

## Automatic Drill for Pipe Tappings

Document No: IW-HSQE-SA-08

Revision: 1.1

Approved By: Claire Lyons

Effective Date: 17/8/2017

### 1. What Happened?

A fitter and his supervisor were testing the operation of an “under pressure drilling rig” in the maintenance yard workshop, in preparation for a new water connection. They were using an automatic drill for pipe tappings (Automatic Drill for Pipe tappings Series 1490). The present Maintenance Team had not used this piece of equipment before. It was purchased in 1997 and had been used on two previous occasions. This piece of equipment is widely used in the water industry to make a direct connection into a live main and poses advantages as the water does not need to be turned off. The injured operative and his supervisor were observing the operation of the rig on the floor of the maintenance workshop. The injured operative was kneeling beside the rig while his colleague was testing the rig. The testing of this equipment involved pressure being applied with the use of a mobile drill which in turn rotated the shaft which allows the mechanism to cut out the piece of pipe where the connection is made. The rotating shaft is exposed (see figure 1) and because the rig wasn't anchored, it started to rotate. The injured operative reached out his right gloved hand to prevent this rotation but got his index finger caught in the exposed rotating shaft. The colleague testing the equipment ceased operating the drill. The supervisor administered first aid immediately and proceeded to the hospital with the injured operative. The fitter sustained serious injuries to his right index finger (amputation of his finger tip).

Figure 1:



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### 2. Immediate Actions

- Stop works on site.
- Administer first aid and take the injured person to hospital for further treatment.
- Decommission the piece of equipment.

### 3. Further Actions

- Identify if you have any Automatic Drill for Pipe Tappings Series 1490 equipment in use.
- This particular piece of equipment had an unguarded rotating shaft. Any tapping tool with an exposed shaft must be immediately taken out of use and replaced by a model where the shaft is guarded.
- Identify whether you have any other unguarded equipment in use. In the absence of guards or if any obvious defects or uncontrolled hazards are identified, ensure that the piece of equipment is taken out of use immediately.
- Manufacturers instructions were supplied with this drill but this particular piece of equipment had no CE marking. Ensure that any work equipment provided for use by employees complies with any relevant enactment implementing any relevant European Directive. Check for the presence of CE marking and a Declaration of Conformity with the Machinery Directive 2006/42/EC, either as a separate document or part of the users instructions.
- Ensure that manufacturers instructions are in place and available to those using the equipment.
- Ensure that procedures are put in place for testing of new equipment or existing procedures updated.
- Ensure that operators are trained in the safe use of work equipment.
- Ensure that specific risk assessments are completed and adequate control measures are incorporated for all work equipment.
- Ensure that pre use equipment checks are completed.

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### 4. Further Information

For further information on this safety alert please contact [hsqe@water.ie](mailto:hsqe@water.ie)

### 5. Distribution list

Internal		
Asset Operations <input checked="" type="checkbox"/>	Asset Delivery <input checked="" type="checkbox"/>	Asset Strategy <input type="checkbox"/>
Asset Management <input type="checkbox"/>	All IW staff <input type="checkbox"/>	
Other Please Specify _____		

External		
Local Authority <input checked="" type="checkbox"/>	DBO <input checked="" type="checkbox"/>	Capital Contracts <input checked="" type="checkbox"/>
Relevant Framework Contractors <input checked="" type="checkbox"/>		
Other Please Specify _____		