

BEST PRACTICE

LOCATION:	Concrete products plant	ARTICLE YEAR	2018
ACTIVITY:	Maintenance & Housekeeping	COMPANY:	Brett
SUB ACTIVITY:	N/A	COMPANY LOCATION:	Southampton
BEST PRACTICE No:	BP2019	COMPANY TEL:	0000
COUNTRY OF ORIGIN:			

TITLE

Penta tumble drum chute wear plate improvements eliminates confined space hot work

ARTICLE

DESCRIPTION

At Brett's site in Poole, the fully automated Penta Line 'ages' concrete block pavers by tumbling the cured blocks inside a rotating steel tumbler drum fitted with lifter bars. The tumbling action is extremely abrasive and causes both significant wear on the feed chute and drum, this is compounded by impact damage. The wear and damage are minimised by installing wear strips on the feed chute. However, the interior had to be inspected on a weekly basis and repairs made. This required operators to work in a confined space where hot work was undertaken such as welding to replace damaged wear strips taking about two hours.

The operators were exposed to risks associated with HAVs, oxygen depletion and fumes, use of gas for welding, whilst working with restricted space inside the tumble drum. Control measures were in place to minimise the risk from these hazards. However, it was recognised that the process needed to be made safer.

The solution was to reinforce the tumble drum chute and fit bolt-in wear bars instead of weld-in wear strips. The bolt in wear bars were also extremely hard wearing. The bolts holding the strips in place could be undone from the outside. The installation cost was £ 4,300 with estimated annual costs of £3,350 per annum.

BENEFITS

- Eliminated weekly hot work and grinding of wear strips
- Eliminates category three work in a confined space
- Saving of four hours of maintenance per week
- New plates easy to replace and long lasting
- Safer and more efficient working environment.

ARTICLE IMAGES

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