Rokuhan Track Offers New Options Rokuhan Company Ltd. straight (R001) and the 220mm straight (R009). Missing is

7-27 Numawada Tochigi-city 328-0042 Japan www.rokuhan.com Rokuhan of Japan has entered the Z scale market with a line of pre-ballasted track. This news surprised the Z com-

munity at the end of last year when the line was released in Japan. Rokuhan is not necessarily new to Z. They have a history of working with Japanese Z scale manufacturers to design Z products. Companies such as Pro-Z have utilized their services. But this is their first direct foray into Z. Rokuhan is touting themselves as a "precise railroad system" and use this phrasing in their logo. It is obvious that Rokuhan is highly committed to Z and is ready to push the envelope. Ztrack received a sample package of their track and transformers. We were immediately struck by the professional packaging and look of the products. The packaging and their

website have a consistent red and black look. Their introductory offerings include nineteen track products and accessories. While this is short of the full range such as we see with Märklin, it is definitely a good start. Plus, Rokuhan has a few surprises which we will get into later in the review. One issue is that all of our samples came packaged in Japanese only. Rokuhan has launched an English website, North America.

but we will be curious to see if their products will be packaged with English instructions once they are released in The track is being called "Classic Track; Wooden Design Ties". The track system follows the standard established by Märklin in 1972 and adhered to by Micro-Trains with their track system which was released in 2005. This is great news since the geometry is the same. This also allows Rokuhan track to be used with existing Märklin and Micro-Trains track plans. Three of the four key straight sections have been released. These are the 55mm straight (R008), the 110mm

the small, but essential 25mm track section. Only Märklin offers this small filler piece that is so useful for complex track plans. The curved track is the first place we find Rokuhan really shining and breaking away from the standards. Rokuhan has

released the 45°, 145mm radius curve (R005), the 45°,

195mm radius curve (R002), the 45°, 220mm radius curve (R004) and the 13°, 490mm curve sections as we would expect since these are standard. But Rokuhan surprised the Z world with three new track radii. These are the 45°, 95mm radius curve (R010), the 45°, 120mm radius curve (R011) and the 45°, 170mm radius curve (R003). Many long time Z scalers will recognize the 170mm curves as one of our missing links. This curve fits nicely on the inside of 195mm curves and has been desired for some time. Those fans of small layouts will love the 120mm and 95mm curves. These are very tight, but will give options for those designing compact layouts that will accommodate the smallest of wheelbase locomotives and rolling stock. The general appearance of the track is interesting. The roadbed is gray and very similar in color to Micro-Train's

ballasted roadbed. I found the ballast texture to be soft compared to Micro-Trains.

Rokuhan track shown on top, MTL underneath. The ties and tie spacing are a disappointment. For many years, Z scalers have debated tie spacing. Märklin uses a

5

Ztrack Magazine

into them. The ties are much broader than Micro-Trains ties. They measure out to 2' scale versus 1' for Micro-Trains. They also appear a bit wider than Märklin. This may be due more to the fact that Märklin also has a wood grain molded in the surface. The Rokuhan ties appear larger due to the uniformed surface. While this may not be an issue for most, I was left thinking that our Nn3 cousins would really like the look of this track. It just seemed a bit 'heavy' for Z.

wider tie spacing that is more typical of European roadbed. Micro-Trains uses a much tighter tie spacing that is more typical of North American. Rokuhan tie spacing is actually farther apart than that of Märklin. Using our trusty Z ruler,

The Rokuhan wood ties have no surface detail. Though

they are painted dark brown like the Micro-Trains ties, they

are flat. The Micro-Trains ties have a wood grain molded

we came up with these approximate measurements:

Märklin - 3' Micro-Trains - 2'

Rokuhan - 3.5'

Rokuhan track shown on left, MTL is on the right. Both the Rokuhan roadbed and the Micro-Trains roadbed measure a scale 11' wide. The height of the Rokuhan roadbed is taller when compared to Micro-Trains. The Rokuhan is 5' to the rail, whereas the Micro-Trains is 4' to the rail. While this is not a huge difference, shimming will

be required if using the two systems in conjunction. Overall,

Ztrack Magazine

The terminal block is shown in

position.

cally designed to be used with the A001 track powering plug

A look under the track. Rokuhan is on top and the Micro-Trains is on bottom.

the roadbed is remarkably similar. Especially the ends of the

Rokuhan track on the left is joined with Micro-Trains track.

Note the tie spacing. The MTL track will need to be shimmed

The plastic rail joiners have a near identical look, but can-

not be used together. The issue is that the heights are different. What is common is that the plastic joiners can be removed. Once they are removed, the metal rail joiner will

track, and the way the rail joiners work.

remain on the track. I was able to connect the Rokuhan and Micro-Trains track together. The rail heights were nearly perfect. One swipe of a file can quickly smooth out any discrepancies. But, the appearance is still a sticking point to me. Though it is possible to connect the two systems, they don't look right intermixed.

right.

A 110mm section of track with the slide piece removed. The terminal wiring is shown on the

Moving on, I was very surprised to discover that Rokuhan does not have a terminal track in their system. They have a unique solution to powering the track. The 110mm straight track (R001) and the 220mm straight track (R009) both have a small piece of plastic that slides out. This void is specifi-To successfully create this loop, I would need two packages of the R004 curved track. Four sections of a track come to a package. I also used the R009 straight track (again two

packages would be needed), one package of the R012 490° curved track (note only two sections come to a package),

Creating the loop, I found the track went together very well. It fit like a glove with a tight fit on the curved sections and the straight sections. Every joint was uniformed and smooth and at no time did I experience the track riding up

one R006 left turnout and one R007 right turnout.

on the rail joiner.

6

All was going very well until I added the turnouts to the test loop. Here I experienced the biggest flaw and disappointment in this track system. The problem occurs when you attempt to attach track to the two divergent track sections off of the turnout. In our example, we are using a 490mm section of track off of the curved section of the turnout. When the 490mm section is in place, I could not connect a straight piece of track to the turnout. This is due to the roadbed width hampering connectivity. This was not unexpected. Micro-Trains track had the same issue. MTL solved this problem, by providing a modified straight section in each of their turnout packages. The straight section was modified to work with the roadbed on the adjacent track Continued on the next page...

Ztrack Magazine

左分岐ポイントレール

※ かっトの際は、ケガにご注意ください。また、周りの人にケガをさせないよう、展際に十分配慮してからカットしてください。 ※ 誤ってジョイナーもカットしないよう、ご注意ください。

track going to the turnout will need to be adjusted.

The printed instructions from the turnouts. The black areas are where the owner should notch the track. Note both pieces of the

not modify the track in order to create the straight pass-

After the loop was created, I moved on to the wiring and

electrical components. The transformer (C001) is quite

unique. It has a gray plastic body with a large dial. The unit

is designed for play and the creation of simple loops. Beside

the speed throttle, the controller has an on/off switch, direc-

tional control switch and two toggle switches which are

used to remotely control two turnouts. This is a nice touch.

On the left side of the unit is two modules which are used to

plug in additional turnout controllers. This makes the expan-

▲ ジョイナーはカットしないよう、ご注意ください。

-ル側につなぐレールのカットイメージ

■ 左分岐側の接続レールのカットイメージ図(原寸)

through section.

8

Micro-Trains

990 40 902

990 40 917

990 40 904

990 40 903

990 40 908 (roadbed)

990 40 909 (track)

9

and play adapter. The one end of the adapter connects to the Rokuhan transformer. The other end has a slide with two copper leads that insert into the void. The copper slides have a slight bulge that touch the rail and supply track power. There is a gray piece that will sit next to the rail. It has been detailed to look like a piece of trackside electrical equipment. On one hand, this is genius. I love how this system works. The track slide is nearly invisible when not used. But, on the other hand, I don't like seeing so much copper shining up under the rail. I want it to be more invisible. I also don't quite like the gray box off to the side of the track. While it looks better than the terminal clip on the MTL and Märklin track sections, it is still an extension that is not needed. I have to wonder why Rokuhan did not come up with a solution to hide the terminals under the roadbed. For the record, I had the same question concerning the Micro-Trains track system in 2005. I also am a somewhat concerned by this approach to powering the track. My connection feels a bit 'loose'. I would like to see a more firm connection with greater friction between the rail and the copper connectors. I fear this could

better reliability. Time will tell if this is needed or not. Okay, now the fun is to begin. Time to setup the track and test run some trains. I chose to setup a test loop of 220mm track with a siding on our high performance testing platform (aka the dining room table). I utilized two turnouts to create a passing track and siding for testing purposes. Note how the 490° curved piece

piece. But, the Rokuhan track does not have a pre-notched

Take the issue even one step further, I removed the 490mm curved section and attempted to connect a straight section of track to the turnout. This was not possible. There is a small

piece of plastic roadbed that prevents a track piece from

being connected to the turnout without modification.

prevents the straight section

Notice the gap when attempting to connect the straight section.

Ztrack Magazine

Straight track

110mm - 4 3/8"

Straight track

55mm - 2 3/16' Straight track

25mm - 1"

Straight track

220mm - 8 13/16"

Straight adjustment

track - 108.6mm

Straight adjustment

track - 112.8mm

45° Curve - radius

95mm - 3 3/4"

45° Curve - radius

120mm - 4 3/4"

45° Curve - radius

145mm - 5 3/4"

45° Curve - radius

170mm - 6 1/2"

45° Curve - radius

195mm - 7 11/16"

30° Curve - radius

195mm - 7 11/16"

Reverse loop set

Rail joiners

Challenger.

from connecting.

section.

7

be a point of failure should the slide move, or dirt and grime builds up between the contact points. You may find you will have to keep this touch point clean like you would with the rails. Also, be careful when scenicing. Scenicing is a prime culprit for gumming up areas such as this. Ballast and glue could even create a short between the leads. I suspect some Z scalers may eventually solder these leads to the rail for

the package. The instructions are in Japanese, but include illustrations. The illustrations clearly show that modification of the roadbed is required to connect the track to the turnouts. I have to admit, I was a bit surprised by this. For a track system touted as 'precise', I can't think of anything less precise, as well as non-user friendly as having to modify track sections to work together in a standard configura-

ed systems such as this are suppose to provide.

tion. This eliminates the plug and play approach that ballast-

So for testing, I just went with the turnout siding and did

Märklin

8500

8503

8504

8505

8506 (use w/8559 & 8560)

8507

(use w/8559 & 8560)

8510

8520

8521

Rokuhan provided printed instructions for their turnouts in

30° Curve circuit track 8529 - same as 8521 45° Curve - radius 990 40 913 8530 220mm - 8 11/16" 30° Curve - radius 8531

220mm - 8 11/16" 30° Curve circuit track 8539 - same as 8531 990 40 910 Left electric turnout 8562 Three piece set 990 40 911 Right electric turnout 8563 Three piece set 990 40 914 Left manual turnout 8565 Three piece set 990 40 915 Right manual turnout 8566 Three piece set Electric left curved 8568 turnout Electric right curved 8569 turnout Crossing 8559 Double slip switch 8560 8587 (55mm) 900 40 906 (110mm) Uncoupler track Märklin couplers MTL couplers Isolating track 8588 55mm - 2 3/16" Circuit track 8589 110mm - 4 3/8" Feeder track 8590 990 40 905 110mm - 4 3/8" 13° Curve - radius 8591 990 40 912 490mm - 19 1/4" Straight adjustable 8592 track 100 - 120mm

8993

8954

This is were the Rokuhan turnouts and track system really

excelled. Ztrack tested a wide variety of locomotives from a

series of manufacturers and locomotive types. We focused

on some of the more common designs such as Märklin's

0-6-0, Märklin's two-axle rail buses, Micro-Trains F7, assorted Märklin four-axle truck-based locomotives, Micro-

Trains GP35, AZL's GP7, AZL's SD70M, AZL's new Budd

RDCs, Tenshodo's D51 Mikado and the real beast, an AZL

The fact is, there is really nothing I can say. The turnouts

have been designed for operations and performance. It is

Ztrack Magazine

You will need a hobby saw. Shown above is one from Atlas that can be found in most hobby shops. ■ 左分岐側の接続レールのカットイメージ図(原寸)

110mm 直線レール側につなぐレールのカットイメージ

In the previous article, we discussed the concerns with Rokuhan's turnouts. In order to use the them, you will be required to modify the tracks that connect to these turnouts.

The following steps should be followed:

The printed instructions from Rokuhan are to scale. It shows the portion of the track to cut off. The top two illustrations are for the straight track. The bottom two are for the 195mm curved track. It is very important to make sure you use the correct illustrations otherwise your cut will not match the placement on the turnout. I positioned the track on the template. A small angled line is visable. This line is your cut line. You will want to match your saw to this line. We found that you will not have to cut the ties. I positioned the saw blade against the first tie and angeled back. The photo below shows the cut being made. Note the angle of the saw and the corresponding triangle of

roadbed that matches the blacked out area on the illustration

above. You will want to cut straight down with a smooth

even movement.

sion of the electrical components very easy. The controller is light weight. Our controller came with a large US compatible adapter and the track powering module. Setting up the transformer did showcase Rokuhan's design considerations. As we had mentioned earlier how the R001 track is powered, one end of the module R008 is a black end that snaps into the back of the transformer. So in a minute, you can have the track powered and ready to go. R009 The turnouts all are electrical and have two wires coming out of the roadbed. Here is a very important detail that Rokuhan got right. The electrical turnout

Rokuhan R010 R011 R005

R004 gant. A nice design indeed. R006 R007 moved quite easily and freely.

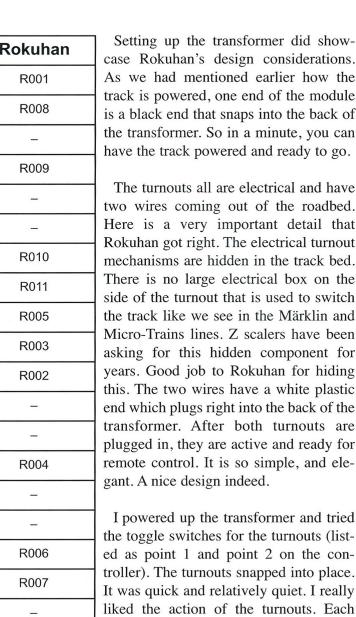
there are no real performance concerns to note. The system is solid when it comes to performance. Speaking of performance, the throttle of the controller should not be overlooked. The throttle and speed control is exceptional. There is a real opportunity for creep and slow speed running. The throttle control is smooth. I noticed no discernible jumps in speed as I increased the throttle. I did find that this controller is optimized for coreless motors. Products that utilize the coreless motors such as the AZL locomotives, MTLs GP9 and GP35 as well as their SD40-2 will really benefit from this controller. The older style motors from Märklin and those used in the MTL F7 still per-

Modifing Rokuhan Track For Turnouts

Above is the track after the cut has been made. Note the gray sliver of roadbed to the right of the track. This sliver matches the template. BRUNERRESTREET

A smaller cut is required for the 195mm track section. I removed the rail joiner prior to making the cut. I was wor-

The track is now connected. The gap from the cut is noticeable and you may want to fill in with gray ballast. Overall, the plastic roadbed was easy to modify and the finished look is acceptable. -RJK



turnout also has a small knob on the side for manual control. I found the points The turnouts route power. This is a new concept for Z scale. If you are unfamiliar with power routing, here is how it works. Say you have a turnout that goes to a siding. If the turnouts are set to move a train into the siding, then the turnout routes power into that siding. Once you switch

R012

the routing away from the siding, the sid-

ing is no longer is powered. This concept

means you no longer have to 'block'

But the real test of any turnout is it's

Continued on the next page...

Ztrack Magazine

performance when trains are being run.

Left, a track comparison chart showing the

track sections and part numbers from

Märklin, Micro-Trains and Rokuhan.

clear Rokuhan put some play into their turnouts to allow a multitude of products to run through them. I really thought the Challenger may pose a problem due to it's length and centipede tender, but it went through flawlessly. Maybe a bit of a bump on the front wheels, but that is all. Everything we tested went through the turnouts without hesitation or any real noticeable wobble. We never had a stall or derail in our

Note: Rokuhan turnouts are only designed at this time to be used with the Rokuhan controllers. Though you can safely use the turnout manually with other systems, the electronics will only perform safely with Rokuhan products. Damage to the turnouts may occur if used with other controllers.

Ztrack also test ran numerous samples of rolling stock

Another nice feature of the controller is the trouble alert. I purposely ran a locomotive into a turnout with the point set the wrong way. The trouble light went red on the controller and the power was shut off. The only way to reset the controller was to turn off the controller and back on again. This

Rokuhan has plans to expand the line. These plans include a 90° crossing, smaller turnouts and additional curved sections of track. All of this will be very welcome. But overall, the track line has left me conflicted. Rokuhan has done so much to produce a well thought out track line and the performance shows this. The appearance is not what I would like to see. But the fact one has to modify the track in order to work with turnouts is a negative. This may turn off those who want a true plug and play system. Overall, if you are looking for steady performance and turnouts that can handle anything you put through them, then Rokuhan has delivered. We look forward to seeing the track line expand and new

testing. The turnouts are impressive.

motors which we expect.

is a great safe guard.

options released. - RJK

10

tracks in order to store locomotives.

from AZL, Full Throttle, Micro-Trains, and Märklin. Again, form well, but not quite with the finesse of the coreless

ried that I would cut the joiner in the process.

11

Ztrack Magazine