

# Golden Gate Depot 100-Ton Wooden Coaling Tower

Review and Photos by George Brown

By the early 20th century, specialized structures for rapid loading of coal into steam locomotive tenders had evolved into large coaling towers. Hopper cars brought coal from the crusher to the coaling tower and dropped their loads into a pit constructed either underneath or beside the tower. A steam or electric powered bucket conveyor mechanism lifted the coal from the pit to the top of the tower and dumped it into the tower's elevated storage bin. With a locomotive tender positioned at the coaling chute, the fireman or hostler pulled the chute down so the coal could pour into the tender's coal bunker.

Although few wooden coaling towers were built after the early 1900s, they served their owner railroads for a number of years. The 1:48 scale coaling tower from Golden Gate Depot (GGD) models the style of wooden coaling tower built by the Ogle Construction Company of Chicago. Scott Mann, president of Golden Gate Depot and also Sunset/3rd Rail, related that inspiration for the model came from a coaling tower kit and photos of real Ogle towers including the one built for the C&O Railroad at English Lake, Indiana. Historical information that Scott shared with me showed the wooden English Lake tower still in use in 1939. He also shared that Bob Heil, the East Coast representative for Sunset Models, was instrumental in the concept, development, and detail of the model.

As one of three major builders of this type of facility in the early 1900s, Ogle built over 600 coaling stations for 66 North American railroads between 1911 and 1929. Some of these towers were wooden using an outside frame, but most were concrete or steel.



## Construction

Just like real coaling towers, the GGD model is a large structure with an overall square footprint of 7-1/2" on each side and 21-1/2" tall, or 86 scale feet. Before

the tower arrived, I anticipated the structure might not have a rigid feel to it because of its sheer size and plastic construction. My concern for any lack of



Metal chains with counterweights are owner-installed over functional plastic pulleys.

rigidity evaporated as I lifted the solidly built model from its box.

To me, the exposed beams of the tower's outside frame give it a distinctive character as do the simulated wooden stairways. These frame members, as well as the truss legs that support the tower, measure 0.205" thick, which at a scale 9.84" to the side are close enough to be considered 10 x 10 beams. Individual planks for the bin measure close to a scale 6" wide, which in the absence of any specification for a full-sized wooden coaling tower seems reasonable to me. Handrails and steps on the stairways also appear reasonably proportioned.

Both coal chutes on the front of the tower raise and lower with metal chains and counterweights serving their realistic function of holding the chutes in the raised position. But because the chains might not survive the rigors of shipment, they accompany the model packed in a plastic bag, and their installation is left to the owner. After downloading and printing the chain installation instructions from the GGD website ([www.goldengatedepot.com](http://www.goldengatedepot.com)), it took me about 30 minutes to install the three chains on each chute using two pair of small needle-nose pliers. The only tedious part of the task was opening the factory-installed wire loop on each coal deflector, which was too small to receive an attaching ring for the chain.

One of the rings separated from its chain apparently when I carried the tower from the photo lab to my train room; fortunately, there were two extra rings in the packet of chains. To this day, the errant ring has not surfaced, and I pressed one of the spares into service.

Photos of the English Lake coaling tower show a hopper car sitting under the tower, which likely places the coal pit between the support trusses instead of behind the structure. However, the GGD tower has a third chute on the underside of the bin for loading coal into a tender parked under it. Unlike the movable chutes on the front of the tower, this third chute is fixed.

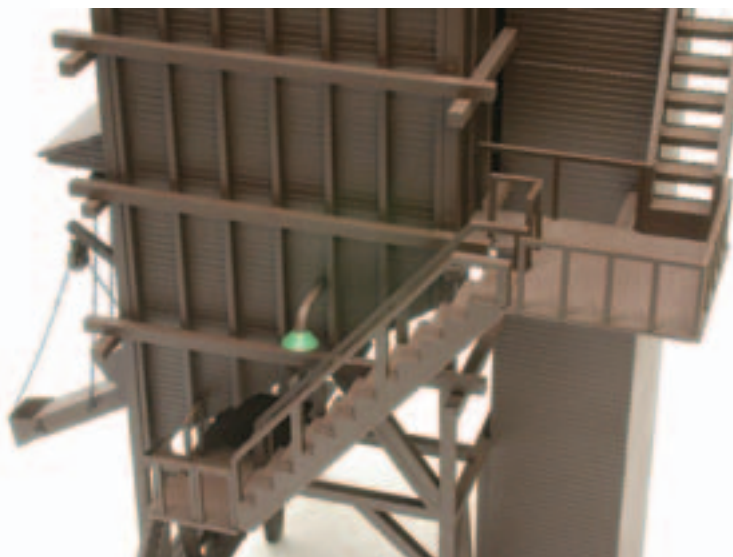
Stairway climbs to the top of the elevator tower. Safety lamps light the stairs during nighttime operation.



## Appearance

An overall deep brown flat finish gives the tower a massive look while green doors, window frames, and lamp reflectors provide a touch of contrasting color. Flat black roof panels are removable for access to the two incandescent light bulbs that illuminate the tower's interior. A circuit board for

Simulated wooden planks are molded into the coal bin and stairway landings.





The lowered coal chute has just finished filling the Hudson's coal bunker, while the other chute is raised out of the way.

### Ogle Wooden Coaling Tower

Retail Price: \$229.95 directly from GGD

Golden Gate Depot; 408-866-1727;  
sales@goldengatedepot.com




Windows are clear plastic. The door at the top of the tower opens and is spring-loaded.

constant brightness lighting resides inside the coal bin and provides a constant 6-volt output from an input of 6–18 volts, AC or DC. Exterior lighting includes safety lamps above each coal chute, the side and back stairways, and the platform at the top of the tower. A small slide switch at the bottom of the tower controls the lights, which shine a soft, realistic, and nostalgic glow on a nighttime layout.

### Wood First, Concrete Next

In our product reviews, we do not normally give insight to a future product. But one of my corollaries to the physical law of action and reaction states “to every policy there is an equal and opposite exception.” In a conversation with Scott that paved the way toward this exception, he enthusiastically described the next GGD coaling tower that will ship in 2009. It models a concrete structure, which was the predominant type of coaling tower across North America after WWI. Considering that the major engineering effort for dimensions and basic tooling came from GGD’s wooden tower, it’s understandable that the size and shape of the new concrete tower closely relates to its predecessor, as shown in Scott’s photo of the pilot model.

### At the End of the Run

Except for the owner-installed coal chute chains, the GGD model of the Ogle wooden coaling tower is a fully assembled and painted structure that I found fascinating. If your layout and steam locomotives need a wooden coaling tower, this model could likely do the job. 



A glimpse into the future at this writing is GGD's upcoming concrete coaling tower.

Photo courtesy of Scott Mann