Motive Power
Dependability
From Electro-Motive
SD50: 3500 HP MAINLINE LOCOMOTIVE

SPECIFICATIONS
Dimensions
Length over coupler pulling faces . . . 71’2”
Distance between bolster centers . 45’10”
Truck—rigid wheel base .......... 13’7”
Width over grab irons ............ 10’3¾”
Height above rails ............... 15’7¾”
Wheel diameter ................... 40”
Minimum curve radius .......... 195’

Weight
Total loaded weight
on rails ........ (Approx.) 368,000 lbs.

Supplies
Fuel ................................ 3,200 gal.
Sand ............................ 56 cu. ft.
Cooling water .................... 255 gal.
Lubricating oil ................... 243 gal.

EQUIPMENT
Engine
Sixteen cylinder 645F3, turbocharged, GM diesel.

Main Generator
AR16-D18 alternator with rectified output for delivery to traction motors. Nominal 600 volt direct current rating, ventilated by blower.

Traction Motors
Six D87 direct current, series wound, forced ventilated, roller bearing, axle hung motors, 70:17 gear ratio.

Truck Assemblies
High adhesion, HTC, three motor — six wheel truck assemblies.

Modular Control Cabinet

Tractive Effort Curve

SD50
GP50: 3500 HP
GENERAL PURPOSE LOCOMOTIVE

SPECIFICATIONS

Dimensions
Length over coupler pulling faces . 59'2"
Distance between bolster centers . 34'0"
Truck—rigid wheel base ........... 9'0"
Width over handrail supports .... 10'3½"
Height above rails ................ 15'6"
Wheel diameter ................... 40"
Minimum curve radius .......... 140'

Weight
Total loaded weight on rails ........ (Approx.) 260,000 lbs.

Supplies
Fuel ............................ 3,000 gal.
Sand ............................ 40 cu. ft.
Cooling water .................... 235 gal.
Lubricating oil ................... 243 gal.

EQUIPMENT

Engine
Sixteen cylinder 645F3, turbocharged, GM diesel.

Main Generator
AR15-D18 alternator with rectified output for delivery to traction motors. Nominal 600 volt direct current rating, ventilated by blower.

Traction Motors
Four D87 direct current, series wound, forced ventilated, roller bearing, axle hung motors, 70:17 gear ratio.

Truck Assemblies
Two motor—four wheel truck assemblies with outside swinghanger suspension.

Modular Control Cabinet
GP49: 2800 HP GENERAL PURPOSE LOCOMOTIVE

SPECIFICATIONS
Dimensions
- Length over coupler pulling faces: 59'2"
- Distance between bolster centers: 34'0"
- Truck—rigid wheel base: 9'0"
- Width over handrail supports: 10'3½"
- Height above rails: 15'6"
- Wheel diameter: 40"
- Minimum curve radius: 140'

Weight
- Total loaded weight on rails: (Approx.) 250,000 lbs.

Supplies
- Fuel: 2,600 gal.
- Sand: 40 cu. ft.
- Cooling water: 240 gal.
- Lubricating oil: 304 gal.

EQUIPMENT

Engine
- Twelve cylinder 645F38, turbocharged, GM diesel.

Main Generator
- AR15-D18 alternator with rectified output for delivery to traction motors. Nominal 600 volt direct current rating, ventilated by blower.

Traction Motors
- Four 087 direct current, series wound, forced ventilated, roller bearing, axle hung motors, 70:17 gear ratio.

Truck Assemblies
- Two motor—four wheel truck assemblies with outside swinghanger suspension.

Modular Control Cabinet
SD40-2: 3000 HP MAINLINE LOCOMOTIVE

SPECIFICATIONS
Dimensions (Approx.)
- Length over coupler pulling faces: 68'10"
- Distance between bolster centers: 43'6"
- Truck—rigid wheel base: 13'7¾"
- Width over grab irons: 10'3¾"
- Height above rails: 15'7¾'
- Minimum curve radius: 193'

Weight (Approx.)
- Total loaded weight on rails: 368,000 lbs.

Supplies
- Fuel: 3,200 gal.
- Sand: 56 cu. ft.
- Cooling water: 275 gal.
- Lubricating oil: 243 gal.

EQUIPMENT
Engine
- Sixteen cylinder 645E3B, turbocharged, GM diesel.

Main Generator
- AR10 alternator with rectified output for delivery to traction motors. Nominal 600 volt direct current rating, ventilated by blower.

Traction Motors
- Six D77 direct current, series wound, roller bearing, forced ventilated, axle hung motors, 62:15 gear ratio.

Truck Assemblies
- High adhesion, HTC, three motor — six wheel truck assemblies.

Modular Control Cabinet
GP40-2: 3000 HP GENERAL PURPOSE LOCOMOTIVE

SPECIFICATIONS

Dimensions
Length over coupler pulling faces .................................. 59'2"
Distance between bolster centers .................................... 34'0"
Truck—rigid wheel base .................................................. 9'0"
Width over grab irons .................................................... 10'3½"
Height above rails ......................................................... 15'47/16"
Wheel diameter ............................................................. 40"
Minimum curve radius .................................................... 140'

Weight
Total loaded weight  
on rails ................... (Approx.) 257,000 lbs.

Supplies
Fuel ................................................................. 2,600 gal.
Sand ................................................................. 56 cu. ft.
Cooling water ......................................................... 254 gal.
Lubricating oil ......................................................... 243 gal.

EQUIPMENT

Engine
Sixteen cylinder 645E3B, turbocharged, GM diesel.

Main Generator
AR10 alternator with rectified output for delivery to traction motors. Nominal 600 volt direct current rating, ventilated by blower.

Traction Motors
Four D77 direct current, series wound, roller bearing, forced ventilated, axle hung motors, 62:15 gear ratio.

Truck Assemblies
Two motor—four wheel truck assemblies with outside swinghanger suspension.

Modular Control Cabinet
GP39-2: 2300 HP
GENERAL PURPOSE LOCOMOTIVE

SPECIFICATIONS
Dimensions
Length over coupler pulling faces . . 59'2"
Distance between bolster centers . . 34'0"
Truck—rigid wheel base ............. 9'0"
Width over grab irons ................. 10'3½"
Height above rails .................... 15'4¾"
Wheel diameter ....................... 40"
Minimum curve radius ................. 140'

Weight
Total loaded weight on rails (Approx.) .... 250,000 lbs.

Supplies
Fuel ..................................... 1,700 gal.
Sand ..................................... 56 cu. ft.
Cooling water ........................... 240 gal.
Lubricating oil ......................... 304 gal.

EQUIPMENT
Engine
Twelve cylinder 645E3B, turbocharged, GM diesel.

Main Generator
AR10 alternator with rectified output for delivery to traction motors. Nominal 600 volt direct current rating, ventilated by blower.

Traction Motors
Four D77 direct current, series wound, roller bearing, forced ventilated, axle hung motors, 62:15 gear ratio.

Truck Assemblies
Two motor—four wheel truck assemblies with outside swinghanger suspension.

Modular Control Cabinet
**GP38-2: 2000 HP GENERAL PURPOSE LOCOMOTIVE**

**SPECIFICATIONS**

**Dimensions**
- Length over coupler pulling faces: 59'2"
- Distance between bolster centers: 34'0"
- Truck—rigid wheel base: 9'0"
- Width over grab irons: 10'3½"
- Height above rails: 15'4¾"
- Wheel diameter: 40"
- Minimum curve radius: 140'

**Weight**
- Total loaded weight on rails: (Approx.) 250,000 lbs.

**Supplies**
- Fuel: 1,700 gal.
- Sand: 56 cu. ft.
- Cooling water: 240 gal.
- Lubricating oil: 243 gal.

**EQUIPMENT**

**Engine**
- Sixteen cylinder 645E, Roots-blown, GM diesel.

**Main Generator**
- AR10 alternator with rectified output for delivery to traction motors. Nominal 600 volt direct current rating, ventilated by blower.

**Traction Motors**
- Four D77 direct current, series wound, roller bearing, forced ventilated, axle hung motors, 62:15 gear ratio.

**Truck Assemblies**
- Two motor—four wheel truck assemblies with outside swinghanger suspension.

**Modular Control Cabinet**
GP15T: 1500 HP
GENERAL PURPOSE LOCOMOTIVE

ELECTRO-MOTIVE

SPECIFICATIONS

Dimensions
Length over coupler pulling faces ..... 54'11"
Distance between bolster centers ..... 29'9"
Truck—rigid wheel base ............ 9'0"
Width over grab irons .......... 10'3½"
Height above rails .......... 15'2½"
Wheel diameter .............. 40"
Minimum curve radius .... 120'

Weight
Total loaded weight on rails (Approx.) ........ 240,000 lbs.

Supplies
Fuel ............ 2,400 gal.
Sand ............ 56 cu. ft.
Cooling water .... 150 gal.
Lubricating oil .... 135 gal.

EQUIPMENT

Engine
Eight cylinder 645E3C, turbocharged, GM diesel. Main Generator AR10-D14, nominal 600 volt direct current rating, ventilated by blower.

Traction Motors
Four D77 direct current, series wound, roller bearing, forced ventilated, axle hung motors, 62:15 gear ratio.

Truck Assemblies
Two motor—four wheel truck assemblies with outside swinghanger suspension.
GP15-1: 1500 HP
GENERAL PURPOSE LOCOMOTIVE

SPECIFICATIONS
Dimensions
Length over coupler pulling faces . . . 54'11"
Distance between bolster centers . . . 29'9"
Truck—rigid wheel base ............. 9'0"
Width over grab irons ............... 10'3¼"
Height above rails .................. 15'4½"
Wheel diameter ..................... 40"
Minimum curve radius .............. 120'

Weight
Total loaded weight
on rails (Approx.) ........... 240,000 lbs.

Supplies
Fuel .................................. 2,400 gal.
Sand .................................. 56 cu. ft.
Cooling water ....................... 230 gal.
Lubricating oil ..................... 165 gal.

EQUIPMENT
Engine
Twelve cylinder 645E, Roots Blown, GM diesel.

Main Generator
D32-D14, nominal 600 volt direct current rating, ventilated by blower.

Traction Motors
Four D77 direct current, series wound, roller bearing, forced ventilated, axle hung motors, 62:15 gear ratio.

Truck Assemblies
Two motor — four wheel truck assemblies with outside swinghanger suspension.

Tractive Effort Curve

GP15-1
MP15AC: 1500 HP MULTIPURPOSE LOCOMOTIVE

SPECIFICATIONS

Dimensions
- Length over coupler pulling faces: 50'2"
- Width over side sills: 10'0"
- Maximum height above rail: 15'0"
- Width of operator's cab: 10'6"\(\frac{1}{2}\)"
- Wheel base—truck: 9'0"
- Truck centers: 24'8"
- Number of drivers: 4 Pair
- Wheel diameter: 40"

Weight
- Total loaded weight on rails (Approx.): 248,000 lbs.

Supplies
- Fuel: 1,100 gal.
- Sand: 30 cu. ft.
- Cooling water: 230 gal.
- Lubricating oil: 165 gal.

EQUIPMENT

Engine
- Twelve cylinder 645E, Roots-blown, GM diesel.

Main Generator
- AR10 alternator with rectified output for delivery to traction motors. Nominal 600 volt direct current rating, ventilated by blower.

Traction Motors
- Four D77 direct current, series wound, roller bearing, forced ventilated, axle hung motors, 62:15 gear ratio.

Truck Assemblies
- Two motor—four wheel truck assemblies with outside swinghanger suspension.

Tractive Effort Curve

- Tractive Effort: 1,000 Pounds
- Speed: Miles Per Hour

Motor Shunting

Basic Locomotive

12
MP15DC: 1500 HP
MULTI-PURPOSE LOCOMOTIVE

SPECIFICATIONS
Dimensions
- Length over coupler pulling faces: 48'8"
- Width over side sills: 10'0"
- Maximum height above rail: 15'0"
- Width of operator's cab: 10'/4"
- Wheelbase—truck: 9'0"
- Truck centers: 24'2"
- Number of drivers: 4 pair
- Wheel diameter: 40"

Weight
- Total loaded weight on rails (Approx.): 248,000 lbs.

Supplies
- Fuel: 1,100 gal.
- Sand: 30 cu. ft.
- Cooling water: 200 gal.
- Lubricating oil: 165 gal.

EQUIPMENT
Engine
- Twelve cylinder 645E, Roots Blown, GM diesel.

Main Generator
- D32, nominal 600 volt direct current rating, ventilated.

Traction Motors
- Four D77 direct current, series wound, roller bearing, forced ventilated, axle hung motors, 62:15 gear ratio.

Truck Assemblies
- Two motor—four wheel truck assemblies with outside swinghanger suspension.

Tractive Effort Curve

Motor Shunting
Basic Locomotive

SPEED—Miles Per Hour

TRACTIVE EFFORT—Pounds

80,000
70,000
60,000
50,000
40,000
30,000
20,000
10,000
0
10 20 30 40 50 60 70
SW1001: 1000 HP
SWITCHING LOCOMOTIVE

SPECIFICATIONS

Dimensions
Length over coupler pulling faces . 44' 8"
Width over side sills ................. 10' 0"
Maximum height above rail ........... 14' 3"
Width of operator's cab .............. 10' 0"
Wheel base—truck ..................... 8' 0"
Truck centers ....................... 22' 0"
Number of drivers .................... 4 pair
Wheel diameter ...................... 40"

Weight
Total loaded weight on rails (Approx.) . . . . . 230,000 lbs.

Supplies
Fuel .................................. 600 gal.
Sand .................................. 30 cu. ft.
Cooling water ......................... 190 gal.
Lubricating oil ....................... 135 gal.

EQUIPMENT

Engine
Eight cylinder 645E, Roots-blown, GM diesel.

Main Generator
D25, nominal 600 volt direct current rating, self ventilated.

Traction Motors
Four D77 direct current, series wound, roller bearing, forced ventilated, axle hung motors, 62:15 gear ratio.

Truck Assemblies
Two motor—four wheel truck assemblies.