## **School visits Birla production facility in North of Italy**

On October 30th, 2015, class II B of "Cassano" secondary school visited one of the seventeen production sites of India multinational "Adytia Birla - Birla Carbon", located in S. Martino di Trecate.

The main pillars of the Company are safety, creativity, dedication, research (executed by specialized global teams across several production sites), commitment, focus on customer satisfaction and environmental protection achieved by maximizing water recycling and by reducing carbon emissions.

After being welcome by the staff we have reached the training room to watch a presentation video about the Company and about carbon black process production. The product is used as additive to improve mechanical properties of rubbers and plastics, high performance tires, kitchenware, car accessories and internals. It is also used as additive in make-up products such as mascara and eye liner. Almost 99% of black rubbers and plastics contains carbon black.

The production site employees 80 resources to operate the plant, control the product quality in the laboratory and to provide the required services for Administration, Human Resources, Procurement and Logistics

After the presentation video we have visited the plant and the laboratory in two separate groups. During the visit of the plant each of us was wearing his personal protective devices (helmet and glasses) In the plant we had the opportunity to look inside the reactor through a 9" sight glass. In the reactor chamber the raw material is partially burnt under controlled conditions. The heat liberated by the partial combustion brings the operating temperature inside the reactor at about 2000 deg. C. At this high temperature and at these conditions the raw material is thermally cracked producing carbon black and flue gases. Carbon black powder is then filtered from the flue gas and palletized in order to be safely transported.

The plant also recovers heat from flue gas, generating steam and producing electric power which is exported to the national grid.

In the laboratory an analysist has explained us the chemical process to produce one of the 20 different types of Carbon Black which are produced in the plant. Some of us had also the chance to reproduce the production process.at laboratory scale

After completing the site visit we went back to the training room where we returned our personal protective devices and a received a gift presented by the Company.

Thanks for this interesting experience.

Classe 2° B (grade seven)