



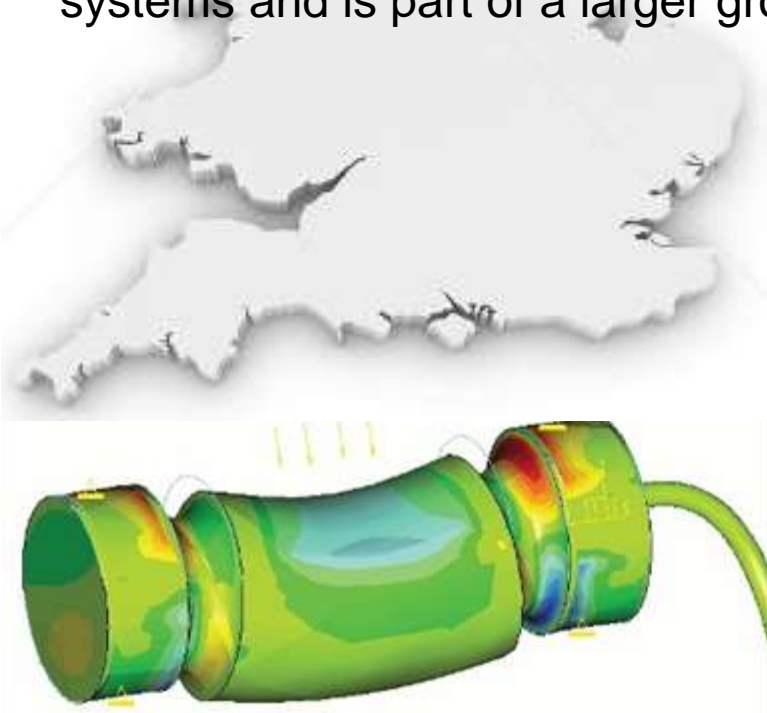
CWS

Container Weight System

Who is Strainstall?

- Over 50 years in business
- Started as a UK manufacturer of load cells

Now focuses on Specialist load cells or complete load monitoring systems and is part of a larger group



- **Marine**
- **Mining**
- **Offshore**
- **Subsea**
- **Nuclear**
- **Aerospace**



James Fisher & Sons PLC

- Comprises 25 companies focused on:
 - Offshore products & services
 - Subsea products & services
 - Marine products & services
 - Nuclear and wind energy



- Fenders
- Anchors
- Cables
- Lights



- Line monitors
- Wireless Shackles
- Wireless Load links
- Equipment hire and repairs

Container weighing

IMO MSC.1/Circ.1475
9 June 2014

16.1 The SOLAS requirements regarding verified gross mass of a container carrying cargo (SOLAS regulation VI/2) are expected to enter into force in **July 2016**.



Made “**perfectly clear**” that there would be “**no delays**” to the SOLAS amendment on VGM

IMO’s senior deputy director for marine technology and cargoes, maritime safety division, Joseph Westwood-Booth

ICHCA conference in Barcelona



Who is responsible?



Shipper / packer

UK:

Shippers	3000
Applications	100
Approved	0



Haulier



Terminal

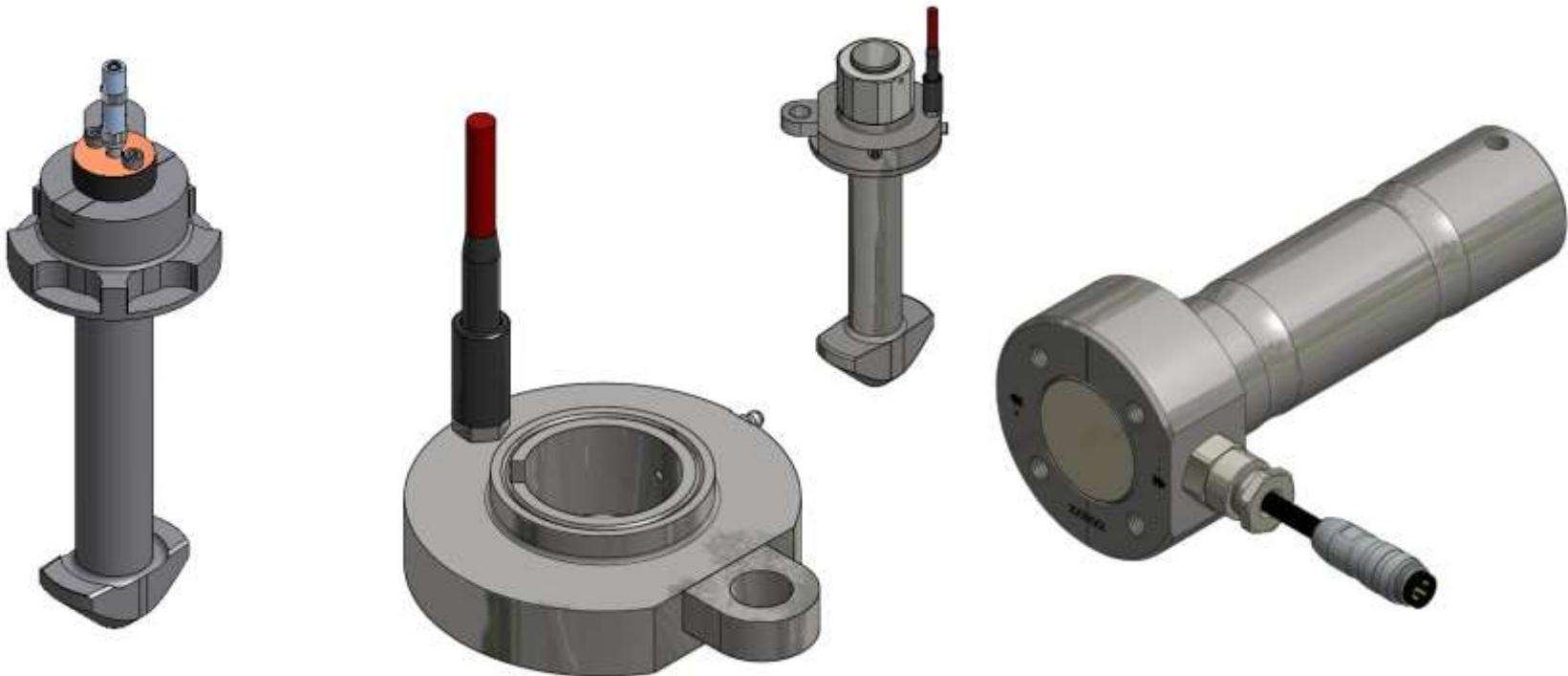
Container weighing - Methods

A logical focus is of the terminals is to minimise driver interaction and maximise throughput so keeping the terminal operating smoothly



Container weighing - Methods

- Gauged twistlocks
- Annular load cells – Strainstall patented technology
- Load pins



Container weighing - RTG

ZPMC Headblock – ZPMC Spreader, Felixstowe, UK



Container weighing - RTG

ZPMC Headblock – Bromma Spreader, Felixstowe, UK



Container weighing – Straddle Carriers

Terex Straddle Carrier – Stinis Spreader, Southampton, UK

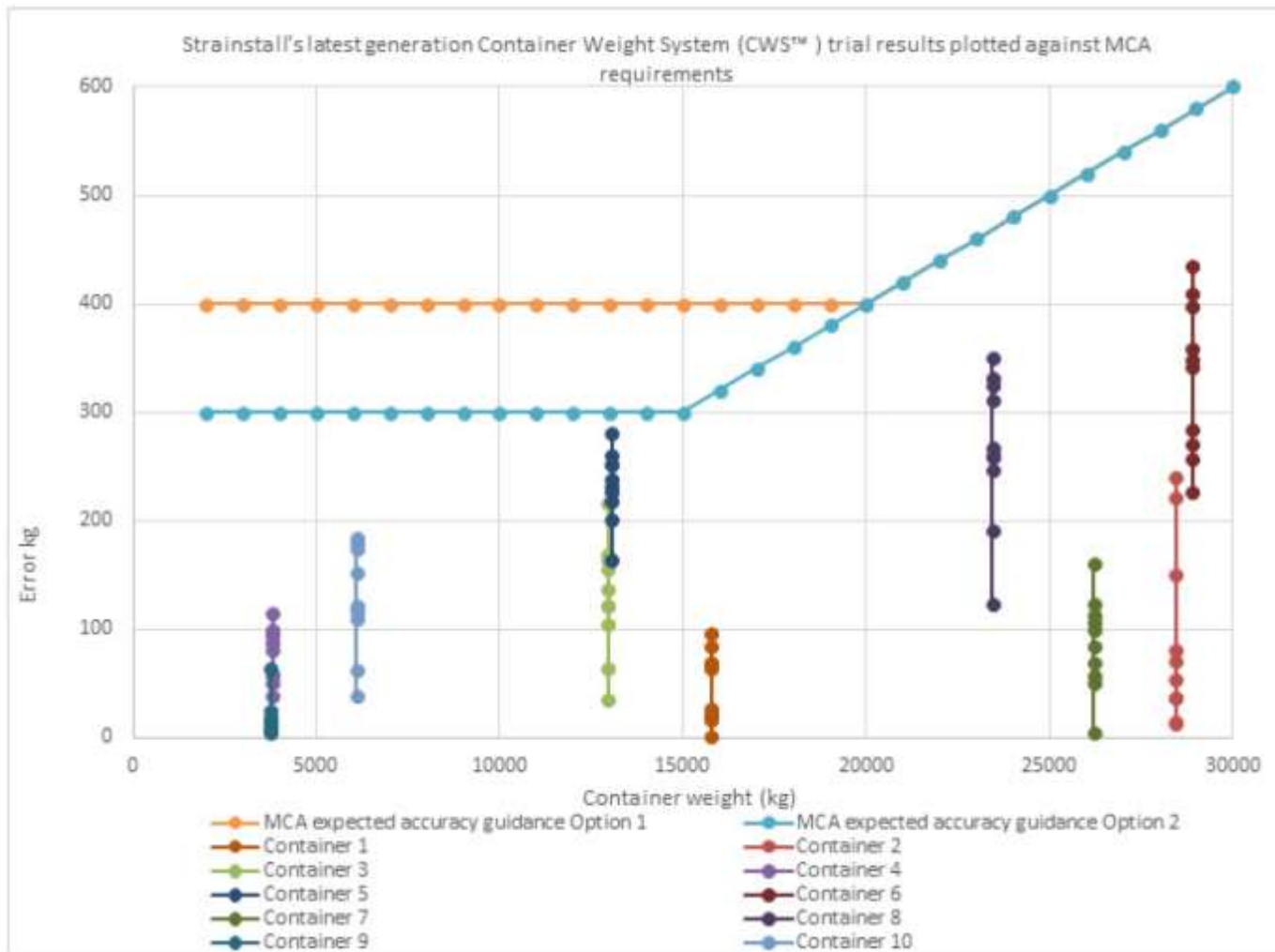


Container weighing – Straddle Carriers

Straddle Carrier – Stinis Spreader, Tilbury, UK

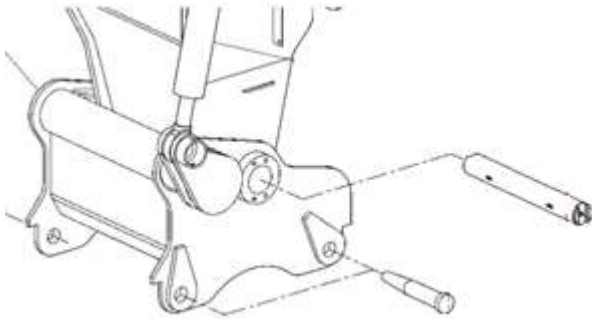


Container weighing – Straddle Carriers

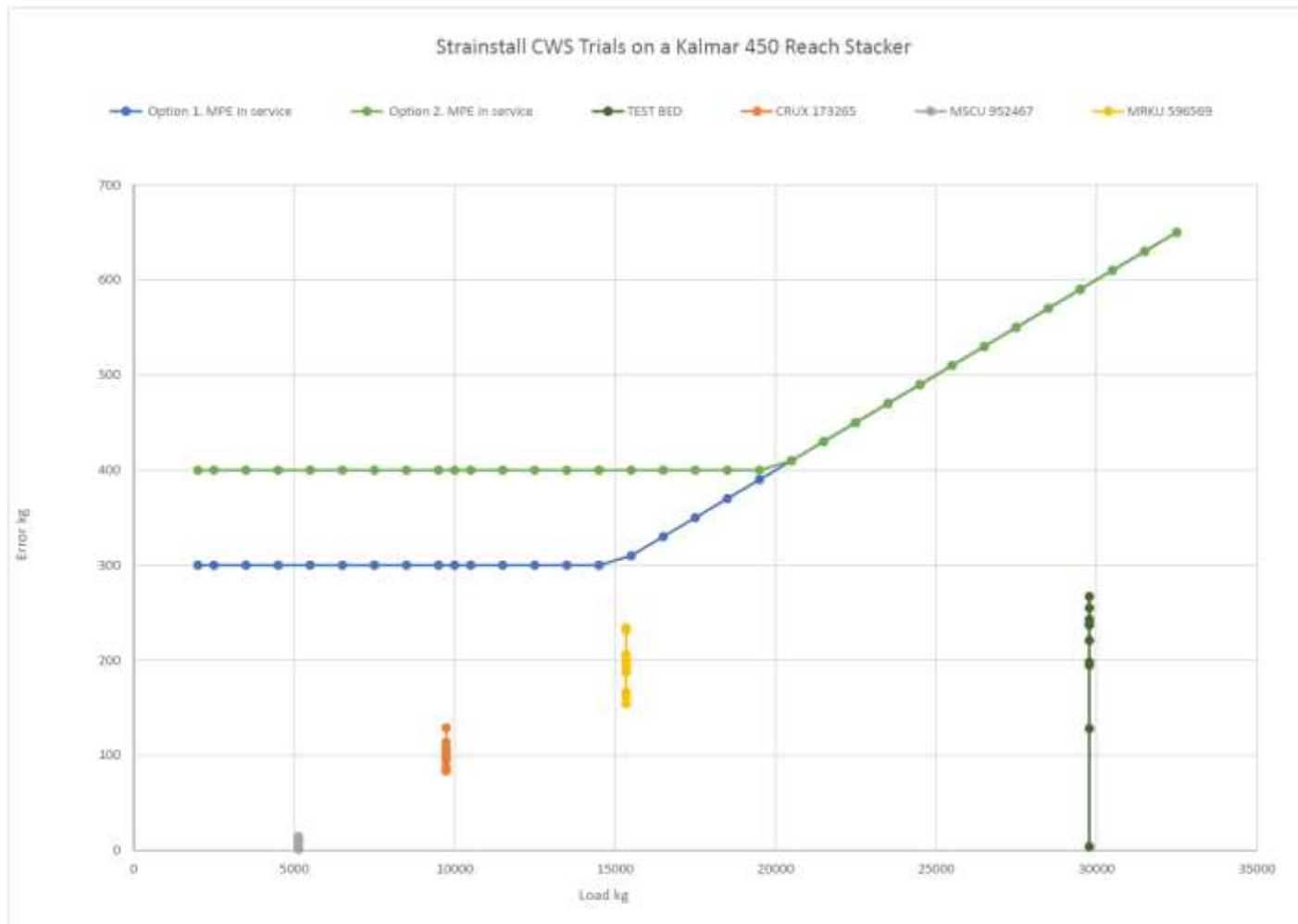


Container weighing – Reach Stackers

Reach Stackers



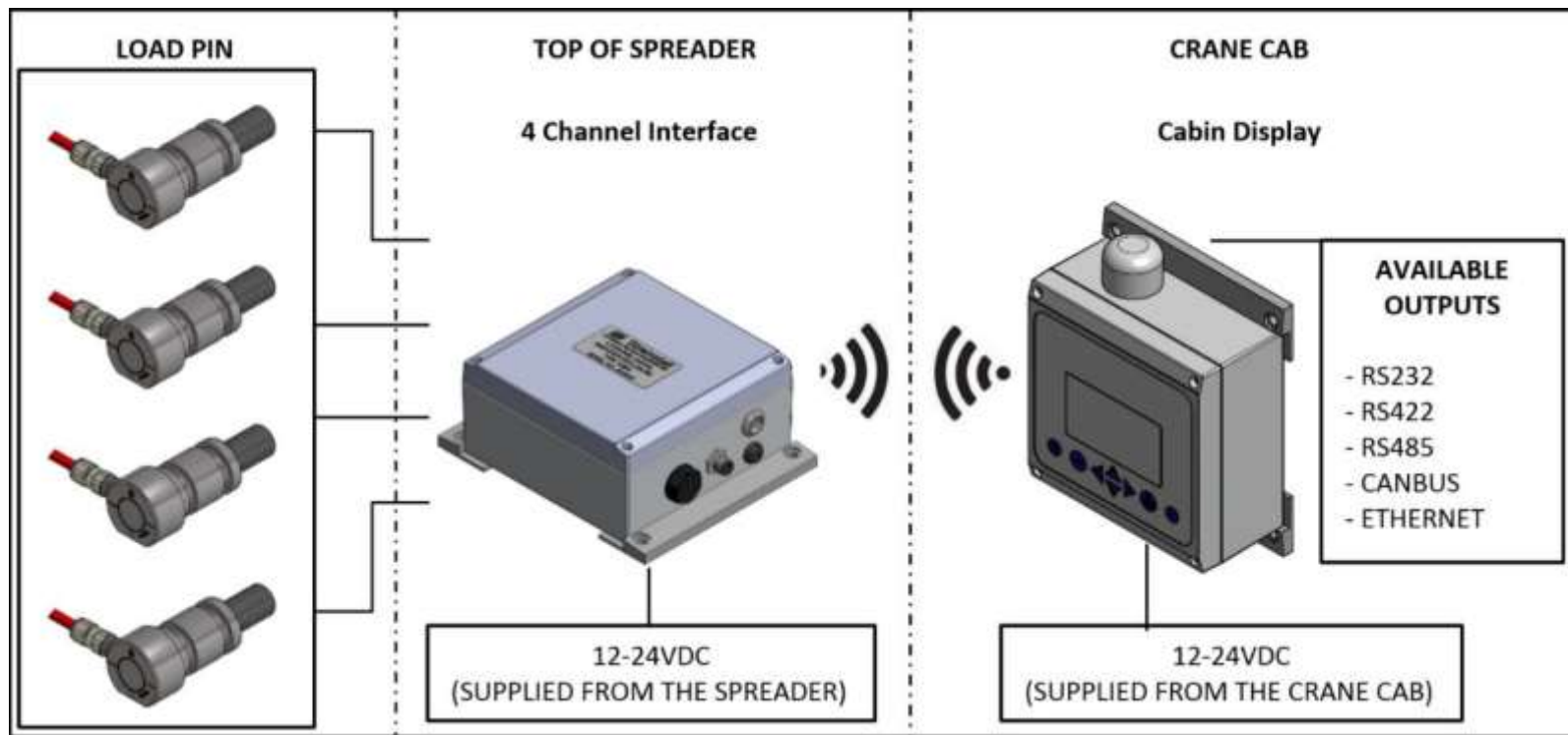
Container weighing – Reach Stackers



Container weighing – System Overview



Container weighing – System Overview




Container weighing – System Overview

Strainstall Container Weighing System

System StatusConfigurationLogsUser Account

Lift detection settings




Configuration:

- Spreader
- Lift Detection
- Network
- Logging
- Interfaces
- Notifications
- Warning Levels
- Time and Date
- Restart

Strainstall Container Weighing System

System StatusConfigurationLogsUser Account

Download Raw Log Files



These files are complete logs of load data for a given day.

Select a log file to download:

May 2014

15 May 2014

September 2015

01 September 2015

11 September 2015

14 September 2015

15 September 2015

16 September 2015

17 September 2015

18 September 2015

21 September 2015

23 September 2015

25 September 2015

26 September 2015

27 September 2015

28 September 2015

29 September 2015

October 2015

01 October 2015

02 October 2015

Log Files:

- Download Lift Log Files
- Download Raw Log Files

Container Weighing System © 2015 Strainstall Ltd | Theme by CodingDev

Container weighing - Calibration

On site calibration and verification by:

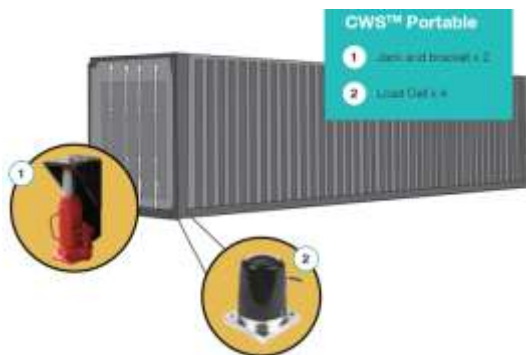
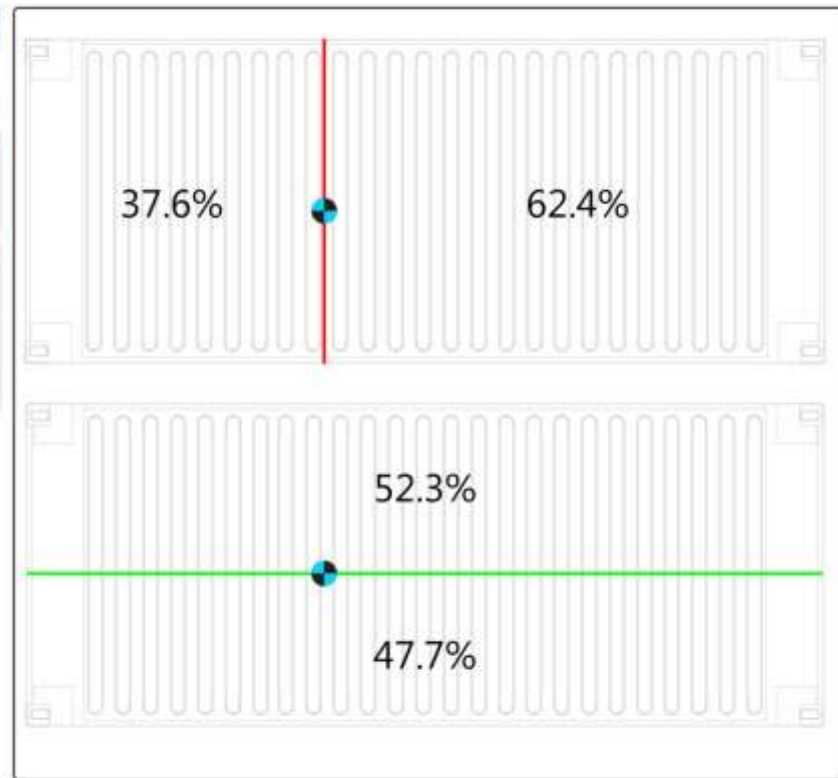
- Straininstall
- A Straininstall agent
- End User

CWS™
Portable container weight system

Container Details	
Container Type:	20' Container
Container #:	CSQU3054383

Centre of Gravity	
X Eccentricity:	37.6%
Y Eccentricity:	52.3%
Total Load:	4,543kg

Print report



Container weighing – Summary

SOLAS / VGM amendment is coming

I will not be delayed beyond July 2016

No preparation in logistics chain = containers with no VGM

US may be happy to load these, but will the shipping lines?

Consider:

- Equipment lead times
- Shipping times
- Installation times
- Staff training times
- Introduction of new procedures
- **100 days left!**



Container weighing - Considerations

Questions?



Thank You