

insiders report

A Vital Part of any Community

Historically, one of the first structures to be built in or near a rural village was the church. Constructed by the congregation, rural churches were as much a village social center as a place of worship. Their high ceilings allowed for a choir loft, while their tall steeples assured that the bells could be heard for miles around. These features evolved into a very recognizable building type.

The Cornerstone Series® Gold Ribbon Series™ Cottage Grove Church captures the rural charm of wooden churches across North America. Take a drive through the countryside and you're sure to pass at least one such structure. They're so common that a layout without one would seem incomplete.

A Building You can Use Anywhere

As with rural, one-room schoolhouses, most churches were built at easily accessible locations so they could serve nearby residents. They were, and still are, found at country crossroads as well as in small villages.

Because churches like Cottage Grove Church were found everywhere from the late-1800s on, they're natural additions to any layout. While some have been replaced with larger facilities as their congregations have grown, many still serve their original function; others have been rebuilt into everything from private residences to antique stores.

Like all Gold Ribbon Series kits, Cottage Grove Church offers quick construction using detailed, snap-together main parts. Walls and contrasting trim are molded as one part, eliminating any need for painting. The kit also includes an interior light and realistic-looking simulated stained glass window decals.

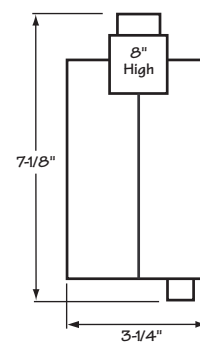
Adding this church to your layout is easy. Just place a parking area next to the building and a few



decorative shrubs or hedges along the stone foundation. Modern scenes might have a paved parking lot and an exterior light post. Finally, because these buildings are usually well-maintained, your church needs only light weathering with chalks. ■

Cottage Grove Church,
933-3606 \$29.98

As communities have grown, some small churches have been replaced or converted to other uses. In 2001, this building north of Virginia, Minnesota, has become a small restaurant and shop. Photo by Bob Gallegos



Use these Cottage Grove Church measurements when planning your church scene.

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Big Steel's Definitive Structure comes to N Scale

No other structure cries out "steel" like the Blast Furnace. In many cities across the continent, these massive, fire-breathing dragons stand tall against the skyline. Running continuously, they consume many tons of coke and iron ore each day and ship out carload after carload of molten iron and slag. From a modeler's perspective they're an ideal industry – almost everything moves in or out by rail.

For the first time ever, a realistic blast furnace comes to N Scale from Walthers. This new model, based on the crown jewel of the steel industry, brings creating an impressive, rail-dependent heavy-industrial scene within easy reach of all N Scale modelers.

module on this one business. The kit includes the parts you need to create a realistic blast furnace: a detailed top platform, complete with bell levers and explosion valves, gas washers, heating stoves, cast house, highline and skip hoist. Realistic decals and complete instructions also come with the kit.

At many locations, the blast furnace is a stand-alone facility. In your railroad's operating

change to the mainline railroad.

On the cast house end of the structure, hot metal cars and slag cars are pulled by another switcher every few hours when the furnace is tapped. These can be hauled to a

ballast. For an idea of track arrangements at the Walthers Blast Furnace, check out the diagram on page 3.

Additional Detailing

Several manufacturers produce N scale steel industry cars for use at your blast furnace. Atlas and Model Power make ore cars; open hopper cars are avail-

able from most major manufacturers. Minitrix (Märklin) produces hot metal and slag cars.

The Blast Furnace is sometimes part of an integrated steel mill – one that melts iron, makes steel and produces steel ingots, coils of rolled sheet or other products. If you're into kitbashing or scratchbuilding, the large corrugated metal buildings of an electric or basic oxygen furnace (the destination for the hot metal cars) and a continuous caster are relatively easy projects. The upcoming



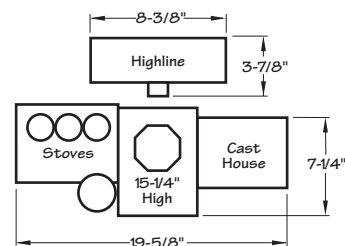
N Scale Blast Furnace, 933-3249

Steel on your Layout or Module

The Cornerstone Series® Blast Furnace, 933-3249 \$129.98, gives you a great opportunity to design a realistic scene packed with operation. In fact, some modelers might base an entire layout or NTRAK

scheme it can provide plenty of action. At a nearby yard, loaded ore cars and hopper cars of coke and limestone flux arrive. A switcher moves them up the highline where they're dumped into underground pits. Empties are moved back to the yard for inter-

facility off the layout; at a large integrated mill, they would be hauled to other locations for conversion into steel. Slag cars are routed to a slag dump where the material is processed for industrial use in cement, pavement, and even railroad track





Above: In many locations, blast furnaces were constructed in groups. The four furnaces (the fourth barely visible on the right) of this mill in Pittsburgh tower over nearby residential and commercial buildings. Notice the rust on the skip hoist, skip cars (visible on the skip hoist) and along the highline, as well as the overall coloring of the facility. Jim Weaver photo from the collection of Dean Freytag

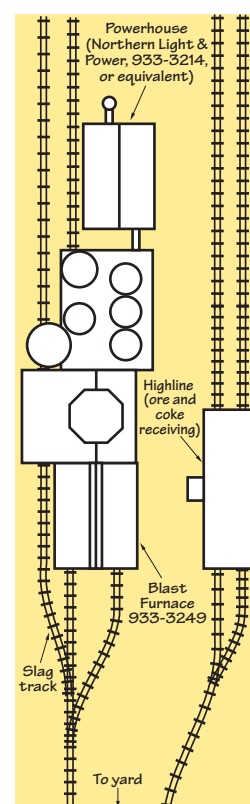
Cornerstone Series N Scale Rolling Mill, 933-3250, is a natural addition to a scene surrounding the Blast Furnace. Because of their immense size – some large rolling mills are over a quarter mile long – many modelers use these structures as 3-D backdrops for their mill scenes.

Finally, paint doesn't last too long on the actual structures because of the intense heat, so you'll want to paint them a good rusty brown color. Many real mills do this so dirty or bare areas aren't too conspicuous. Streak the



parts with weathering chalks of various browns, grays and blacks. On the highline where limestone is dumped, add some light gray chalk along the tracks. Use reddish-brown chalks on the skip hoist to simulate rusty iron ore dust. Take a look at the prototype photos for weathering ideas. ■

Above: A Nickel Plate Road freight scoots past the Republic Steel blast furnace in Cleveland, Ohio, in the early 1960s. Other structures surrounding it include additional furnaces for converting molten iron into steel. Photo by Dean Freytag



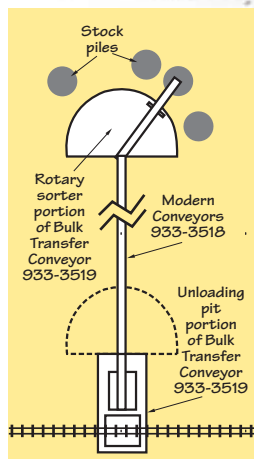
Trackwork surrounding the Blast Furnace need not be complex. A typical arrangement requires only five spurs.

Bulk Industry in a Small Space

Aggregates are big business for most railroads. While quarries, mines and rock crushers like Glacier Gravel Company (933-3062 \$59.98) can fill up entire trains, individual car-load shipments also make up a good portion of the traffic mix. All those cars have to go somewhere! That's where the Cornerstone Series® Bulk Transfer Conveyor kit comes in. This facility, capable of handling single cars or entire unit trains, is just the ticket for adding a trackside industrial facility in a small amount of space.

One Facility, Many Uses

Pavers, builders and concrete batch plants need crushed stone to stay in business. Hopper car unloaders like the Bulk Transfer Conveyor are quick to add to your layout and can be used for more than just aggregates. Other common materials unloaded at similar facilities include granulated fertilizers, road salt, ores and minerals, coal, coke and some feeds and grains.



Many facilities extend the reach of their unloading facility with additional conveyors. Here's a suggestion using the Modern Conveyors kit, 933-3518.

Operations at the unloading facility are fairly straightforward. A hopper car is positioned with one bay over the grate. Rock spills onto a below-track conveyor that feeds a wheeled rotary sorter conveyor at ground level. The wheeled rotary sorter pivots in an arc on a concrete pad, allowing it to dump

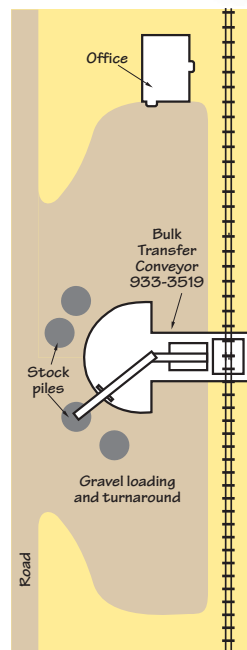
into several piles. It can be used for different grades of rock or for dissimilar materials.

Blending Bulk Transfer Conveyors into your Scenes

Businesses with bulk transfer conveyors receive a variety of hopper cars. At an agricultural supplier, covered hoppers bring in fertilizer and feeds. These materials are sensitive to the weather, so they're usually stored in bins, although some granulated fertilizers can be stored in outdoor stockpiles for short periods. Municipalities in cold climates receive road salt in covered hoppers; conveyors directly feed stockpiles, trucks or bins.

Aggregate receivers usually install their railroad spur and hopper car unloader wherever materials can be stockpiled or transloaded into trucks. Many facilities are arranged just like the one in the kit. When the spur is not next to the stor-

Cornerstone Series Bulk Transfer Conveyor kit 933-3519



The Bulk Transfer Conveyor kit along a spur. The large gravel area is for trucks and a front-end loader to maneuver.

age area, the pit conveyor feeds a fixed conveyor which, in turn, feeds a dis-

tant rotary sorter. This is easily modeled by cutting off the semicircular portion of the kit base and placing it at the storage site. Connect the pit conveyor and rotary sorter using parts from the Modern Conveyors kit, 933-3518 \$12.98.

Additional details for the pit area include the office and fencing. Chain-link fencing (provided in the kit) often separates the facility from adjacent roads and public areas; you probably won't find fencing in remote areas. The office is usually squeezed in along the access road.

Hauling Aggregates across your Layout

Bulk transfer conveyors can host a variety of open hoppers. The new Walther's Greenville 100-Ton Twin Hoppers and the 40' Ortnor 100-Ton Open Aggregate Hoppers are ideally suited for use in your scenes.

The newest models are the Greenville 100-Ton Twin



Hoppers. These ready-to-run workhorses have been in service across the continent since the 1970s. They're regularly used to haul aggregates, railroad ballast and ores. The cars feature a detailed, one-piece plastic body, heavy one-piece diecast underframe, separate door and brake details, free-rolling trucks and working knuckle couplers.

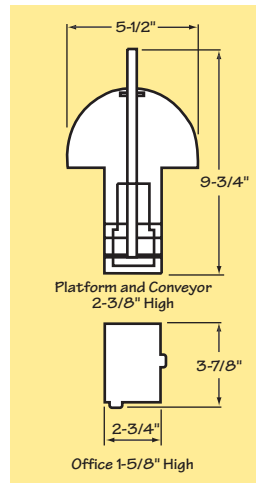
Some railroads, especially shortlines and industrial

operations, use any cars they can beg or borrow for hauling rock. Other Walthers cars you can use for aggregate service include 49' 100-Ton Quad Hoppers, PS3 Ribside Twin Hoppers and Ore Cars. Aggregate businesses usually pick these cars up used, so weather and reletter them accordingly. ■



Above left: This car unloader feeds a fixed conveyor which, in turn, feeds a rotary sorter a few hundred feet away. Photo by Bob Gallegos

Left: Weather your track grate with light (fresh) rust and dust. Some installations add slope sheets to either side of the grate to guide spilled material into the pit; you can do this using styrene strips cut to length. Photo by Bob Gallegos



Above: Transfer Conveyor kit footprint shows measurements of individual components.

Walthers Aggregate-Handling Models

Bulk Transfer Conveyor kit 933-3519 \$29.98

Greenville 100-Ton Twin Hoppers

Roadnames	Single cars, \$12.98 each	2-Packs, \$25.98
NS	932-7401	932-27401
UP	932-7402	932-27402
SP	932-7403	932-27403
WC	932-7404	932-27404
SOU	932-7405	932-27405
Granite Rock	932-7406	932-27406
Golden West Service	932-7407	932-27407
Undecorated	932-7400	

Aggregate Loads for Greenville Hoppers
pkg(2) 933-1054 \$6.98



Above: Here's an SP Greenville 100-Ton Twin Hopper in service. These cars get mighty dusty; you can recreate the look using weathering chalks. Walthers Archives



Greenville 100-Ton Twin Hopper 932-7407

Offer Your Road's Customers a New Service

Back when railroads were the only choice for shipping over long distances, business was brisk for less-than-carload-lot (LCL) shipments on many lines. In order to reduce handling, special containers were designed to maximize the number of small shipments per car. The resulting cars and loads were real eye-catchers in any freight consist – gondolas filled with small boxes seemed exotic on trains where box cars predominated.

Imagine adding a 46' USRA gondola loaded with LCL containers to your steam- or classic diesel-era freight consists. New Walther's LCL container service models make it easy to simulate this unique system of cargo handling on your HO Scale railroad.

They Offered Great Promise

Before World War I, LCL traffic contributed heavily to most railroads' bottom line; the problem was that it required considerable handling. LCL freight was typically handled in specially designated box cars or cabooses, called waycars, on locals or wayfreights. Express shipments were carried on passenger trains.

Walther's LCL Bulk Containers (933-2120 series), patterned after those constructed by Youngstown, carried specialty minerals like dolomite, lime and manganese to steel mills and other consumers.

Normally, an LCL shipment required workers to load and position it on the car as other shipments were picked up along the

LCL Coke Containers hauled coke from manufacturers to steel mills and foundries. The Walther's models (933-2120 series) are based on the corrugated versions built by Youngstown and used by a variety of roads.

line. At terminals the shipment was moved into a freight station, then later placed on another car bound for the next destination.

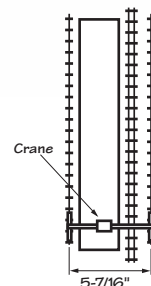
There it was unloaded, and sometimes delivered to the receiver. All this was for a simple, one-railroad shipment. Imagine how much handling a shipment received (also risking damage and pilferage) as it traveled across several railroads and through many freight houses! Clearly, things had to change.

Containerization promised to reduce handling and increase security. The concept was simple: shippers

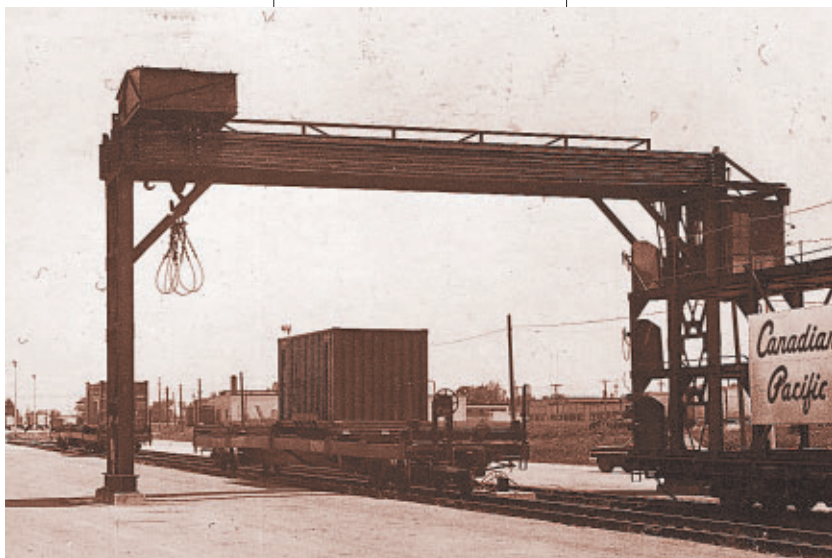
The Cornerstone Series® LCL Container Terminal is based on a typical facility often located in a yard or near a team track. Compare it with the prototype photo and you can see that some of these facilities lasted into the modern container era. Here the model is shown with the merchandise containers and 1940s-era delivery truck from the deluxe version of the kit.

and freight forwarders could consolidate loads with similar destinations into LCL containers. They were trucked to an LCL Container Terminal, similar to the Cornerstone Series® model, where a crane loaded them into gondolas. Unlike waycars, which usually carried less

Roadway
11-13/16" x 2-3/16"
Height to top of crane 4-1/8"



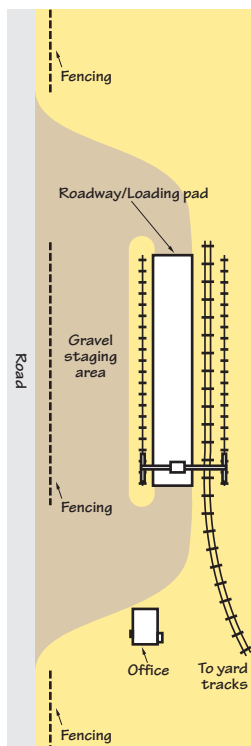
Office
2-1/2" x 1-3/4" x 1-5/8"



than 10% of their capacity, fully-loaded container cars were billed at lower carload rates. The forwarding and consolidation companies made their money on the difference between LCL and carload rates.

Boxes and Bins

The first LCL containers took to the rails in the early 1920s. Specialized versions were developed to haul small packages, merchandise, cement, bricks, powdered chemicals and even refrigerated goods. The earliest containers were developed by the LCL Corporation, an arm of the New York Central, followed by arch rival Pennsylvania. Unfortunately, infighting between the two roads led to incompatible systems where containers could not be interchanged. Eventually, third-party builders such as Youngstown constructed containers for several railroads.



A typical arrangement for the components in the LCL Container Terminal kit.

Although it was a great idea, LCL container service came along a little too late. While it was catching on, trucks were already siphoning away LCL traffic. The inability to interchange containers between two key north-eastern carriers also created barriers to widespread acceptance – especially for merchandise traffic. Bulk commodity service, on the other hand, was more successful.

Walthers chose some of the most widely used and longest-lived containers as the basis for its models. Open-top coke containers and enclosed bulk containers, which hauled convenient “doses” of dolomite, lime and other commodities, were used primarily by the steel industry to reduce handling. Cranes like the one in the LCL Container Terminal kit lifted

This crane was handling 20' containers in the 1960s. Note that the tracks are off to one side and a roadway/loading pad runs next to them. Photo from the collection of Bob Gallegos

the containers out of gondolas and moved them directly to their point of use. LCL Coke and Bulk containers could be seen loaded in gondolas through the 1990s.

Loading Them Up and Moving Them Out

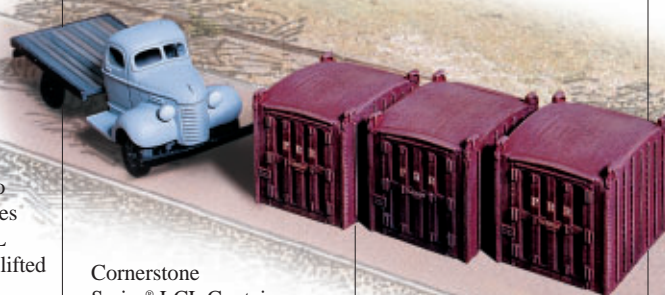
When LCL container service began in the 1920s, railroads constructed unloading facilities in yards and near team tracks. The

out the diagram for an idea of how to arrange the models on your layout.

The new LCL Container Terminal kit is available in two versions: standard and deluxe. Both kits include all of the above components, plus realistic decals, to make setting your scene easy. The limited-run Deluxe kit includes additional resin and metal parts to make three LCL merchandise containers – based on Pennsylvania Railroad DD1 prototypes shown in the photo – and a 1940s-era local delivery truck.



By the time this photo was snapped in the 1960s, these PRR LCL merchandise containers had been relegated to use as storage sheds at a station along the Pennsy Panhandle Line in Ohio. Photo by Dean Freytag



Cornerstone Series® LCL Container Terminal kit includes the parts you need to create such a facility on your layout. On the prototype, the movable overhead crane traveled the length of the gondolas on crane rails, transferring containers between gondolas and delivery trucks. For better visibility, crane operators rode in an elevated cab.

A brick or paved loading pad for trucks helped keep dust and mud to a minimum. Other features usually included a clerk's office and fencing to control the flow of unwanted visitors. Check

Additional details from the LCL Container Terminal Deluxe Kit include one 1940s-era delivery truck and three PRR-style merchandise containers.

Getting LCL Containers from Point A to Point B

Out on the high iron, LCL containers traveled in gondolas or on flat cars. Some were essentially truck bodies placed on flat cars – predecessors to today's

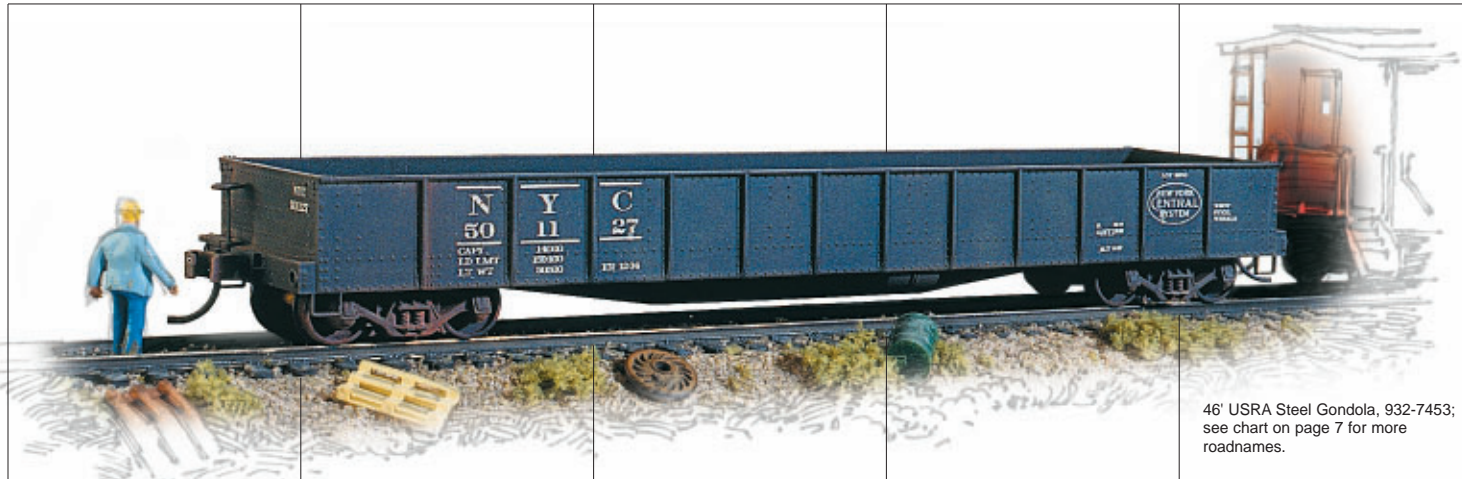
Continued on page 8

Walthers LCL Container Service Models

LCL Container Terminal	933-3174	\$29.98
LCL Container Terminal Deluxe	933-3709	\$49.98

46' USRA Steel Gondolas

Roadname	Single cars, \$13.98 each	2-Packs, \$27.98	3-Pack, \$10.98	3-Pack, \$10.98
B&O	932-7451	932-27451	933-2121	933-2101
PRR	932-7452	932-27452	933-2122	933-2102
NYC	932-7453	932-27453	933-2123	933-2103
Erie	932-7454	932-27454	933-2124	933-2104
NKP	932-7455	932-27455	933-2125	933-2105
WM	932-7456	932-27456	933-2126	933-2106
MP	932-7457	932-27457	933-2127	933-2107
LV	932-7458	932-27458	933-2128	933-2108
Undecorated	932-7450		933-2120	933-2100



46' USRA Steel Gondola, 932-7453; see chart on page 7 for more roadnames.

Continued from page 7

modern intermodal containers. Other LCL containers, especially coke, bulk, brick and cement types, rode mostly in gondolas. Typical cars included the 46' USRA Steel Gondola, on which the Walthers model is based, and similar cars. By the 1970s, most moved in 50' gondolas.

The prototypes for the Walthers models were constructed following designs adopted by the United



States Railroad Administration (USRA) during its

Container gondolas, especially the Monon's with their added end bulkheads and homebuilt containers, had a distinctive appearance. Photo from the collection of Mont Switzer

To view our entire line, visit walthers.com or see the Walthers Reference Books.

Quick links to products mentioned in this issue of *Insiders Report*

Cottage Grove Church, 933-3606

N Scale Blast Furnace, 933-3249

Bulk Transfer Conveyor Kit, 933-3519

Greenville 100-Ton Twin Hoppers, 932-7400 Series

Aggregate Loads for Greenville Hoppers, 933-1054

Glacier Gravel Company, 933-3062

Modern Conveyors Kit, 933-3518

LCL Container Terminal, 933-3174

LCL Container Terminal Deluxe, 933-3709

46' USRA Steel Gondolas, 932-7450 Series

LCL Coke Containers, 933-2120 Series

LCL Bulk Containers, 933-2100 Series



This USRA gondola was in wreck-train service by the time it was photographed in 1968. Photo by Chuck Yungkurth

World War I-era control of the country's railroads. The USRA developed several standard types of freight cars, including the 46' mill gondola. Thousands were built and allocated to railroads for wartime use; several railroads ordered more after the war and placed portions of their fleets into LCL container service. Most USRA 46' steel gondolas were out of service by the late 1960s.

Like their prototypes, Walthers ready-to-run 46' USRA Steel Gondolas have a distinctive appearance.

Designed for hauling up to 70 tons of steel or other heavy loads, they had deep, "fishbelly" underframes and low sides. The models have simulated drop-ends in the closed position (container service cars had their ends welded shut). Whether carrying LCL containers or hauling steel or aggregates, they'll add realism to any steam- or classic diesel-era freight train.

Simulating LCL Container Service on your Layout

You can model LCL container service on your pike by hauling containers between two points or a staging yard. If you're into modeling heavy industries, you could run coke containers between an LCL Container Terminal at the

Coke Ovens & Quencher, 933-3053 \$99.98, and on-line foundries and steel mills. LCL Bulk Containers ran between mineral producers and terminals at steel mills. LCL coke containers were also moved to off-line foundries by truck, so you can the same containers as realistic loads.

Finally, if you prefer to operate merchandise containers, you could add two limited-run LCL Container Terminal Deluxe kits at opposite ends of your layout and run loaded cars between them. A single terminal could receive containers from from an off-line location. ■