Weighing the containers : A Case study at Karlshamn Port

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***Abstract*—IMO has set new rules to weigh all the containers before they are loaded in a view to reduce the casualties in sea. This is a concern because not all ports are ready to accommodate this change. To investigate the impact of these regulations, we visit the Karlshamn port located in south of Sweden and document our findings.**

I. Introduction

A. Background

Karlshamn port is a relatively small port but the sixth biggest in terms of tonnage that is handled. There are 80 people working in the port and 50 of them are dock workers. The port also has existing IT system like Terminal Operating System, HTMS, manifests. The weighing in karlskhamn port is done by a 3rd party which will be inspected once a year. The weighing in the port is also done with cranes. The problems with this that we understand are :

- 3rd party cannot be trusted for weighing the cargo.
- There can be differences in wight depending on how it is balanced. Because by tilting the container, weight can change.
- Weight of the container can also change with the environment. For instance, weight of the timber can differ depending on if it is dry or wet.
- The responsible for bearing the costs for weighing are still very vague.

We were also informed by the port management authority that they are using a database on weights for the containers.

B. Problem Statement:

As informed by the port authorities, we figure out that following problem can exist:

- Most of the containers are leased containers and have wooden flooring. So, dampness in wooden flooring implies an increase in weight.
- Today, vehicle scale has to be certified every year but reach stacker need not be certified for life time. This means an inaccurate weighing system.
- Reach Stacker only measures for every 100kgs, which means we can get only an approximate weight.
- As weighing is an overhead, many ports rely on the weights from the shipper for reputed companies.

II. Conclusion

References