

Canalside Industrial History at Market Bosworth

When boating along the Ashby canal on the approach to Bridge 42 Bosworth Wharf, there is little to suggest that the site opposite the new marina, now occupied by houses and apartments, is of any particular interest but from 1919 until 2002 this was the location of the longest established and single largest capacity plant in the UK for the fire protection of wood, a highly specialised operation with significant history and part of the industrial heritage of Leicestershire.

Wood is perhaps the oldest and most versatile natural material known to humankind and the wide diversity of species each with differing characteristics of grain, texture, colour, density, durability and working properties enable it to be used for an almost limitless range of applications.

However, one thing that all wood species have in common is a good natural fire performance when used in large sizes due to a low rate of thermal conductivity with charring at a slow and predictable rate but, as we all know from using kindling sticks to light a fire, when used in small sizes it ignites, burns rapidly and becomes a serious risk to life and property.

This has been known since the dawn of civilisation and throughout millennia efforts have been made to stop wood burning when used in small sizes.

The ancient Egyptians soaked wood in Ox urine, the Greeks saturated wood in sea water and the Romans covered wood with a mixture of clay, loam and lime plaster, but all these efforts were of very limited effect.

It was not until the late 19th century with growing industrialisation and increasing loss of life in fire that serious efforts were made to find an effective means to stop wood burning and in the mid 1890's an English scientist, engineer and entrepreneur A. W. Baxter pioneered a chemical formulation to stop wood burning when used in small sizes.

Against all the odds Baxter raised investment to acquire a site at Fulham in West London and build a processing plant which would enable wood to be processed by using a water borne chemical solution forced into the cellular structure of wood by vacuum pressure impregnation techniques that would provide protection against fire without changing the appearance and properties of the wood.

The company commenced trading in 1897 as the British Non Flammable Wood Company Ltd and, as the first commercial operation in the world for the fire protection of wood, was a ground breaking and high risk venture.

On hearing about this new facility the Royal Navy immediately placed a contract for the fire protection of all wood to be used in the new Royal Yacht, four battleships, two cruisers and twelve torpedo boats, a huge volume which would enable the plant to operate to capacity for some years and gave the new venture a flying start.

Unfortunately, after the new ships were commissioned service problems were experienced due to the corrosion of ferrous metal fixings when in contact with the processed wood, maintenance costs became unacceptable, the Navy cancelled the contract in 1903 and soon after the company became insolvent and ceased trading.

Despite this huge set back Baxter quickly set up a new company trading from the same site as the Non Flammable Wood and Fabric Co Ltd, found a solution to the service problems experienced by the Royal Navy and somehow continued in business.

In January 1908 following a disastrous accident on the London Metropolitan Railway with heavy loss of life due to fire the process was specified for all wood used in the construction of passenger carriages for that railway, an important contract which provided much needed volume for the processing plant and strengthened the company's trading position.

Soon after the Royal Navy showed renewed interest, in 1910 the company was re named The Timber Fireproofing Co Ltd and in 1911 the process was again specified by the Royal Navy.

In 1912 following the Ditton junction rail disaster the London and North Western Railway also specified the process for wood to be used in carriage construction and soon after other railway companies followed suit enabling the company to become firmly established which, at the time, was the only processing plant of it's kind in the world.

From 1914 to 1918 the plant operated to capacity to support the wartime ship building programme for the Royal Navy and by 1919 with no room for expansion it was decided to relocate and build a new plant at Market Bosworth.



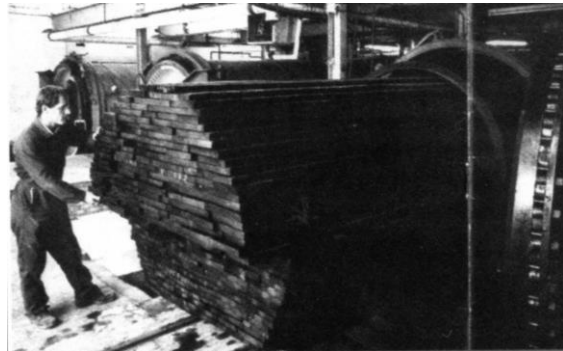
Bosworth Gas Works pre 1913.

Why Market Bosworth? One of the Directors owned the site of the former Gas Works at Market Bosworth which had rail, road and canal access and at 5.5 acres had ample space for future expansion and the company purchased the freehold.



Bosworth Wharf, coal boats

Construction of the purpose built state of the art processing plant took 18 months and it was commissioned and became operational in November 1920 when it was still the only commercial process for the fire protection of wood in the UK and possibly in the world.



Timber Fireproofing, pressure vessel being unloaded prior to drying.

From 1920 the business prospered with the Royal Navy contract retained and processed wood being used in the Ark Royal, Rodney, Norfolk and many other famous ships. It was also used in the construction of naval ships of other countries including Australia, Norway, France and Turkey with much of the bulk timber supply being delivered by rail to Market Bosworth station and some raw materials, notably coal, delivered by narrow boat to the company's canal basin and jetty equipped with a small derrick.

The process continued to be used by the railway companies, London Underground and increasingly to provide improved fire safety of construction projects for the London County Council, City Corporations and other town councils.

Lloyds approved the use of the fire protected wood in merchant ships and was widely used in the construction of the great trans Atlantic liners including the Queen Mary and Queen Elizabeth.

During the 1930s two competitor plants became established but the Timber Fireproofing Company retained it's position as market leader operating the largest capacity plant in the UK.

During 1939-1945 the capacity of the plant at Market Bosworth was unable to meet the demands of the Royal Navy's war time ship building programme and a second plant was built at Hillington, Glasgow to support the Clydeside shipbuilding industry.

During the 1950s and 1960s the market for fire protected wood continued to grow and was further stimulated by the introduction of new Building regulations relating to fire safety which lead to a rapid development for the fire protection of wood as an industry both nationally and internationally. Competition increased from other processing plants in the UK, Europe and America as well as the introduction of specialised fire retardant paint and varnish surface coatings.

In 1964 the company was acquired by Meyer International, the largest group of timber trading companies in the UK and with access to new investment and management major re-organisation took place, the Glasgow plant was closed, the plant at Market Bosworth was further expanded and the company continued to adapt to increasing competition and retain it's position as market leader.

During the 1970s alternative vacuum pressure impregnation processes were developed for the fire protection of wood to be used in high humidity and fully external applications leading to further market growth and this was followed in the 1980s by the development of low flame spread wood board products in which the fire protective chemical was applied as an integral part of the manufacturing process.

In 1998 Meyer International was acquired by the French conglomerate St Gobain which led to the disposal of many peripheral businesses including the Timber Fireproofing Co Ltd which was bought by three businessmen who, in spite of the company continuing to hold the contract originally placed by the Royal Navy in 1911, closed down the business in 2002 and sold the freehold 5 acre site for residential building development.



Shortly before closure, 2002.

A sad end to a company whose legacy has seen the development of the fire protection of wood into a global industry that makes an enormous contribution to public safety when wood is used in fire risk situations and will continue to do so well into the future.

Alan Ball