



## **A brief history of the Magna Site**

The Don Valley's long history of human settlement and metal working is ultimately connected to its abundance of natural resources, including water, iron-ore, and coal. The 'Magna' site has witnessed many transformations and new developments provide an important link with local tradition.

The region's mineral deposits were crucial to the steel industry: the rich South Yorkshire coalfields provided both iron ore and requisite fuel. Transport facilities improved in the 18<sup>th</sup> century, with schemes such as the canalisation of the River Don (from 1727) and setting up of a number of turnpike roads. The Sheffield - Tinsley canal was completed in 1819, followed by the North Midland railway connecting Rotherham to London. The Sheffield - Rotherham railway opened in 1838, and Sheffield was soon connected by rail to Manchester as well.

### **Bronze Age**

Whilst digging the foundations for a steel furnace in the 1960s a Bronze Age canoe was excavated.

### **Roman**

Archaeological finds show that the area was once the site of a Roman Fort, with iron works dating back to the period 1<sup>st</sup> - 4<sup>th</sup> Century AD. Some of the artefacts uncovered can be seen at Clifton Park Museum, Rotherham.

The Romans built forts here in three different periods of occupation. They were dated as follows:

- Original wooden fort, founded 54 - 57AD. It was 6.5 hectares in area and accommodated 800 soldiers of the 4<sup>th</sup> Cohort of the Gauls, including 240 cavalry men led by Didus Gallus.
- A new stone fort constructed at the end the 1<sup>st</sup> century, probably abandoned in the 2<sup>nd</sup>.
- A third fort built, apparently in haste, probably in the later 3<sup>rd</sup> century, occupied until the last half of the 4th century.

Small-scale excavations undertaken by the Rotherham Literary and Scientific Society in 1877 confirmed Roman remains. Pottery, inscribed tiles, a Roman well and two colonnades were recovered. Also found was a bloomery and two or three smith's hearths used for making nails. Iron from the bloomery was used to make tools and weapons.

### **Medieval**

A short distance north of the site monks began iron working from local ores.

## **20<sup>th</sup> Century**

The shortage of steel to make shells during the First World War led to the construction of the Templeborough Steelworks completed in 1916.

The newly constructed steel works had 11 open-hearth furnaces, and 3 more were added later. Templeborough's 14 chimneys became known as the Fourteen Sisters, a famous Rotherham landmark. It was the largest open-hearth melting shop in Europe.

Personal accounts from the front-line testify to the direct effect of Peech's steel shell programme. During the 1914 -16 period the 18lb guns of the Sheffield Gunners were limited to one shell per gun per day. The change came in the 2<sup>nd</sup> Battle of the Somme on 16<sup>th</sup> Sept 1916. Bill Kitching, formerly chief engineer at Templeborough, reported, "Zero hour was 12:30 midday. I had prepared with others the way for tanks. You could not hear yourself speak for British shells going over. I saw the result of Jim Peech's work at Thiepval – I was there".

The works became known as 'Steelos' after the owners Steel, Peech and Tozer. Being so vast, it stretched for a mile on both sides of the road site, navigation was by landmarks. The steelmaking process started at the 'Sheffield End' and the finishing took place at the 'Rotherham End'.

During the Second World War 'Steelos' produced almost 4 million tons of ingots. Air raids were a serious problem. Open hearth furnaces had to be fired almost continuously. On one occasion the corrugated roof sheeting was damaged by a land mine dropped during the 'Sheffield Blitz', and Shift Superintendent 'Tubby' England wanted to restart the furnaces before repairs could be made, but was prevented when the local air warden (one of his employees) threatened him with imprisonment.

Electric Arc Furnaces were introduced in the early 1960s to replace the open-hearth furnaces that were both lower in efficiency and productivity. It adopted as its emblem the phoenix, a symbol of perpetual reinvention. At one time the steelworks produced almost 25% of the UK's electrically melted steel and was the world's largest steel plant. The new electric furnaces could now produce 110 tons of steel in 3 hours and 20 minutes instead of the 10 -12 hours taken in the old furnaces.

No longer as labour intensive and increasingly computerised, the number of employees at the steelworks dramatically dropped. In 1993 due to a poor market, and high raw material and power costs the works ceased production. The area however is still a large steel producer, but with a relatively small number of people now employed in the industry.

## **21<sup>st</sup> Century**

In 2001 Magna opened to the public celebrating science, technology and the arts, which are interwoven in the fabric of the site's heritage.