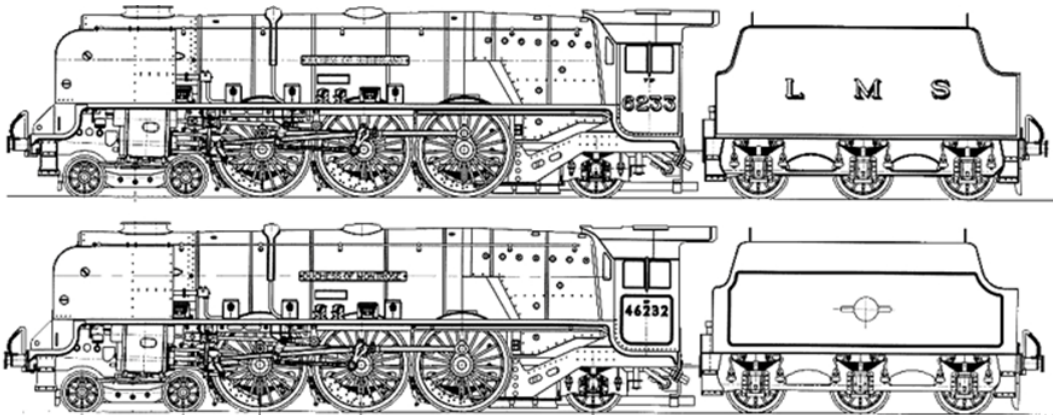
The restored 'Duchess of Sutherland' also achieved the unique distinction of being considered so reliable that she could safely be entrusted with the working of the Royal Train in June 2002. This was Her Majesty The Queen's Golden Jubilee year and 6233 'Duchess of Sutherland' performed her duty with considerable distinction.

It is indeed fortunate that three members of the Princess Coronation Class survive. No. 6233 'Duchess of Sutherland' continues to thrill railway enthusiasts with regular outings

on the mainline. Presently out of service is No 46229 'Duchess of Hamilton', which is on display alongside her former rivals, the LNER A4 'Mallard' and A3 'Flying Scotsman', at the National Railway Museum, York. Also preserved, but unlikely to be restored to working condition, is No 46235 'City of Birmingham', which can be seen at the Birmingham Museum of Science and Discovery in Warwickshire, UK.



Artwork courtesy of Richard Green, [Locos in Profile](#)



SPECIFICATIONS OF The Princess Coronation Class Duchess

SCALE/GAUGE: 1/32 , GAUGE ONE (45mm)

TOTAL WEIGHT: 6.2 kg (13.7 lbs) (Engine 4.64 kg + Tender 1.56 kg)

DIMENSIONS: LENGTH O.B. 711 mm (28 inches)

WIDTH: 91 mm

HEIGHT: 129 mm

WHEEL ARRANGEMENT: 4 - 6 - 2 PACIFIC

DRIVING WHEELS: DIA. 64.0 mm (made of STEEL. black nickel plated & black painted)

PILOT TRUCK WHEELS: DIA: 26.0 mm (made of STEEL. black nickel plated & black painted)

TRAILER TRUCK WHEEL DIA. 38.0 mm (made of STEEL. black nickel plated & black painted)

MINIMUM RADIUS: 2 METER

ENGINE CYLINDERS: 4 CYLINDERS WITH SLIDE VALVE

BORE: 11 mm x STROKE 22 mm

VALVE GEAR: WALSCHAERTS VALVE GEAR

VALVE TRAVEL: 6mm, CUT-OFF 75%

BOILER: TYPE: "C" TYPE WITH TWO FLUE TUBES

WATER: 250 CC AT 70% FULL

PRESSURE: 3-4 KG./SQ.CM AT NORMAL WORKING

FITTINGS: 2 x SAFETY VALVES, GAUGE GLASS, PRESSURE GAUGE, BLOWER VALVE, REGULATOR VALVE, CHECK VALVE, FILLER PLUG AND SUPERHEATER

AXLE DRIVEN PUMP: BORE 5mm×STROKE 5mm

LUBRICATOR: ROSCOE DISPLACEMENT TYPE

TENDER WATER TANK CAPACITY: 250 cc, HAND PUMP MOUNTED.

ALCOHOL TANK CAPACITY: 200 cc

FUEL: METHYLATED ALCOHOL

TENDER BOGIE WHEELS: DIA. 40.5mm (made of STEEL. black nickel plated & black painted)

(SUBJECT TO CHANGE WITHOUT NOTICE.)

