

# M2234

*Posted on 14.05.2024 by Adam Parnell*

**Categories:** [Commercial Fishing](#), [Cruise and Ferry](#), [General Maritime](#), [Ports and Harbours](#), [Tugs, Towing and Workboats](#)

**Report Title** Fingers amputated in rotating machinery

## Initial Report

At about 14:50 hrs LT, the electrician left the engine control room, went to the electrician's workshop to leave his tools, and then went for his work break. While passing the refrigerant provision plant, he saw dust in the idle No. 2 electric motor compressor. The ETO used a rag to clean the motor's axis and turn the belt.

Dust was also seen on the No. 1 electric-motor compressor. The No. 1 unit was in "auto" mode, but the motor was not running. The ETO used the rag again to clean the axis, and at that time, the motor started to operate. The rag got tangled between the motor and the compressor.

In an effort to pull out the rag, the electrician's right hand became caught in the motor's belts. The electrician felt great pain as three last fingers were partially amputated. The vessel was in port, so the electrician was taken to hospital, where the last three fingers ( middle, ring, little) were amputated, about 1/3 of each finger. The injury caused permanent incapacity for employment at sea.

## Comment

The report highlights the importance of maintaining mindfulness in our actions and surroundings, especially when individuals work independently. Despite being aware of the risks involved, the electrician's decision to conduct unscheduled cleaning resulted in a tragic oversight of essential safety measures. It emphasises the need for a systematic approach, such as **Stop, Look, Think, Assess, and Look Again**, to ensure thorough assessment and awareness before undertaking tasks.

Operating autonomously, ships' electricians may only sometimes have direct oversight, potentially leading to neglect of vital safety procedures. Therefore, it is crucial to regularly remind the ship's Electro-Technical Officers (ETOs) to seek assistance if they deviate from planned work, typically assessed at daily work planning meetings.

The incident underscores the dangers of machinery operating in automatic mode, which may remain inactive until triggered by specific signals. Implementing robust safety measures like the Tag Out-Lock Out-Try Out (TOLOTO) system is essential to address such risks. This system ensures equipment is adequately secured against unintended operation during maintenance or cleaning

activities. Additionally, installing protective guards on equipment adds another layer of defence against lapses in attention or mindfulness.

## Key Issues

**Teamwork-** Considering your last ship, how well did you communicate with the electrician? Were they provided the necessary support, and did they feel they were part of the team?

**Distractions-** How often do you become distracted from your current intentions to go to a place or do a job of work? Would you alert someone if you were going to make a change of plan and do something different?

**Situational Awareness—**The refrigeration provision plant runs continually throughout the ship's working life. Its machinery operates periodically in an idle state and can start without notice. Working in this area demands a high level of awareness, and work should not be undertaken unless signed off by another supervising senior officer.



