

# TankLightModule

*Proving excellence in Lightweight marine structures*



**E-LASS kickoff**  
**Borås – October 8:th, 2013**

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**A theoretical, but still real, study showing the possibilities and advantages of using lightweight materials in shipbuilding.**

**Results and technical report presented at "Donsö Shipping Meet 2011".**

**Supported by:**

- Västra Götalandsregionen
- SP- Techn. Research Institute
- Svenskt Marintekniskt Forum



TILLBERG DESIGN



swerea|SICOMP



CHALMERS



sapa:



**Study case:  
m/t "OLYMPUS"  
m/t "TELLUS"**

**Length: 124 m  
Capacity of cargo  
tanks: 11'000 m<sup>3</sup>.**

**Owner: Sirius  
Shipping - Donsö**



**Calculation of Return of Investment:  
"1 Ton saved weight in superstructure  
is 1 Ton more cargo capacity"**

**Input from Owner: "1 Ton extra cargo capacity (refined  
petroleum products) is worth 10'000 – 15'000 SEK/Year."**

## ”Before”

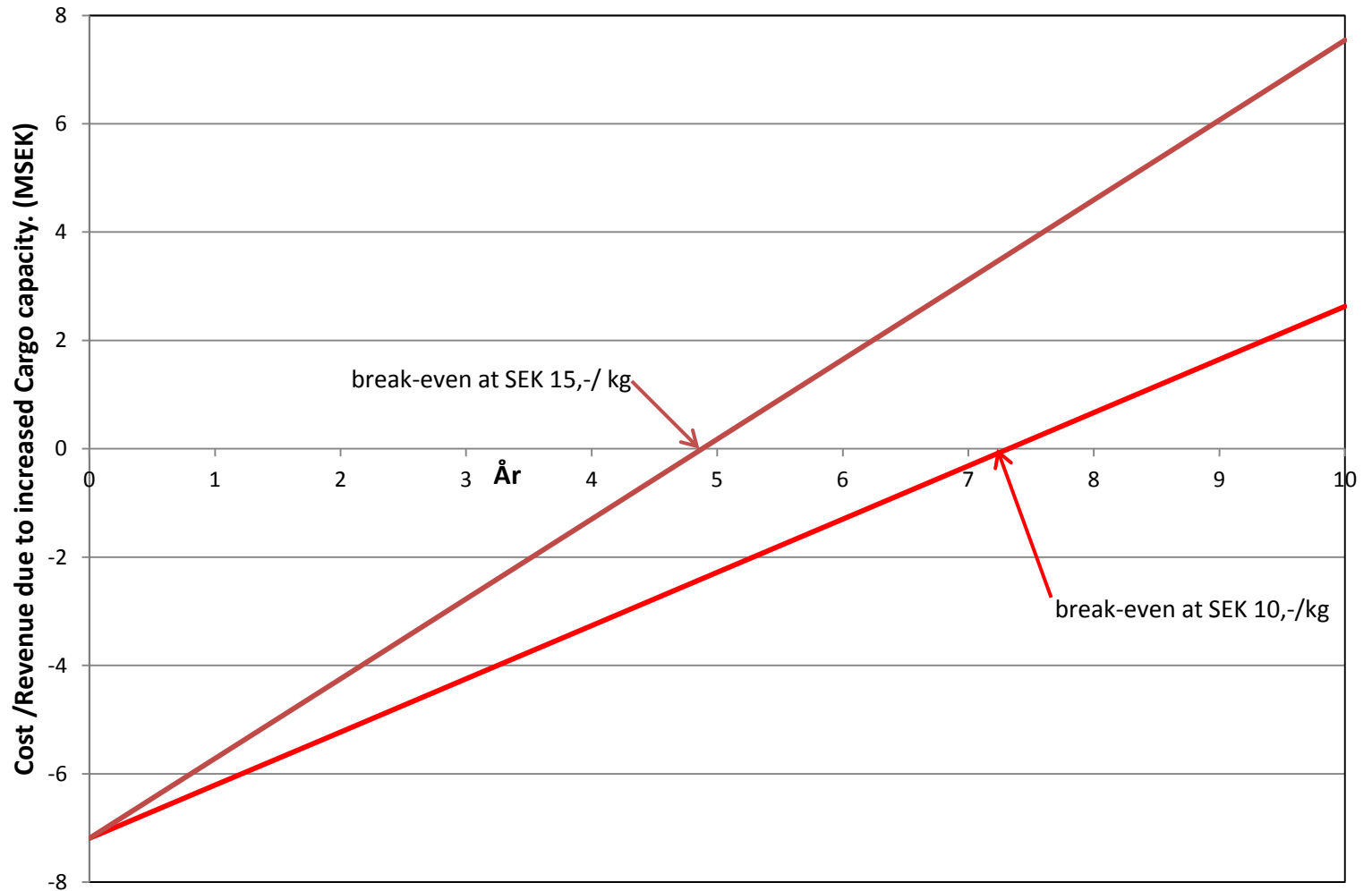


Superstructure: Steel  
Fire insulation  
Comfort insulation  
Weight: 184 T  
Cost: 16 MSEK

## ”After”



Superstructure: FRP Composite  
Fire insulation  
Comfort insulation  
Weight: 85 T  
Cost: 23 MSEK





**Thank you!**

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