360 Quality newsletter

Number 2

The purpose of this Newsletter is to keep an awareness in front of those shipping fruit and others involved in the movement of perishable products of the differences of transportation by container against shipments in specialized reefers on container under deck. As its name implies, the 360 Quality Association promotes the quality advantages of shipping on specialized reefers.

The membership of the 360 Quality Association is presently made up of reefer vessel owners, operators and terminals committed to the specialized shipping mode of transportation. It is an association of people following the same targets. Naturally, a group can be stronger than a single individual.

The Association strives to make sure that the handling of reefer cargoes on specialized vessels is continuously improved in order to provide the customers' cargoes with the care they require. We are specialists, who can handle cargo ensuring the highest possible quality standards which is demanded more and more in the field of perishable shipments. The Association have developed the 360 Quality Code which focuses on the work of seaport terminals and specialized reefer vessels. The Code lays down standards to identify, prevent, measure and control potential damages to cargo. Some 229 reefer vessels have been certified as complying with the exacting provisions of the Code. Technical cooperation by members to ensure consistency in quality so that 360 Quality members can assure their potential customers of highly qualitative results in transportation is an important role.

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South Africa Citrus Trade

Soon the South African citrus season will start. The fruit being shipped to the NW European markets and carried by the specialized reefer mode will be served, just like last year, by shipping lines NYKCool and Seatrade Reefer Chartering. The discharging terminal on the North Continent will be, just like last year, the fresh fruit terminal of Kloosterboer in Vlissingen (Flushing). All vessels under the Vessel Sharing Agreement between Seatrade and NYKCool from South Africa are calling exclusively Kloosterboer in Vlissingen.

The SA citrus trade is served with a unique "door to door" concept. Clients can choose to have their citrus fruit delivered at their doorstep or leave the fruit in the port for further distribution from there on. Rates are Low and service is High!

Kloosterboer is a family-owned company with 85 years of experience in international produce and other temperature-controlled trades. It has subsidaries specialized in warehousing, stevedoring, forwarding, shipping, customs and logistics IT. At Vlissingen, the company has a storage capacity of 200.000 tons of which at least 35.000 pallets are available for handling and storage of fresh produce as well as a container yard with a capacity of 3.000 TEU and 180 reefer plugs. Advanced IT services provide total track and trace and full inventory and quality control of the products.

South Africa Citrus Trade cont.

The port of Vlissingen has a unique geographical location with direct acces to the open sea. It is located between some of the main economic centres of North-West Europe and the ports of Rotterdam and Antwerp. A first-rate, congestion-free network of road, rail and waterway links to the hinterland of Europe makes it a perfect location to serve their customers all over Europe.

Regarding stevedoring services, Kloosterboer Vlissingen must be considered as a major service provider to the conventional (reefer) mode. Last year a record number of 410.000 pallets (inbound and outbound) was handled.

Taking care of clients' products as a good housekeeper is a key element to the services Kloosterboer are providing. As a result Kloosterboer is keen on securing their working processes on quality by embedding codes just like those of the 360 Quality Association in the case of handling cargo carried by the specialized reefer mode.

Following the standards of the association Kloosterboer has a strong focus on prevention of damages and in case of any, a transparent registration and reporting to parties involved.

Furthermore the site is ISPS certified and will also reach its AEO (authorized economic operator) status next month.

Just like last year Kloosterboer is looking forward to a successful South African citrus season.

Jack.Kloosterboer

Carton Quality and Condition

For Dole, Fruit quality and condition go hand in hand with pallet and carton quality and condition.

The 360º program is a culture.

A culture we start while the pallet is building up on the pack-line. By pushing 360º upstream right to the packing line we are identifying and eliminating all sorts of poor product handling practices.

Inculcating this culture through all parties is a process, it is not an event.

It requires a driver and it requires relentless monitoring, educating and policing. But slowly one finds the effort required is becoming less and less as all parties realise this 360º is here to stay and not a passing fancy that dies it's own death.

We are now past the phase of trying to persuade and convince the parties in our supply chain. Now the focus is on monitoring, audits and follow up.

The implementation of 360º is a collaboration of committed partners. Of which the weakest link has always been the packing line, followed by the transport to the port.

Even now we are relentlessly fighting the inferior quality of pallets used by the citrus industry.

However we are very fortunate that the Specialised Reefer Vessel shipping lines started this process and forged it to fruition in all our ports.

The new culture of ensuring no pallets are allowed to be taken in a poor state is identifying which producers are our 'problem children' and which are consistently diligent, a pattern that emerges quite clearly.

The fruit terminals are also applying 360 Quality processes to all Specialised Reefer Vessels even those not signatory to the 360 Quality Code.

Andy Connell

360 Quality

Ambient Loading South Africa

Ambient loading means loading citrus arriving to the ships side at ambient temperatures instead of being pre-cooled. In the past Reefer Vessels were only allowed a certain percentage of fruit at ambient temperatures to be loaded. The amount allowed was based on the Vessels age. We disputed with the PPECB, who were the ruling party as to what percentage was allocated, when one of our Summer class Vessels loaded a full cargo from South African ports for discharge United Kingdom and Europe, and when the Vessel returned to South Africa two months later she had turned 20 years old and the PPECB then advised us that the percentage for warm fruit had been reduced. On board on the first voyage were a total of 17 % ambient fruit and the balance of cargo pre-cooled. When she returned only 8 % of ambient fruit was allowed. We then set up numerous meetings with the PPECB so that we could understand why the percentage had been reduced based on Vessels age as well as to present our views as to why Vessels age should not have any negative effect on the cooling plant and the refrigerated capacity thus not reducing the allowance of ambient loading.

To add to this we saw ambient shipments being made from the port of Maputo where warm citrus fruits were being loaded into containers with the permission of the PPECB and our stance was quite simply that if a container is allowed to load a full cargo of warm fruit then this is a disadvantage to reefer vessels. On this basis the PPECB agreed to do trials in order to prove that reefer Vessels are very capable of loading and cooling fruit from ambient temperature without affecting the quality.

The first trial was done in one deck where all the USDA probes were inserted into various pallets at points chosen by the PPECB. The pallets were more or less in the same positions as when loading steri cargo to the USA or Japan. Over and above the USDA sensors NYKCool purchased and used numerous Sensi-tech sensors. In addition sensors from the PPECB were used. So in total we had approximately 30 sensors in various locations in the deck.

Quality inspections were done by the PPECB; measuring all aspects of the fruit prior to the pallets being loaded onboard and the same inspection was carried out at the discharge port to ensure that all quality measurements were taken to prove that hardy citrus can be loaded ambient without affecting the quality of the fruit.

When the first trial was set up our reefer expert (Mr. Ralph Mohlin) in Stockholm participated to assist the NYKCool Southern Africa office. We also arranged to provide funding to the PPECB so that Mr. Peter Hoekstra could be in Durban to carry out the inspection and probing of the sensors onboard during loading and then to finally fund the PPECB to fly to Europe to carry out the final quality inspection at the discharge port of Rotterdam. In addition the PPECB trained a local independent surveyor to be able to read the same quality parameters as more trials would be in line up where a common deck was used and then finally a complete cargo hold.

All the trials proved without any doubt that Reefer Vessels can load citrus at ambient conditions. The PPECB then agreed to increase the percentage to 52 % on all Reefer Vessels calling to South African Ports and including Maputo.

With the increase of the percentage in loading ambient citrus to 52 % we immediately saw our clients planning to load more and more ambient fruit which has a direct cost saving to the clients as the cargo is delivered direct to Vessel which saves the through cold store rate. In 2010 we had some Vessels reach the maximum allowance and had we been allocated a higher percentage of ambient fruit we would have quite easily reached also this limit.

We have had additional meetings with the PPECB and it is now agreed that we must do a final trial where we load a complete Vessel with fruit at ambient temperatures. Once this is done and the trial has proved successful, the PPECB will grant 100 % of hardy citrus at ambient loading. We plan to complete this trial in 2011.

To load fruit at ambient temperatures will have many a benefit for the South African grower / exporter as it will eliminate a cold store charge as well as additional trucking charge. From what we are told by our clients it will push more cargo through the port of Maputo instead of Durban as without having to go into cold stores, which are very limited in Maputo, cargo will go direct to Vessel. The trucking cost will be greatly reduced as from farm gate to the Vessel the distance is much shorter, it will also ease the congestion in Durban where in peak season most outside cold stores and the loading terminals are bulging at the seems.

Conclusion of the trials:

- **There are no quality issues with the citrus arriving in Europe and the procedure did not have any negative effect on the quality handled in this way.**
- **A huge cost saving to the grower / exporter.**
- **Once the final trials have been concluded in 2011 we will update you accordingly.**

Acknowledgements :

Mr. Peter Hoekstra & Mr. Jurgen Bence (PPECB), Mr. Samuel Vadivelu (NYKCool Southern Africa) and Mr. Piet Post (van Ameyde Rotterdam).

Clinton Smart and Ralph Mohlin

NYKCool

Define Measure Analyse Inform and Control

Introduction:

The 360 Quality Code requirements were developed 5 years ago. During these years awareness was created amongst ship owners and ship managers of specialized reefer vessels.

In the future there will be a challenge to shipping lines, terminals, stevedores and receivers to cooperate to reduce handling damage on cargo and work on food safety issues to deliver a quality product to our customers.
The platform of this cooperation is in DMAIC (short for Define Measure Analyse Inform and Control) teams, organised per trade. In the teams representatives of load, discharge ports and shipping lines are present.

In several trades these teams have already found success.

The non-360 Quality supply chain:

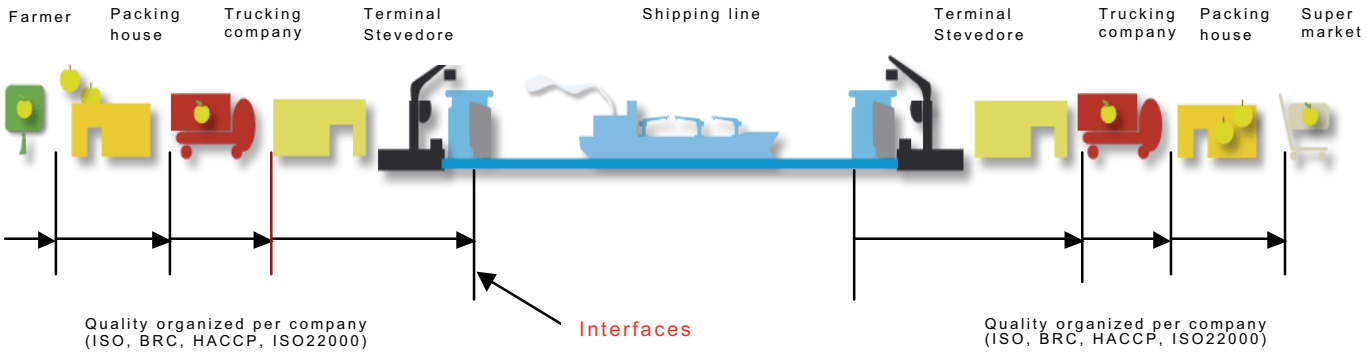
In the traditional process, cargo is handled in load and discharge ports by terminals and stevedore companies. Most of these suppliers are certified such as: ISO, HACCP (food safety) or BRC. These quality standards are focussing on the process of the particular company.

In the non-360 Quality supply chain (see fig 1) 8 interfaces are present and one can wonder:

- **Are all supply chain partners working in line with the receiver requirements?**
- **How is the responsibility of the cargo transferred at these 8 interfaces?**
- **Do all supply chain partners work with the same aim?**
- **Do all supply chain partners have the same perception concerning 'Damaged Cargo'?**

Of course, every company does its utmost but all the interfaces are not covered and that means that the present process is fragmented and that is not in the interest of our customers.

Fig1: Non-360Quality supply chain



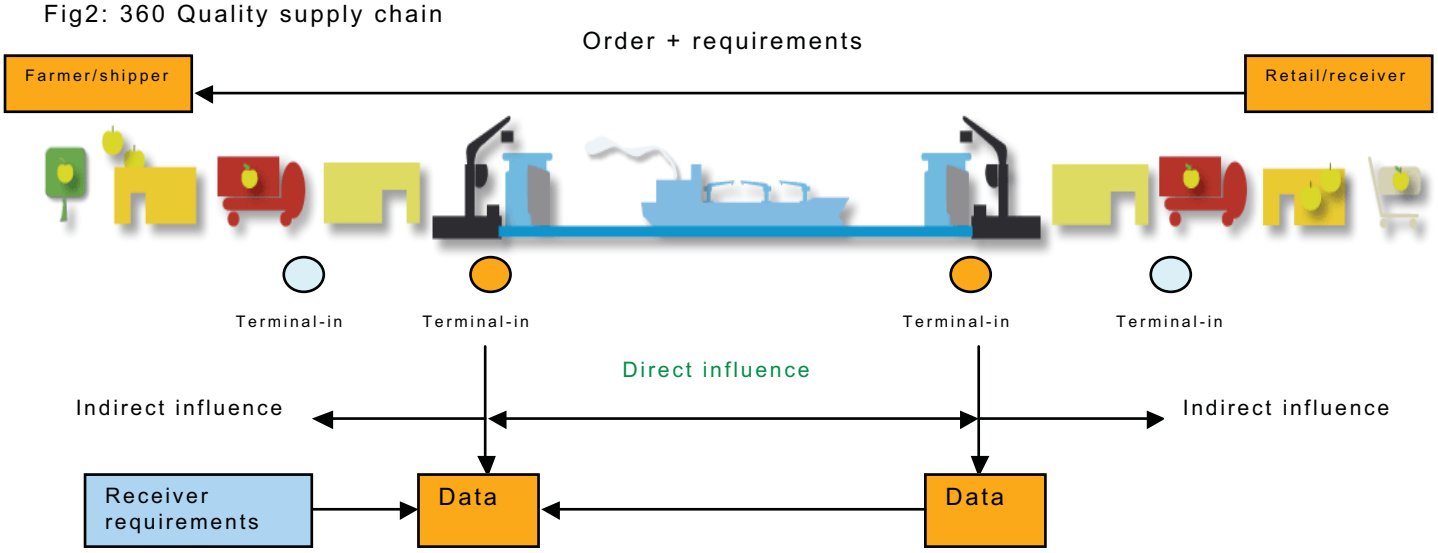
The 360 Quality supply chain:

In the 360 Quality supply chain the above described interfaces are still present, but there is a difference. The added value of the 360 Quality supply chain is:

1. **The inspections are executed based on agreed acceptance and rejection criteria, which include the receiver requirements.**
2. **That all vessels and terminals are certified and thus comply with 360 Quality requirements.**
3. **All cargo is inspected at the time of loading and discharging with the same inspection criteria.**
4. **The result of the inspection is recorded in data and sent to the shipping lines.**
5. **This data feedback is given to the load ports and discussed with trade teams.**
6. **Solutions are agreed in trade teams and followed-up.**

Define Measure Analyse Inform and Control cont.

Fig2: 360 Quality supply chain



In the 360 Quality supply chain the receiver has expectations concerning the packaging, pallet build up and in what condition the fruit should arrive. These requirements are essential and must be part of a local loading procedure. This procedure is used in the load port to inspect the cargo. In the present local load procedure 10 standard damage codes are inserted, but extra damage codes can be added if needed. On each damage code the acceptance and rejection criteria is defined. Accepted means that the cargo can be loaded on the vessel and rejected cargo should be set aside to be repaired, re-inspected and re-loaded. Some examples of the standard damage codes are: missing cartons; damaged packing materials; pallet base damage or compression damage on bottom cartons. The local working procedure creates a transparent supply chain.

In each loaded deck such inspections are executed and recorded. In some trades an independent inspection body is installed to check the cargo. These inspection bodies reports directly to the shipping lines to avoid conflict of interest.

Based on the findings, recommendations are made to the load port. Inspections can then be intensified on that particular issue in order to reduce the damages on the next vessel.

In trades where fruit pallets are transported it is sometimes observed that a lot of pallet bases must be repaired before they can be stowed in the holds. To repair these pallets takes a lot of time and these repairs disturb the cargo flow to the vessel. To prevent this situation cargo could be inspected on reception at the terminal. In most ports at this point there is enough time to execute the repairs and the trucker can be made aware or eventually charged for repair costs. Through this feedback awareness is created for the shippers, too.

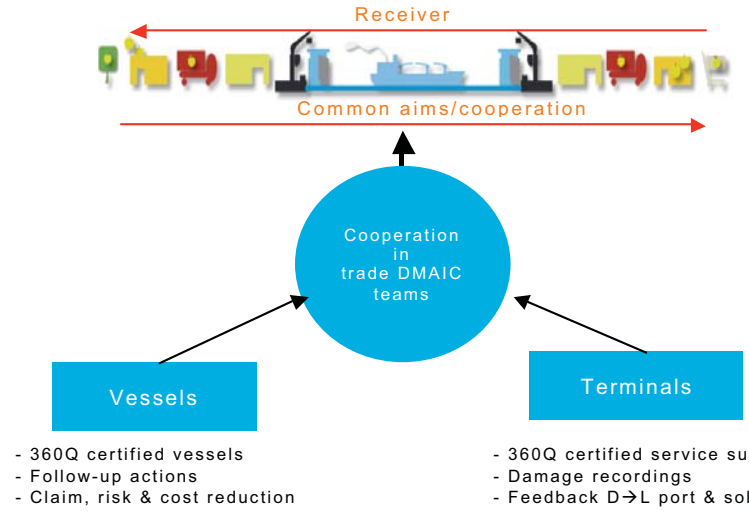
This part of the supply chain is difficult to influence for the shipping lines but it is important that everyone in the supply chain delivers the cargo at every interface according to receiver requirements in order to keep our customers happy.

DMAIC teams:

The DMAIC team is working for a specific trade and starts mostly with a definition of a specific problem. By measuring it will be known where the specific problem in the supply chain occurs and if it is regular pattern or randomly. Analysing the data give you a feeling of the variation of the process. The DMAIC teams look to possible solution, considering the possibilities in the load port.

Most important is that all DMAIC team members must have a positive approach to improve the situation and all issues can be discussed.

Fig 3: DMAIC teams:

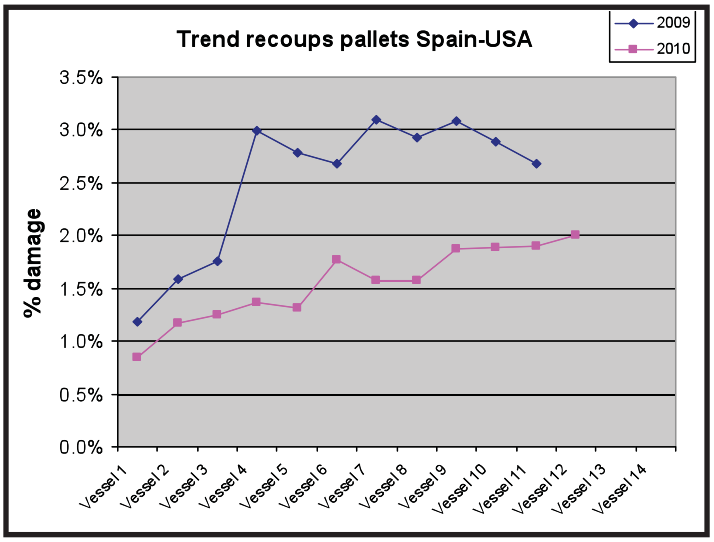


Define Measure Analyse Inform and Control cont.

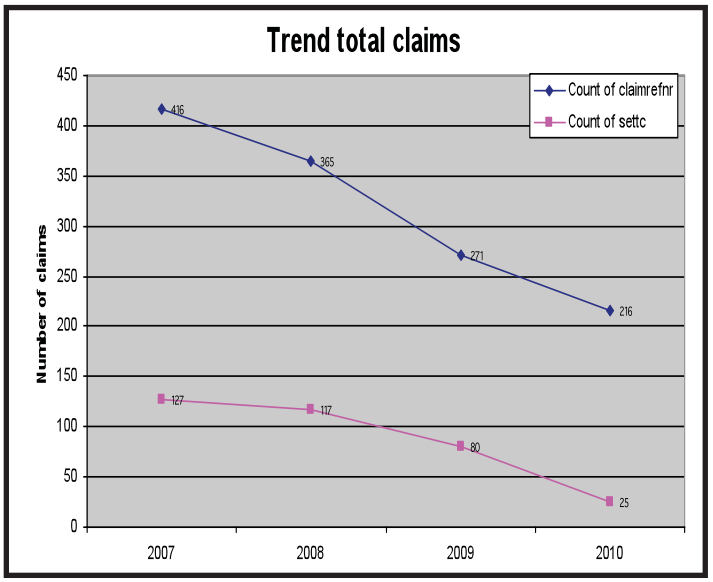
In fig 3 the methodology of DMAIC team is presented. Cargo is transported in only 360 Quility certified vessels. This means that these vessels can comply with 145 requirements. Actions to ship owners are actively followed up. Concerning terminals, 73 requirements are defined. Some examples of terminal requirements are: length & width of forklift tines, certified stevedore equipment, trained forklift and crane drivers or flush quay sides to avoid in-stabilise of cargo.

Shipping lines of specialised reefers only work with certified vessels and terminals because both work in DMAIC teams and have the same aim. The common aim is to comply with the receiver requirements all over the supply chain. In fact alignment of all the supply chain partners takes place which covers all the interfaces!

You probably wonder what is the overall result of this all? Right an example is given of the Spain-USA trade. The average damaged cargo is reduced from 2.7% (2009) to 2.0% (2010) and recoup costs could be reduced.



Another example is the tremendous reduction in claims. A reduction of 35% is realised between 2007 and 2009. Due to all efforts shipping lines are taken, supply chain partners benefit from this situation.



Conclusion:

What can we conclude on this all?

It is clear that since 360 Quality has been implemented for vessels, terminals and trades a reduction in damages has been observed. The main five advantages of 360 Quality are:

- **It focuses the attention on agreed damaged codes (incl. receiver/retail requirements) of all supply chain partners and thus covers all interfaces!**
- **360 Quality certified vessels and terminals comply with practical requirements. All measures are taken to prevent handling damage and contamination of cargo (food safety) in order to protect the cargo!**
- **In the DMAIC teams, organised per trade, supply chain partners work together with the same aim and that is to comply with the receiver demands!**
- **There is more understanding between load and discharge ports, which gives a better atmosphere to improve the trade!**
- **Results show that damages and claims are reducing!**

360 Quality is a methodology which proves to be successful. It is in the benefit of the retail companies, importers and receivers to adopt this method in their trade because there is direct control over the supply chain.

Wout van Huijstee Seatrade

MEMBERS:

Maestro Reefers A/S

N.Y.KCool AB

Seatrade Group N.V

Star Reefers U.K Ltd

Universal Reefers Ltd

AFFILIATE MEMBERS:

Ambassador Services Inc. *U.S.A*

AROLA Aduanas Y Consignaciones S.L, *Spain*

Belgian New Fruit Wharf, *Belgium*

COOPEUNITRAP R.L, *Costa Rica*

Fresh Produce Terminals Ltd (FPT) *South Africa*

FRUPORT, *Spain*

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Gloucester Terminals LLC (Holt Logistics) *U.S.A*

K Services LLC U. *S.A*

Kloosterboer Vlissingen vof, *The Netherlands*

Marmedsa Group, *Spain*

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