

John Sipple

Sipple on Trains

Bachmann's Giant K-27

The new 1:20.3 Mudhen is a real monster — and a real masterpiece.

Rio Grande's Mudhens

When they first arrived from Baldwin Locomotive Works in April 1903, the Salida Mail and Salida Record newspapers of Salida, Colorado, couldn't decide whether to call these new locomotives Monsters or Mudhens. Since these new 2-8-2 locomotives were so much larger than the other narrow gauge locomotives currently in use, the monster term certainly was applicable. Mudhen came from the tendency to waddle at any speed, a trait that reminded observers of the female Coot duck — the mudhen.

At first, their range was limited due to the weight of the rail, but eventually the entire Rio Grande narrow gauge empire was relaid with heavier track so that the Mudhens and progressively heavier locomotives could travel to any location on the line. The original 15 Mudhens had some problems that were addressed through successive upgrades. The Vaucrain Compound cylinders were replaced rather quickly with D-slide valves and Stephenson valve gear. This process was finished along with electric headlights, generators, new tender boxes, and new smoke stacks by the end of 1915.

Around 1924, all but four were upgraded to piston valves and Walschaert valve gear, steel pilots, and single 11 inch cross compound air pumps, and this rebuild program was finished in 1929. Seven received outwardly slanted piston valves while the remaining four were inwardly slanted. It is the outward slanted group that Bachmann has chosen to model.

Bachmann's Mudhens

When the Mudhens rolled out with piston valves, the



whole group of fifteen was given a new class designation: K-27, where the K was for MiKado and the 27 was for their 27,000 pounds of tractive effort. This from a modest narrow gauge locomotive was a goodly amount of pull. Bachmann's model that very much outdoes this.

The locomotive alone is 12 pounds 2 ounces, and the tender puts up 3 pounds 4.8 ounces of pull, equal to 27.22 percent tractive efficiency. This is astounding, and goes well beyond what the prototype could have boasted, posting as it did a respectable 21.5 percent. Not only is the locomotive a technical marvel, it is possibly one of the finest mass-produced locomotive models ever built.

I have compared dozens of photos, and have determined that my sample is about right for the era from 1945 to perhaps 1952. All of the air and steam plumbing is where you'd expect it to be, and the outside drive mechanism and counterweights are not just there but operational. Even more, the Johnson bar in the cab operates the reversing link in the valve mechanism on the side of the locomotive, exactly as it did on the prototype.

Paint is applied with precise smoothness and appropriate texture. Paint on the smoke box and fire box area simulates the appropriate oil-

and-graphite coating used to protect these high heat areas. Lettering is crisply applied and correct for the period.

There are three versions of the Mudhen with the smaller snow plow, worn year around, and four versions without the plow. My sample is a plow version. I was pleased that the plow didn't hit on any rail obstructions,



The future of large scale just may be under the K-27's coal bunker. DCC? RC? Battery? Track power? Regular old DC? You name it.

but you should allow 3.5 inches from the center of the track to each side for clearance, especially on curves. The locomotive will swing a 5-foot diameter curve without the tender, and will operate nicely through 8-foot curves, tender and all.

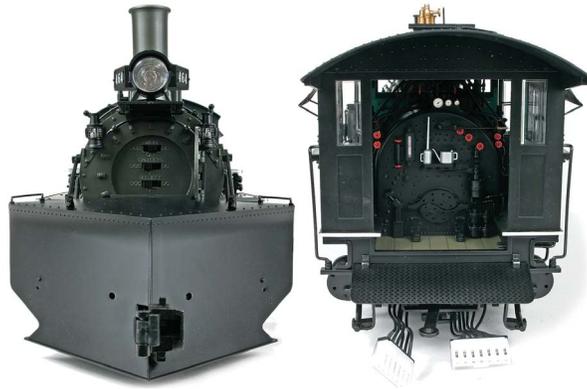
Look into the cab and you'll see all the valves, gauges, throttle, brake levers, and everything else the real locomotives had. The windows slide, the front doors swing open, and the packaging contains figures to sit upon the seats to operate all those controls. Detail is simply breathtaking.

Bachmann tooled three different tender box shells for the group of locomotives they have chosen to model. My 464 has square corners on the back of the box. The coal load is accurate and believable. The tender is connected to the locomotive by a 7-pin and a 6-pin plug. These provide for the myriad electrical connections between the locomotive and the tender where the power board is located.

The motor is a 24 volt Pittman, and it doesn't employ the standard worm gear drive, something you can determine readily because you can push the locomotive on the track and the drivers will turn, if with some resistance due to gear reduction. All eight drivers pick current up from the rails as do all eight wheels on the tender. This makes for a huge electrical footprint and more reliable track connection. The board has provisions for those who wish to use battery/RC power and disconnect the track contacts.

Operating the Mudhen

Operation is very reliable, in part because of the remarkable suspension and double shaft technology. While the



Measurement across the plow is 6.25 inches, but modelers should allow a little extra clearance, especially on curves.

outside frame drive components are able to travel up and down, their ability to travel side to side must be limited. However, the wheels are on a separate axle outside of this axle, and they have some freedom to slide back and forth, though they are spring-loaded to the center.

I had no trouble getting my sample to stroll along at very slow speed, equal to a scale

walk of perhaps two miles per hour. The same was true of DCC where I could dial it down to around one scale mile per hour. On dirty winter-ravaged track, I needed to keep her up to around five scale miles per hour to maintain continuity. Top speed is approximately 30 S.M.P.H.

While Bachmann has included a set of couplers that work with their old low head design, this new standard is really the same height as prototypical couplers, which are the same height as Kadee couplers, and this works better dynamically because railroads designed things to function this way. Their coupler boxes are generally designed to also accept Kadee #830 couplers with drop-in simplicity, but the plow coupler required some careful modification. The tender is a straight conversion, and you can use the stock Bachmann on the plow as-is.

Fn3 is the narrow gauge standard for 1:20.3 scale. This turns the #1 gauge track into perfect 3-foot narrow gauge and the code 332 rail becomes equal to 110 pound track. With Bachmann, building freight cars to this standard in their highest quality Spectrum line while adding this delectable Mudhen as the main course, seems to me that 2008 is the year of Fn3 for large scale model railroading. That rates my enthusiastic "all aboard." **HM**



38-1/2 inches long at more than 12 pounds, she's a real puller — 3 pounds, 4.8 ounces for a 27.22 percent tractive efficiency.