3600 Horsepower SD45 Diesel-Electric Locomotive
(The diesel engine turns a generator, electricity makes it go)

20 Cylinder, 2 Cycle, Turbocharged Diesel Engine
16 - 1 Compression ratio, 645 cubic inch per cylinder
Each piston is 9 1/16" diameter x 10" stroke
4 Exhaust valves and 1 fuel injector per cylinder
Idle RPM is 315, Throttle 6 RPM is 900

4000 Gallon fuel tank
294 Gallons of engine-lube oil
288 Gallons of cooling water (no anti-freeze)

Fuel consumption:  
Low Idle 4.7 gal/hr
Normal Idle 6.0 gal/hr
Throttle 8, full load 194 gal/hr

Main traction Alternator  
(rectified output) 600 volts DC 9000 amps

6 Axel mounted DC Traction Motors - 600 HP each

Air Compressor is 3 cylinder, 2 stage, water cooled
254 cubic feet per minute at 900 RPM

Main Reservoir pressure is 130 - 140 PSI

Driving wheels are 40" diameter

Dynamic Brake is 700 AMP capacity

Gear Ratio as delivered 60 - 17 (76MPH)
currently 62 - 15 (65MPH)
(lower speed equals more pulling power)

Auxiliary Generator 74 volts DC 18 KW
(for control circuits and battery charging)

Locomotive weight 367,200 lbs
length 65 feet 8 inches
width 10 feet 3 inches
height 15 feet 7 inches

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