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NATIONAL SAFETY INSTRUCTION

UK BP/SE/NSI 19 OVERHEAD TRAVELLING CRANES

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DOCUMENT MANAGEMENT RECORD

Document Title	OVERHEAD TRAVELLING CRANES
Document No:	UK BP/SE/NSI 19
Previous Review Date:	
Next Review Date:	

Document Issue Status				
Issue	Date	Notes	Originator	Authorised for Use
2	September 2004	Re Drafted as UK BP/SE/NSI 19	A Foster	J Fenn Transmission SHE Manager

OVERHEAD TRAVELLING CRANES

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1 SCOPE

This National Safety Instruction applies the principles established by the Safety Rules to achieve **Safety from the System** for personnel working on or in the vicinity of overhead travelling cranes and similar machines. It excludes hoists or similar lifting machines.

Whilst the equipment covered by this Instruction does not fall strictly within the scope of the Safety Rules, the duties imposed by statutory legislation necessitates the inclusion of this Instruction for work on **or in the vicinity of** overhead travelling cranes.

2 DEFINITIONS

Terms printed in bold type are as defined in the Safety Rules.

3 EQUIPMENT IDENTIFICATION

Equipment on which work is to be carried out must be readily identifiable. Where necessary means of identification must be fixed to it which will remain effective throughout the course of the work.

4 DANGERS

The main **Dangers** to personnel working on or in the vicinity of overhead travelling cranes or similar machines, arise from

- being struck, **crushed** or trapped by a travelling crane or its load
- electric shock from contact with exposed **Live** overhead conductors
- falling
- the release of stored energy

5 ACCESS TO AND EGRESS FROM THE CAB OF AN OVERHEAD TRAVELLING CRANE AND SIMILAR MACHINES AT WHEEL-TRACK LEVEL

5.1 The preferred method for a **Person** gaining access to or egress from the cab of an overhead travelling crane is when the crane is not in use and is **Isolated**.

5.2 The change-over of crane Operators should preferably take place at ground level

Guidance: accidents, some of them fatal, have occurred due to trapping or falling when a crane unexpectedly moves away just as the relief Operator is actually stepping into the cab

- 5.3 If it is essential for a **Person** to gain access to or egress from an overhead travelling crane whilst it is operational the Operator must first be informed of the proposed action. This should be by signals or other agreed means of communication. Once permission has been given by the Operator for access to or egress from the crane, the crane must not be operated or moved until the **Person** has contacted the Operator to confirm that the action is completed.

Guidance: most safety procedures identify a risk to cranes Operators only, whereas it is crane maintenance personnel, especially electricians, who are mainly at risk. Accidents including falling and crushing have occurred when the Operator thinks, incorrectly, that the Person has already left the crane or is already safely on the crane and then moves off.

- 5.4 Operators must be made fully aware of the proposed activities of the **Person** gaining access. There must be liaison between the Operator and the **Person** in order that both parties may be alerted to any **Danger**.

6 WORK ON OR NEAR TO EXPOSED OVERHEAD TRAVELLING CRANE CONDUCTORS OR SIMILAR MACHINES

- 6.1 Where work is to be done on or near to **Live** exposed conductors of overhead travelling cranes and **where Danger** could arise, the conductors must be **Isolated, Points of Isolation** established and a **Permit for Work** issued.
- 6.2 Before starting work on the conductors they must be proved to be **Dead** at the point of work by an **Approved** testing device.
- 6.3 The conductors, including the neutral must be short-circuited and, where reasonably practicable, **Earthed**.
- 6.4 Where there is the possibility of **Danger** arising when handling long conducting objects in the vicinity to **Live** exposed conductors of overhead travelling cranes **the requirements of 6.1 above must be met**

7 WORK ON OR NEAR THE WHEEL TRACKS OF OVERHEAD TRAVELLING CRANES OR SIMILAR MACHINES

- 7.1 When **Persons** are to work on or near to the wheel-tracks of overhead travelling cranes, where reasonably practicable, the cranes must **Isolated, Points of Isolation** established and a **Permit for Work** issued.

Guidance: such work should be confined to weekends or to other times when the crane is not in use.

- 7.2 Where it is not reasonably practicable to immobilise the crane for operational reasons, a **Senior Authorised Person** must assess the means of achieving safety.

- 7.3 The safety precautions to be adopted must include
- a) Warning the Operator that **Persons** are to work in a position where they would be liable to be struck by the machine or its load
 - b) Effectively preventing the machine approaching to within 20ft (6.1m) of the **Persons** (See Factories Act, 1961, Section 27(7))
 - c) Supplementing the warning given to the Operator by indicating the approach limit by using red flags, flashing lights, signallers at floor level, look-out personnel in the cabs or other effective means such as the use of track clamps.
- 7.4 The **Senior Authorised Person** must issue a **Limited Access Certificate**. The **Senior Authorised Person** must also warn the **Competent Person** receiving the **Limited Access Certificate** that the overhead travelling crane is operational and where appropriate that the crane has **Live** exposed conductors. These warnings must be recorded on the **Limited Access Certificate**.

Guidance: whenever overhead travelling cranes or similar machines are operating, there is a **Danger** that **Persons** working in the vicinity may be struck by the machines or their loads. This could be particularly dangerous if **Persons** are working above ground level and consequently fall. An example of this is occasional work such as repainting walls, installing electrical conduit etc using ladders or scaffold. Although not specifically a matter of **Safety from the System** and therefore not of this document, it is appropriate to make the following recommendation. No work should be undertaken until it has been ascertained whether any part of the work will involve **Persons** being in places where they are liable to be struck by any part of an overhead travelling crane or its load. Instructions are to be given to **Persons** when being set to work and then discussed during the toolbox talk of any actions necessary to minimise the **Danger** of being struck whilst the crane is in operation.