The Perils of Shipping with Reefer Containers and Flexi Tanks

Thursday, May 26th, 2011

by: Frank Bruzzese Demers Adjusters

- 1. Basic construction and function of a reefer
- 2. How produce reacts in containers
- 3. CA and MA (Controlled Atmosphere and Modified Atmosphere)
- 4. Flexi Tanks

Function:

- 2 methods: Conduction (passive) & Convection (forced air), the latter being the reefer method. Convection:
- The cold temperature supply is at the opposite end of the doors (location of reefer unit on left of below diagram).
- The reefer unit is fitted with cooling coils and blowers; basic refrigeration units by way of forced air.
- Air is blown and directed to the floor of the container via a baffle plate.
- The air flows through the elevated grates on the floor, to the rear (doors) then flows over the top of cargo at the doors and is then sucked back to the front by a return air suction at the top of the reefer unit.

Some air will also flow up and threw the pallets loaded in the container.



OVERALL VIEW OF VENT INTAKE FROM EXTERIOR OF REEFER



CLOSE-UP OF VENT SETTING



- 1. Basic construction and function of a reefer
- 2. How produce reacts in containers
- 3. CA and MA (Controlled Atmosphere and Modified Atmosphere)
- 4. Flexi Tanks

- 1. Basic construction and function of a reefer
- 2. How produce reacts in containers
- 3. CA and MA (Controlled Atmosphere and Modified Atmosphere)
- 4. Flexi Tanks

CONTROLLED ATMOSPHERE



DIGITAL READOUT



TYPICAL THERMOGRAPH/ RYAN



PARTLOW CHART



- 1. Basic construction and function of a reefer
- 2. How produce reacts in containers
- 3. CA and MA (Controlled Atmosphere and Modified Atmosphere)
- 4. Flexi Tanks









