

The Industrial Trust Chemistry: the next generation South Yorkshire CASE STUDY

School: Hinde House Specialist Engineering School
Date: Thursday 17th July 2008

Host: Corus UK - Scunthorpe
Group: 40 Yr 9 pupils, 3 Teachers

Programme:

The day's events started with a presentation of the Corus business followed by a tour of the facilities that showed the practical application of chemistry in the manufacturing process with a gap for lunch. After a short introduction the Corus Marketing Manager helped the students to understand the Corus product range and what marketing/selling/communications in a business involves. A Corus production manager then outlined the vast range of measures Corus take to maintain control of environmental issues and how production process for the range of steel products enhances environmental sustainability through exceedingly high levels of recycling.

Following a detailed H&S briefing the pupils were taken on a tour of the site looking at the processes to convert Iron Ore into useable steel products. At each stage the pupils met local technicians, who explained the main chemical/physical reactions/changes taking place. The party was shown the blast furnace, sinter plant and rolling mill, but the piece de resistance was clearly when everyone was able to watch from close (but safe) range the discharging of red hot coke from the huge battery of coke ovens. The high level of excitement and interest was confirmed irrefutably by the fact that not one pupil made any complaint about the smell!

Teacher Feedback

"The day proved to be a great introduction to the world of work in a heavy industry. The day brought to life much of the science we teach in the school environment. Not only did the pupils learn about some of the detailed chemistry of steelmaking, they also got to understand the huge scale of the processes. The importance of Health & Safety and the efforts Corus make to minimise the environmental effects of the process are both clear messages that will remain with the pupils throughout their lives."

Jill Todd, KS2-3 TRANSITION AND KS3 CO-ORDINATOR FOR SCIENCE, Hinde House School, Sheffield

Company Feedback

"The pupils were all well behaved, particularly during a fairly heady session in the Conference Centre.

The format of this visit was slightly different from our normal visits. In the context of a major steelworks it is difficult to provide the pupils with much hands-on chemistry activity; we therefore concentrated on presenting the chemistry while the pupils were visualizing each of the processes.

For future such visits we shall probably allocate more time to the tour of the processes and less to the sit down presentations."

Ron Wilkins, Corus Works Visit Coordinator



Student Feedback

"The importance of H&S"; "I learnt how coke is made"; "I learnt about the effects on the environment"; "I learnt about how many every day things we use are made from steel".

Over 80% of pupils found the visit "interesting", "enjoyable" and "useful to their school work".

100% of pupils confirmed they "knew more about how industry works and what jobs people do".

Over 80% of pupils had not given much thought to the role of Chemistry in industry prior to the visit.

Over 70% were more aware of the role Chemistry plays in industry after the visit.

75% of the pupils plan to equal or exceed the FE/HE qualifications achieved by their parents/guardians.

Year 9 Science Students, Hinde House School