

Go large with big business

Some industries are big enough to take up a whole layout



A paper mill, like the Crown Vantage mill near Berlin, N.H., is an industry large enough to be a layout all on its own. As part of a larger model railroad, a big industry can give a railroad an obvious reason for being. Marty McQuirk photo

Selective compression – modeling something as smaller than it really is by shrinking dimensions or omitting parts – is one of the most useful tricks in the railroad modeler’s toolbox. However, there are reasons you may want to model a really big business.

Some prototype industries, such as steel mills, only come in one size: XXL. Compressed versions of these trackside behemoths just never look quite right, so we settle for backdrop flats or imply a larger complex by modeling only a corner of it.

But what if you could give that industry the space it deserves?

Modeling a truly big industry can pay off in a big way. The most obvious benefit is realism. The bigger a business is, the more it looks like it needs rail service. You can ship more cars to and from a big industry. A large, diverse industrial complex, like an auto plant, would also demand a wider variety of cars than, say, a stamping plant alone.

And instead of receiving those cars on one or two spurs, a big factory complex would have numerous sidings,

docks, unloading points, and holding tracks to handle the constant flow of cars. These operations might require a dedicated switcher, which would need its own enginehouse and servicing tracks. Often these complexes will have their own power plants, creating a demand for gas, oil, or coal.

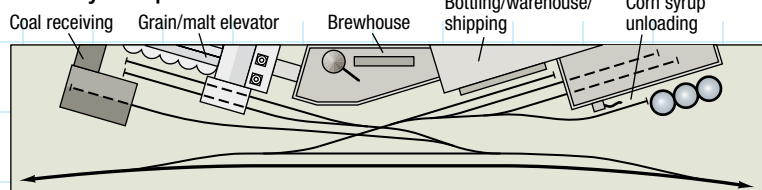
For some examples, check out “Modeling a steel mill in 4 x 8” in *Model Railroad Planning 2008* and “Big industry in the valley” in the special issue *How To Build Realistic Layouts: Industries You Can Model*. – Steven Otte

Brewery

Breweries are a common industry in the Northeast and Midwest, though large ones can be found anywhere from Florida to Alaska. Many offer interesting modeling opportunities, as buildings in different architectural styles were added over the years.

The heart of a brewery is the brewhouse, often a tall brick building with large, distinctive windows. A large complex will also need a bottling plant, warehouse, water tower, grain elevators, and covered loading/unloading areas for sensitive ingredients. Breweries receive rail shipments of barley malt, corn, and hops in

Brewery complex



H0 scale (1:87.1), 12" grid

Illustrations by Model Railroader staff

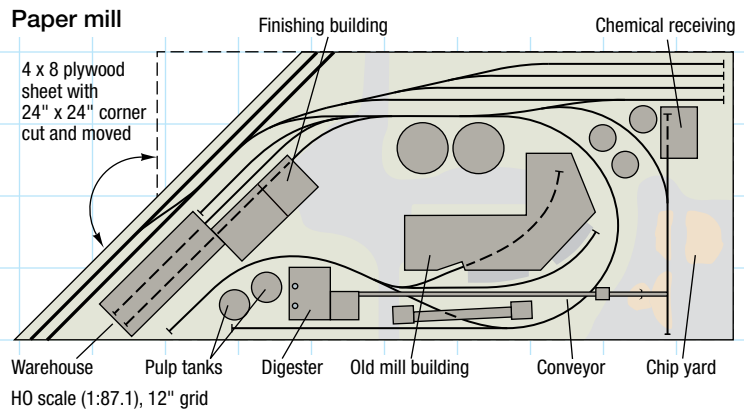
boxcars or, later, covered hoppers; tank cars of corn syrup; and packaging materials in boxcars, including empty cans, bottles, kegs, and cardboard boxes. The finished product ships out in reefers or insulated boxcars.

Paper mill

Paper mills take in a wide variety of raw materials. Though wood chips and pulpwood (in gondolas) are the most obvious, chemicals including liquid chlorine, sulfuric and hydrochloric acid, hydrogen peroxide, titanium dioxide, kaolin clay, and talc are also needed. Most of these arrive in dedicated tank cars.

The finished product goes out in boxcars, often with plug doors to protect the paper from moisture. Such boxcars are often specially labeled and dedicated to paper service.

Most paper mills are marked by large piles of wood chips. Conveyors carry them into the digester building, which converts them into wood pulp. However, you could model a paper-only mill, which instead receives bales of pulp in boxcars. The pulp is bleached, liquefied, and piped to the long, low mill building, where it



becomes paper. Rolls are then moved to a warehouse, which will have covered loading areas. A mill complex will also have tank car unloading facilities and tanks to store the chemicals. Papermaking takes a lot of water, so mills are often located along rivers.

Glass factory

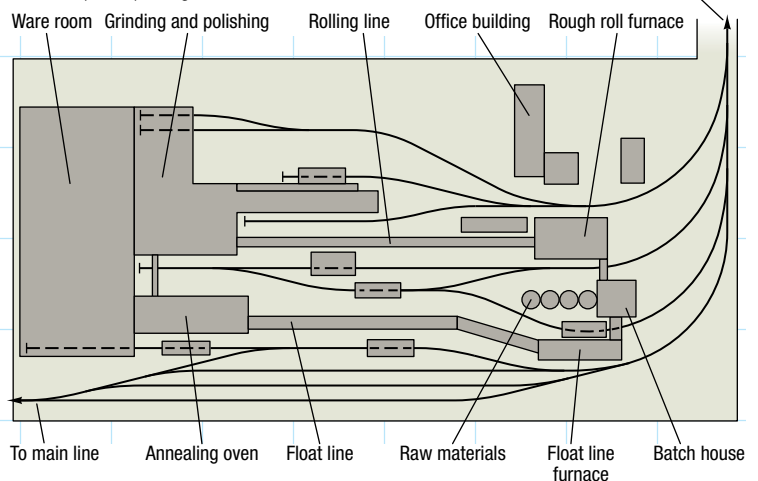
Plate glass factories are not as commonly represented on model railroads as, say, coal mines or grain elevators, but they're just as interesting, with plenty of detail to model. A glass plant is not only a destination for hoppers of sand, limestone, and sodium carbonate (soda ash), but also supplies boxcars of glass to ship to your sash-and-door factory or auto plant.

In addition to the raw ingredients of glass, a factory would also require fuel – a lot of it, since glass is melted at temperatures over 2,800 F. Materials needed later in the process, including salt, iron oxide, felt (for polishing), and packaging materials, would be received in boxcars.

Since a glass furnace can never be allowed to cool down, factories operate 24 hours a day, keeping that industrial switcher busy.

Glass factory complex

HO scale (1:87.1), 12" grid



Auto plant

How much of the auto industry you model will depend on the era of your railroad. In the early days, most fabrication was done on-site. A steam-era auto plant needed shops to work with iron, steel, glass, wood, and textiles. After World War II, factories specialized in engines, wheels, electrical systems, and more, and these parts were then shipped to assembly plants. Most parts would be shipped in boxcars, though rolls of steel, gondola loads of auto frames, hoppers full of plastic pellets, and tank cars of fuel, oil, solvents, and welding gases would add variety.

You'll also need to ship out those new automobiles. An early plant would have long docks to load finished autos into double-door boxcars, while a modern one would have movable ramps at the end of stub tracks to load today's multi-level auto racks.

Transition-era auto plant

HO scale (1:87.1)
12" grid

