

Reducing Accidents and Insurance Claims Within Ports & Terminals 2016

TT CLUB
IS MANAGED
BY **THOMAS
MILLER**

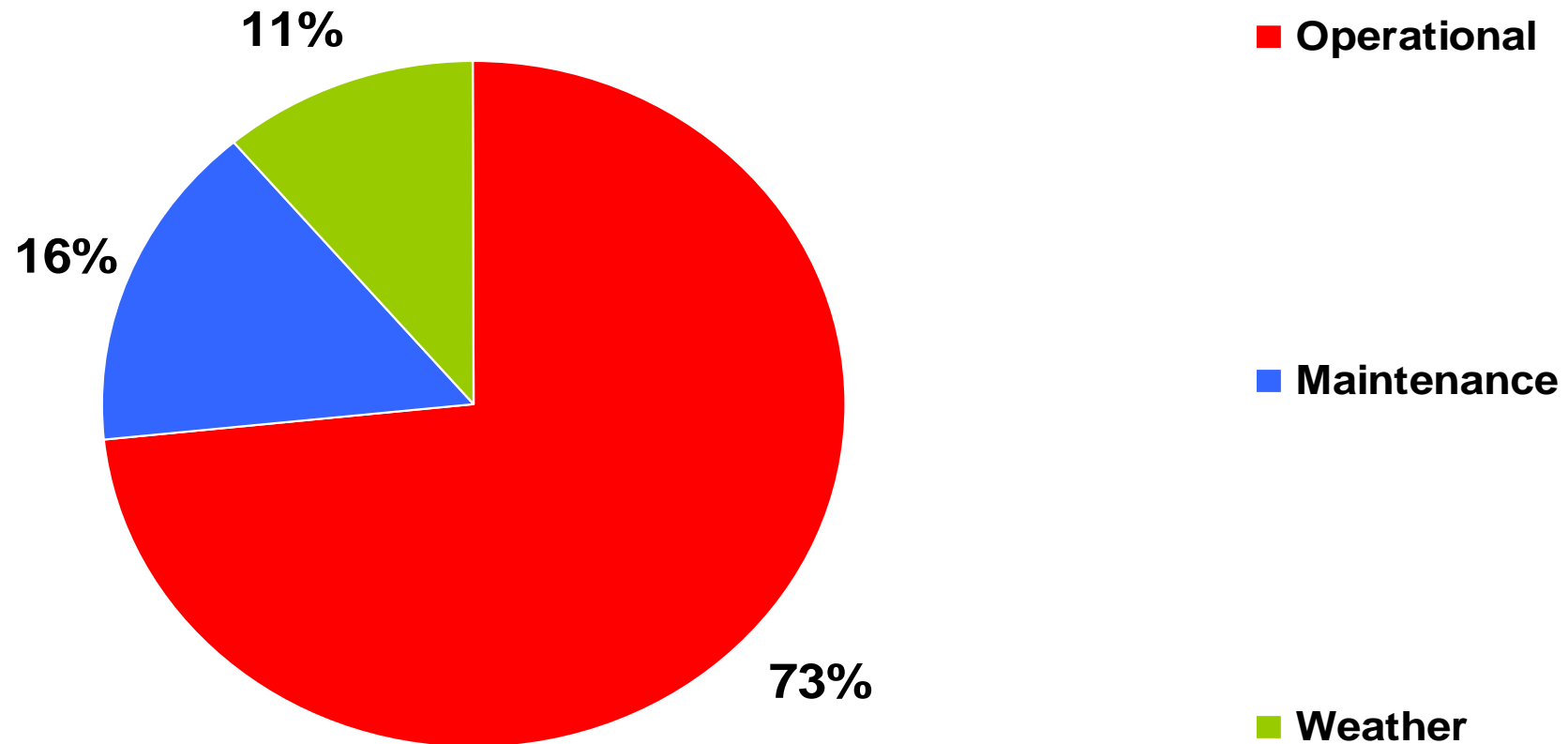
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Analysis of the main causes of claims:

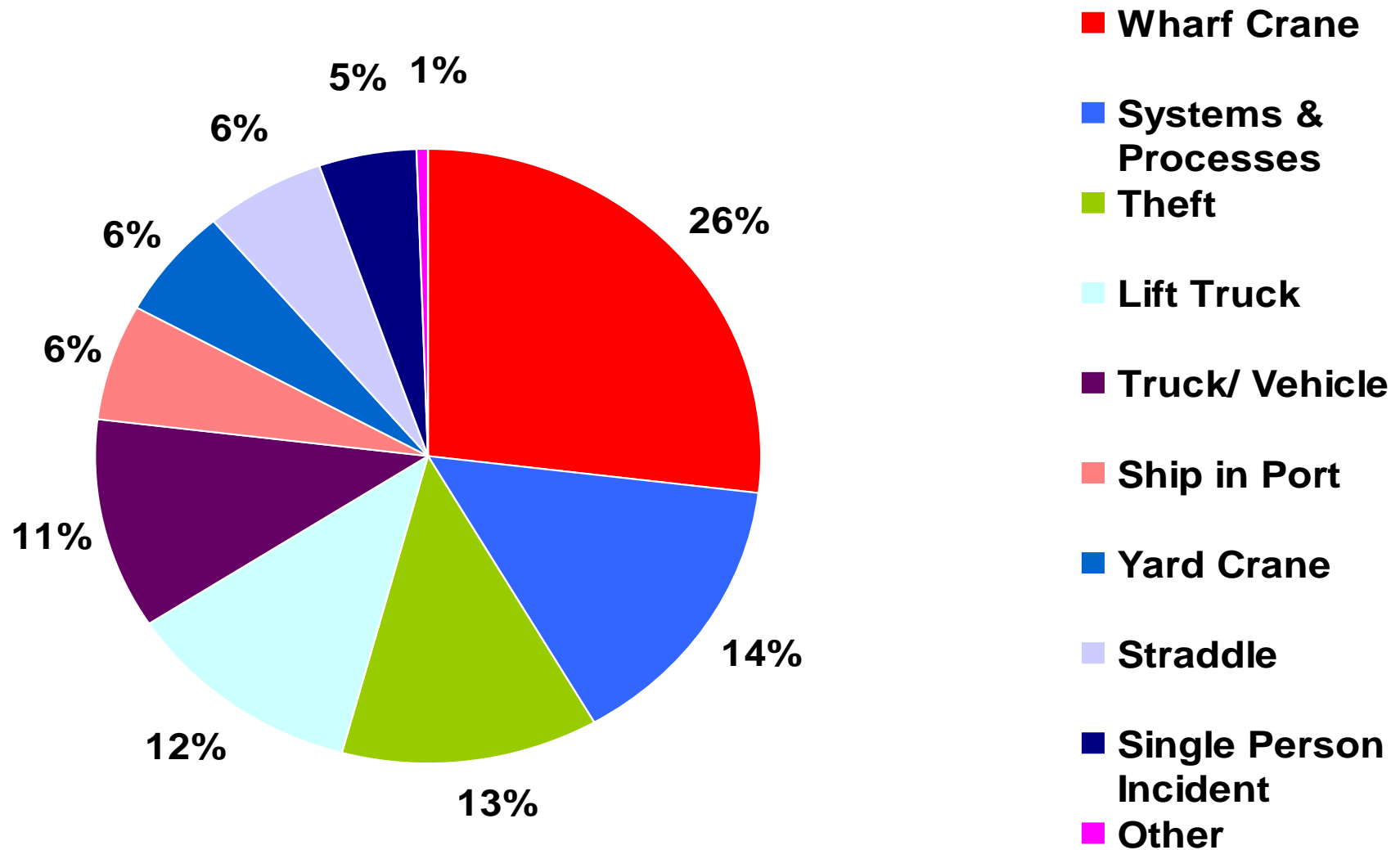
- Includes last 5 years data
- All claims over US\$10,000
- Over 7,000 claims
- Includes all claim types:
 - Property
 - Liability
 - Bodily injury

Main cost cause categories





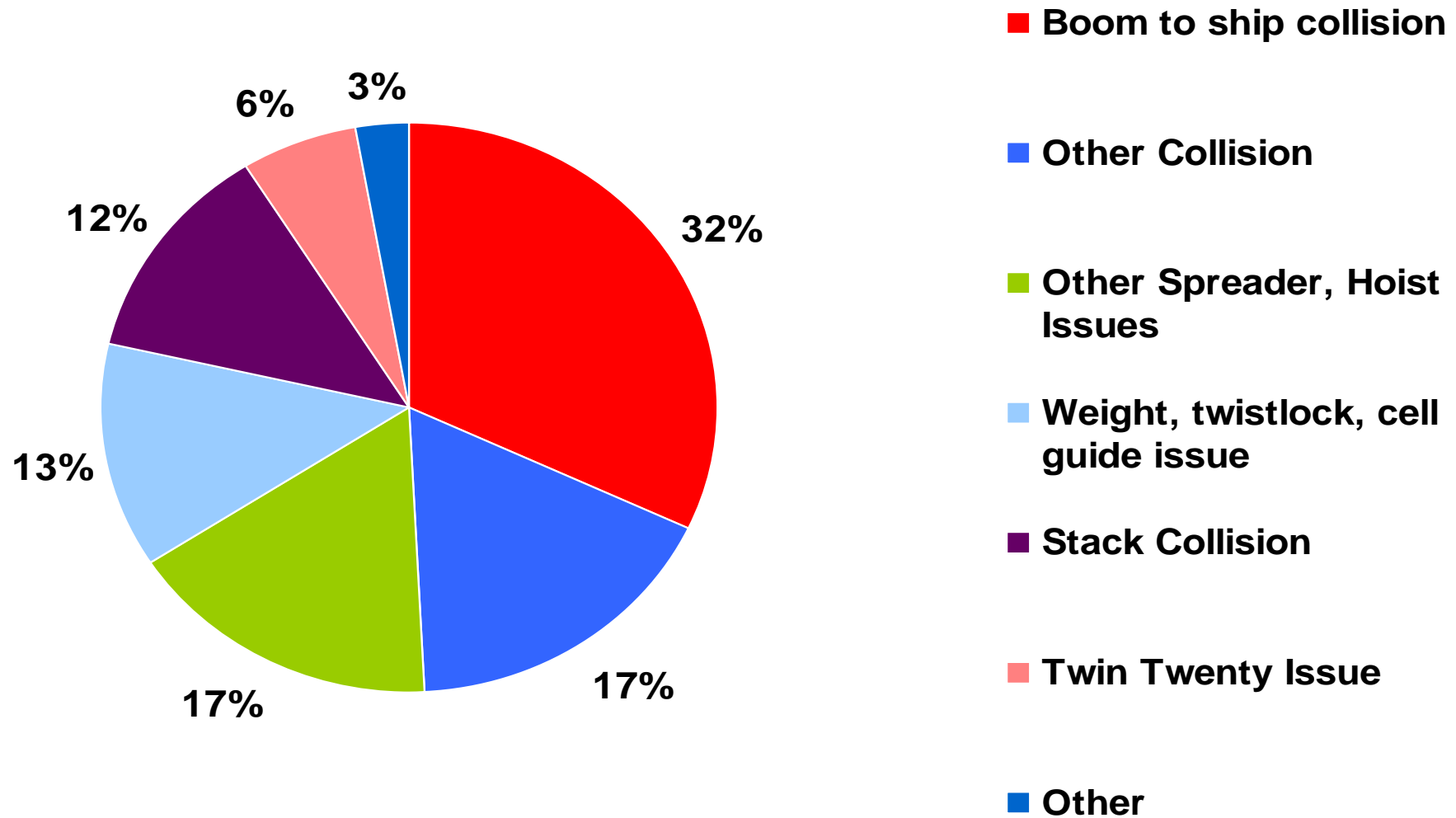
Operational issues costs



Bigger ships and bigger and more cranes



Quay crane issues costs





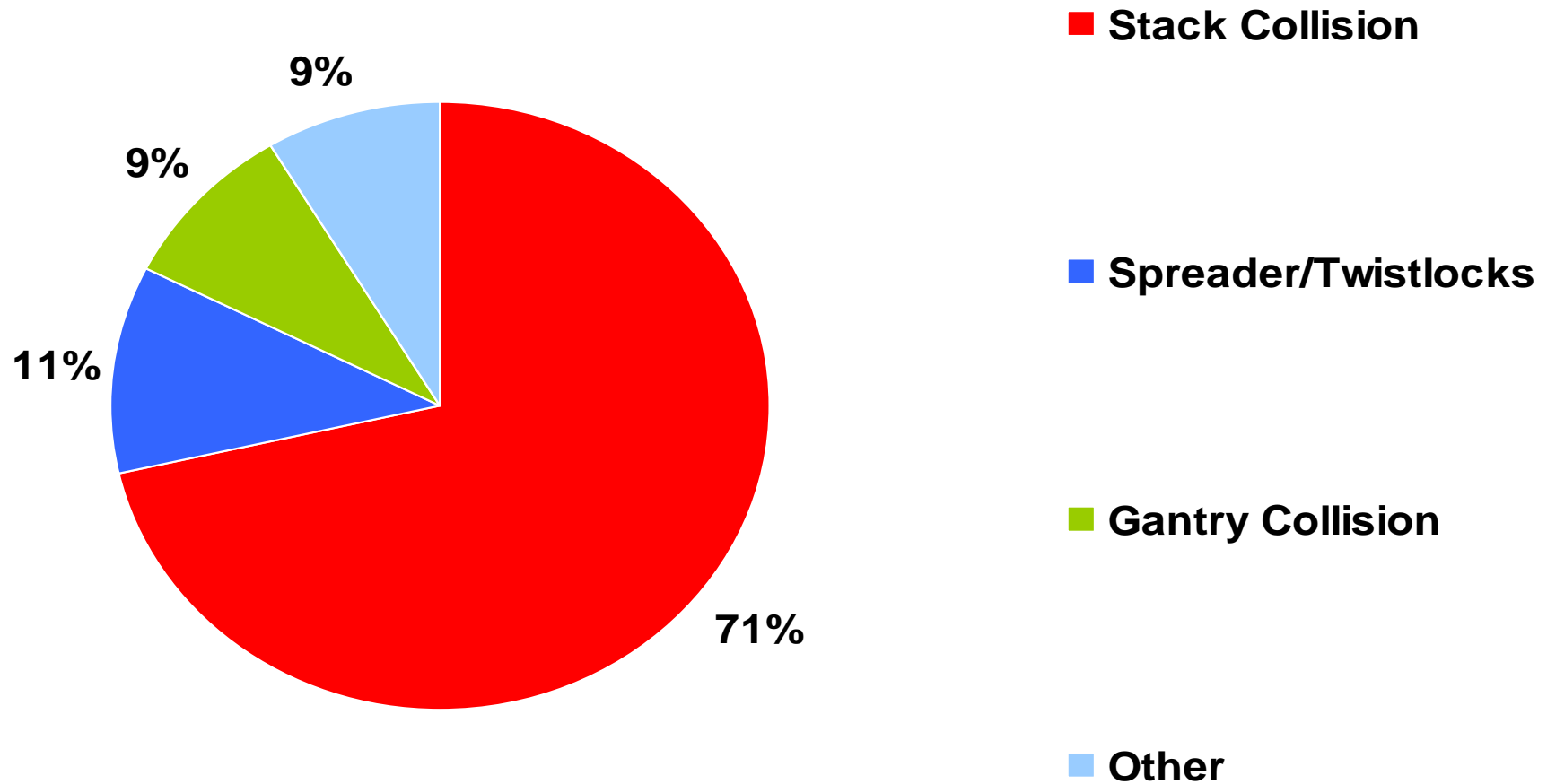
32% of quay crane claims costs

Biggest single cause of quay crane claims cost

Totally preventable with quay crane boom anti-collision sensors

Laser sensors – www.sick.com

Yard crane issues costs







12% of quay crane claims costs

71% of yard crane claims costs

Loss prevention:

- Reduced with crane PLC logic to limit trolley & gantry travel unless at full hoist – cheap option but will slow operations.
- Totally preventable with a stack profiling system using sensors & PLC logic

Lifting the trailer and container







Spreader, twistlock, container weight & eccentricity issues

13% of quay crane claim costs

11% of yard crane claims costs

Many preventable with twistlock load sensing technology

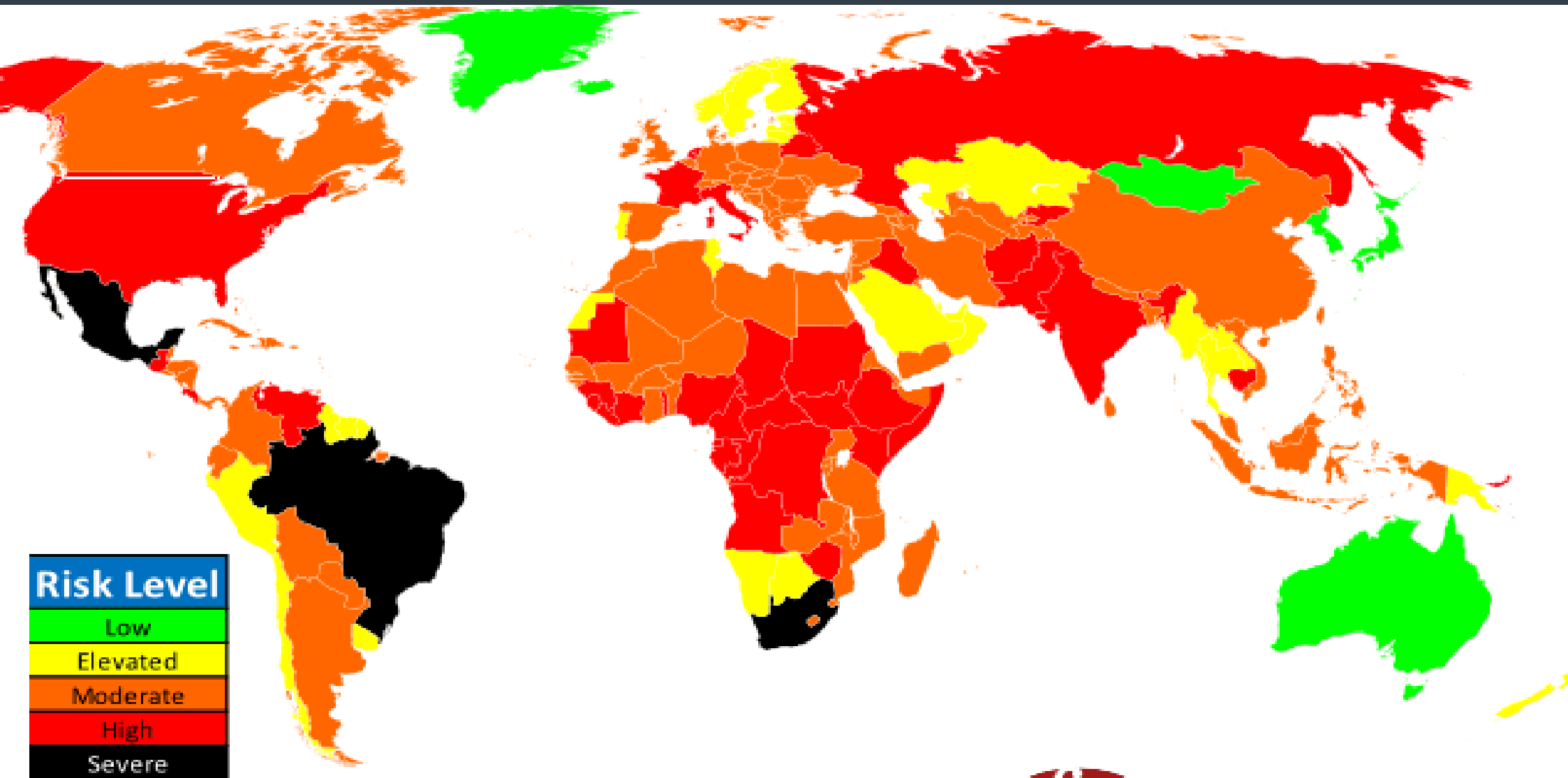
Measures weight & eccentricity of each container

Can be installed on any twistlock, on any spreader and on any equipment

Suppliers:

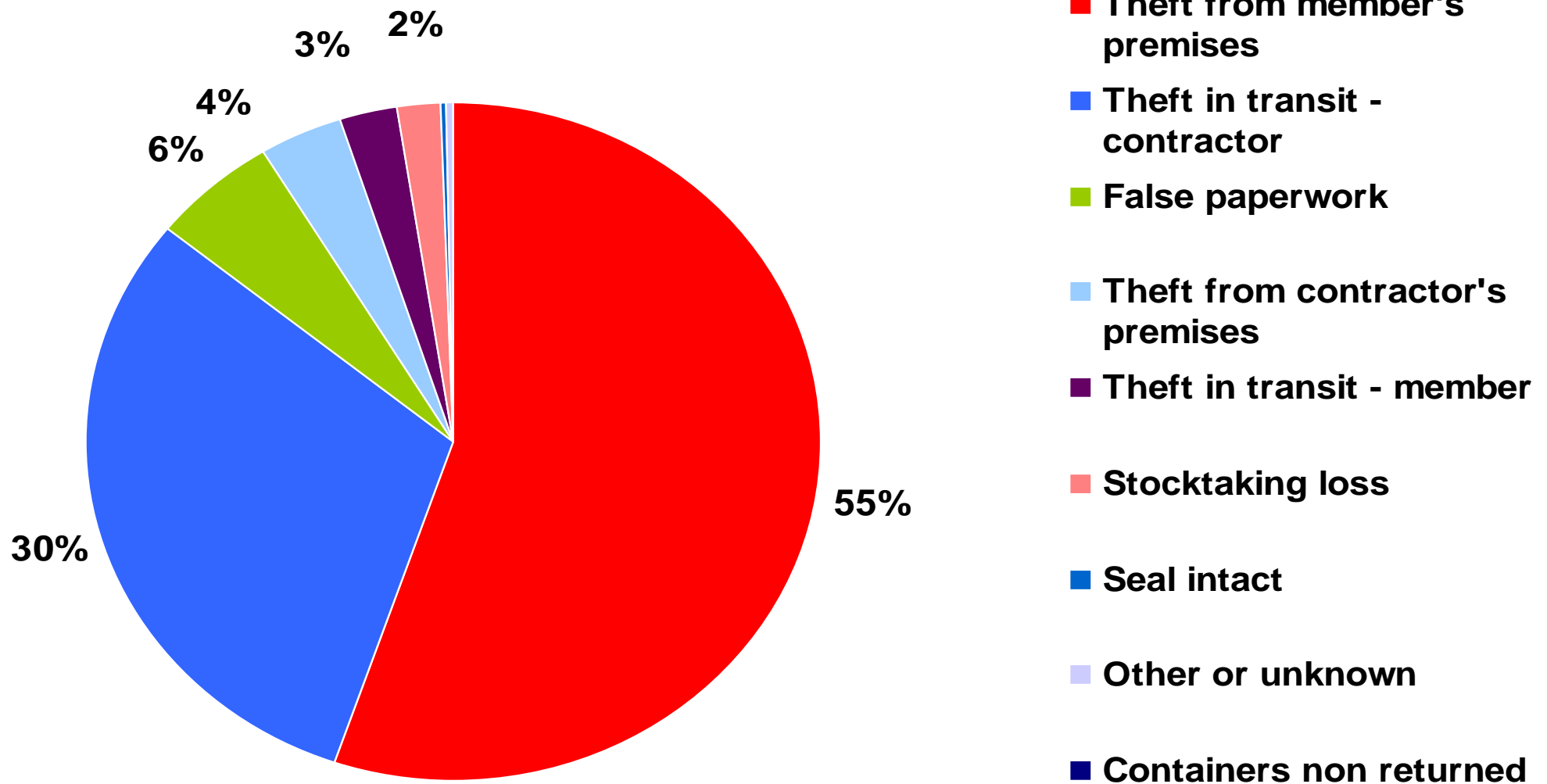
- Lasstec – www.lasstec.com
- Bromma – www.bromma.com

Cargo theft - level of risk by country



© FreightWatch International (U.S.A), Inc. 2013





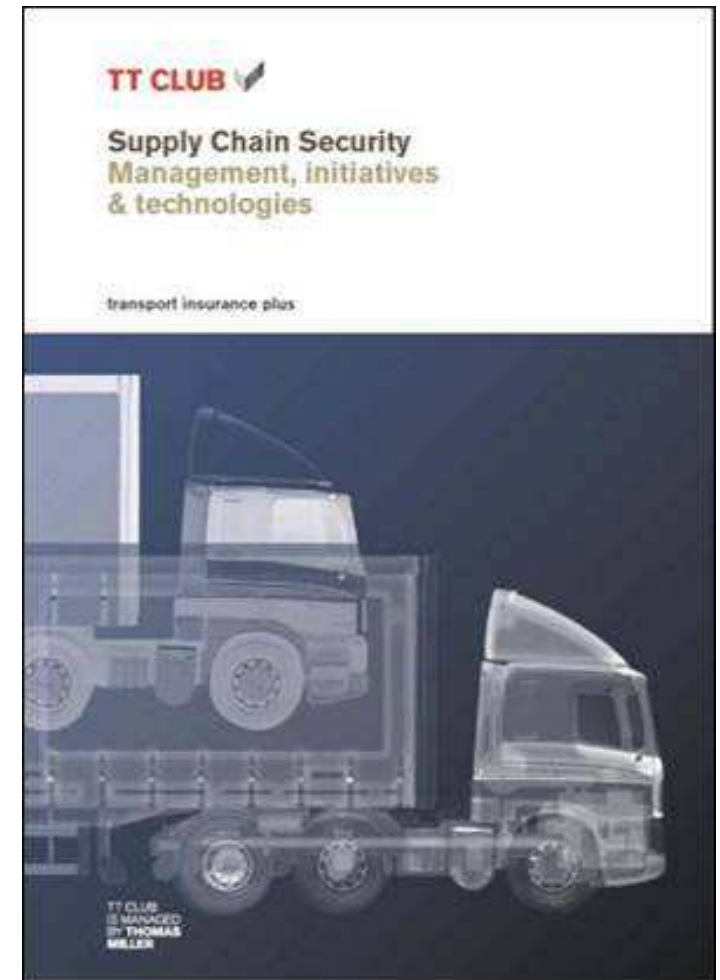
59% of theft costs occur from premises

Prevention:

- physical security – good fences
- security guards
- CCTV monitoring
- automated gate control system
- checks and double checks on paperwork

Most thefts are inside jobs

Refer to TT Club Supply Chain Security booklet
Available at www.ttclub.com



30% of theft costs occur in transit using contractors

4% due to theft from contractor's premises

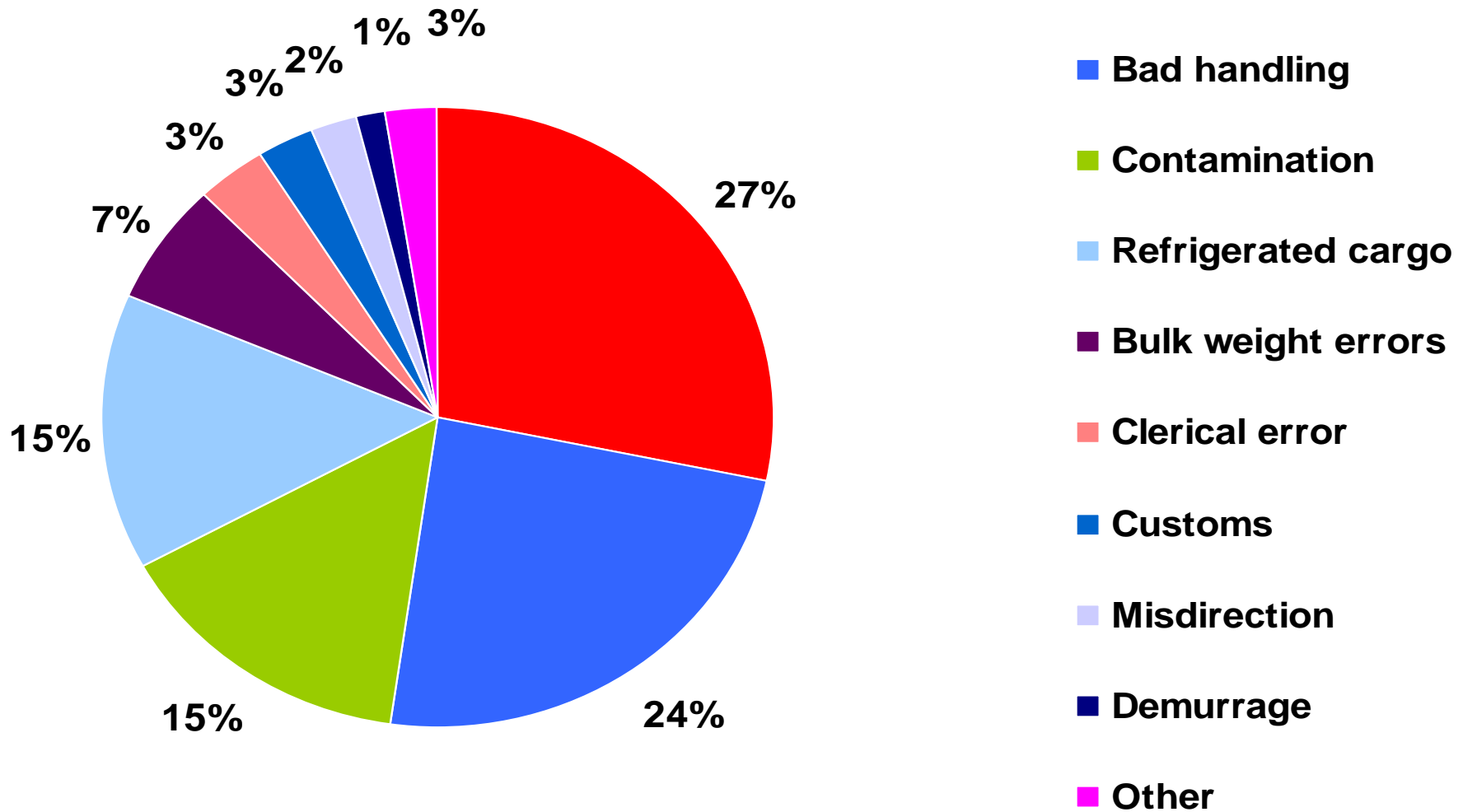
Prevention:

- Due diligence on contractors
- Pre-employment checks / references
- Number of years established
- Company registration number
- Country entity is registered
- Direct contact details
- Any affiliations with Industry Trade Bodies
- Contractors' Standard Terms and Conditions

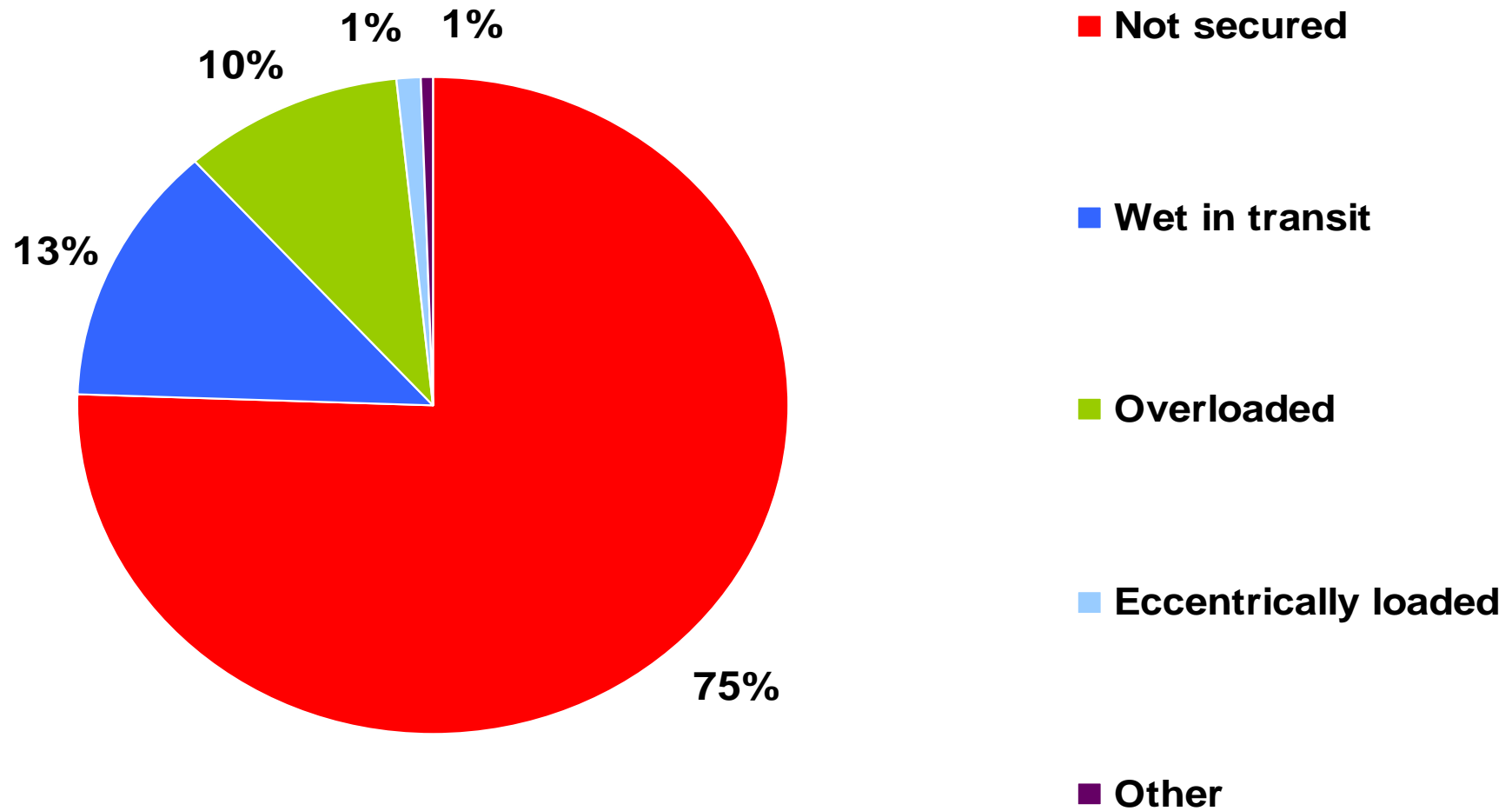
33% of theft costs occur in transit

Prevention:

- Send trucks in convoy
- Only stop at approved truck stops
- Do not leave truck unattended
- Alter routes on regular deliveries
- Only use approved transport contractors
- Use GPS tracking devices
- Share bad experiences
- Use available tracking and locking technologies



Bad stowage/packing issues costs











27% of systems & processing issue costs

Prevention: 'Pack it right'

- Declare correct weight
- Pack container evenly & securely
- Do not eccentrically pack containers
- Declare dangerous cargo
- Protect against wet weather
- Train and monitor staff
- Refer to new IMO/ILO Code of Practice for Packing of Cargo Transport Units
- E-learning system developed by Exis Technologies provides this training
- TT members get 15% discount on Exis training package
- Contact: www.ctupack.com





24% of systems & processing issue costs

- 32% alleged damage – can't be disproved

Prevention for alleged damage:

- Take photos of arrival & departure condition
- Use cameras on in/out gates.

Prevention for damage:

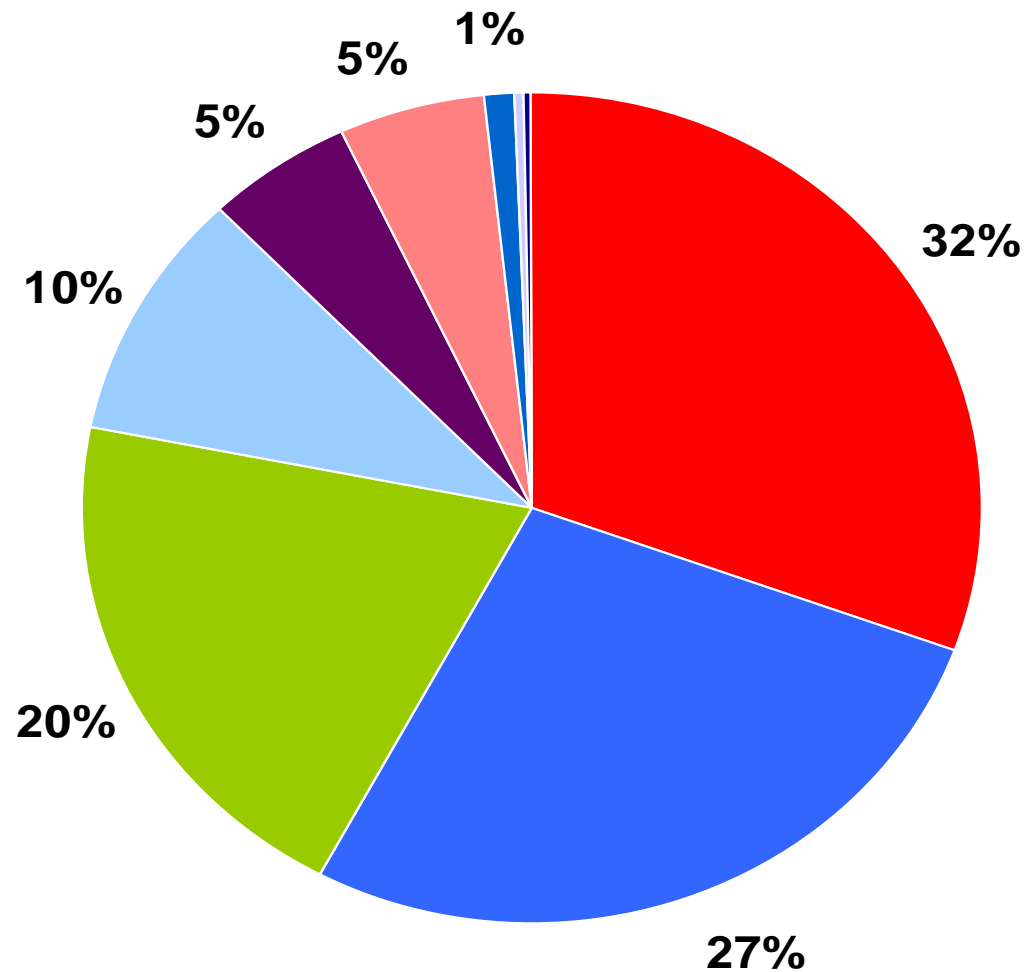
- Equipment driver training (simulators)
- Use low loader when needed
- Store steel coils undercover
- Ensure slings in good condition
- Synthetic slings – no sharp corners



15% of systems & processing issue costs

Prevention:

- Store at correct temperature
- Pack it right
- Do not forget to plug in reefer
- Set correct temperature on reefer
- Fahrenheit or Celsius?
- Double check data
- Use EDI
- Maintain an audit trail
- Monitor – remote reefer monitoring
- Verify condition of reefer unit prior to loading
- Ensure sufficient power for peak periods



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

Lift truck / light pole collision





79% of injury costs caused by mobile equipment and vehicles

Prevention:

▪ **Traffic management procedures:**

- One-way traffic flows
- Limiting vehicles & pedestrians in yard
- Site induction procedures
- Safe area for truckers to secure/unsecure loads
- Speed limits set and enforced

▪ **Technologies:**

- RFID system on all pedestrians and mobile equipment
- Mobile equipment anti-collision sensors
- Rear view cameras on lift trucks
- Automation of main gate and yard cranes
- Automated twistlock removal & placement system under QC
- Cameras to identify container numbers on QC's

20% of injury costs caused by single person accidents

Prevention:

- Safety awareness
- Tool box talks
- Safety lock out systems
- Safety walks/audits with workers
- Good housekeeping

Training:

- **Continuous safety awareness**
- **Enhanced focus on driver training (simulators)**

Procedures:

- **Preventive not breakdown maintenance**
- **Better crane securing procedures & brake maintenance**
- **Structural inspections**
- **Ship movement & berthing procedures**
- **Security – theft**
- **Systems & processes – pack it right**
- **Traffic management**

Re-design/Technology:

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

Thank you
Any questions?

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