

Quarry Hunslet's

Moving away from the standard gauge products of Jack Lane we take a look at some of the nominal 2' gauge locos and a few others along the way. With the current owners of the Hunslet name LH services in the process of batch building some new locos.

There were a couple of main slate quarries that used products from Hunslet these being Penrhyn and Dinorwic. These two had a different method of transporting the product from the workface to the factory and then onwards to the point of trans-shipment.

Dinorwic quarry is located on the opposite side of the Padarn lake to Llanberis. The quarry used locos in each of the galleries and levels to move the slate blocks from the workface to the inclined planes. The loaded wagons were lowered down to the workshop at Gilfach Ddu where the blocks were cut and split to form the final product. Wagons were loaded with the finished product; these were then loaded onto transporter wagons on the 4' gauge Padarn Railway. The locos used in the galleries were cab-less so that they could work through the restricted tunnels and designed to be hoisted up the gradients. On the Padarn Railway the original Horlock (Fire Queen is preserved in Penrhyn Castle) locos had been withdrawn they were replaced by a trio of 0-6-0T's from Hunslet. At the port the loaded wagons are taken from the trans-shipment wagon to the port to be loaded into the awaiting boats. To operate in the galleries the generic 'Alice' class locos were used whereas in the port a similar looking loco type are the 'Port' class.

Dimensions of a Dinorwic 'Alice' class

Size of cylinders (diameter x stroke)	7" x 10"
Diameter of wheels	1'8"
Rigid wheelbase	3'3"
Overall length	13'0"
Overall width	5'4"
Height (to top of chimney)	7'3"
Heating surface - small tubes	86 sq ft
Heating surface - firebox	14 sq ft
Total heating surface	120 sq ft
Grate area	2½ sq ft
Working pressure	140 psi
Tank capacity	100 gallons
Fuel space (coal)	1½ cwt
Weight empty	5 tons 10 cwt
Weight in working order	6 tons 0 cwt
Tractive effort at 75% boiler pressure	2,578 lbs

From the Hunslet catalogue they give a telegraphic code of HELVA for a similar loco and list that it will be capable of hauling a load of 115 tons on the level, reduced to 55 up a 1 in 100 grade and 30 tons on a 1 in 50. This proves why there are still a lot of these useful work horses in use by preserved railways.

Penrhyn quarry operated slightly differently compared to the Dinorwic quarry in so much as they built a nominal 2' line direct from the factory to the port. To operate on the main line from the factory to the port a trio of large 0-4-0ST's were built. This trio Linda, Blanche and Charles are much larger than the quarry locos. Fortunately all three of these survive, Charles is at Penrhyn Castle painted as it would have operated along the main line of the Penrhyn Railway, Linda and Blanche was sold from the quarry to the Ffestiniog Railway. Linda and Blanche have been amended into 2-4-0STT locos with the addition of a large tender to enable them to operate a round trip. In 2005 they were both inside Boston Lodge works having a thorough overhaul; Linda has received a new boiler from Newton's. It might still be possible to purchase a T shirt with a line drawn replica of Linda's works plate from the FR – these were produced to fund the purchase of the new boiler. There have been many column inches in the railway press recently talking about the FR converting (back) some locos to coal firing from oil.

For a history of the quarries in Wales that used the locos see “The Slate Railways of Wales” by Alun John Richards.

Locos that you might see on your travels.

Quarry Hunslets from Penrhyn, Dinorwic, Pen-yr-Orsedd and others in north Wales can be seen in various parts of the country. On the 2' line at Bressingham near to Diss in Norfolk there are a brace along with a Hudswell Clarke loco that operated in a Welsh quarry. West Lancashire Railway at Hesketh Bank near Preston have a couple that they use Irish Mail and Jonathan. Irish Mail has just like many other preserved locos has had a cab fitted so that the loco crew have some weather protection. There is a story of a Middleton member that has visited Launceston and wondered why they never used a cab-less loco until he went on a sunny day and they had one operating then – the comment that had been made was that they look at the weather before deciding which loco to run!

There are many railways in north Wales that you can ensure that if you visit will see a quarry Hunslet in operation. Bala Lake have a few including Alice and Maid Marian that regularly operate during the summer months. Llanberis Lake relies solely on three locos as per my day trip to Wales.

If you get the chance to ride behind one of the cab-less locos its better than riding on our railway when we have 1310 or Sir B running as you can get a view that makes you think that you are sat on the footplate. This is one of the pleasures of riding on the line at Bressingham.

Some of the lines operate these locos with a driver that also fires – essentially they do so on each occasion that the train is stationary. The back plate has a pair of sliding doors that enables easier firing to be carried out from rail level behind the loco.

The Welsh Highland was designed as a line to connect various quarries to the main line at Dinas, just south of Caernarfon and Port Madoc. Of the locos built for the line some people class 901/1906 “Russell” 2-6-2T as being a mainline quarry Hunslet. They had other locos from the factory in Leeds including 206/1878 “Beddgelert” 0-6-4T and 979/1908 “Gowrie” 0-6-4T.

Other builders supplied the quarries with locos to operate in the galleries and the various mainline. A visit to the narrow gauge museum at Towyn is recommended so that you can view a trans-porter wagon from the Padarn railway, Rough Pup (a cab-less

Alice) and a loco supplied by Manning Wardle “Jubilee 1897” (1382) to the Cilgwyn Slate Co.

The chance for you to ride behind a quarry Hunslet loco will continue into the 21st century as LH are building some more. Currently the first of the modern batch is operating on the recreation of the Lynton and Barnstaple railway. This line was famous for the 2-6-2T locos that were supplied to it from Manning Wardle; replicas are being built at Boston Lodge (for WHR) and by the current Manning Wardle for the L&BR.

Of the quarry locos that were exported to museums in America some of them have not been on show for many years. Just like the Darjeeling Railway B class 0-4-0ST No. 19 that came back from USA a few years ago, Leeds resident Andrew Neale has bought one that he will have restored for operation.

The majority of the locos were given names by the owners of the quarries. Some of the obvious names were children of the owner, A fair number of them were named after racehorses that the quarry owners also owned.

At the Llanberis Lake Railway they have renamed the 3 locos that they run as they have built these from the various parts that they acquired with these locos. The new names represent a few of the locally appropriate names such as Dolbadarn (the castle between Gilfach Ddu and Llanberis on the lake shore), Elidir (named after the mountain that the Dinorwic quarry was located), Thomas Bach (named after one of the drivers that had worked in the quarry).

Some of the quarry locos have got parts from their sisters that they acquired during their working lives in the quarries. There are early locos having later style boilers cabs and bunkers.