BEST PRACTICE

LOCATION:	**Cement plant**	**ARTICLE YEAR**	**2015**
ACTIVITY:	**Maintenance & Housekeeping**	**COMPANY:**	**CEMEX UK Materials**
SUB ACTIVITY:	**N/A**	**COMPANY LOCATION:**	**Rugby Cement Works**
BEST PRACTICE No:	**BP1946**	**COMPANY TEL:**	**07500984229**
COUNTRY OF ORIGIN:	**United Kingdom**		

TITLE

Bucket elevator maintenance isolation and safety system (BEMISS)

ARTICLE

DESCRIPTION

Following a fatal accident overseas involving a contractor coming into contact with an electrically isolated bucket elevator, it was decided that additional isolation precautions were needed. A small group of the workforce at Rugby Plant was asked to design a mechanical isolation system for the sites many bucket elevators. From this request the Bucket Elevator Maintenance Isolation and Safety System (BEMISS) was born.

The BEMISS is a mechanical isolation system which is to be used alongside the electrical isolation. Once the BEMISS has been installed the elevator can no longer turn under its own weight. If a bucket elevator has been crash stopped and therefore the buckets on the up stroke are full with material, the elevator chain will not be in balance due to the weight of the material being held in the buckets. Therefore there is a chance that the drive can creep backwards, or if the brake (GBX Anti run back) fails the bucket elevator can turn. The BEMISS system prevents this.

The BEMISS is made up of a steel frame and fully welded to each side of the bucket elevator upward stroke leg. An opening into the casing of the elevator is then made to expose the chain (A bolted cover is provided when the elevator is in operation). Where possible the isolation steel bars can then be slid through the chain link and positioned using the location pins. The location pins are attached to the isolation bars and are then inserted through the BEMISS steel frame which has several possible location points to allow for any deviation in the position of the elevator.

BENEFITS

- Prevents any movement on bucket elevators and potential for injury
- System can be deployed on elevators on other sites
- Team involved motivated by inclusive and successful
- A safer working environment for all

ARTICLE IMAGES

Click image to enlarge

