

## Appendix A – 3350/168

# Infrastructure Group Safety Bulletin

## Use of Ironmen

An investigation into a recent accident involving the use of Ironmen has highlighted the danger of using pairs of Ironmen from different suppliers (Rotamag and Permaquip)

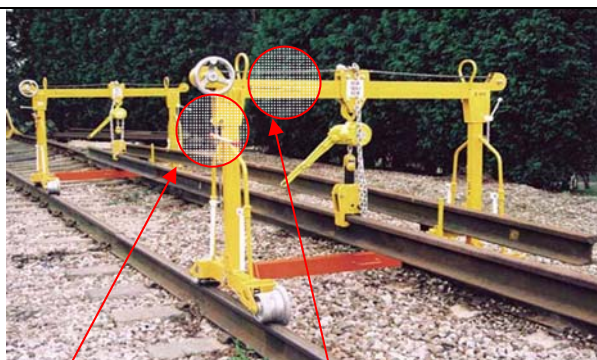
- A team of six men were engaged in moving 2 x 60ft rails (2000Kg) over a mile using a pair of iron men. The daytime job done was carried out in a T3 possession and was part of an ongoing task to position rail for a future re-railing works.
- The Ironmen were assembled in the possession. The team was configured with 3 men at the front and 3 at the back although 1 man at the back was required to act as a site warden dependant on the location during the journey. The team encountered resistance from the trailing iron man before it derailed to the right causing the injured person to suffer a serious injury to his shoulder.

A contributing factor to the derailment was the use of Ironmen from different suppliers. This is because of the slightly different configuration of the rail carrying brackets

### Identifying ironmen

There are two manufacturers of Ironmen currently being used in maintenance, and the main differences can be seen below.

1. The manufacturers name will generally be visible on the equipment, although over time this may be difficult to read.
2. The brake handles on the two pieces of equipment are different



Brake Handle

Name of Manufacturer

Permaquip



Name of Manufacturer

Brake Handle

Rotamag

## **Actions**

Only use pairs of Ironmen from the same manufacturer

### Other Pre Use Checks

- Check that the serial numbers of the frame are matching
- Check that the frame locking pins are located and locked before movement/use
- Test the brakes
- Check brake levers are on same side when using in pairs

### Controls whilst using Ironmen

- Check that the load is taken on the pull lifts in a controlled manner
- Check that some tension remains in the lifting tackle whilst rail or S&C is supported by the bottom beam
- Always Push, do not pull, the Ironman
- Do not use mechanical means to keep brake lever off.
- Turn traversing wheel in small movements, do not spin
- Take care when releasing the traversing wheel on canted track
- Always move Ironman with the bottom beam in place and constantly monitor, especially on high cant curves
- Take care when moving Ironman through S&C

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