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

TEXAS & PACIFIC RAILWAY

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

This Diesel Passenger Locomotive consists of two cab units arranged for double end control from either cab, thus eliminating turn-arounds. Each unit is equipped with two 12 cylinder, V-type, 2-cycle General Motors Diesel engines having a bore of 8½", stroke 10" and a unit fuel injection system. These engines, capable of independent operation, are rated at 1000 horsepower each at 800 RPM, providing a total of 4000 horsepower for the locomotive. Each engine is directly coupled to a DC generator. Current from these generators is fed through control apparatus to eight traction motors—two per truck—geared directly to the driving axles. Two six-wheel trucks per unit are used in this locomotive for smoother operation in the upper high speed range, middle wheels being designed to aid in weight distribution only.

SPECIFICATIONS

DIMENSIONS

Overall length over couplers	142'-2½"
Maximum width over grab irons	10'-6⅞"
Width over body posts	9'-10"
Height over all, above rail	14'-10"
Wheel diameter	36"
Rigid wheel base of trucks	14'-1"
Roller bearing journals	6½" x 12"
Distance between bolster centers	43'-0"

Truck swing designed for 21° curve or 274-foot radius

BASE WEIGHTS (approximate)

Total weight, fully loaded	630,000 lbs.
Weight on drivers, fully loaded	424,620 lbs.

TRACTIVE EFFORT

(calculated from base weight)

Maximum tractive effort at rim of driving wheels at 25% adhesion	106,154 lbs.

SUPPLIES

Fuel oil	2400 gals.
Sand	32 cu. ft.
Lubricating oil	560 gals.
Engine cooling water	600 gals.
Boiler water	2400 gals.

GENERAL MOTORS LOCOMOTIVES