



#### Reducing Accidents and Insurance Claims

# For Ports & Terminals 2014









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# Ports & Terminals Claims Analysis Overview

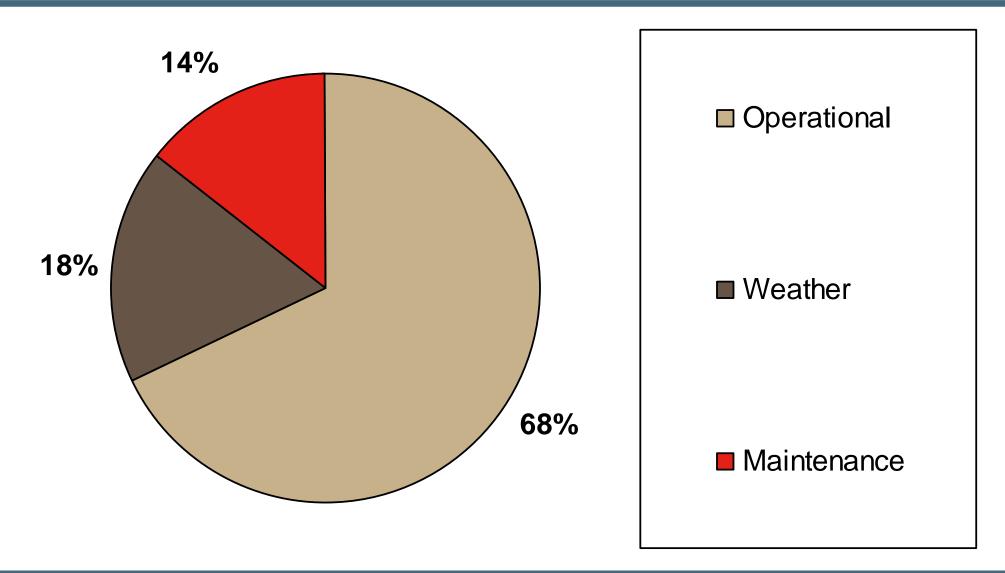
#### Analysis of the main causes of daims

- Includes 7 years data
- Analysis of all TT Club claims over 9,500
- Over US\$400m in claims
- Includes all types of claims
  - Bodily injury
  - Liability
  - Property





# Ports & Terminals Main Costs Cause Categories





- Claims Analysis & Loss Prevention Actions:
  - Operational Issues
  - Maintenance Issues
  - Weather Issues







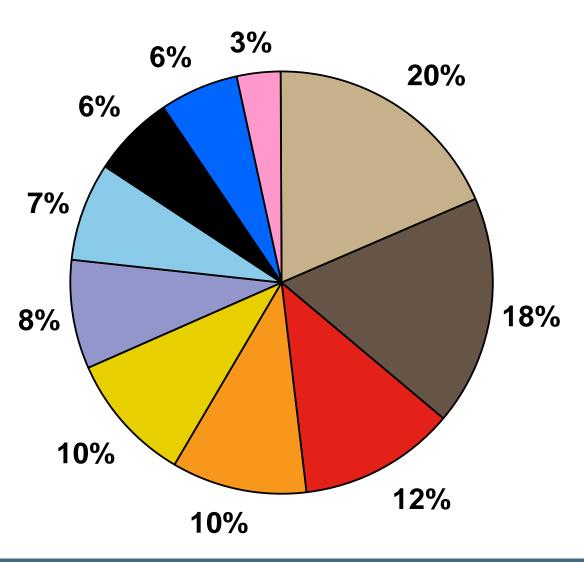


### **Operational Issues**





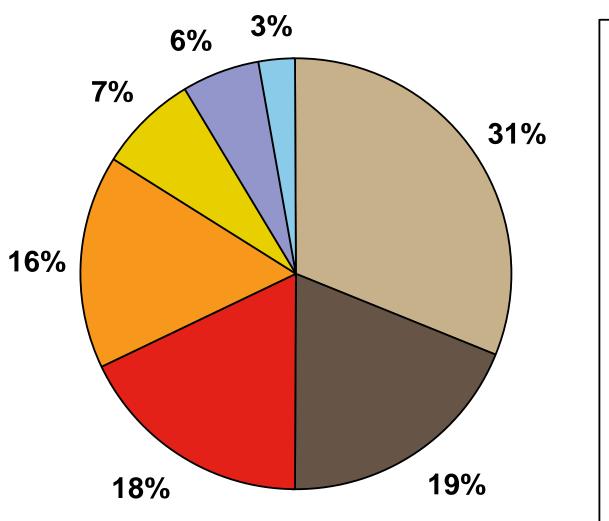
# Ports & Terminals Cost of Operational Issues



- Lift Truck
- Wharf Crane
- Systems & Processes
- Yard crane
- Truck/ Vehicle
- Straddle
- Ship in Port
- Theft
- Single Person Incident
- Other



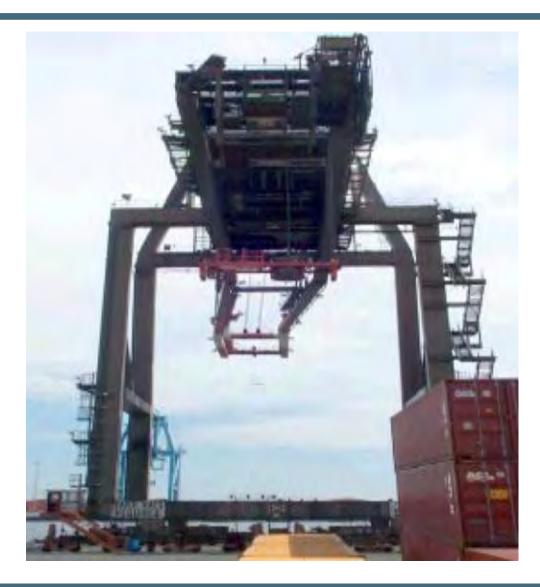
# Ports & Terminals Cost of Quay Crane Issues



- Boom to ship collision
- Stack collisions
- Weight / twistlock / cell guide issues
- Other collisions
- Other spreader / hoist issues
- Twin twenty issue
- Other



#### **Boom Collisions**









- 31%(\$15m) of quay crane damage daims
- 236 daims in last 7 years
- Preventable with quay crane boom anti-collision sensors

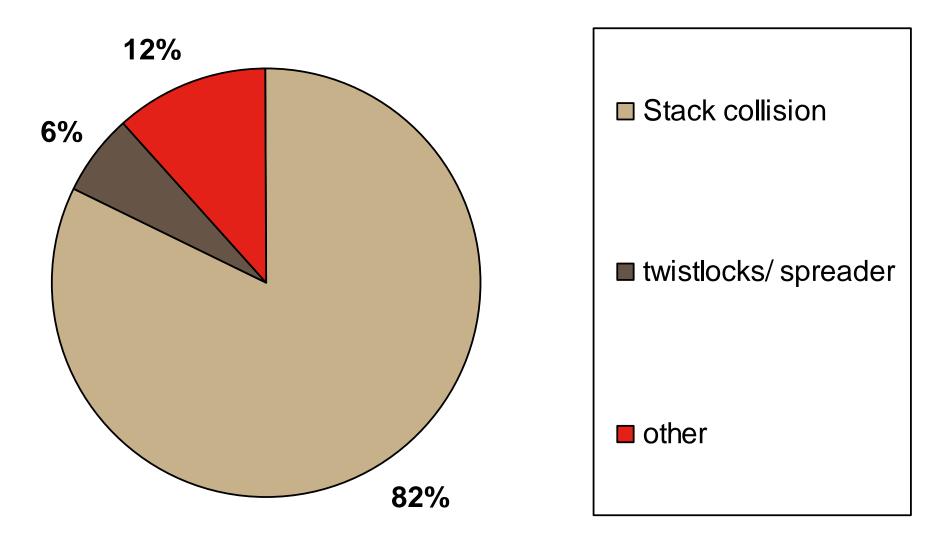


### Trying to Lift 2 x 20' in 40' Mode



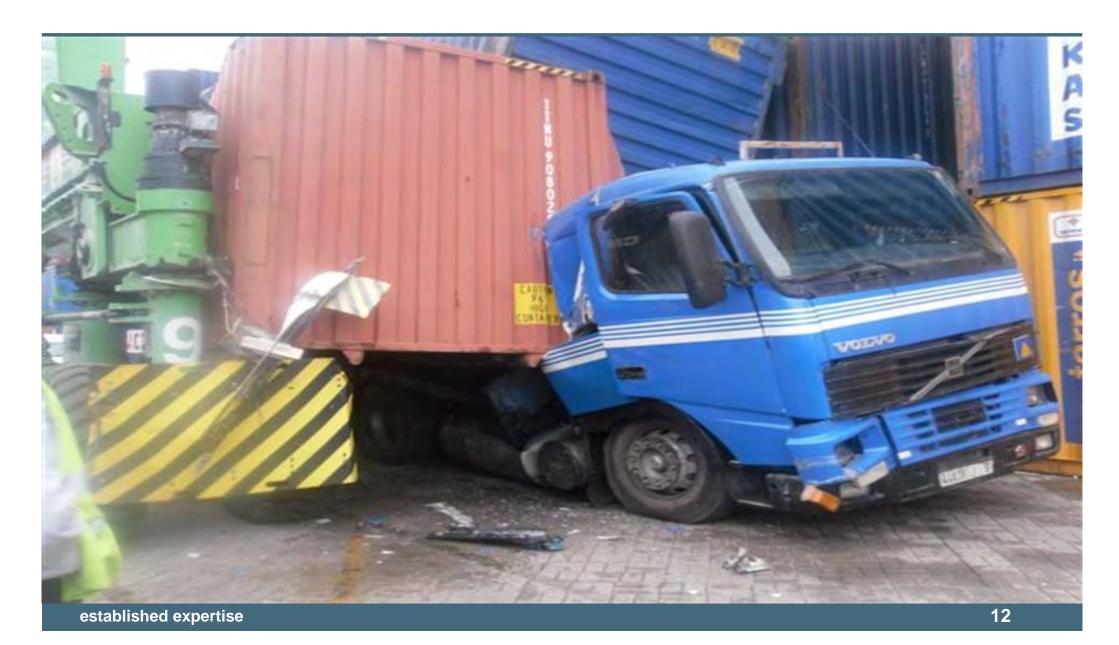


## Ports & Terminals Cost of Yard Crane Issues



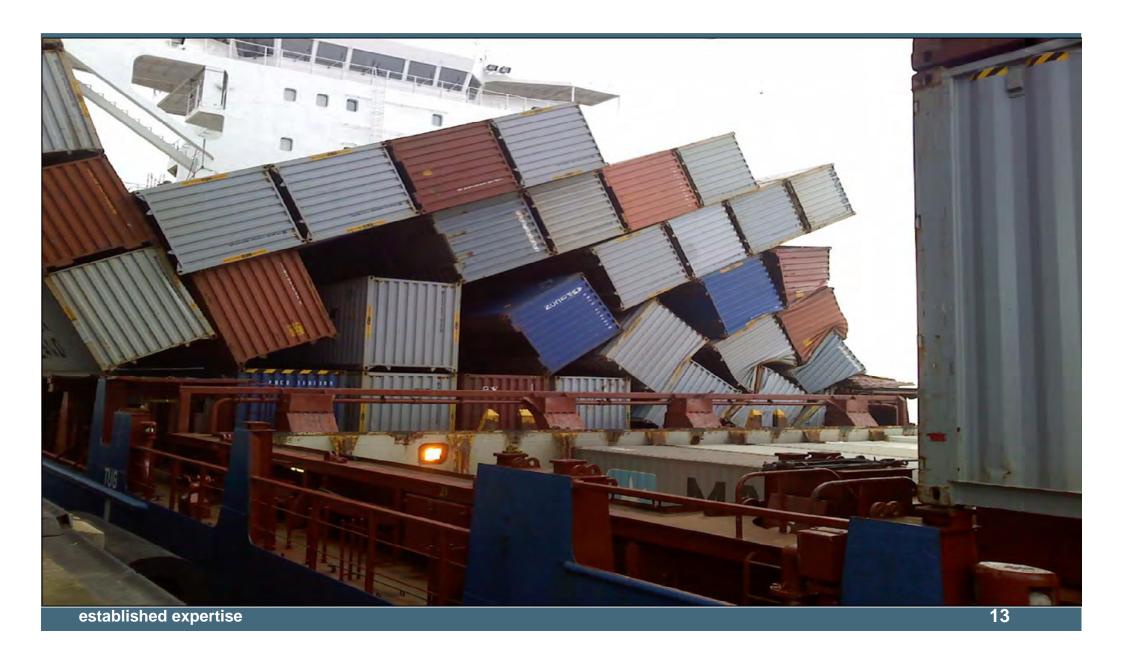


### Stack Collision and Collapse in the Yard





### Stack Collision and Collapse During Unloading







- 19%(\$10m) of quay crane daims
- 82%(\$23m) of yard crane daims
- 339 daims in last 7 years
- Preventable with a stack profiling system



### **Lifting Trailer and Container**





### **Snag Loads**



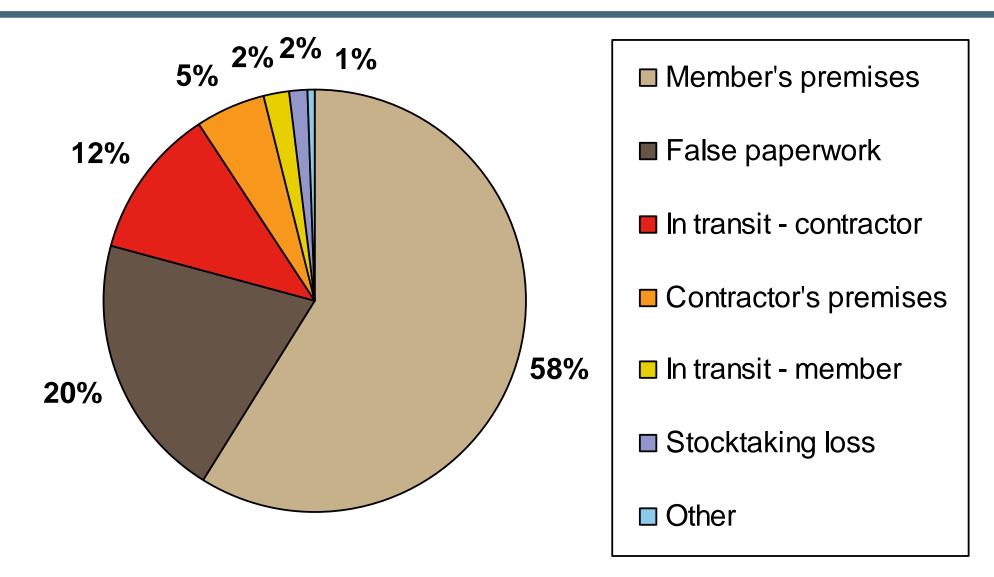


#### Spreader, twistlock, container weight & eccentricity issues

- 18% of quay crane claim costs
- 6% of yard crane claims costs
- Many preventable with twistlock load sensing technology
- Measures weight & eccentricity of each container
- Also detects & prevents many safety issues identified in previous slides
- Can be installed on any twistlock, on any spreader & on any equipment



## Ports & Terminals Theft Issues





## Ports & Terminals Theft

#### 58% of theft costs occur from own premises

#### **Prevention:**

- a physically secure site good fences
- security guards
- CCTV monitoring
- automated gate control system
- checks and double checks on paperwork

#### Most thefts are inside jobs

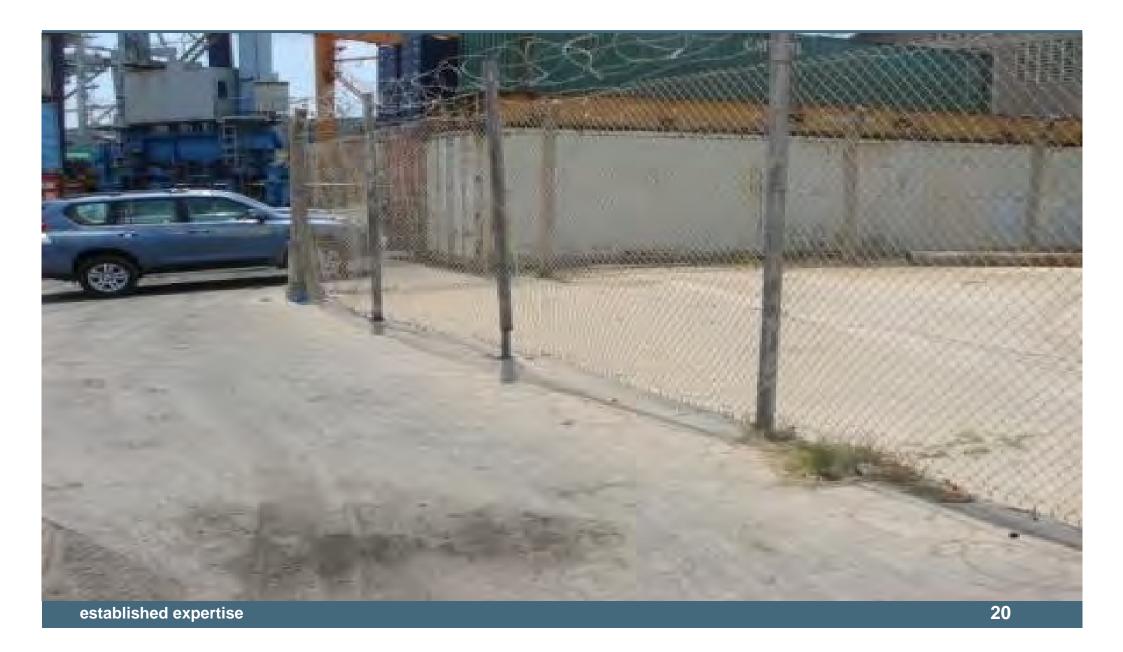
#### Refer to TT Gub Supply Chain Security booklet

available at www.ttclub.com





### **Theft**







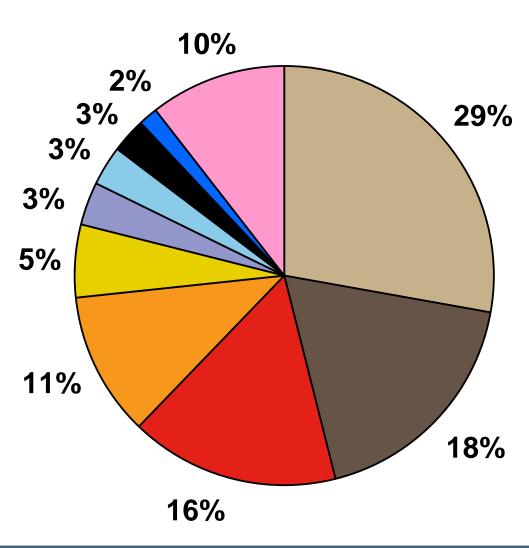


## TT CLUB





# Ports & Terminals Systems & Process Issues



- Bad handling
- Refrigerated cargo
- Bad stowage
- Customs
- Contamination
- Clerical error
- Bulk weight errors
- Contractual
- Misdirection
- Other









### **Good Handling**







# 29% of systems & process costs Many alleged damages – can't be disproved

#### **Prevention:**

- Use low loader when needed
- Store steel coils undercover
- Take photos of arrival condition
- Use cameras on in/out gates
- Ensure slings in good condition.









## Ports & Terminals Reefers

#### 18% of systems & process costs

#### **Prevention:**

- Do not forget to plug in
- Set correct temperature
- Double check data
- Monitor remote reefer monitoring
- Maintain an audit trail
- Verify condition of reefer unit prior to loading.









### **Bad Stowage**











## Ports & Terminals Bad Stowage

#### 16% of systems & process costs

#### **Prevention:**

- Declare correct weight
- Stuff container evenly & securely
- Do not eccentrically load containers
- Declare dangerous cargo
- Protect against wet weather
- Train and monitor staff
- Refer to the ILO best practice guidelines.









# **Loss Prevention Focus Misdeclared Dangerous Goods**





#### IMDG Code 35-10 (1st January 2012)

IM DG Code 36-12 (1st January 2014)

- Mandatory training for shore side staff involved in the preparation, handling and transport of dangerous goods by sea
- Employers must keep training records
- E-learning system developed by Exis Technologies satisfies this training

TT members get 15% discount on Existraining package





#### 11% of systems & process costs

#### ssues:

- Misdeclaration of cargo
- Ensuring T1 documents are closed
- Lack of or late paperwork
- Clerical errors in paperwork
- Drug or illegal immigrant discovery

#### Results:

- Costly delays
- Costly fines.

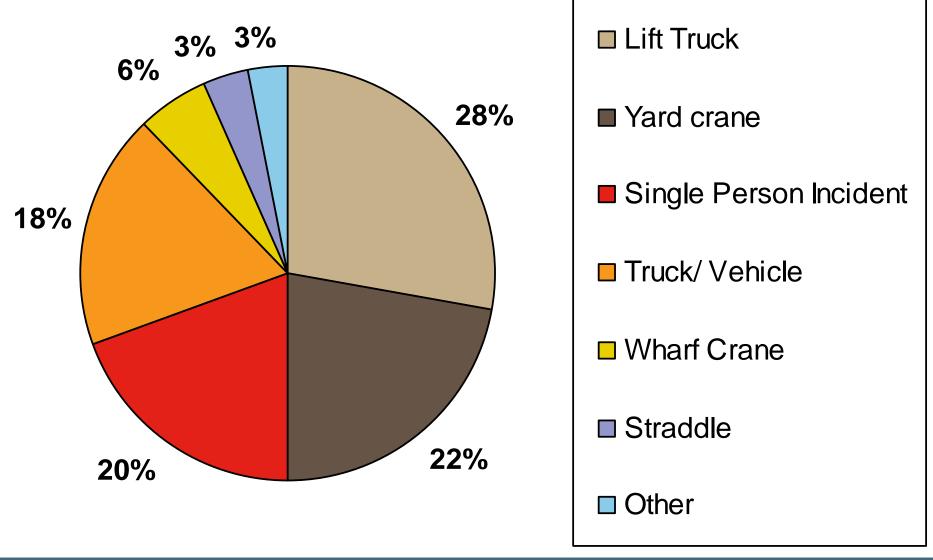






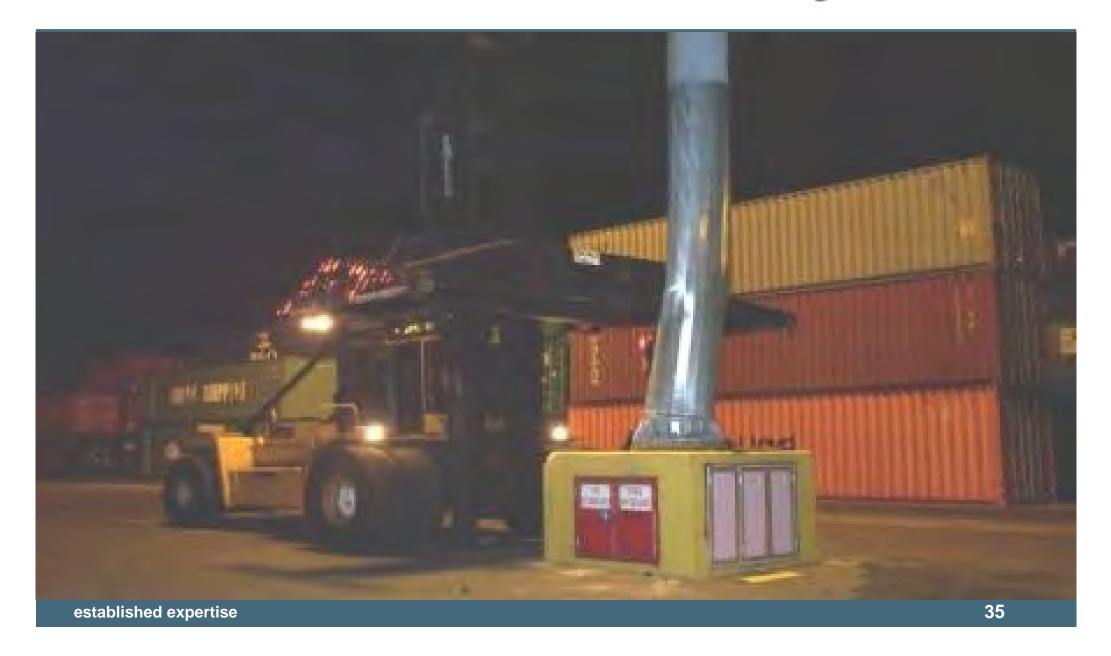


## Ports & Terminals Bodily Injury Claims Costs





### Lift truck/ Light Pole Collision



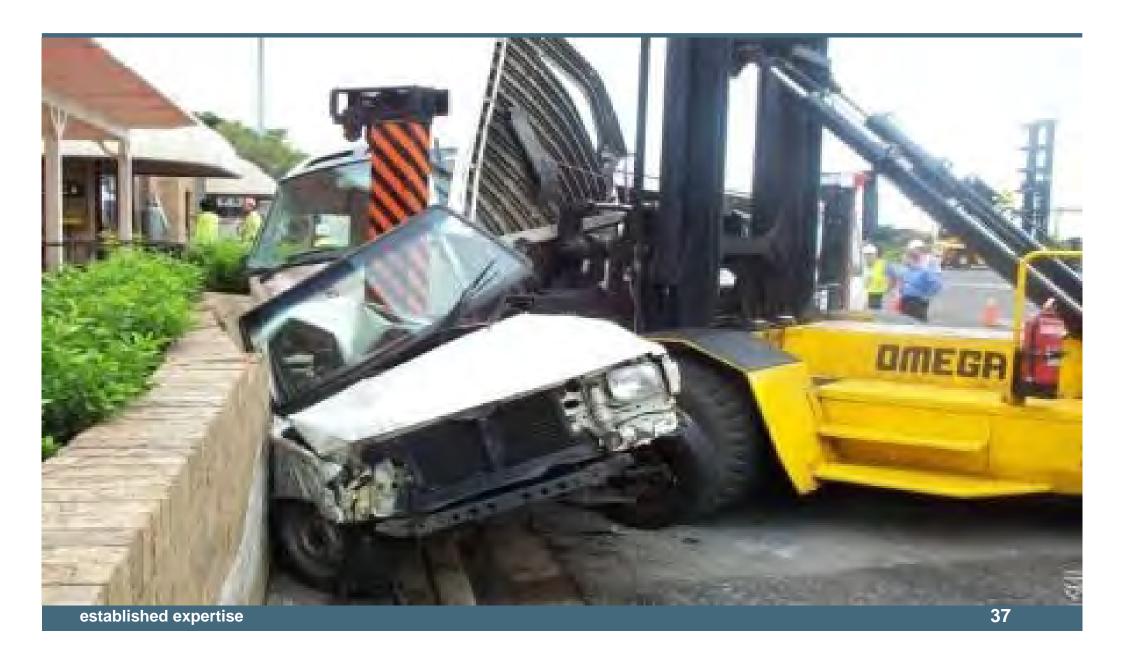


#### **Forklift Accident**





#### Lift Truck / Car Collision





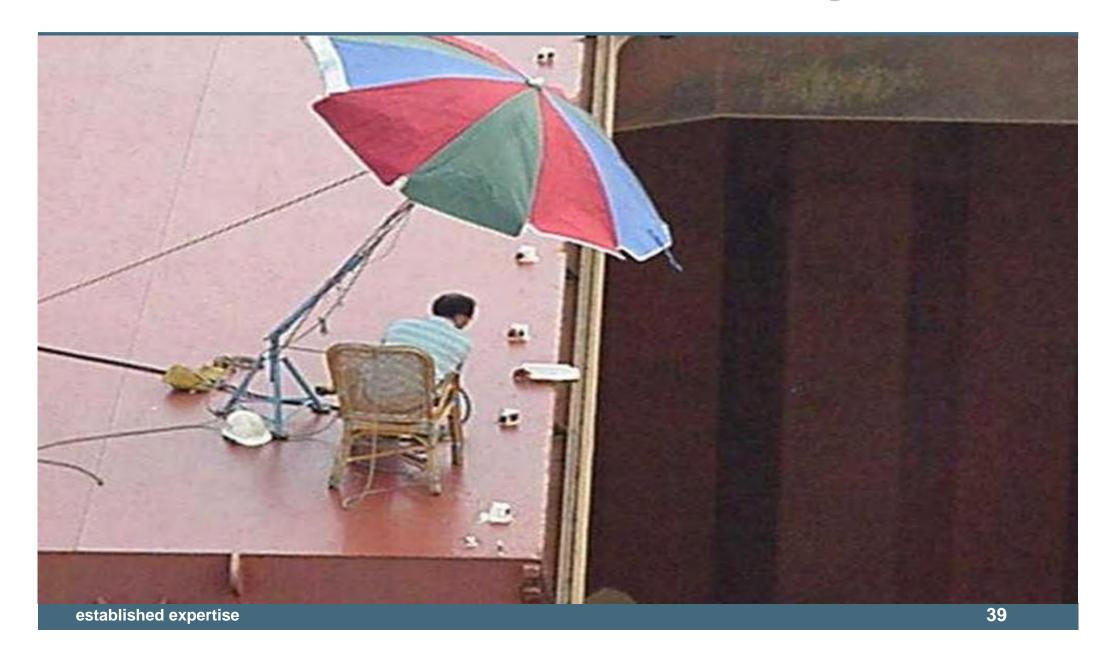
 80% of injury and fatality costs caused by equipment and vehicle drivers

#### **Prevention**

- Traffic management procedures:
  - One-way traffic flows
  - Limiting vehicles & pedestrians in yard
  - Site induction procedures
  - Safe area for truckers to secure/unsecure loads
- Technologies:
  - RFID system on all pedestrians and mobile equipment
  - Mobile equipment anti-collision sensors
  - Rear view cameras



## **Dangerous Practices**





- 20% of injury and fatality costs caused by single person accidents
- You must have procedures that promote:
  - Safety awareness
  - Tool box talks
  - Safety lock out systems
  - Good housekeeping



## Ports & Terminals Summary of Loss Prevention Actions

#### • Training:

Continuous safety awareness

#### Procedures:

- Security theft
- Systems & processes
- Traffic management

#### Re-design/ Technology:

- Wharf crane boom anti-collision sensors
- Wharf & yard crane stack profiling
- Mobile equipment travel anti-collision sensors
- Container weight & eccentricity measurement.



## Thank You

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