

# Canadian Pacific Railway Co.

## SPECIFICATION

FOR

# STANDARD LOCOMOTIVE.

Eight Wheel Freight Engine, having Four Coupled Driving Wheels, with Four-Wheel Engine Truck, Tender carried on Eight Wheels.

### GENERAL DESCRIPTION.

Cylinder 17 inches diameter, 24 inches stroke.  
Gauge of track, 4 ft. 8 $\frac{1}{2}$  in.  
Driving wheels with tire, 62 in. diameter outside.  
Driving wheel centres, 56 in. diameter.  
Driving axles (steel), 7 in. diameter, finished.  
Driving wheel base, 8 ft. 6 in.  
Total wheel base, 23 ft. 1 $\frac{1}{2}$  in.  
Centre of driving axle to centre of cylinder, 11 ft. 9 $\frac{1}{2}$  in.  
Weight on driving wheels, about 48,000 lbs.  
Total weight of locomotive in working order, about 74,000 lbs.  
Level top boiler.

### BOILER.

Made of steel. Cylinder part of boiler,  $\frac{5}{8}$  in. thick. Side sheets  $\frac{5}{8}$  in. thick. Throat and head sheets,  $\frac{1}{2}$  in. thick. Saddle Sheet,  $\frac{1}{2}$  in. thick. Dome sheet,  $\frac{1}{2}$  in. thick. All vertical joints to be single rivetted. All horizontal joints to be double rivetted with welts 7 $\frac{1}{2}$  in. wide by  $\frac{5}{8}$  in. thick outside and inside. Caulking done with round pointed tools. Boiler to be stayed thoroughly in all its parts, provided with cleaning holes and hand-hole plugs of brass, one of 2 in. diameter at each corner of water leg, one in bottom of cylinder part of boiler about centre of forward sheet, also two cleaning holes on each side of boiler on the saddle sheet above level of crown sheet. These holes to be formed by attaching a brass counterflange to saddle sheet, having a 3 $\frac{1}{2}$  in. brass plug in it. Six 2 $\frac{1}{2}$  in. brass plugs to be placed in smoke box flue sheet and distributed thus, two over tubes, two at sides, and two at bottom below tubes. Three 2 in. brass plugs to be provided in head sheet above level of crown sheet.

### SHELL.

Shell of boiler 52 $\frac{1}{2}$  in. outside diameter at fire-box end. Made level top, with one dome 27 $\frac{1}{2}$  in. inside diameter by 2 ft. 9 in. high, and placed on middle course of boiler. Dome cover to be provided with one whistle.

### FIRE-BOX.

Made of steel, 5 ft. 11 $\frac{1}{2}$  in. long by 2 ft. 11 in. wide inside. Side and back sheets  $\frac{5}{8}$  in. thick. Water space on sides and back 3 in., on front 3 $\frac{1}{2}$  in. Crown sheet  $\frac{3}{4}$  in. thick. Flue sheet,  $\frac{1}{2}$  in. thick. Stay bolts, best quality (Low Moor, Bowling Sligo, or Globe) iron,  $\frac{3}{4}$  in. diameter, screwed through both sheets and rivetted to sheets both ends. Distance from centre to centre of stay bolts not to exceed 4 $\frac{1}{2}$  in., and not more than 17 sq. in. area between four stays. To have 17 in. space from top of box to inside saddle plate.