



Case Study: Accident Investigation

Case Study: Stacker Tip-Over Accident Investigation

ITI Field Service: Accident Investigation & Report

Client: A heavy lift and transport port authority.

ITI Project Manager: Jonathan Parnell, PE

Case Overview:

A pair of container stackers working in tandem lifted a very long, heavy load, preparing to move it from one end of their storage yard to the other where the load would come to rest on a rail car. An accident occurred resulting in an overturned stacker and dropped load. The customer contacted ITI Field Services to investigate what caused one of the stackers to tip over.

Assisting the ITI Project Manager included Senior Consultant Steve Miles. The project was overseen by ITI Technical Director & President, Mike Parnell.

Client Goals:

1. Determine what physical forces caused the stacker to tip over
2. Determine what improper load handling practices caused the stacker to tip over
3. Provide recommendations for safer load handling activities

Execution:

The investigation encompassed one day to collect load handling data, post-accident photographs, measurements, and develop a context of the load handling procedure. ITI Consultants produced its root cause analysis three days after the initial investigation.

The project plan included the review of:

- Current load handling practices employed for the lifting activity
- Equipment manuals for capacities and limitations
- The unique load characteristics in question
- The method of rigging involved

ITI delivered to the customer:

- A summary of the findings
- Accident root cause analysis
- Recommended corrective actions concerning load handling activities

Outcomes:

- The port authority had a solid understanding of what caused the stacker tip over accident.
- The port authority received recommendations for implementation to ensure adherence to safe practices in the future.