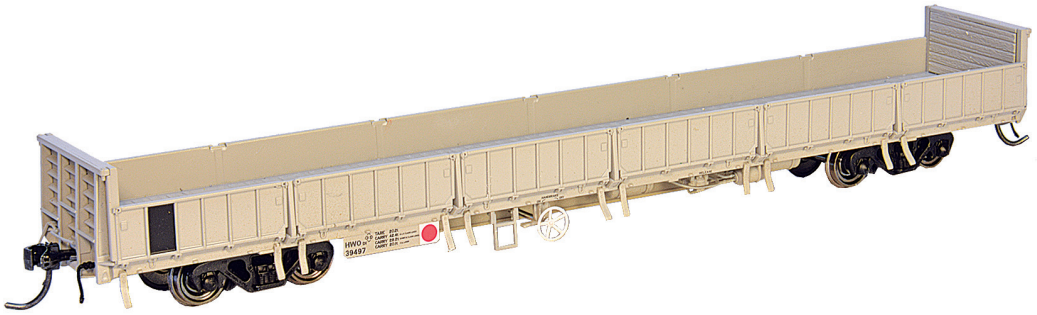
AUSTRALIAN MODEL RAILWAY MAGAZINE



QR/QRN HWO/HWOS Open Wagons, r-t-r in HO scale by CGL Models, PO Box 5288, Bundaberg West 4670. Website: www.cglmodels.com.au. Price: $225.00 per three-pack (available for HOn3½ [12mm gauge] or standard HO [16.5mm gauge]; gauge must be specified at time of ordering).

Prototype

In 1976, Queensland Railways placed an order with Commonwealth Engineering at Salisbury, Brisbane, for 125 HWO class open wagons. Running numbers 39480 to 39604 were allocated to the class, with the wagons being delivered between August 1977 and March 1978. When ordered in 1976, they cost $30,139.00 each.

As the QR classification suggests, (H) eight-wheeled open wagon, (W) fitted with a hardwood floor insert and (O) when fully loaded the wagon had a gross weight of 63t. Another feature of the wagon was higher bulkhead ends with a hardwood insert, to cover a new requirement for some load types when marshalled next to bulk liquid dangerous goods. When delivered, the HWO wagon featured steel doors with pressed vertical ribs for strength. Lashing rings were provided along the solebar under the doors to secure tarps and drop down securing rings were provided in the floor behind the doors for attaching chains for further load securing. They were to be the last open wagon type purchased by QR and the largest all-door sided open wagon to be operated on the Queensland system.

The wagons had a tare of 21t and could carry 42t on A and S class lines. On B class lines the permissible load was just 19t. The all-side drop-doors allowed for easy loading of many styles of general goods, including palletised loading with forklifts. As per policy the wagons were allocated to customers where they could be loaded to their maximum capacity. This was mainly with freight forwarding companies such as Brambles, TTS, QRX and UTO for traffic on the North Coast and Mt Isa Lines.

In 1979, two HWOs were conveyed in PTC of NSW NOCY open wagons to the Newcastle and Port Kembla Steelworks for evaluation for steel traffic. As they were not constructed for bogie exchange, the bodies were lifted from the bogies and placed on timber frames. There was also a report that HWO39499 was at Newport Workshops in Melbourne on 5'3" bogies. HWOs 39546 and 39544 were recorded as having conveyed empty 'stubbies' from Roma Street to C.U.B, Cairns, on 14 April 1979.

In the early 1980s a number were allocated to Hiles Transport at Rocklea for their traffic to Toowoomba and Dalby and later to Warwick. By 1992, 14 wagons had been allocated to this traffic. Around this time all companies using the wagons also had set vehicles allocated for their exclusive use, resulting in many wagons receiving company decals.

Many of the wagons allocated to Brambles, QRX, UTO and TTS were fitted with end and side gates with 'bows' to the loading gauge to give maximum capacity. The loads were covered by company tarps similar to these being used on their semi-trailers. Hiles Transport over time fitted gates to their Dalby and Warwick wagons and used mainly QR tarps.

The wagons were fitted with inside stanchions similar to all other side door wagons on the network. This did not give a uniform loading area between the doors resulting in gaps within the loading area when loaded with pallets. This required packing to be placed between pallets and lots of floor space.

The QR Manager of Special Loads was touring South Africa when he saw the outside stanchion arrangement on SAR wagons, giving a uniform loading platform between the doors. In the late 1980s/early 1990s, as they passed through workshops, the wagons were fitted with outside stanchion pockets, new stanchions and doors. A number board was added to the solebar, so the wagon details would be visible when tarps were fitted to the wagon. This modification required new wheels to be fitted to the wagon to keep the outside stanchion pockets within the loading gauge. At the same time, the original pressed steel doors were replaced with a new pattern that was much stronger. The new pattern door featured a flat steel plate inside face, with steel box section framework on the outside. The first few returned to service with buffers and transition links fitted, but these were soon removed.

With the shift towards containerisation, the use of open wagons declined and from the early 1990s, many HWO wagons were converted or reallocated to perform other roles. During 1991, 21 HWOs were converted to CCH 'Prairie' wagons, which were allocated to QRX traffic. In addition some were allocated to Q-Link traffic for 'ruff' loading, many returning from the west loaded with wool.

In September 2001, 25 wagons were re-coded HWOS and allocated to steel traffic. The HWOS wagons also received blue painted doors on both ends of the wagon, with stenciling *STEEL TRAFFIC ONLY*, *RETURN TO ACACIA RIDGE WHEN EMPTY*. These wagons were loaded with various types of steel products from the BHP siding at Acacia Ridge for major stations on the North Coast Line. At the same time a further 25 wagons were re-coded HWOI and allocated to infrastructure work. HWOI39485 was being used as a coal mine weighbridge test wagon.

The first withdrawals of the HWO class occurred in 2001, with around 35 remaining in service as HWO by the end of 2001.

Around 2007 many wagons conveying steel started having issues with the stanchion pockets hitting platforms due to worn wheels. Some of these wagons were reallocated to central and northern Queensland Q-Link traffic, while about five were allocated to infrastructure and had the doors and stanchions modified yet again. Around 2008, QRN was not successful in retaining the BHP steel contract and most wagons used in this traffic were placed into storage at Normanby. Around 2010 they were moved to old Gympie.

From 2008 further withdrawals of the class were made, with a combined total of 40 HWO, HWOS, and HWOI still in use by June 2009. Most were transferred to Aurizon ownership in 2010.

The last revenue use of the HWO class was the weekly Rockhampton to Winton service with Q-Link. Some can be found being used as 'slave' (dump) wagons around service locations. As of 2016, several of the class survive, with many of these noted as HWOS.

Model

The wagons come in packs of three, with four different packs available. Pack 1, general traffic wagons (1990s); Pack 2, one general traffic, one Q-Link, one QRX (1990s); Pack 3 is three HWOS steel wagons (2000s); Pack 4 is one general traffic, one QRX and one HWOS (2000s). All packs have their own individual numbers. Packs 1 and 4 (12 mm gauge) were the subject of this review.

The wagons come in packs similar to other wagons made in China. The outer cardboard packaging leaves no doubt as to what prototype is inside, a company logo similar to a QR 1200 class DEL chevron, with blue and buff yellow lines on a white box. Inside the pack with the models is a plastic sleeve of fine detailing parts (air hoses, uncoupling rods, and door stops) and a two-page illustrated instruction sheet. The sheet gives an overview of the models' features, safety notes, important information regarding delicate parts, warranty, spare parts, adjustable coupling pockets to suit either 16.5mm or 12mm track standards, brake pipe

hoses, uncoupling levers and door stops.

The wagons are of the modified version with the outside stanchion pockets which give a uniform loading area between the doors. Packs 1 and 2 (1990s era) are darker in colour than Packs 3 and 4 (2000 era). On the layout, under artificial lighting, the colour looks good and similar to what I recall of the prototype in service.

I found the fine detailing parts were easy to fit, plus it allowed me to position parts how I wanted them. We all treat our models differently; fine detail can be easily damaged even with care, some may choose to leave some parts off. Modellers running on 16.5mm gauge track may find the door stops beside the bogies could cause reduced bogie movement on small radius curves (under 26"/650mm). It was common for door stops to be missing or broken on the prototype. Should many join the 'frequent flyers club', there are spares on the sprue.

When assembled to suit 12mm gauge mounting height, the Kadee trip pin just clears the rail head. Given couplers have movement during normal operating conditions, I adjusted them up a fraction. When the detail is added, a wagon weighs 58/59g, depending on what extra details have been added.

The detail on the wagons is to die for. Having worked with the prototype for many years, nothing is missing. It's all there, right down to the door pins that hold the doors up. The brake gear looks like it will work. The bogies have brake beams and blocks, and a VTA valve (load/empty device) on one bogie; this also lines up with the brake pipes under the wagon. The bogie class, manufacturer and other markings are all there. The bogies are fitted with correct size (8.7mm) blackened NMRA RP25-88 profile wheels. The bogies are strong and there is no side play in the wheelsets.

The wagon ends have bifurcated brake pipe hoses, one has the tap open and the other is closed, just like the real thing on a train. Stencilling on the wagons is spot on, all correct size, and correct information markings for the era.

Using a digital caliper and QR general arrangement drawing P 347 (dated 1977), I checked a few measurements (see side box). The drawing is of the original wagon (I am not aware of a GA drawing for the modified wagons).

The wagons are fitted with Kadee No.153 scale short whisker couplings. On the layout, there were no issues on points or curves, even coupled to other long vehicles fitted with buffers. For an exercise I did some measurements with two wagons coupled. If I take the over-headstock measurement from the over-coupling measurements I should have the distance between wagons. Yes, a lot comes into play, even the railways outside our back door have a lot of fun with this stuff, drawgear packs, pulling and pushing, wear and tear all play a part. For every 40 wagons in a train, there is one wagon of slack. We have stock standard Kadee (we have no choice) comparing it with the real thing. Distance between wagons 1.060m (12.1mm), that's from door to door as per the plan, wagon stretched 14.9mm, wagons bunched 12.1mm. Had I taken the measurements from the bulkhead supports, it would have been less again. I leave it to you.

On the prototype the backs of the doors inside the wagon are plain steel sheets, the door fitted up snuggly with the back of the stanchions to provide a uniform loading area. A small indentation for the stanchion is all that is visible along each side. As plain as it looks on the model, it has captured the prototype appearance to a 'T'.

On the track, straight out of the box, the wagon rolls very freely. Leave them on a slight grade and they take off! Across rail joints the wagon sounds just like the real thing. On my Peco track and points the wagons operated faultlessly and passed the requirements I use as a standard for rolling stock going on the layout for operations sessions. After this, I gave them the 'flick' test; most times this ends up in a mess all over the layout. For these wagons (all six coupled together), I had to go to the other end of the layout to find them! In trying to derail the wagons, I pushed the six wagons on the front of a loco at speed through a double crossover. They stuck like glue to the track and passed through the crossover without incident. I could also 'fly shunt' them off the shunt straight.

For the modeller who likes to add his own stamp to his rolling-stock, what a canvas you have to work with; endless opportunities for loads and weathering. Hardwood floor inserts and bulkhead timber all have wood grain. That gives you both inside and out to weather. Given most of these wagons were only painted once when modified, you can let your hair down.

The manufacturers have done their homework. They have considered how the model will look and run on the layout and be handled by the modeller. One could write a book highlighting the detailing on these wagons!

This is the first production run by this manufacturer. If they produce any more wagons, I will need to rethink my QR modelling era/eras, it is such a top-class model. Congratulations Carl, Graham and Lincoln (CGL Models) on an awesome model and for making a very popular modern era QR general freight wagon available to modellers.

Arthur Hayes

	Prototype	HO equivalent	Model
Wheels	760mm	8.7	8.7
Bogie Axles distance	1.676m	19.26	19.26
Bogie Centres	10.970m	126.09	126.08
Over Headstock (doors)	15.4m	177.01	177.0
Over Couplings (Centre of Kadee)	16.46m	189.19	189.07
Top of door above rail level	1.73m	19.88	19.88
Top of bulkhead above rail level	2.255m	29.5	29.5
Across doors (outer)	2.61m	30.0	30.1
Outer door height	775mm	8.9	8.9
All scale measurements are in millimetres.