

# PETERBOROUGH SECTION

## SITE VISIT AT WEDGE GROUP GALVANIZING PLANT

### 15 SEPTEMBER 2010

### SAWTRY, CAMBRIDGESHIRE

Our September site visit was a visit to the unique Galvanizing Plant in the UK which incorporates the most up to date galvanizing equipment in the industry. The plant which is a subsidiary company of Wedge Group Galvanizing Ltd, the largest galvanizing group in the UK, boasts the latest shell design for the galvanizing process with integrated green systems.



Internal and external views of the new state-of-the-art galvanizing factory

The visit kicked off with a half hour presentation on the development of the new factory and also a brief introduction into the galvanizing process both in the factory environment and also an explanation of how steel becomes galvanized by zinc dipping. The power point presentation identified the process

was originally discovered and developed in France around 1800, with British history of Galvanizing stretching back as far as 150 years. Wedge Group Galvanizing are able to track back their own history to 150 years, so were one of the first initiators of the process in the UK.

Following the very informative presentation by Warren Bulger and Paul Bayford the attendees were split into two groups and taken around the factory. The process in its simplest form consist ***pre-treatment, galvanizing and inspection***.

***Pre-treatment*** for galvanizing consists of 4 separate stages

- initial inspection to check if items are safe and suitable for galvanizing
- degreasing steel in a solution to remove oils
- pickling with weak acid to clean metal
- fluxing to assist the galvanizing reaction



Stuart Broughton, Peterborough Section Chairman inspects the pre-wash baths

**Galvanizing** is where material is immersed in molten zinc a temperature of around 450 degrees. During this process the molten zinc reacts with the surface of the steel to form a series of zinc/iron alloys. These alloy layers protect steel from corrosion for 30-40 years. Once removed from zinc bath the product is then transferred into a quench tank where it is allowed to cool.



Material is being lifted out of the zinc bath and then transferred to the quench tank.

**Inspection** of the galvanized steel is first visually inspected for its appearance and conformity to standard. Batches are then non-destructively tested for thickness and uniformity



Local Members listen to Paul Bayford of WEDGE Ltd

The evening site visit was attended by twenty local Members and could have been more but numbers needed to be limited. So this was a very good turn out. The hosts were very informative and we give our thanks to Paul and Warren for giving up their personal time to organize the visit.



Material is being lowered into the quench tank

Report by Mark Palmer

Peterborough Section Committee Member

