

Tadcaster Mill as an Electricity Generating Plant

In 1901 the mill closed as a flour mill and became an electricity generating plant. It provided power at 230 volts d.c. to the town of Tadcaster.



Fig 1 Power cables feeding Tadcaster

This was not the first time that electricity had been generated here. In 1885, John Ingleby installed a small generating plant for lighting within the mill. It had previously been lit by gas lighting. Lighting was by open gas flame as gas mantles were yet to be invented. The combination of flames and flour dust was a potentially explosive mixture, so electric lighting was a major advance in safety.

In 1901, John Ingleby working with John Smith's Brewery set up Tadcaster Electricity Company, installing generating plant at the mill. It is said that the first generator installed sank into the floor.

The Tadcaster District Electric Lighting Order, 1902 set out the area that the company was to supply and made provision for digging up streets to bury cables.

In 1906 William Burrell took charge of the running of the Electricity Generating Station at Tadcaster. The station was recorded as being "run by steam, water, diesel engines and has a D.P. battery¹ installed".

John Ingleby sold his interest in the station to Tadcaster Electricity Co in 1920 to John Smiths.

In the 1920s a new warehouse was built between the mill and former grain store to accommodate two rotary converters. These took the a.c. supply from Yorkshire Electrical Power Co and converted it to d.c. to supplement the locally produced power. The centre of Tadcaster remained on a d.c. supply until the early 1950s fed from these rotary convertors, which could be heard for some distance around.

¹ D.P. Battery - a battery made by the Dujardin-Plante Battery Co



Fig 2 Inside the generator room in the 1930s



Fig 3 Employees of the station 1938, The man on the extreme right is the Chief Engineer 'Billy' Burrell who lived in Mill Garth Cottage

In 1941 the Tadcaster Electricity Company became an independent concern. It was recorded that the mill was leased from John Smith Brewery Company for a period of six years from the 1st January 1941 at a rent of £320. The premises occupied comprised the Generating Station, Water tank, Siding, Water supply and Heating plant.

The generating plant comprised one 340 KW. Mirrlees Diesel Set, one 170 KW Willans Diesel Set, one 140 KW Mirrlees Diesel Set and an 80 KW Water Turbine, making a total power output of 730 KW

Under the lease Tadcaster Electricity Company undertook to continue to supply water extracted from the river to:

Mr. J.R. Edward Brooksbank
Tadcaster Rural District Council
Mr Ingleby (Fircroft)
Tadcaster Tower Brewery Company
Mr. J.R. Page
L.N.E.R (at the railway station).

The 1941 agreement lists the equipment (in considerable detail) at the mill as being:

Fast and loose pulleys on shafting of Water Turbine situate on the ground floor in 200 B.H.P. Mirrlees Diesel Engine Room with belting to line shaft and pulleys on the third floor and driven by a B.T.H. 7.5 B.H.P. motor No. R.480, 460 v, 1000 r.p.m. 12.8 amps, and situate on the second floor and used for working the Hoist, also shafting running over the Willans Engine Room to Conveyor belt over wood bridge.

1. One 50 H.P. Wolf Water Turbine (out of commission)
2. One 12 H.P. Motor for driving pumps
3. One 3 throw ram pump. Tangyes
4. One Horizontal pump. 2 stroke Tangye
5. One Lancashire Boiler
6. One small vertical Boiler
7. All suction and delivery pipes and control valves
8. One Ash Barrow (worn out) for Boiler
9. One Boiler Shovel " "
10. One Pricker Bar " "
11. One Rake " "

MILL TOWER

Supply Tank and all delivery and draw off pipes and valves

In 1947, the electrical supply industry was nationalised and Tadcaster Electricity Company was absorbed into the Yorkshire Electricity Board.

In October 1955 the Central Electricity Authority gave notice of termination of their tenancy of the premises. An automatic pumping plant was installed to continue to provide water to the five consumers to which it was contracted.