

**Dorman, Long & Co Ltd** until 2/10/1954

NZ 488212 – Map F

**R.P. Dorman & Co** until / 1899

**Jones Bros & Co Ltd** until /1890

**Jones Brothers & Co** until c/1876

Ayrton Rolling Mills (later Sheet Works) were established near the north end of Forty Feet (later Forty Foot) Road in the Ironmasters District, with sidings off the NER Marsh Branch. The business was founded by Jones Brothers & Co in 5/1870 to produce sheet, hoops, billets and rods in the works which was named after Judge W.S. Ayrton, a substantial backer of the project. There were 16 puddling furnaces on the premises, together with rolling mills and production commenced in 3/1871; a speciality being the manufacture of thin iron sheets. By 1880 the works contained 29 puddling furnaces and two rolling mills. The link from the Marsh Branch served a couple of sidings on the western boundary of the works before terminating in a head shunt and 3-4 short sidings entered the main part of the premises.

In 1890 Robert Page Dorman, younger brother of Arthur Dorman, took over the works. Unfortunately he died in 1898, following which Dorman Long gained control, although it continued to be known as "R.P. Dorman" and had a trademark to that effect. At this date, the plant consisted of six sheet mills, 22 puddling furnaces, two shingling hammers and a "puddled-bar rolling train". It was capable of producing 400 tons per week, the bulk of which was galvanised corrugated sheets for roofs and buildings. There appears to have been a small single road engine shed on a short spur from the railway tracks on the western boundary. A new Black, Hawthorn 12 inch four-coupled saddle tank had been acquired in 1890.

On the northern boundary, in the area defined by the Old Town Branch Loop, were the Wharnccliffe Ganister Brick Works and a cast steel foundry, although the latter was to be subsequently incorporated into the Ayrton Sheet Works site. In 1908, Ayrton had six sheet mills, four galvanising baths, 16 puddling and two ball furnaces, with 470 people employed. It had an annual capacity of 20,000 tons of mostly corrugated galvanised iron sheets. This had become its staple product for which it was very well known. However, the change to steel was inevitable and, in 1922, the last of the puddling furnaces finished, the existing plant was dismantled and new furnaces and mills were installed to produce sheets using steel supplied by the Britannia Works. At some stage responsibility for shunting Ayrton was taken on by Britannia Works locomotives. The 1929 Dorman Long survey revealed that it had the use of two Hawthorn Leslie locomotives with 12in cylinders, a 10hp petrol tractor by Trackless Rail Ltd of Bedford and a Grafton 2½ ton jib crane.

The Iron and Steel Institute visit to the works in 1937 was informed that the steel bars were delivered from the Acklam Works to the stocking ground at the rear of the mills "and are loaded by a locomotive crane into trucks for delivery to the bar bay which is served with a 10-ton crane". The bars were cut to length and fed into one of four furnaces heated by blast furnace gas from Acklam Works. The steel then passed through seven pairs of hot rolls and three pairs of cold rolls. Galvanising involved a pickling tank to clean the steel, three galvanising machines and then two corrugating machines. A new Lewis Mill commenced production in 1937-38 and this made many of the sheets used in Anderson shelters during World War 2. These sheets went to the Cleveland Works boiler yard for bending and punching because it had the only hydraulic press in the area to do this work. Virtually all of these sheets were despatched in railway wagons.

About the mid 1960s the rolling mills at Ayrton finished, by which time, there was probably little if any rail traffic although much of the siding layout remained. In 1968 the Light Plate Mill (opened 1937) closed and the work transferred to Lackenby which could produce in two hours what had occupied Ayrton for a week. From then on, the works concentrated on 'cold forming processes' producing items such as steel lintels and motorway safety barriers. Operations at Ayrton ceased in 1/1985 when this work was transferred to BSC's Whitehead factory in South Wales. Subsequently the Ayrton site and some of the buildings were taken over by A.V. Dawson Ltd (which see).

The following list of locomotives is probably incomplete, for example, the IRS suggests that BH 478 of 1880 may have moved here from West Marsh Works before going to Britannia. Locomotives used at Ayrton mostly came from one of the other nearby Dorman Long works and are included in their lists.

**Gauge : 4ft 8½in**

R.P.D. & Co No.1	0-4-0ST	OC	BH	977	1889	New	(2)
SHEET WORKS No.3	0-4-0ST	OC	BH		1888	(a)	(1)

(a) origin & identity unknown.

(1) to Acklam Works, Middlesbrough.

(2) to Britannia Works, Middlesbrough.

Also see the Combined Acklam, Britannia, Newport steam locomotive fleet located in the Britannia Steel Works entry.