



# 1924 Baldwin 2-10-0 Decapod

## At a Glance

0-60 mph est 76.5 sec

0-1/4 mile est 47.9 sec

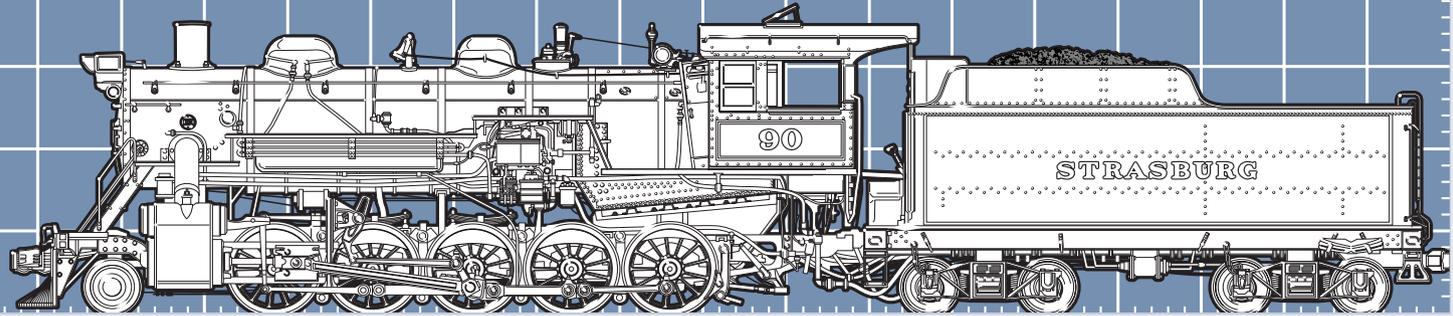
Top speed 60 mph

Brake rating very good

List Price: **\$36,552**  
 Price as Tested: **Not for sale**  
 (but insured for **\$1,000,000**)

Price as tested incl std equip. (6ET automatic brake system, side air reservoirs, pneumatic brakes w/rear-mounted hangers, leaf-spring 3-point suspension, pneumatically operated sand traction control, 56-in. cast steel wheels, soot patina upholstery, wood trim, manual climate control, two-way radio, keyless entry, anti-theft system [provision for padlock on throttle], non-power seats, windows & door locks, non-panorama sunroof, bell), speedometer (\$750), Value Added Pkg (incl 250-watt 34-volt headlight bulbs, injector indicators, clean glass, rear markers, rear flange oilers, snap-lid oil cup driving box fills, Teflon valve seats, polished driving rods, epoxy-coated tender tank, striping package, cross-compound air compressor, automatic bell ringer) est \$40,000.

SCALE: 50 IN. (1270 mm) DIVISIONS  
 DRAWING BY TIM BARKER

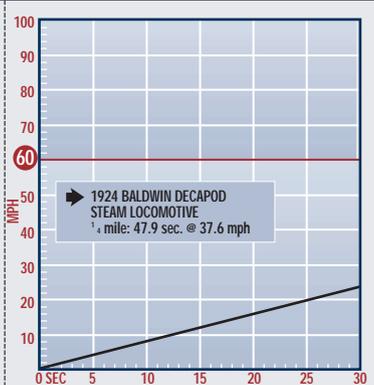


## SPECIFICATIONS

| Engine  | Warranty  | General Data  | Drivetrain   |
|---|---|---|--|
| Type.....steel 2-cylinder, double-acting, piston valve, 90-degree right lead, alligator-type crosshead, outside connected | Boiler.....none   | Curb weight (locomotive only).....212,000 lb              | Transmission:.....1-speed manual   |
| Valvetrain.....Walschaert   | Running gear.....none                                   | Test weight.....212,300 lb                                | Gear Ratio Overall ratio (Rpm) Mph   |
| Displacement.....25,334 cu in.  | <b>Chassis &amp; Body</b>                               | Weight dist, f/r %.....10/90                              | Direct 1:1 1:1 (30) 5  |
| Bore x stroke.....24.0 x 28.0 in.   | Layout.....front engine, 10-wheel drive                 | Wheelbase (locomotive only).....236.0 in.                 | Direct 1:1 1:1 (360) 60  |
| Compression ratio.....variable  | Frame.....steel   | Track.....56.5 in.  | Final drive ratio.....1:1  |
| Horsepower (BLW).....1705 bhp = the ratio of: Calculated Water Evaporation/ Steam Used per I.H.P. Hour                    | Brakes.....trailing shoe                                | Length.....866.5 in.                                      | Engine rpm @ 60 mph.....360  |
| Tractive force (cyl).....47,808 lb @ 80% cutoff; 39,168 lb @ 50% cutoff   | Total swept area.....6920.0 sq in.                      | Width.....125.0 in.                                       | <b>Instrumentation</b>   |
| Tractive force (boiler).....127,875 lb @ 5 mph; 21,312 lb @ 30 mph; 90,478 lb-ft @ 0 rpm                                  | Swept area/ton.....66.0 sq in.                          | Height.....178.0 in.                                      | 60-mph speedometer, 400-psi steam-pressure gauge, water level, 200-psi air-pressure gauge (locomotive), 200-psi air-pressure gauge (train) |
| Torque on center.....127,935 lb-ft @ 0 rpm  | Wheels.....steel, 56 x 4 with counterweights            | Ground clearance.....8.0 in.                              | <b>Safety</b>  |
| Torque w/crank-pins @ 45 deg.....360 rpm  | Tires.....steel-banded ASTM A-551 Class C               | Trunk space.....4.6 cu ft (in tender)                     | Masten Gregory Quick Release System steam whistle bell   |
| Redline.....360 rpm   | Steering.....single axle lead truck, double heart links | Towing capacity.....8 passenger cars, 400 tons, typically |  |
| Fuel injection.....manual   | Turning circle.....818 ft                               | <b>Accommodations</b>                                     |  |
| Fuel.....bituminous coal; semi-bituminous coal; water   | Suspension.....leaf springs w/equalizer bars            | Seating capacity.....2                                    |  |
|   |   | Standing capacity.....3                                   |  |
|   |   | Head room.....48.0 in.                                    |  |
|   |   | Seat width.....2 x 15.5 in.                               |  |
|   |   | Leg room.....72.0 in.                                     |  |
|   |   | Seatback adjustment.....0 deg                             |  |
|   |   | Seat travel.....0 in.                                     |  |

## PERFORMANCE

| Acceleration                             |         |
|--|---------|
| Time to speed                            | Seconds |
| 0-10 mph.....est 12.7                    |         |
| 0-20 mph.....est 25.5                    |         |
| 0-30 mph.....est 38.2                    |         |
| 0-40 mph.....est 51.0                    |         |
| 0-50 mph.....est 63.7                    |         |
| 0-60 mph.....est 76.5                    |         |
| Time to distance                         |         |
| 0-840 ft.....est 38.2                    |         |
| 0-1320 ft (1/4 mile).....47.9 @ 37.6 mph |         |



| Braking  |  |
|--|--|
| Minimum stopping distance  | From 60 mph.....varies according to conditions |
| Control.....excellent  | Brake feel.....very good                       |
| Overall brake rating.....very good   |  |
| <i>Subjective ratings consist of excellent, very good, good, average, poor; na means information is not available.</i> |  |
| Handling   |  |
| Lateral acceleration.....yes   | Balance.....corners on rails                   |
| Speed through 700-ft slalom.....sluggish   | Balance.....unsettling                         |
| Lateral seat support.....none  |  |

| Interior Noise   |                           |
|--|---------------------------|
| Idle in neutral.....yes                                      | Maximum.....wear earplugs |
| Fuel Economy   |                           |
| Normal driving.....100-gal. water/mile, 100-lb. coal/mile    |                           |
| 10 mph loaded.....480-gal. water/mile, 800-lb. coal/mile     |                           |
| Cruise range normal.....90 miles water, 300 miles coal       |                           |
| Cruise range 10 mph loaded.....19 miles water, 38 miles coal |                           |
| Fuel capacity.....9000 gal. water, 15 tons coal              |                           |

### Test Notes:

Tug the whistle cord, push and pull several levers and release the brakes. Grab hold of the baseball-bat-size throttle and pull. The Baldwin moves ahead with ease. There can be wheelspin if the 600-degree-superheated steam is released

too quickly into the cylinders. • During braking, just make sure you have plenty of track in front. • Around the skidpad, the 212,000-lb. locomotive will corner as fast as the turntable at the wheelhouse.

### Test Conditions:

| Temperature | Humidity | Elevation | Wind         |
|-------------|----------|-----------|--------------|
| 90° F       | 100%     | 200 ft    | In your face |