

IDEAL BOILERS & RADIATORS LTD

Origins of the Company

The Company's central heating links date back to 1872 in Ware, Massachusetts when one John Pierce acquired a small tin and stove shop that was struggling to stay in business. Pierce immediately set about transforming the interior and exterior of the shop, throwing out accumulated rubbish. He hung lamps and got the painters in.

In a very short time his hard work started to pay off. His window displays, his keenness and obvious desire to please began to attract trade and Pierce soon needed assistance. So, he hired Joseph Bond who had experience in installing stoves and furnaces.

Up to this point - the late 1870s, the heating of buildings had been through the medium of hot water or steam pipes. However, during the 1880s people started talking about a new idea in heating whereby steam or hot water was circulated through a series of iron castings called radiators.

It was said that this revolutionary method of heating - central heating - because it came from a central heat source, would eventually be cheap enough to fit in city and suburban homes.

Many people were quick to realise that this new system of heating offered immense business potential. Pierce and Bond who now owned Pierce Steam Heating Company were among those who prospered.

In 1892 they merged with the Michigan Radiator Company and then the Detroit Radiator factory to form the American Radiator Company. In 1897 they purchased the entire stock of the Ideal Boiler Company and so began the manufacture of cast iron boilers under the now famous trade name "Ideal".

Why Kingston upon Hull?

The decision to build a production plant in the UK was taken following the successful introduction of American designed boilers and radiators to England and Europe by the American Radiator Company.

The site of the new UK manufacturing site was a battle between local authorities who all felt that the site they had to offer was the most suitable. Most were quickly eliminated and it looked like the final decision would be a site near Leeds. There was however, one man, Alderman F Larard, the then Lord Mayor of Hull, who was determined that the factory should be built in Hull. He continued to stress the advantages of the Hull site:

- the geology which made available bore hole water
- the close proximity of the railway systems of the North Eastern Railway Company and the Hull to Barnsley Line

- the position of the site in relation to the docks and the direct shipping lines to Northern Europe and Scandinavian countries.

Building the Factory

Work commenced on site in March 1906. At the time, the site was a grass field, partly occupied by an old brick works in what was then open country.

Nine months later the factory was built and in production. On 21st December 1906 the furnace was lit for the first time, the first iron melted and the first radiator cast. The National Radiator Company as the factory was named was in business.

The title of the Company gave its name to the works road that in 1907 became National Avenue.

In the Meanwhile ...

As the foundation stone was being laid to mark the beginning of the Company's association with Hull, it had only been three years since the Wright brothers had made their first historic flight.

As the factory was being built between March and December 1906 the British Empire occupied one fifth of the land surface of the globe with a population of 400,000.

WK Kellogg Toasted Corn Flake launched their new product and Coca Cola put caffeine in their drink to replace cocaine.

The Baker to Waterloo underground railway opened and the term 'suffragette' was coined to describe women campaigning for the vote.

1906 also saw the invention of the jukebox.

Time for Expansion

By 1910 the factory was being extended. The original buildings were designed by a London based group of architects but from 1910 onwards the majority of building extensions were carried out by the Hull building firm Houlton & Sons.

1917 saw large-scale expansions as the company anticipated a building boom at the end of the war.

The War Years

1914 - 1918 During the war the company produced a limited range of boilers and radiators as the majority of the plant was turned over to the production of shells and other munitions.

1940 - 1945 The site suffered very little damage in spite of the fact that, as captured records show, it had been the principle target of a Luftwaffe attack on the night of 4 April 1941.

During the war the company produced 250,000 boilers, 24,000,000 square feet of radiators and 500,000 pieces of vitreous china for military camps and airfields at home and abroad. It also made 20 million small calibre mortar bombs, shells and grenades.

During both World Wars the Company employed many women.

Major Changes in the Early years

The 1920s provided a major change in the way that the National Radiator Company operated. It had become obvious that American designed boilers were not particularly well suited to the majority of British properties.

In America most of the boiler installations were sited in basements and so the appearance of the boiler was secondary. In Britain, where basements are the exception rather than the rule, the boiler was sited in the kitchen and so appearance was as important as efficiency. So the company decided to design their own products to meet British requirements.

In the 1930s fashions in fuels were changing. Gas with its labour saving advantages, was proving popular with users and in cities. Developers were attracted to gas as a fuel because of the non attendant problems of storage and delivery access. And so gas became a more desirable method of heating homes. Oil was also becoming acceptable as a substitute for the more traditional solid fuels. The Company faced a massive re-designing programme to introduce new products for the efficient burning of the new alternative fuels.

1935 saw a completely new factory being built for the production of vitreous china plumbing fixtures and porcelain enamelled cast iron baths as American Radiator and Standard Sanitary combined and the Hull site started to produce bathroom suites. The two kilns required for this work were powered by producer gas manufactured on site from coal in a small gas works. At the time there were no gas mains of sufficient capacity available from the local Gas Board.

1935 saw a major modernization and mechanization of the boiler and radiator foundry. It became the largest mechanized grey iron foundry in England.

Changes during the 50s and 60s

The early 1950s saw new plant being built for the production of light gauge sheet steel fabrications and radiator panels. In addition, there was major expansion to the vitreous china production facility and the building of a separate cast iron bath factory.

With all the design changes the factory invested in a brand new Thermal Research Laboratory. The main office block was also extended. The site now covered 90 acres.

In the 1960s the company faced an increase in the sales of gas fired domestic central heating boilers as the natural gas finds in the North Sea started to come on stream and the gas boards invested heavily in further distribution systems.

Company Name Changes

In 1953 the Company changed its name to Ideal Standard as the Standard Company, USA, now owned it.

In 1976 Stelrad Group (part of Metal Box) acquired the boiler and radiator sections of the Company which became known as Stelrad Group Limited. The vitreous china part of the business continued to operate as Ideal Standard - a completely separate concern.

Stelrad invested heavily in new radiator plants outside the Hull area and the Hull site stopped producing radiators becoming the sole boiler manufacturing plant.

Metal Box de-merged its activities in April 1989. The remaining companies of Metal Box were renamed MB Group. MB Group acquired the Caradon group of companies in November 1989 which included Mira, Everest and Terrain. The Company was now known as MB Caradon and the Hull factory was called Caradon Heating.

In 1993 Caradon Heating split into two, the radiator factories became known as Caradon Stelrad and the Hull boiler plant as Caradon Ideal - reflecting the Ideal brand name that had been first introduced to Hull in 1906.

Recent Investments

A huge and ongoing investment and modernization programme has led to Ideal's position today as a world class manufacturing business. Since 1992, Caradon has invested over £6m in its Hull factory, with new plant and equipment, state-of-the-art responsive manufacturing cells, a new development laboratory and environmental control systems for emissions.

The organization has become customer focused, driven by the need to delight our customers. We are striving to become a world class company and the vehicle we are using to get us there is First In Service (our name for Total Quality Management).

All employees have been trained in First In Service which has encouraged teamwork, explaining the importance of every individual having responsibility for the quality of their work, given an understanding of the need for continuous improvement and equipped everyone with the tools and techniques they need to work in teams and contribute to the improvement activity.

What do Caradon Ideal Make?

Caradon Ideal make central heating boilers under the brand name "Ideal".

One of the early British designs was the Ideal Cookanheat. This was a revolutionary designed, free standing stove which combined in one unit an open fire, a central heating boiler, a cooking oven and a hot cupboard. The Ideal Cookanheat did more to introduce central heating into lower cost homes than any other similar appliance. It was made from polished iron and black leaded to make it shine.

Central heating boilers have changed a lot since those early days. Today most people wishing to install a boiler want an appliance that will fit discretely into their kitchen or even into a kitchen unit.

What are boilers made of?

The only part of the modern day boiler that is still made of cast iron is the heat exchanger. The boiler casings nowadays are made of light gauge painted sheet steel.

Cast iron is produced in our foundry and the process uses sand and iron. The sand is quarried in the Midlands and is used to make moulds and cores. It is delivered by lorry about twice a month. We recycle the sand in our sand reclamation plant.

The iron, is made up of pig iron and scrap. The pig iron originates in Sweden and is transported by ship to Britain to agents. We deal with a foundry supplies agent in the Wales area who deliver the iron once a month.

The steel used to make the casing and components also comes from the Midlands.