



Cascade refrigeration system with NH_3 and CO_2

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I little background

- The first CO₂/NH₃ systems was installed in 2001
- Since a number of systems have been installed in Europe and North America
- Ship owners are still very satisfied with their transition from R22 pump
- All trawlers in Holland, which not scrapped, have been updated
- The smaller fishing boats still have fluorinated hydrocarbon refrigerants

■ A few remarks on the CO₂:

- Leakage is difficult to find
- Wrong operation sometimes lead to blow off
- Hot-gas defrosting at the end of production day is difficult as there is no capacity request from the production side (plate freezers)
- Not all suppliers of CO₂ deliver water free CO₂