

**SHERIFFDOM OF NORTH STRATHCLYDE AT OBAN**

Court ref: OBN-B21-20

**RESPONSE**

to the

DETERMINATION OF SHERIFF PATRICK HUGHES

UNDER THE INQUIRIES INTO FATAL ACCIDENTS AND SUDDEN DEATHS ETC.  
(SCOTLAND) ACT 2016

IN THE

INQUIRY INTO THE DEATH OF JAMES DARREN KERR

To: the Scottish Courts and Tribunals Service

1. The Health and Safety Executive (HSE), being a person to whom a recommendation under section 26(1)(b) was addressed, do respond as follows.
2. HSE has an interest in the inquiry, having received a recommendation, but was not a participant in the inquiry.
3. HSE was recommended to open an investigation into how grade 6 locknuts incorrectly designated as being of the higher grade |8| strength came to enter the supply chain; and whether any ongoing risk to safety arises from their having done so.
  - (1) HSE opened an investigation as recommended. The investigation is unable to conclude that the nuts from the incident were incorrectly marked.
  - (2) The Nyloc nuts retrieved from the site of the incident were M24 fine pitch nuts of standard dimensions marked as grade |8|. Testing by HSE's Science Division (not including proof load testing) showed that they had properties consistent with those of a grade |8| nut manufactured in accordance with BS 3692:2014.
  - (3) The Caparo Testing Technologies report published by the MAIB showed that they had tested M24 fine pitch nyloc nuts marked as grade 8 and determined that these were consistent with a thin nut made of grade 6 material. The publicly available data from their report does not provide dimensions and the

conclusions show the nuts tested were not in accordance with either BS3692:2014 or BS EN ISO 898-2:2012.

- (4) It is not possible to determine if the nuts tested by Caparo were the same as the nuts retrieved from site and tested by HSE's Science Division; the difference in markings reported indicates they were not. On this basis HSE cannot apply the findings of this report to the nuts involved in the incident. There is an absence of any other evidence to suggest that the M24 fine pitch nyloc nuts marked as |8| were incorrectly marked when they entered the supply chain.
- (5) Nuts can be manufactured in accordance with a variety of different standards. Due to the markings on the nuts, which appear to be in accordance with BS 3692:2014, HSE has not investigated whether the nuts involved in the incident comply with any other standards. There is no legal requirement to use one particular standard. HSE are continuing to investigate if other common standards for nuts use similar markings to BS 3692:2014.
- (6) There is no ongoing risk to safety from |8| nyloc nuts, which are fully in accordance with BS 3692:2014 entering the supply chain if users are aware of what the |8| marking means and make their decisions on how to use them accordingly. Any ongoing risk to safety from Atlas Cranes UK Ltd having supplied grade |8| nyloc nuts instead of grade 8 nuts to their clients should have been mitigated by the actions they took to inform their clients that they may have been supplied incorrectly. It would be expected that on receiving this information Atlas Cranes UK Ltd's clients would have taken remedial action where necessary.
- (7) HSE's conclusions are based on the information made available to them since the fatal accident investigation. Information contained in the FAI, or publicly available from the Marine Accident Investigation Bureau (MAIB) have had to be relied on as fact where HSE have not been able to obtain the evidence to support the statements made in these publicly available documents. The material that HSE has used to inform its investigation is:
  - Publicly available MAIB report and annexes
  - Fatal Accident Inquiry Determination
  - Report ES/2015/48 from Health & Safety Laboratory
  - Additional photos of crane ID from Health & Safety Laboratory
  - Documents including invoices, purchase orders and delivery notes obtained by West Yorkshire Trading Standards and MAIB
  - Investigation notes and report to Procurator Fiscal from MCA
  - Emails from HI-AT (Scotland) Ltd ordering the fitting kit
  - Witness statements – Walter Galbraith, James Donaghue
  - HI-AT invoice for the crane
  - Atlas Cranes UK Ltd quote for the crane

