

## USE OF STANLEY KNIVES FOR CUTTING CONVEYOR BELTING (AND OTHER USES)

In Tarmac two operatives were injured whilst using a Stanley knife to cut conveyor belting.

A field operative was seriously injured, suffering a deep cut to his right thigh, when the knife he was using to cut a piece of conveyor belting slipped and he stabbed himself in the leg. The wound required hospital treatment (see photograph opposite).

Another operative suffered a similar injury when he too cut himself whilst using a Stanley knife to cut conveyor belting.



### Safety issues – Using Stanley knives to cut conveyor belting

The following are some of the factors that make using a Stanley knife to cut conveyor belting potentially unsafe.

- When jointing a conveyor belt, the person cutting the belt normally cuts against a straight edge (T-square), held in position with the other hand. It can be awkward to hold and control both at the same time.
- Conveyor belting is very tough material and normally has to be cut by drawing the knife blade towards the body, so as to maintain sufficient purchase and accuracy of cut.
- Making a deep cut with a blade, by applying considerable force, means that if the blade comes free from the belt then the knife user is usually unable to control where it goes.
- Damaged or blunt knife blades mean that unnecessary force is needed to achieve the cut.
- Some types of Stanley knife are not appropriate for heavy-duty cutting work.
- Adverse weather can make the process difficult, particularly wet weather or very cold weather when the hands and senses can become numb.

## Cutting conveyor belting safely

The following measures will significantly reduce the likelihood of someone being hurt whilst cutting conveyor belting.

Wherever possible a mechanical belt-cutting tool should be used to cut conveyor belting. However, where it is not reasonably practicable to have such a tool available on site or where the tool cannot be used, for example when doing intricate cutting work, then the use of a Stanley knife may be necessary.

At sites where conveyor belt jointing is a routine task, eg at a sand quarry with a conveyor field system, a mechanical cutting tool should be available and used. The photograph opposite shows a mechanical belt-cutting tool for this purpose (the one shown is manufactured by Flexco and available from Canning Conveyor Ltd for about £500). It clamps around the conveyor belting and cuts through it, using a blade, which is drawn across the belt by turning a handle.



Where a knife has to be used to cut conveyor belting, always cut away from the body if possible.

Always cut through conveyor belting by making several light, controlled cuts with the knife, rather than trying to cut through it with one or two heavy cuts.

Use a hammer and belt punch to pierce holes in belting (for drapes, skirts etc). Do not try to gouge holes using a knife.

When cutting drapes for transfer-point chutes for example, prepare them in the workshop, where the belting can be clamped securely to a bench and worked on safely.

Whenever anyone is using a Stanley knife to cut conveyor belting they must always use appropriate PPE. Kevlar or other cut and puncture resistant gloves for hand and wrist protection must be worn.

Whenever a Stanley knife is likely to be drawn towards the body an additional risk assessment must be carried out to identify the need for extra PPE. This will probably include the need for a leather and Kevlar apron to be worn, which protects the abdomen and thigh area in particular from a stab injury.

Stanley knives which are used for cutting conveyor belt should be the 'dagger' handle non-retractable blade type, which is less likely to twist or close when being used.

Always make sure the knife blade is sharp and is not damaged. Always carry spare blades.

## Risk assessment and the use of Stanley knives

Site Managers must make sure that all belt-cutting activities on their site have been adequately risk assessed and have appropriate safe systems of work in place so the task can be completed safely. This will include:

- availability of suitable tools
- restrictions on the use and type of Stanley knives
- appropriate PPE
- training
- authorisation

It should also be recognised that Stanley knives are not only used by belt fitters. Every year we have other accidents involving Stanley knives. One employee was injured recently when he cut himself with a Stanley knife blade that was loose in his toolbox. An apprentice electrician suffered a deep cut to his hand when he cut himself whilst using a Stanley knife to cut electrical cable insulation.

All sites should identify where Stanley knives are being used and who carries one. Whenever possible, alternative cutting tools should be used, ie a cable cutting tool for cutting cables. Only those persons who need a Stanley-type knife for their job should be authorised to carry one. The remainder should be confiscated.

### QUESTIONS – (there may be more than one correct answer)

		A	B	C
1	What factors make using a knife potentially unsafe to use?	Considerable force is needed to cut the belt	Blade is usually drawn away from the user	Incorrect knife used
2	A damaged or blunt blade affects what?	The effort required to cut is increased	Quickens the cutting speed	Decreases the chance of an incident
3	How does adverse weather affect the task?	Cold conditions can affect the feeling and sensitivity in the hands	Wet weather can cause the knife to slip	Cold weather makes the rubber easier to cut
4	What can be used to make the task safer?	Make it a two man operation	Try and cut through the belt in one go	Use a mechanical belt-cutting tool, if practicable.
5	What else can make the task safer?	Cut away from the body if possible	Always use the correct tool with a sharp blade	Use standard issue gloves

