

BEST PRACTICE

LOCATION: **ARTICLE YEAR:** 2009
ACTIVITY: Maintenance & Housekeeping **COMPANY:** CEMEX UK
SUB ACTIVITY: N/A **COMPANY LOCATION:** Tilbury Grinding Plant, Essex
BEST PRACTICE No: BP643 **COMPANY TEL:** 01375 843502

TITLE

Safe commissioning of plant

ARTICLE

CEMEX UK developed a detailed plan to ensure the safe commissioning of their new 1.2m tonne cement grinding plant at Tilbury.

The plan, which included the testing of approximately 250 drives, was put in place to ensure the safety of contractors working on the project.

The system uses coloured tags to indicate completion of the various stages of commissioning.

Each of the stages has requirements that must be fulfilled before moving on, and include the elimination of potential hazards associated with the following stage.

Fundamental to this process is a locking system which operates as soon as electricity is available and the equipment can potentially be energised.

The keys to the locks are controlled by a very limited number of nominated company employees.

A piece of equipment can only be energised once the following criteria are satisfied:

- Mechanical checks must be complete.
- Electrical checks and signal testing must be complete.
- Any outstanding safety or functionality issues must have been resolved.
- Control measures must be in place for operation/rotation of the piece of equipment, in accordance with the risk assessment.
- Equipment must be checked to ensure it is clear of unauthorised people.
- Commissioning team members, all in radio contact, must be positioned so that all parts of the equipment are visible.
- The area around the equipment has been closed off with dated warning signs.

It is the responsibility of the nominated company employees to ensure that all of the above criteria are satisfied before any equipment is energised and that the isolation locks are replaced as soon as test operations are complete.

The benefits of the scheme include:

- Identification of key electrical and mechanical hazards at the design and construction stages.
- Quantitative approach to electrical and mechanical hazards clearly recorded and communicated.
- Control of all personnel throughout the end of construction to commissioning programme phases.
- 'Authorised person and permit approach™ to both electrical and non-electrical isolation and re-energisation of all

ARTICLE IMAGES

