



4000 H.P. DIESEL PASSENGER LOCOMOTIVE . . DESIGNED AND BUILT BY ELECTRO-MOTIVE DIVISION . . GENERAL MOTORS . . LA GRANGE, ILLINOIS, U. S. A.

4000 H. P. DIESEL PASSENGER LOCOMOTIVE

Designed and Built for

ATCHISON, TOPEKA & SANTA FE RAILWAY SYSTEM

BY ELECTRO-MOTIVE DIVISION • GENERAL MOTORS • LA GRANGE, ILLINOIS

This 4000 horsepower Diesel passenger locomotive consists of two units. Each unit is equipped with two 12 cylinder, V-type, 2-cycle General Motors Diesel engines with $8\frac{1}{2}$ " bore, 10" stroke and unit fuel injection system. Each engine is directly coupled to a DC generator. Direct current is fed through control apparatus to

traction motors which are geared directly to drive axles. There are two traction motors per truck, two 6-wheel trucks per unit. The 6-wheel trucks are used in this locomotive for smoother operation in the upper high speed range, middle wheels designed to aid in weight distribution only.

DIMENSIONS

Overall length over couplers.....	141'-6 $\frac{3}{4}$ "
Maximum width over grab irons.....	10'-6 $\frac{7}{8}$ "
Width over body posts.....	9'-10"
Height over all, above rail.....	14'-11"
Wheel diameter.....	36"
Rigid wheel base of trucks.....	14'-1"
Roller bearing journals.....	6 $\frac{1}{2}$ " x 12"
Distance between bolster centers.....	43'-0"
Truck swing designed for 21° curve or 274-foot radius	

SPECIFICATIONS

BASE WEIGHTS (approximate)

Total weight, fully loaded.....	600,000 lbs.
Weight on drivers, fully loaded.....	404,400 lbs.

TRACTION EFFORT

(calculated from base weight)

Maximum tractive effort at rim of driving wheels at 25% adhesion.....	101,100 lbs.
--	--------------

SUPPLIES

Fuel oil.....	2400 gals.
Sand.....	16 cu. ft.
Lubricating oil.....	440 gals.
Engine cooling water.....	556 gals.
Boiler water.....	2200 gals.

