



S Gauge Trains That Do More

M.T.H. S Gauge Old Favorites, New Technology

If you're an S gauge model railroader, you're probably familiar with the trains formerly produced by S Helper Service. Over the course of two decades, owners Michael Ferraro and Don Thompson helped bring S gauge into the 21st century — creating a line of cars and locomotives with details and running qualities that rivaled the best ready-to-run products in any scale. In addition, their S-Trax System became the gold standard for S gauge sectional track.

In 2012, when Michael and Don decided to retire, M.T.H. was proud to acquire the tooling that S Helper Service had created. Over time, our intent is to re-introduce and add to the eighteen types of freight cars and eight locomotives in S Helper's lineup, while upgrading each locomotive to Proto-Sound® 3.0 — M.T.H.'s sound and control system with features never before seen in S gauge.

No matter how you operate your railroad — analog DC, analog AC, NMRA-standard DCC command control, or our own DCS $^{\text{TM}}$ Digital Command System — a Proto-Sound 3.0 engine is ready to run. Just put your engine on the track and run it — it knows what kind of power is on the rails and adapts accordingly.

WHO IS M.T.H.?

While our name may be new to S gauge model railroaders, M.T.H. Electric Trains is a seasoned American model train manufacturer with a long history of innovation. In little more than three de-

cades, M.T.H. has grown from a tiny business operated out of a spare bedroom into an 80+ employee company headquartered in its own sprawling building in a suburb of Washington, D.C.

Over the past 33 years, we have cataloged over 22,000 different items in five scales: 0 Gauge, One Gauge, HO Gauge, tinplate Standard Gauge, and now S Gauge. We are co-owners of two overseas facilities that make nothing but M.T.H. trains, and we use three other factories that are dedicated solely to our product line. This gives us more control of our manufactur-

ing process and quality than many other train companies, whose products are often made in the same factories used by their competitors.

Our research and development team has received more than 10 patents on innovations in model railroading. We believe the Proto-Sound sound and control system found in every M.T.H. locomotive, in combination with our optional Digital Command System (DCS), makes our trains more realistic and more fun to operate than any other trains in model railroading.

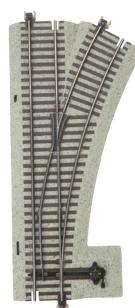


WHAT IS PROTO-SOUND 3.0?

Our Proto-Sound® 3.0 sound and control system enables M.T.H. locomotives to run in every S gauge environment: conventional AC or DC, NMRA-standard DCC, or our own DCS digital command system.

With a conventional AC or DC transformer, Proto-Sound offers diesel motor sounds that ramp up and down with engine speed, or chuff sounds synchronized with a steam locomotive's driver revolutions. You'll also hear squealing brakes whenever an engine slows down or stops. In addition, the engine's Proto-Speed control acts like the cruise control on an automobile, helping your locomotive maintain a constant speed regardless of hills, curves, or heavy loads — at any throttle setting from a 3 mph crawl to full throttle.

Add an M.T.H. AC transformer equipped with whistle and bell buttons, and you can experience a much larger range of locomotive sounds: horn or whistle, bell, passenger station announcements or freight yard sounds, crew conversations, and typical engine sounds such as air pumps or steam letoff.





If you operate with Digital Command Control (DCC), you'll find Proto-Sound 3.0 locomotives take full advantage of the capabilities of DCC and are completely compatible with all DCC motive power. In fact, Proto-Sound engines are already equipped to use DCC functions 0 through 28, to take full advantage of newer DCC controllers that use the full range of NMRA standard functions.

To experience the full capabilities of Proto-Sound 3.0, add the M.T.H. Digital Command System (DCS) for full command control and an even larger range of sound and control features. Turn the page to learn more about the features that Proto-Sound offers under DCS control, or visit a DCS Demo Center to try DCS in action for yourself.

HI-RAIL OR SCALE . . . IT'S YOUR CHOICE

Every M.T.H. S Gauge diesel comes equipped with an extra set of wheels and couplers, so it can be quickly converted from a hi-rail to a scale-wheeled model. Each insulated scale wheel set quickly drops into the power truck block. The oversized S gauge hi-rail couplers can be removed and replaced with Kadee®- compatible S scale couplers in minutes. This flexibility ensures that an M.T.H. S gauge locomotive will be right at home on any hi-rail or scale S gauge layout.

JUST FOR FUN

In addition to scale-sized cars and locomotives and a sectional track system, you'll find something in this catalog that is totally whimsical: accurate reproductions of classic American Flyer® accessories, upgraded with modern motors and electronics for better operation than the originals. If you've always wanted to play with a Seaboard Coaler, Gabe the Lamplighter, the Log Loader, or the Saw Mill, here's your chance to experience the magic of these 1950s operating accessories.

We invite you now to turn the page and see what we have to offer, in this, our first S gauge catalog of many to come. We hope you'll find items here that surprise and delight you, and help you continue to enjoy this most wonderful of hobbies.



M.T.H. S Gauge rolling stock features intricately detailed bodies mounted atop durable, well-detailed, smooth-rolling trucks. Metal hi-rail wheel sets and S Gauge operating couplers come standard. Each fully painted and assembled car is loaded with fine scale details like separate grab irons, steps, ladders, brake cylinders and other prototypically correct components that ensure an M.T.H. S Gauge car is an exceptional value.

Many cars sport accurate graphics in prototypical colors and roadnames, while others may be adorned with popular logos and colors of famous and not-so-famous brands. Regardless, every M.T.H. S Gauge freight car is produced in two

car numbers. Many can also be purchased in six-car sets, ensuring that long freight consists — with each car bearing a unique number — can be obtained.

Scale operators can quickly replace each car's hi-rail wheel sets with separately sold scale wheel freight car kits.* S Gauge

couplers can be swapped out with Kadee compatible couplers and quickly mounted to the built-in Kadee coupler mounts in just minutes.

*(Each scale wheel freight car kit contains four wheel sets and two Kadee compatible scale coupler spacers.)

Item 35-1109

Contents

Proto-Sound 3.0	2
EMD F3 Diesel	4
Rolling Stock	
PS-2 Covered Hopper	6
70-Ton Ore Car	8
40' Woodsided Reefer	10
Steel Rebuilt Box Car	12
Track and Accessories	14
Transformers and DCS	17

Visit your local
authorized M.T.H.
Retailer or
www.mthSgaugetrains.com
to purchase
these catalog
offerings

Not all products depicted in this catalog are production models. In some cases, the items pictured may be models in HO scale, O scale, or another scale that have been altered digitally.

Each item's graphic features and content are subject to change after publication.

All product features may be verified on their retail packages.

M.T.H. Electric Trains is in no way affiliated with any of the railroads featured in this catalog.

Products bearing Chicago and North Western, Denver & Rio Grande, MKT, M-K-T, Missouri Pacific Lines, Missouri Pacific, Pacific Fruit Express, Southern Pacific Lines, Southern Pacific, Union Pacific, and Western Pacific names are made under trademark license from Union Pacific Railroad Company.

American Flyer is a registered trademark of Lionel LLC.

Lionel®, The Lionel Corporation, TrainMaster Command Control®, TMCC®, LEGACY™, CAB-1®, American Flyer® and Lionel Electric Trains® are registered trademarks of Lionel Trains L.L.C. Licensed By Lionel LLC

Kadee® is a registered trademark of Kadee Quality Products Co.

©2013, M.T.H. Electric Trains, 7020 Columbia Gateway Drive, Columbia, Maryland 21046-1532 • www.mthtrains.com • 410-381-2580

Proto-Sound 3.0 THE RICHEST SET OF FEATURES IN MODEL RAILROADING!

Whether you operate with a conventional transformer or in command mode with DCC or DCSTM (M.T.H.'s Digitial Command System), the Proto-Sound 3.0 system found in every locomotive in this catalog offers more realism, more fun, and more variety than any other locomotive control system in any scale.

adjusting bell, horn or whistle, and chuff volume. And most steam engines have quillable whistles, which can be "played" like a real engineer does with the whistle cord.

STATION SOUNDS

Proto-Sound passenger engines offer Passenger Station Proto-

ATMOSPHERIC SOUNDS

Crew conversations, the whoosh of a steam engine opening its cylinder cocks, and a host of other atmospheric sounds play automatically at random when using a conventional transformer — or can be activated manually from a DCC controller or the DCS handheld.



VIVID ENGINE SOUNDS

Proto-Sound features crystal-clear digital sounds. We strive to make our sounds as authentic as possible, using the correct prime mover sounds for each diesel, for example. With our optional DCS system, you can tune each engine to your preference by individually

Effects™, a complete arrival and departure sequence that you can activate from your DCC or DCS controller. In most cases, the station sequence features an actual name train pulled by that particular engine. Freight engines include Freight Yard Proto-Effects, a symphony of freight terminal sounds.

EXTRAORDINARY SLOW SPEED CAPABILITY

Proto-Sound engines can throttle down as slow as three scale miles per hour, highball down the main line, and maintain any speed in between. With certain DCC controllers, and any DCS controller, you can set engine speed in one-scale-mile-per-hour

increments up to 120 smph. Go ahead, get out your stop watch and ruler and see how accurate our scale speeds are.

UNMATCHED SPEED CONTROL

The Proto-Speed Control™ built into Proto-Sound 3.0 acts like the cruise control on a car, keeping your train moving at the speed you select, regardless of hills and curves. You can even switch off the speed control if you prefer.

LIGHTING EFFECTS

Proto-Sound locomotives feature prototypical Rule 17 lighting, including a variety of realistic lighting effects. Depending on the locomotive, these may include constant-brightness headlights, illuminated number boards, lighted marker lamps, and alternating ditch lights. In DCS operation, many of these lighting



BRAKE SOUNDS

Engine brakes squeal whenever you throttle back sharply or pull into a station. In DCS mode, you can trigger the brake sound with the Brake button on the DCS handheld.

FULL COMPATIBILITY WITH ALL S GAUGE OPERATING SYSTEMS

Right out of the box, every Proto-Sound 3.0 M.T.H. engine is compatible with all S Gauge operating systems: conventional AC, conventional DC, DCC, and our own Digital Command System (DCS). No switches to flip or adjustments to make. Your Proto-Sound engine senses what kind of power is on the rails; just set it on the track and run it.

BI-DIRECTIONAL COMMUNICATION

Proto-Sound 3.0 engines not only receive commands from the DCS system, they can report back vital information, trigger other devices to operate, and diagnose your layout's wiring and signal quality. Query a Proto-Sound 3.0 locomotive to find out how many scale miles it's run or how many hours it's been powered up. Check out the strength of the DCS signal on the track or measure the track voltage at a trouble spot. Measure the length of your track in scale miles. All of this is possible today, but only with a Proto-Sound 3.0-equipped locomotive when operated using the DCS Digital Command System.

OPERATE 'EM ALL

In DCS command mode, unlike any other command system available today, you'll have one-touch control over every Proto-Sound 3.0-equipped locomotive at the same time. Imagine, with the ALL command, your DCS system will start-up every locomotive at the same time! Almost every DCS feature can be sent to all the active engines at once. Tell 'em to run at 10 scale miles per hour and they'll all start moving at the same time and at the same speed. Blow all their whistles at once, turn on or off their smoke, stop and reverse every active engine — all at the same time.

EASY LASHUPS AND HELPER ENGINES

Want to run lashups of locomotives like the prototype, with double-or triple-headed diesels or steam engines — or even steamers and diesels working together? No other command control system does this as easily or reliably as the M.T.H. Digital Command System (DCS). With the DCS handheld controller, you can operate any combination of M.T.H. locomotives together as a lashup. They'll run in perfect synchronization with each other at any speed. You can even set your lashup so only the lead engine's bell and whistle will sound, as in real life multiple-unit operation.

DCC Features

Proto-Sound 3.0-equipped locomotives can be controlled in command mode with any DCC-compliant command control system. While you won't have access to all of the incredible features of Proto-Sound 3.0, you will have full DCC command control. This means you can use your existing DCC controller to independently control your other DCC-equipped locomotives in addition to your Proto-Sound 3.0 locomotives on the same track at the same time.

When using a DCC controller, the following Proto-Sound 3.0 locomotive features are accessible:

Diesel Features*

- Head Light/Tail Light
- Bell
- Horn
- Start-up/Shut-down
- Passenger Station/Freight Yard Sounds
- All Other Lights (On/Off)
- Master Volume
- Forward Signal
- Reverse Signal
- Grade Crossing
- Clickety Clack (On/Off)
- Idle Sequence 4
- Idic ocquerice +
- Idle Sequence 3

- Idle Sequence 2
- Idle Sequence 1
- Extended Start-up
- Extended Shut-down
- Rev Up
- Rev Down
- One Shot Doppler
- Coupler Slack
- Single Horn Blast
- Engine Sounds
- Brake Sounds
- Cab Chatter
- Feature Reset
- eauence 3

' Check your DCC Controller's manual to see how many features it can access

MTH Trademarks: M.T.H. Electric Trains®, M.T.H.®, MTH Railroaders Club™, lves®, Loco-Sound™, Proto-Sound® 2.0, Proto-Speed Control™, Proto-Doppler™, Proto-Dispatch™, Proto-Cost™, ProtoSmoke™, Proto-Coupler™, Proto-Scale 3-2™, RailKing®, Rugged Rails®, RailKing One-Gauge™, RailTown™, Tinplate Traditions™, ScaleTrax™, RealTrax®, Z-500™, Z-750™, Z-4000®, Z-1000™, DCS ...simply the best way to run a railroad ™, Remote Commander™, DCS™ and the MTH Numbering System and all others indicated throughout this catalog. RealTrax® layouts created with RR-Track™ which is a registered trademark of R&S Enterprises.

M.T.H.'s DCS Digital Command System has received U.S. Patent No. 6,457,681. M.T.H.'s Proto-Sound 2.0 system has received U.S. Patent No's 6,457,681 B1 (sound system), 6,457,681 B1 (Proto-Speed Control), 6,604,641 (Proto-Coupler), 6,280,278 (Proto-Smoke).

M.T.H.'s RealTrax has received U.S. Patent No. 6,019,289.
M.T.H.'s ScaleTrax switches have received U.S. Patent No. 6,491,263.

M.T.H.'s Z-4000 Transformer has received U.S. Patent No's. 6,281,606 & 6,624,537.



See and hear 'em in action: Visit our site to see videos of M.T.H. locomotives in action, locate your nearest dealer, or learn more about our products.

www.mthSgaugetrains.com



From 1942-1945, Electro Motive Division's F-unit was the only road freight diesel built in America. While the War Production Board limited competitors Alco and Baldwin to diesel switcher and steam locomotive production during World War II, EMD's 1,350 hp FT became a runaway best-seller. By war's end, Electro Motive had a lead over its competitors that would last until they closed their doors.

With production restrictions lifted and the U.S. economy humming with pent-up demand, railroads clamored for new diesels to replace a steam fleet exhausted by wartime traffic. In July 1946, EMD introduced a new model F-unit, the F3. Horsepower was upgraded to 1,500 and lessons learned on the FT gave the F3 better reliability and lower maintenance. Under the hood throbbed an improved 567-series V-12 engine. With 567 inches of displacement per cylinder, this same engine would power virtually the entire first generation of EMD diesel locomotives.

The F3 hit the market in an era when almost every boy in America wanted toy trains for Christmas, and F3 mod-

els quickly became a hot topic in letters to Santa. Such was the desire of railroads for publicity that Lionel® convinced the Santa Fe, the New York Central, and EMD to share the tooling costs for its top-of-the line F3. Even today, half a century later, the Santa Fe F-unit remains an icon of railroading to the American public.

Capture the excitement of the first-generation diesel era with this full-scale S Gauge model. With its precision, flywheel-equipped, skew-wound motor, the M.T.H. F3 duplicates the bulldog tenacity of its prototype. Proto-Sound 3.0 offers authentic EMD 567 prime mover sounds, a first-generation diesel horn and bell, crew and station sounds, and the ability to maintain any speed down to 3 scale miles per hour. Our model features the "chicken wire" screens and rectangular rooftop dynamic brake grilles that characterize most F3s, as well as a host of added-on details — including legible builder's plates, grab irons, steam generator exhaust stack (for passenger car heating), windshield wipers, and trucks with separately-applied spring hangers and brake cylinders.

Features

- Intricately Detailed ABS Body
 Detailed Truck Sides, Pilots and Fuel Tank
- Metal Chassis
- Metal Handrails
- (2) Engineer Cab Figures
- Metal Wheels, Axles and Gears
- Kadee Compatible Coupler Mounting Pads
- S Gauge Operating Proto-Coupler
- Supplied with Optional, Drop-In Code 110 Scale Wheelsets
- Prototypical Rule 17 Lighting
- Directionally Controlled Constant Voltage LED Headlight
- Lighted Cab Interior
- Illuminated Number Boards
- * Where Prototypical

- Lighted Marker Lights*
- Operating MARS Light*
- Precision Flywheel Equipped Motor
- All-Wheel Driven Power Train
- Onboard DCC Receiver
- Locomotive Speed Control In Scale MPH Increments
- 1:64 Scale Proportions
- Proto-Sound 3.0 With The Digital Command System Featuring Passenger Station or Freight Yard Proto-Effects
- Unit Measures:
- 10 1/2" x 1 7/8" x 2 7/8"
- Operates On 20" Radius Curves

Verify road specific features online at www.mthSgaugetrains.com





Santa Fe - F3	A Unit Diesel with Proto-Soun	d 3.0	
35-20019-1	Cab No. 18	\$379.95	
35-20020-1	Cab No. 19C	\$379.95	
35-20021-3	Non Powered, Cab No. 24	\$199.95	
Santa Fe - F3 B Unit Diesel with Proto-Sound 3.0			
35-20022-1	Cab No. 24	\$359.95	
35-20023-3	Non-Powered, Cab No. 24B	\$189.95	





Union Pacific -	F3 A Unit Diesel with Proto-Sc	ound 3.0
35-20024-1	Cab No. 1404A	\$379.95
35-20025-1	Cab No. 1407A	\$379.95
35-20026-3	Non Powered, Cab No. 1441A	\$199.95
Union Pacific -	F3 B Unit Diesel with Proto-Sc	ound 3.0
35-20027-1	Cab No. 1471B	\$359.95
35-20028-3	Non-Powered, Cab No. 1446B	\$189.95





Pennsylvania -	F3 A Unit Diesel with Proto-So	und 3.0	
35-20011-1	Cab No. 9508	\$379.95	
35-20012-1		\$379.95	
35-20013-3	Non Powered, Cab No. 9517	\$199.95	
Pennsylvania - F3 B Unit Diesel with Proto-Sound 3.0			
35-20014-1	Cab No. 9512B	\$359.95	
35-20015-3	Non-Powered, Cab No. 9508B	\$189.95	





Jersey Central	- F3 A Unit Diesel with F	Proto-Sound 3.0
35-20001-1	Cab No. 52	\$379.95
35-20002-1	Cab No. 55	\$379.95
35-20003-3	Non Powered, Cab No. !	56 \$199.95
Jersey Central - F3 B Unit Diesel with Proto-Sound 3.0		
35-20004-1	Cab No. D	\$359.95
35-20005-3	Non-Powered, Cab No.	B \$189.95





New York Cent	tral - F3 A Unit Diesel with Pro	to-Sound 3.0
35-20006-1	Cab No. 1608	\$379.95
35-20007-1	Cab No. 1635	\$379.95
35-20008-3	Non Powered, Cab No. 1616	\$199.95
New York Central - F3 B Unit Diesel with Proto-Sound 3.0		
35-20009-1	Cab No. 2413	\$359.95
35-20010-3	Non-Powered, Cab No. 2408	\$189.95



Seaboard - F3 A Unit Diesel with Proto-Sound 3.0

35-20016-1	Cab No. 4024	\$379.95
35-20017-1	Cab No. 4027	\$379.95
35-20018-3	Non Powered, Cab No. 4029	\$199.95

PS-2 Covered Hopper



Norfolk Southern - PS-2 Covered Hopper

35-75003 Car No. 233548 \$59.95 35-75004 Car No. 233635 \$59.95



Norfolk Southern - 6-Car PS-2 Covered Hopper Set 35-70002 \$329.95



BNSF - PS-2 Covered Hopper

35-75015 Car No. 405600 \$59.95 35-75016 Car No. 405619 \$59.95



BNSF - 6-Car PS-2 Covered Hopper Set

35-70003 \$329.95

Until the advent of the covered hopper, bulk commodities like grain and cement were usually packed in sacks and loaded into box cars. Loading and unloading was a tedious, time-consuming, labor-intensive affair. In the 1930s, responding to shipper demand for a more efficient process, a few railroads took the basic coal hopper design and added a roof with loading hatches, enabling bulk commodities to be loaded from the top and unloaded from the bottom.

The Pennsylvania Railroad's H30 was one of the first of these pioneering covered hoppers to be built in quantity, starting in 1935. But it wasn't until two decades later that a mass-produced covered hopper



Milwaukee Road - PS-2 Covered Hopper

35-75001 Car No. 99618 \$59.95 \$59.95 35-75002 Car No. 99614



Milwaukee Road - 6-Car PS-2 Covered Hopper Set 35-70001 \$329.95



Southern PS-2 Covered Hopper

35-75011 Car No. 95420 \$59.95 35-75012 Car No. 95462 \$59.95



Southern - 6-Car PS-2 Covered Hopper Set

35-70004 \$329.95

took the market by storm. Pullman-Standard, following on the success of its PS-1 boxcar, introduced the PS-2 70-ton covered hopper in 1953. Like the PS-1, the PS-2 was a runaway success, finding a place on the rosters of most North American railroads and a large number of manufacturing firms.

The PS-2's all-welded construction did a great job of keeping commodities clean and dry, from grain to cement, soap flakes, salt, sand, and carbon black. In theory the cars could haul a different commodity on each trip. But the necessity of thoroughly cleaning the interior when switching commodities meant that most cars in fact worked in dedicated service hauling a single type of cargo.



Bessemer & Lake Erie - PS-2 Covered Hopper 35-75009 Car No. 3732 \$59.95 35-75010 \$59.95 Car No. 3735



Bessemer & Lake Erie - 6-Car PS-2 Covered Hopper Set 35-70005 \$329.95



Maryland Midland - PS-2 Covered Hopper

35-75005 Car No. 5152 \$59.95 35-75006 Car No. 5186 \$59.95



Maryland Midland - 6-Car PS-2 Covered Hopper Set 35-70008 \$329.95

Features

- Intricately Detailed Durable ABS Body
- Separate Metal Handrails and Grab Irons
- Photo-Etched Roof Walk
- Detailed AB Brake System
- Die-Cast Sprung Metal Trucks
- Metal Wheels and Axles

- American Flyer-Compatible Couplers
- S Scale Kadee-Compatible Coupler Mounting Pads
- 1:64 Scale Dimensions
- Unit Measures:
 - 7 1/8" x 1 15/16" x 2 9/16"
- Operates on 20" Radius Curves



35-75013 35-75014 Car No. 11135 \$59.95



Detroit Toledo & Ironton - 6-Car PS-2 Covered Hopper Set 35-70006 \$329.95

Scale Operator? Add 35-1109 Code 110 Scale Wheel Set

See Page 16



Lehigh Valley - PS-2 Covered Hopper

35-75007 Car No. 50835 \$59.95 \$59.95 35-75008 Car No. 50879



Lehigh Valley - 6-Car PS-2 Covered Hopper Set

35-70007 \$329.95





70-Ton Ore Car



Milwaukee Road - 70-Ton Ore Car

35-75029 Car No. 76712 \$59.95 35-75030 Car No. 76730 \$59.95



Milwaukee Road - 6-Car 70-Ton Ore Car Set 35-70009 \$329.95



Chicago Northwestern - 70-Ton Ore Car

35-75023 Car No. 111542 \$59.95 35-75024 Car No. 111548 \$59.95



Chicago Northwestern - 6-Car 70-Ton Ore Car Set 35-70011 \$329.95

Why are ore cars so short? Because the iron ore they carry is considerably heavier than typical hopper loads like coal, so a short car of ore fills the load capacity of its trucks. Ore cars, also called "jennies," were and still are a common sight in the Iron Range region of Minnesota and nearby states, where they shuttle between mines and Great Lakes ports. On the receiving end, jennies travel between ore docks and steel mills in a number of states. While they're commonly associated with upper Midwestern ore-hauling roads, ore cars have in fact been rostered by nearly 50 North American railroads, and at least a dozen roads have owned significant numbers of jennies.





Duluth Missabe & Iron Range - 6-Car 70-Ton Ore Car Set 35-70010 \$329.95

Each road name is available in 8 different car numbers: 2 individual cars and a 6-car set

Canadian Pacific - 70-Ton Ore Car

35-75021 Car No. 377120 \$59.95 35-75022 Car No. 377128 \$59.95



Canadian Pacific - 6-Car 70-Ton Ore Car Set

35-70012 \$329.95

Until World War II, ore cars generally carried "direct shipping" ore: ore that was rich enough in iron (60% or more) that it could be shipped direct to steel mills as a raw material. By the end of the war, however, the richer ore deposits had largely played out. Lower-grade taconite, once considered a waste product of mining, became the raw material of choice. Rather than being shipped as raw ore, taconite is refined and rolled into small pellets containing about 65% iron. So for more than half a century, the main payload of ore jennies has been taconite pellets, as well as occasional loads of sand or gravel.



Canadian National - 70-Ton Ore Car

35-75019 Car No. 123060 \$59.95 35-75020 \$59.95 Car No. 123064



Canadian National - 6-Car 70-Ton Ore Car Set

35-70014 \$329.95

Add 35-1109 Code 110 Scale Wheel Set SOO LINE 81950 See Page 16

SOO Line - 70-Ton Ore Car

35-75031 Car No. 81950 \$59.95 35-75032 Car No. 81956 \$59.95



SOO Line - 6-Car 70-Ton Ore Car Set 35-70013 \$329.95

Features

- Intricately Detailed Durable ABS Body - Separate Metal Handrails and Grab
- Irons
- Detailed Brake System
- Die-Cast Sprung Metal Trucks
- Metal Wheels and Axles
- American Flyer-Compatible Couplers
- S Scale Kadee-Compatible Coupler Mounting Pads
- 1:64 Scale Dimensions
- Unit Measures:
- 5 3/8" x 1 15/16" x 2 1/8"
- Operates on 20" Radius Curves



Bessemer & Lake Erie - 70-Ton Ore Car

35-75017 Car No. 20090 \$59.95 35-75018 Car No. 20093 \$59.95



Bessemer & Lake Erie - 6-Car 70-Ton Ore Car Set

35-70015 \$329.95



Great Northern - 70-Ton Ore Car

35-75027 Car No. 89001 \$59.95 35-75028 Car No. 89003 \$59.95



Great Northern - 6-Car 70-Ton Ore Car Set 35-70016 \$329.95

Seperate Metal **Handrails**

Sprung-Metal **Trucks**

Scale Operator?





40' Woodsided Reefer



Fairmont Creamery - 40' Woodsided Reefer

35-78001 Car No. 30210 \$59.95 35-78002 Car No. 30212 \$59.95



The coming of the railroad changed the way America ate and drank. The advent of cheap, fast, refrigerated transport enabled local brewers, growers and food manufacturers to become players on a regional or national scale. From the late 1800s into the 1930s, many of those businesses leased refrigerator cars and turned them into rolling billboards for their products.

Unlike the massive fleets owned by railroads or large shippers like Pacific Fruit Express, each billboard reefer leased by the smaller shippers was an individually hand-painted piece of graphic art. As proud bearers of company advertising, billboard reefers tended to be washed frequently and kept in good repair, even during the Depression, when nearly everything on rails looked dirty and downtrodden.



M.K. Goetz Brewery - 40' Woodsided Reefer

35-78009 Car No. 14310 \$59.95 35-78010 Car No. 14313 \$59.95



Santa Fe - 40' Woodsided Reefer

35-78013 Car No. 25090 \$59.95 35-78014 Car No. 25094 \$59.95

In mid-1934, however, the Interstate Commerce Commission mandated the phasing out of bill-board reefers by January 1937. What doomed the billboard cars was truth in labeling. Depending on shipping needs, billboard cars often carried loads for customers other than the company named on the car sides. Shippers were not happy when an empty car arrived at their door bearing a large ad for someone else's product — they felt as if their freight bill was in part paying for another company's advertising. In the plainer schemes of railroads and shippers like PFE, however, woodsided reefers soldiered on as late as the 1960s.



FOR OVER FIFTY YEARS
PELICIOUSLY MILD

Krey's Ham & Bacon - 40' Woodsided Reefer 35-78007 Car No. 873 \$59.95

35-78007 Car No. 873 \$59.95 35-78008 Car No. 875 \$59.95

JELKE

Senate Beer - 40' Woodsided Reefer

35-78015 Car No. 100 \$59.95 35-78016 Car No. 105 \$59.95

Scale Operator? Add 35-1109 Code 110 Scale Wheel Set

See Page 16



MARGARINE
The Finest Spread for Bread

JOHN F. JELKE CO. CHICAGO

Jelke Good Luck Magarine - 40' Woodsided Reefer

GOODLUCK

35-78005 Car No. 10803 \$59.95 35-78006 Car No. 10805 \$59.95

Fulton Market - 40' Woodsided Reefer

35-78003 Car No. 10400 \$59.95 35-78004 Car No. 10402 \$59.95

Features

- Intricately Detailed Durable ABS Body
- Opening Roof Hatches
- Separate Metal Grab Irons
- Detailed Side and End Ladders
- Detailed KC Brake System
- Die-Cast Sprung Metal Trucks
- Metal Wheels and Axles

- American Flyer-Compatible Couplers
- S Scale Kadee-Compatible Coupler Mounting Pads
- 1:64 Scale Dimensions
- Unit Measures:
 - 8 7/8" x 1 3/4" x 2 1/2"
- Operates on 20" Radius Curves

Opening Roof Hatches

Separate Metal Ladders





Steel Rebuilt Box Car



New Haven - Steel Rebuilt Box Car

35-74004 Car No. 36154 \$59.95 35-74005 Car No. 36450 \$59.95



New York Central - Steel Rebuilt Box Car

35-74006 Car No. 174992 \$59.95 35-74007 Car No. 174995 \$59.95



Union Pacific - Steel Rebuilt Box Car

35-74014 Car No. 181679 \$59.95 35-74015 Car No. 181680 \$59.95



Santa Fe - Steel Rebuilt Box Car

35-74012 Car No. 145002 \$59.95 35-74013 Car No. 145005 \$59.95

During and after World War I, American railroads took delivery of tens of thousands of boxcars built to USRA designs: single or double-sheathed wooden sides, wooden doors, and steel ends, roofs and underframes. By the late 1920s, however, all-steel cars had become the norm, although new car construction slowed to a crawl during the Depression.

A cheaper alternative was rebuilding older USRA cars, replacing the wooden sides and doors with steel and re-using the existing underframe, ends, and/or roofs. Brake systems were also upgraded, from the earlier K-brake to the more modern AB brake system. As World War II loomed and traffic began to pick

up, railroads upgraded thousands of USRA boxcars to all-steel construction, usually doing the work in their own shops. Rebuilding programs continued through and after the war, and steel rebuilt cars were a common sight into the late 1950s, with many serving into the following decade.

While rebuilt car details often differed from railroad to railroad, a spotting feature common to most of the cars was the sill brackets added to the existing underframe side sills — a feature replicated on these M.T.H. models. These sill brackets supported new steel sides that were spaced father apart than the old wooden sides, making a wider car with greater carrying capacity.



Boston & Maine - Steel Rebuilt Box Car

35-74002 Car No. 73022 \$59.95 35-74003 Car No. 73025 \$59.95



Western Maryland - Steel Rebuilt Box Car

35-74010 Car No. 29076 \$59.95 35-74011 Car No. 29083 \$59.95

Scale Operator? Add 35-1109 Code 110 Scale Wheel Set

See Page 16



35-74008 Car No. 43628 \$59.95 35-74009 Car No. 43630 \$59.95

Norfolk & Western - Steel Rebuilt Box Car

Features

- Intricately Detailed Durable ABS Body Opening Doors
- Separate Metal Grab Irons
- Detailed Brake System
- Die-Cast Sprung Metal Trucks
- Metal Wheels and Axles
- American Flyer-Compatible Couplers
- S Scale Kadee-Compatible Coupler Mounting Pads
- 1:64 Scale Dimensions
- Unit Measures:
- 8 13/16" x 1 7/8" x 2 9/16"
- Operates on 20" Radius Curves



Christmas - Steel Rebuilt Box Car 35-74001

Car No. 2013 \$59.95



Seperate Metal **Grab Irons**





Track & Accessories

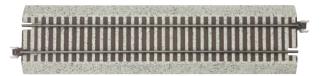


S-Trax - 5" Straight (6-Pack) 35-1003 \$29.95



S-Trax - 20" Radius Curve Track 30 Degree Full Section (6-Pack) 35-1006 \$34.95

35-1007 \$29.95



S-Trax - 10" Straight (6-pack) 35-1002 \$34.95



S-Trax - 25" Radius Curve Track 30 Degree Full Section (6-Pack) 35-1008 \$37.95

S-Trax - 20" Radius Curve Track 15 Degree Half Section (6-Pack) S-Trax - 25" Radius Curve Track 15 Degree Half Section (6-Pack) 35-1009 \$32.95



S-Trax - 15" Straight (6-pack) 35-1001 \$39.95



S-Trax - 30" Radius Curve Track 30 Degree Full Section (6-Pack) 35-1010 \$39.95

S-Trax - 30" Radius Curve Track 15 Degree Half Section (6-Pack) 35-1011 \$34.95

> **TWELVE 30 Degree Curve Sections** Make a Full Circle



S-Trax - 5" Straight with Uncoupler 35-1022 \$24.95

S-Trax - 40" Flex Track Section (6-Pack) 35-1004 \$59.95 S-Trax - 40" Flex Track Section (24-Pack) 35-1005 \$219.95



S-Trax - 5" Track with Bumper 35-1021 \$21.95



S-Trax - 5" Straight with Accessory Button 35-1023 \$24.95

S-Trax - Switch Controller With 40" Harness

Extension Wire Set 35-1020 \$14.95

S-Trax - 40" Harness Extension Wire Set

35-1024 \$4.99

Railjoiner For Flex Track (36-Pack)

35-1014 \$7.95

Railioiner For STrax (36-Pack)

35-1012 \$9.95

Railjoiner Adapter For American Flyer Track (36-Pack)

35-1016 \$9.95

Railjoiner (Insulated) For STrax (36-Pack)

35-1013 \$9.95

Railjoiner Feeder Wire For STrax (12-Pack)

35-1017 \$9.95



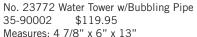
S-Trax - #3 Switch with Remote (Right) 35-1018 \$69.95



S-Trax - #3 Switch with Remote (Left) 35-1019 \$69.95







\$119.95

Measures: 4 7/8" x 6" x 13"

35-90003



#580-1 Teardrop Lamp Set 30-1079a \$19.95 Measures: 6 3/4" Tall





#46 Crossing Gate and Signal 30-11017 \$39.95 Measures: 9" x 3 1/2" x 5 3/4"

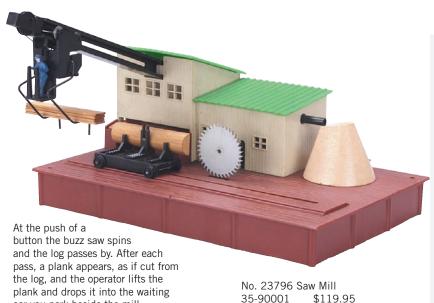


Open the clamshell bucket by remote control, pick up a bucketful of coal, and drop it in the loading bin inside this coaling tower. Then push a button

accessories in this catalog, is an accurate reproduction of a classic American Flyer® S gauge accessory.



Accessories



Measures: 10 1/2" x 9 1/2" x 6 1/2"



AAR 70-Ton Friction Bearing Truck Set w/Scale Wheels 35-1102 \$19.95

Couplers & Trucks



AAR 70-Ton Friction Bearing Truck Set w/Hi-Rail Wheels 35-1101 \$19.95



Barber S-2 70 Ton Roller Bearing Truck Set w/Hi-Rail Wheels 35-1106 \$19.95 Barber S-2 70 Ton Roller Bearing Truck Set w/Scale Wheels 35-1105 \$19.95



AAR Type Y Truck Set w/Hi-Rail Wheels 35-1103 \$19.95

AAR Type Y Truck Set w/Scale Wheels 35-1104 \$19.95



American Flyer Compatible Freight Car Coupler Set 35-1107 \$4.95



Code 110 33" Insulated Scale Wheel Set 4-Pack 35-1109 \$12.95
33" Insulated Hi-Rail Wheel Set 4-Pack 35-1108 \$12.95



Kadee Compatible Freight Car Scale Coupler Set 35-1110 \$6.95

car you park beside the mill.



Simply the **Best Way to** Run a Railroad

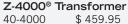




Z-1000™ AC Transformer \$ 109.95 40-1000 With 14 Volt Accessory Port



100-Watt Accessory AC Power Supply 40-1000a



Two AC throttles, each with its own complete set of controls, plus 10-volt and 14-volt AC accessory outputs





400 Watts!



Z-DC300 30 Watt **DC** Transformer 40-300



Z-4000 Remote Control System 40-4001 \$ 149.95



RailKing Controller Set 40-750C \$59.95

DCS COMMANDER: Get into DCS on a budget

Ideal for small layouts running two or three Proto-Sound 2.0 or 3.0 locomotives. Learn more about it using our online Product Search feature to see more information and read the instruction manual.



DCS Commander System w/100 Watt Power Supply 50-1029 \$229.95

DCS Commander Controller (with out power supply) 50-1028 \$149.95



DCS Remote Commander Set 50-1033 \$49.95



DCS Remote Control System 50-1001





DCS Track Interface Unit (TIU) 50-1003 \$189.95



DCS Accessory Interface Unit (AIU)

50-1009



50-1004 \$99.95



6' Mini-to-Mini Cable

\$9.95

Proto-Sound 2.0 Battery Charger 50-1019 \$16.95



AA NiCad Proto-Sound Battery 50-1024



TIU/TMCC-Legacy 6' Connector Cable



Proto-Sound Battery TIU/Barrel Jack Adapter Cable \$11.95 50-1017 \$10.95



Z-DC24 24-Watt Power Supply \$17.95



DCS Companion 60-1279 Digital Version \$12.95 Soft Cover \$29.95 Available as a soft cover book or a pdf download order from



24-Port Terminal Block 50-1020 \$34.95 12-Port Terminal Block 50-1014 \$24.95

Join The Club!



MTHRRC Baltimore & Ohio Rebuilt Steel Box Car S Gauge Membership is \$55.00

The Basic Club Membership does not include a club car Basic Membership is \$25.00



GET THE MOST FROM MODEL RAILROADING Join Online! It's Easy - Just go to www.mthtrains.com

As a member of the M.T.H. RailRoaders Club you'll receive:

Limited-Edition Club Car



The CrossingGate™

Club Magazine

Each year we produce beautifully decorated cars exclusively for our Club members. Members automatically receive the car that matches their Club membership (RailKing, Premier, Tinplate, S Gauge, HO, or One Gauge) and have the option to collect the other Club cars as well.

You will receive our quarterly full color Club magazine, iam-packed with product news, layout visits, rail history, and step-bystep articles on how to eniov M.T.H. products even more.

1st Class Mailing of M.T.H. Catalogs



Club Members get all of our catalogs earlier than all our other mailing list members, via First-Class mailings, so they can order from their local train store before the best items are sold out.

RailWare™ **Software**



Unique Club Products & Discounts Use your computer to design track layouts, search the database of all M.T.H. products, look at our past catalogs, listen to Proto-Sound 3.0 train effects, and much more. This DVD retails for \$79.95, but is yours FREE as a Club member.

You'll have the option to purchase uncataloged membersonly engines and rolling stock, and take advantage of members-only discounts on select cataloged items.

Club Card & Lapel Pin



Proto-Sound 2.0 Upgrade Kits

Club members can save an additional 15% on these kits for upgrading older locomotives.

Show the world your mem-

model railroaders with your

enameled lapel pin.

bership in this elite group of

high-quality embossed membership card and beautiful

Web Site

Club | Visit www.mthtrains.com & type in your member number to gain access to the Club web site. Here you can exchange messages with other Club members, and even build your own homepage.



©2013 M.T.H. Electric Trains 7020 Columbia Gateway Drive Columbia, Maryland 21046