TRANSPORT STYRELSEN

Datum
2012-01-10

Ert datum
2011-11-02

Er beteckning
"Askholmen"

Corolis Utvecklings AB
S Snäckskalsvägen 4
417 29 GÖTEBORG

# ASKHOLMEN reg. bet. S I U D – Läckstabilitetsberäkning, Fribord, Brand

Bifogat är följande dokument

2 st. Läckstabilitetsberäkning (skada förpik) dat 2011-11-01

2 st. Fribordsplan ritn. 102-1 utg. B

2 st. Fribordsplan bilaga utg. B. dat 2011-09-29

4 st. Brand- & Säkerhetsplan, ritn. 103-1 utg B

2 st. General arrangemang 101-1 rev A

2 st. Linjeritning 100-1 rev A

Följande dokument är godkända.

Läckstabilitetsberäkning (skada förpik) dat 2011-11-01

Fribordsplan ritn. 102-1 utg. B

Fribordsplan bilaga utg. B. dat 2011-09-29

Brand- & Säkerhetsplan, ritn. 103-1 utg B

Följande dokument är information.

General arrangemang 101-1 rev A

Linjeritning 100-1 rev A

**Transportstyrelsen**
Sjöfartsavdelningen
Box 12110
402 42 Göteborg
Besöksadress
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**Dan Jonsson**
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Sjöfartsinspektionsområde Göteborg
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010-495 34 25

Följande noteras.

Ritning som visar däckslucka är mottagen som information. Observera att dispens för nedanstående krav skall sökas.

Minsta krav för fartyg <24 m, vidare fart än fartområde C är 450 mm karmhöjd, 2009:114 bil 5 reg 10.

Styrkan i luckan godkänd.

Enskild inspektör kan ej ta beslut i fråga. Dispensansökan skickas till Transportstyrelsen Albert Wiström, fartygstekniska enheten, box 653, 601 15 Norrköping. Skriv motivering till varför en dispens borde ges.

Med vänlig hälsning

Dan Jonsson
Förste Fartygsinspektör

# ANNEX F. RESULTS OUTPUT, DAMAGE STABILITY

Calculations are based on DAMHULL date 2011-11-01 time 15:59



| | | |
|---|---|---|
| Shell thickness used in the calculation | 8.0 | mm |
| X-coord. of aft end of DWL | -0.00 | m |
| X-coord. of fore end of DWL | 18.20 | m |

Calc. sections 41
Plate thickness: 8.0mm

MAIN CHARACTERISTICS OF THE VESSEL:

| | | |
|---|---|---|
| Length betw. perpendiculars | 18.20 | m |
| Breadth, moulded | 5.15 | m |
| Design draught | 1.00 | m |
| X-coord. of after perpendicular | -0.00 | m |
| X-coord. of reference point | 9.10 | m |
| X-coord. of midship section | 5.91 | m |
| X-coord. of building frame 0 | 0.00 | m |
| Thickness of keelplate | 0.000 | m |
| Mean thickness of shell plating | 0.008 | m |
| Density of water | 1.0050 | ton/m3 |

RELEVANT OPENINGS IN DAMAGE STABILITY CALCULATIONS

| NAME | DESCRIPTION | CONNECT | X m | Y m | Z m |
|---|---|---|---|---|---|
| OPE1 | Engine air inlet | | 0.00 | 1.70 | 5.06 |

I= 1
INICASE= I1
INITIAL CASE I1 ----------

| INIT | | I1 |
|---|---|---|
| T0 | m | 0.883 |
| TR0 | m | -0.474 |
| HEEL0 | degree | 0.0 |
| DSP0 | t | 43.0 |
| GM0 | m | 1.927 |

DAMAGE CASE D7
DAMAGED COMPARTMENTS

| DAMAGE CASE DESCRIPTION | COMPARTMENT | PERM. | VOLUME m3 | XCG m | YCG m | ZCG m |
|---|---|---|---|---|---|---|
| D7 | R7 | 0.95 | 10.7 | 17.33 | 0.00 | 1.48 |

INITIAL/DAMAGE CASE I1/D7 FLOATING POSITION

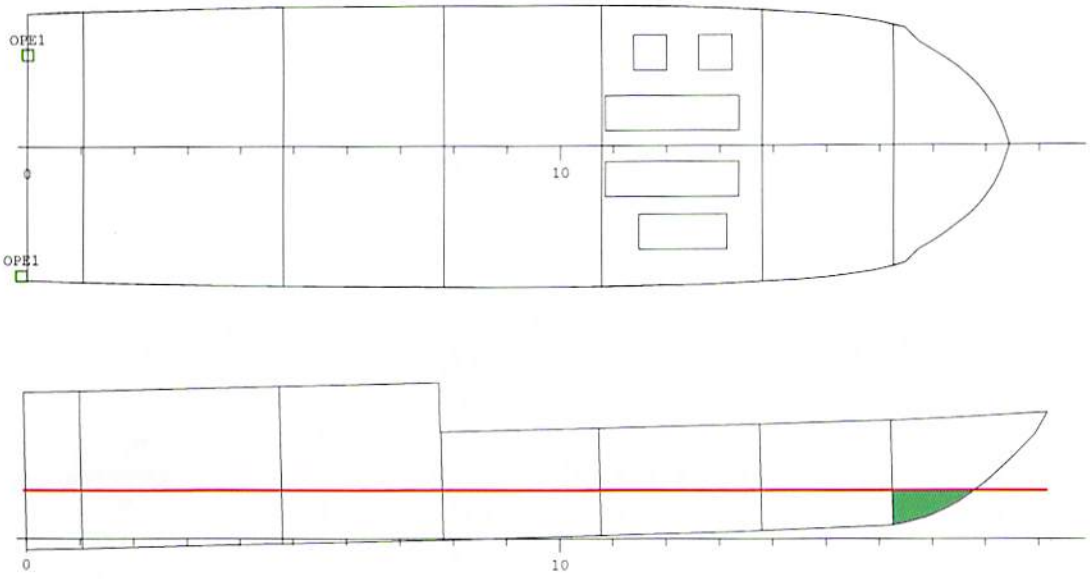
| CASE | PHASE | T m | TR m | HEEL degree | MINGM m | GZMAXR m | MARG.LINE m |
|---|---|---|---|---|---|---|---|
| I1/D7 | EQ | 0.88 | -0.47 | 0.0 | 1.587 | 0.43 | 1.72 |
| I1/D7 | EQ | 0.89 | -0.42 | 0.0 | 1.637 | 0.43 | 1.74 |

INITIAL/DAMAGE CASE I1/D7 IMMERSION ANGLE AND DOWNFLOODING HEIGHT OF OPENINGS
EQUILIBRIUM CONDITION AFTER FLOODING

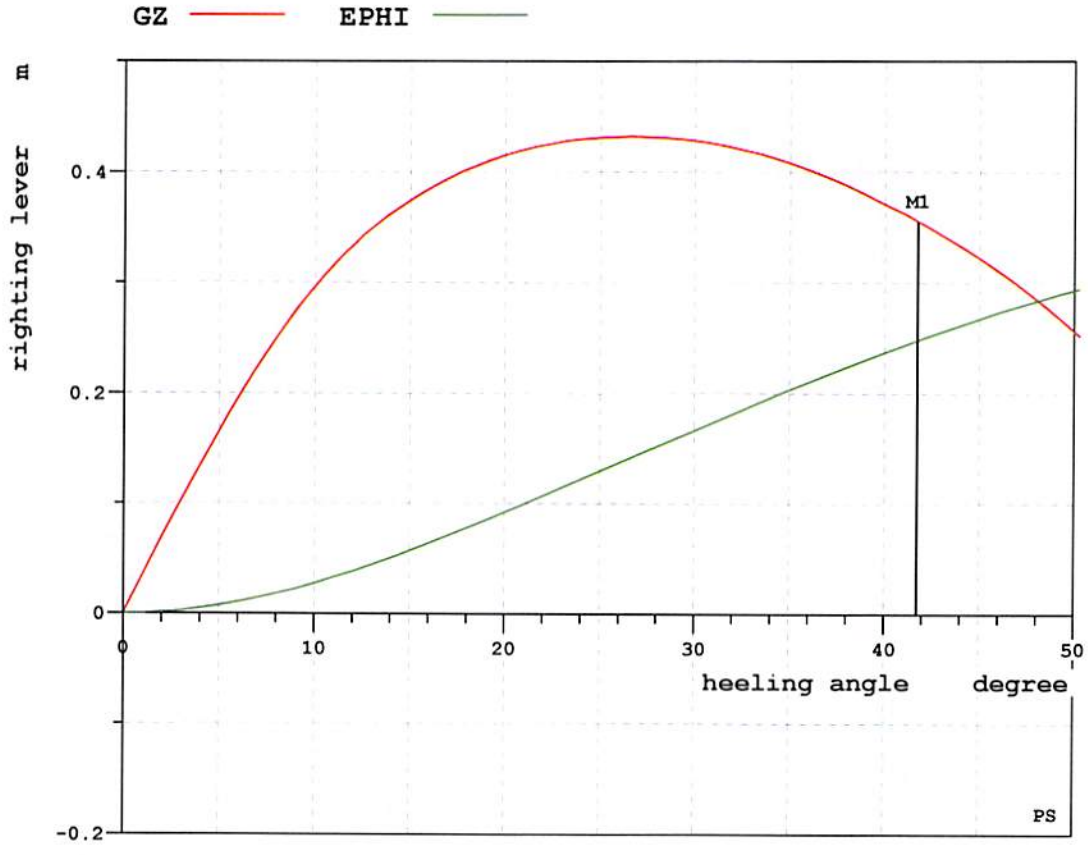
| PHASE | NAME | DESCRIPTION | SIDE | CONNECT | FL.ANGLE degree | FL.HEIGH m |
|---|---|---|---|---|---|---|
| EQ | OPE1 | Engine air inlet | PS | | 80.14 | 3.96 |

INITIAL/DAMAGE CASE I1/D7 SUMMARY OF CRITERIA STATUS

| PHASE | SIDE | CRITERION | DESCRIPTION | REQ. | ATT. | UNIT | STATUS |
|---|---|---|---|---|---|---|---|
| EQ | PS | FMAW_DAM_M. | Deck edge not immersed | 0.000 | 1.741 | m | OK |
| EQ | PS | FMAW_DAM_R. | Varalaita aukkoon | 0.300 | 3.955 | m | OK |
| EQ | PS | FMAW_DAM_M. | Max heel 10 degrees | 10.000 | 0.000 | deg | OK |
| EQ | PS | FMAW_DAM_R. | Positive range at least 1. | 15.000 | 62.656 | deg | OK |
| EQ | PS | FMAW_DAM_M. | Max GZ at least 0.1m | 0.100 | 0.432 | m | OK |
| EQ | PS | FMAW_DAM_D. | Pinta-ala 0.015 mrad | 0.015 | 0.254 | mrad | OK |




COMPARTMENT FILLING AND FLOATING POSITION, LOAD/DAMAGE CASE I1/D7




GZ-CURVE IN EQUILIBRIUM STAGE, LOAD/DAMAGE CASE I1/D7

I= 2
INICASE= I1_ICE
INITIAL CASE I1_ICE ----------

| INIT | | I1_ICE |
|---|---|---|
| T0 | m | 0.929 |
| TR0 | m | -0.499 |
| HEEL0 | degree | 0.0 |
| DSP0 | t | 46.9 |
| GM0 | m | 1.740 |

DAMAGE CASE D7
DAMAGED COMPARTMENTS

| DAMAGE CASE DESCRIPTION | COMPARTMENT | PERM. | VOLUME m3 | XCG m | YCG m | ZCG m |
|---|---|---|---|---|---|---|
| D7 | R7 | 0.95 | 10.7 | 17.33 | 0.00 | 1.48 |

INITIAL/DAMAGE CASE I1_ICE/D7 FLOATING POSITION

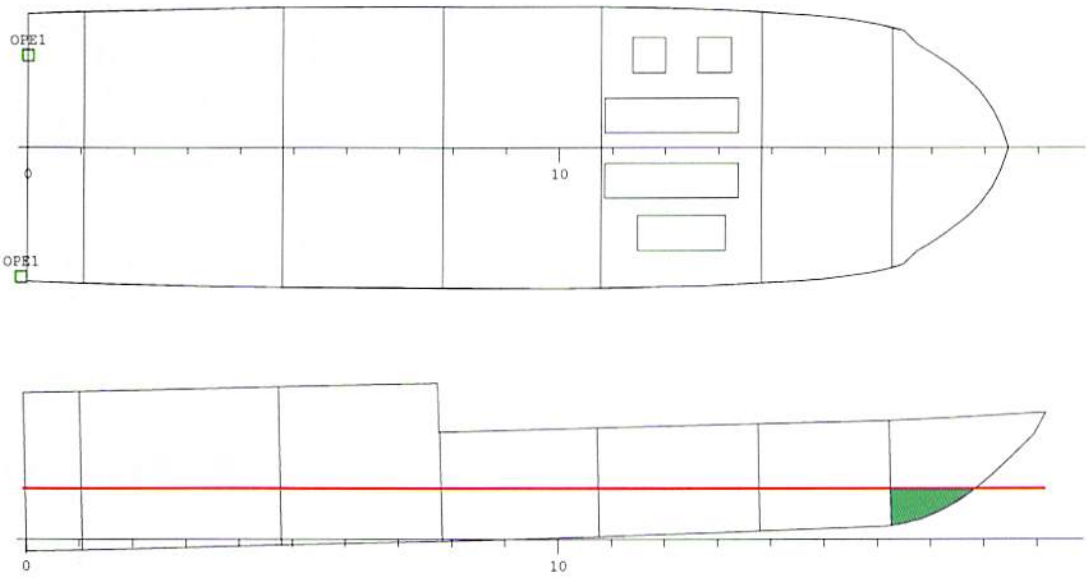
| CASE | PHASE | T m | TR m | HEEL degree | MINGM m | GZMAXR m | MARG.LINE m |
|---|---|---|---|---|---|---|---|
| I1_ICE/D7 | EQ | 0.93 | -0.50 | 0.0 | 1.427 | 0.41 | 1.67 |
| I1_ICE/D7 | EQ | 0.94 | -0.44 | 0.0 | 1.479 | 0.41 | 1.68 |

INITIAL/DAMAGE CASE I1_ICE/D7 IMMERSION ANGLE AND DOWNFLOODING HEIGHT OF OPENINGS
EQUILIBRIUM CONDITION AFTER FLOODING

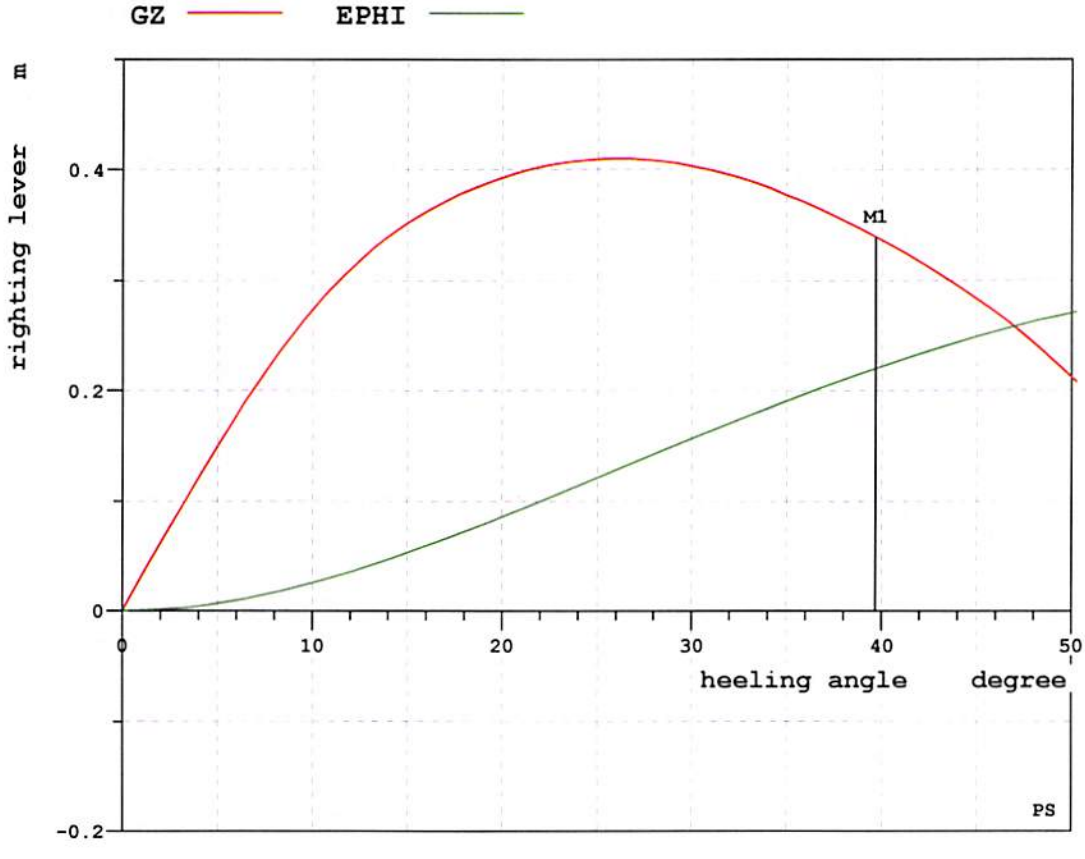
| PHASE | NAME | DESCRIPTION | SIDE | CONNECT | FL.ANGLE degree | FL.HEIGH m |
|---|---|---|---|---|---|---|
| EQ | OPE1 | Engine air inlet | PS | | 78.43 | 3.90 |

INITIAL/DAMAGE CASE I1_ICE/D7 SUMMARY OF CRITERIA STATUS

| PHASE | SIDE | CRITERION | DESCRIPTION | REQ. | ATT. | UNIT | STATUS |
|---|---|---|---|---|---|---|---|
| EQ | PS | FMAW_DAM_M. | Deck edge not immersed | 0.000 | 1.684 | m | OK |
| EQ | PS | FMAW_DAM_R. | Varalaita aukkoon | 0.300 | 3.899 | m | OK |
| EQ | PS | FMAW_DAM_M. | Max heel 10 degrees | 10.000 | 0.000 | deg | OK |
| EQ | PS | FMAW_DAM_R. | Positive range at least 1. | 15.000 | 60.656 | deg | OK |
| EQ | PS | FMAW_DAM_M. | Max GZ at least 0.1m | 0.100 | 0.410 | m | OK |
| EQ | PS | FMAW_DAM_D. | Pinta-ala 0.015 mrad | 0.015 | 0.223 | mrad | OK |




COMPARTMENT FILLING AND FLOATING POSITION, LOAD/DAMAGE CASE I1_ICE/D7




GZ-CURVE IN EQUILIBRIUM STAGE, LOAD/DAMAGE CASE I1_ICE/D7

I= 3
INICASE= I2
INITIAL CASE I2 ----------

| INIT | | I2 |
|---|---|---|
| T0 | m | 0.977 |
| TR0 | m | -0.298 |
| HEEL0 | degree | 0.0 |
| DSP0 | t | 50.0 |
| GM0 | m | 1.703 |

DAMAGE CASE D7
DAMAGED COMPARTMENTS

| DAMAGE CASE DESCRIPTION | COMPARTMENT | PERM. | VOLUME m3 | XCG m | YCG m | ZCG m |
|---|---|---|---|---|---|---|
| D7 | R7 | 0.95 | 10.7 | 17.33 | 0.00 | 1.48 |

INITIAL/DAMAGE CASE I2/D7 FLOATING POSITION

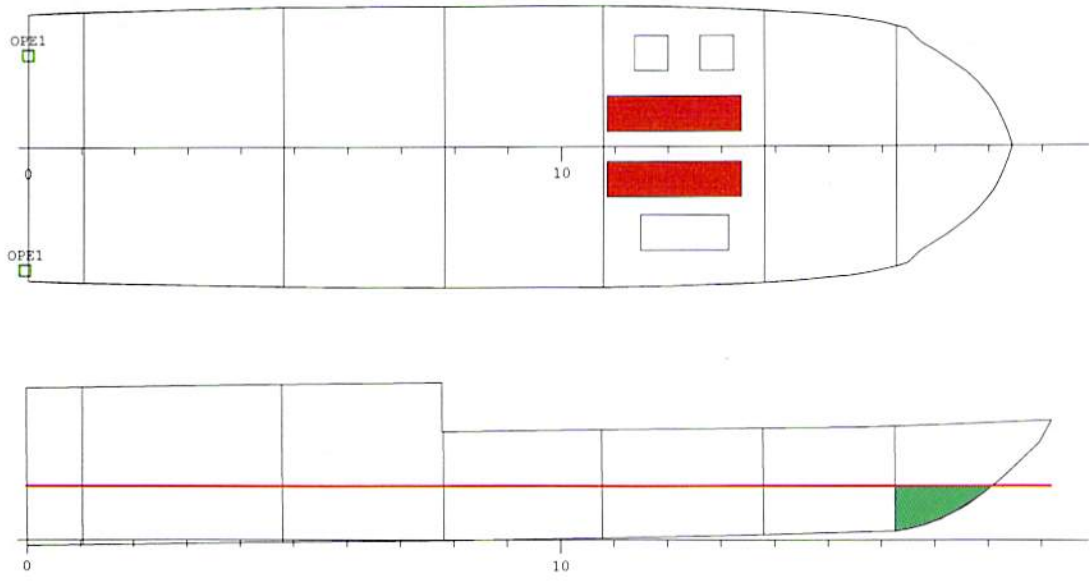
| CASE | PHASE | T m | TR m | HEEL degree | MINGM m | GZMAXR m | MARG.LINE m |
|---|---|---|---|---|---|---|---|
| I2/D7 | EQ | 0.98 | -0.30 | 0.0 | 1.426 | 0.40 | 1.72 |
| I2/D7 | EQ | 0.99 | -0.20 | 0.0 | 1.524 | 0.40 | 1.75 |

INITIAL/DAMAGE CASE I2/D7 IMMERSION ANGLE AND DOWNFLOODING HEIGHT OF OPENINGS
EQUILIBRIUM CONDITION AFTER FLOODING

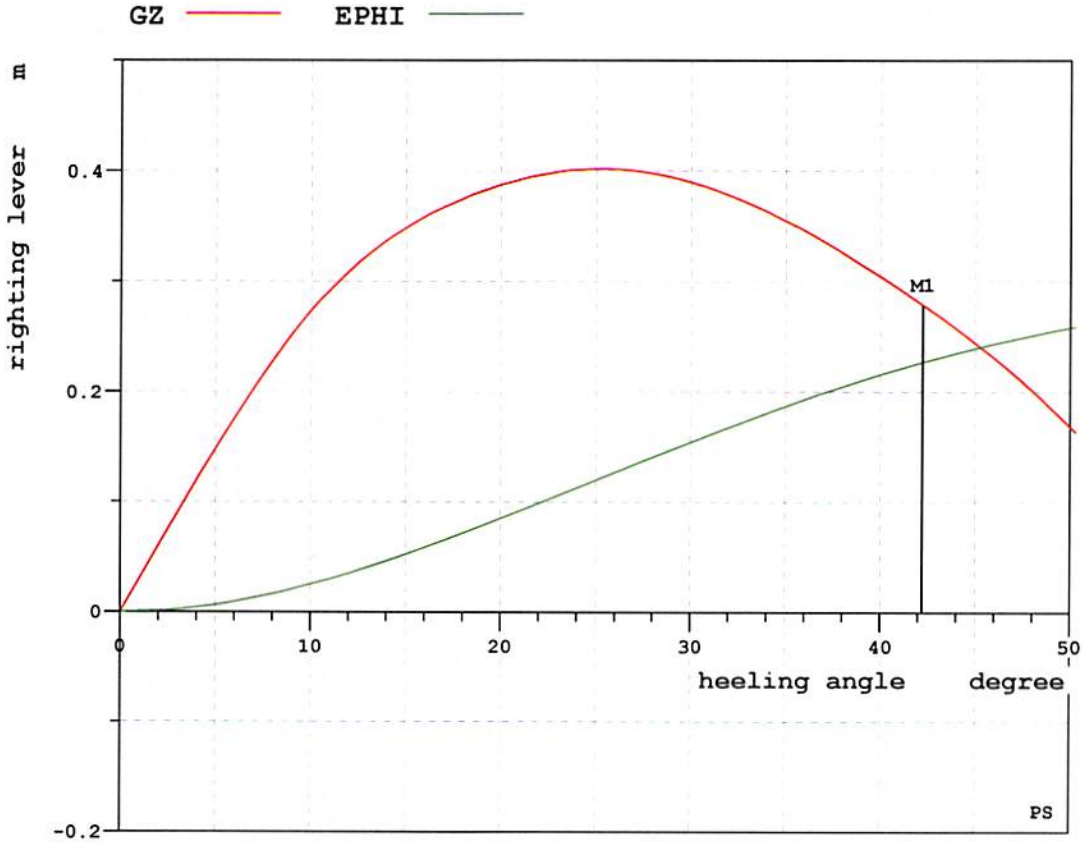
| PHASE | NAME | DESCRIPTION | SIDE | CONNECT | FL.ANGLE degree | FL.HEIGH m |
|---|---|---|---|---|---|---|
| EQ | OPE1 | Engine air inlet | PS | | 81.12 | 3.96 |

INITIAL/DAMAGE CASE I2/D7 SUMMARY OF CRITERIA STATUS

| PHASE | SIDE | CRITERION | DESCRIPTION | REQ. | ATT. | UNIT | STATUS |
|---|---|---|---|---|---|---|---|
| EQ | PS | FMAW_DAM_M. | Deck edge not immersed | 0.000 | 1.748 | m | OK |
| EQ | PS | FMAW_DAM_R. | Varalaita aukkoon | 0.300 | 3.963 | m | OK |
| EQ | PS | FMAW_DAM_M. | Max heel 10 degrees | 10.000 | 0.000 | deg | OK |
| EQ | PS | FMAW_DAM_R. | Positive range at least 1. | 15.000 | 58.706 | deg | OK |
| EQ | PS | FMAW_DAM_M. | Max GZ at least 0.1m | 0.100 | 0.402 | m | OK |
| EQ | PS | FMAW_DAM_D. | Pinta-ala 0.015 mrad | 0.015 | 0.164 | mrad | OK |




COMPARTMENT FILLING AND FLOATING POSITION, LOAD/DAMAGE CASE I2/D7




GZ-CURVE IN EQUILIBRIUM STAGE, LOAD/DAMAGE CASE I2/D7

I= 4
INICASE= I21
INITIAL CASE I21 ----------

| INIT | | I21 |
|---|---|---|
| T0 | m | 1.038 |
| TR0 | m | -0.072 |
| HEEL0 | degree | 0.0 |
| DSP0 | t | 54.5 |
| GM0 | m | 1.640 |

DAMAGE CASE D7
DAMAGED COMPARTMENTS

| DAMAGE CASE DESCRIPTION | COMPARTMENT | PERM. | VOLUME m3 | XCG m | YCG m | ZCG m |
|---|---|---|---|---|---|---|
| D7 | R7 | 0.95 | 10.7 | 17.33 | 0.00 | 1.48 |

INITIAL/DAMAGE CASE I21/D7 FLOATING POSITION

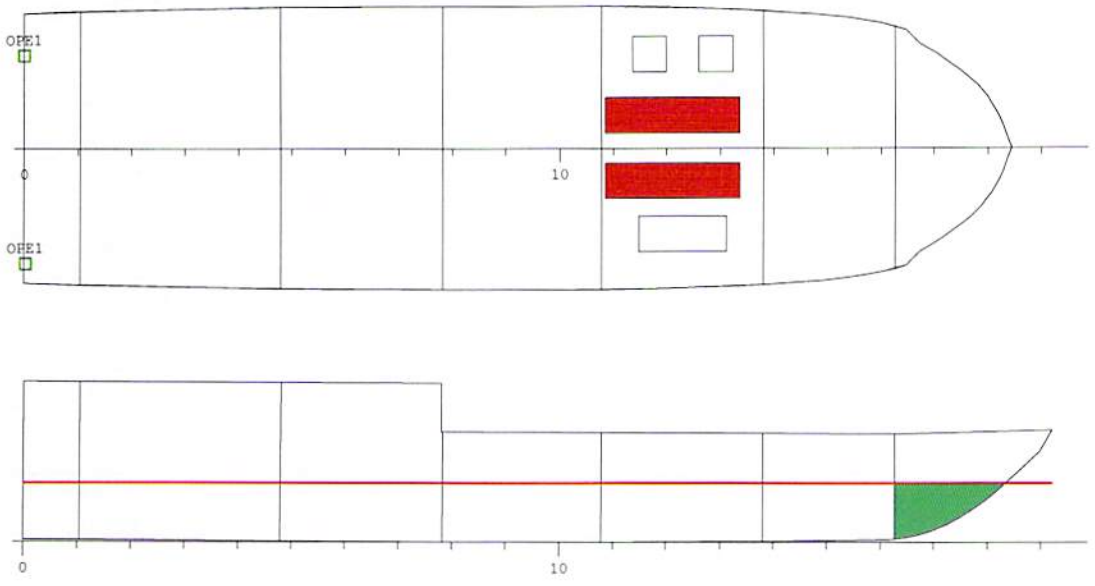
| CASE | PHASE | T m | TR m | HEEL degree | MINGM m | GZMAXR m | MARG.LINE m |
|---|---|---|---|---|---|---|---|
| I21/D7 | EQ | 1.04 | -0.07 | 0.0 | 1.377 | 0.41 | 1.77 |
| I21/D7 | EQ | 1.07 | 0.07 | 0.0 | 1.531 | 0.41 | 1.74 |

INITIAL/DAMAGE CASE I21/D7 IMMERSION ANGLE AND DOWNFLOODING HEIGHT OF OPENINGS
EQUILIBRIUM CONDITION AFTER FLOODING

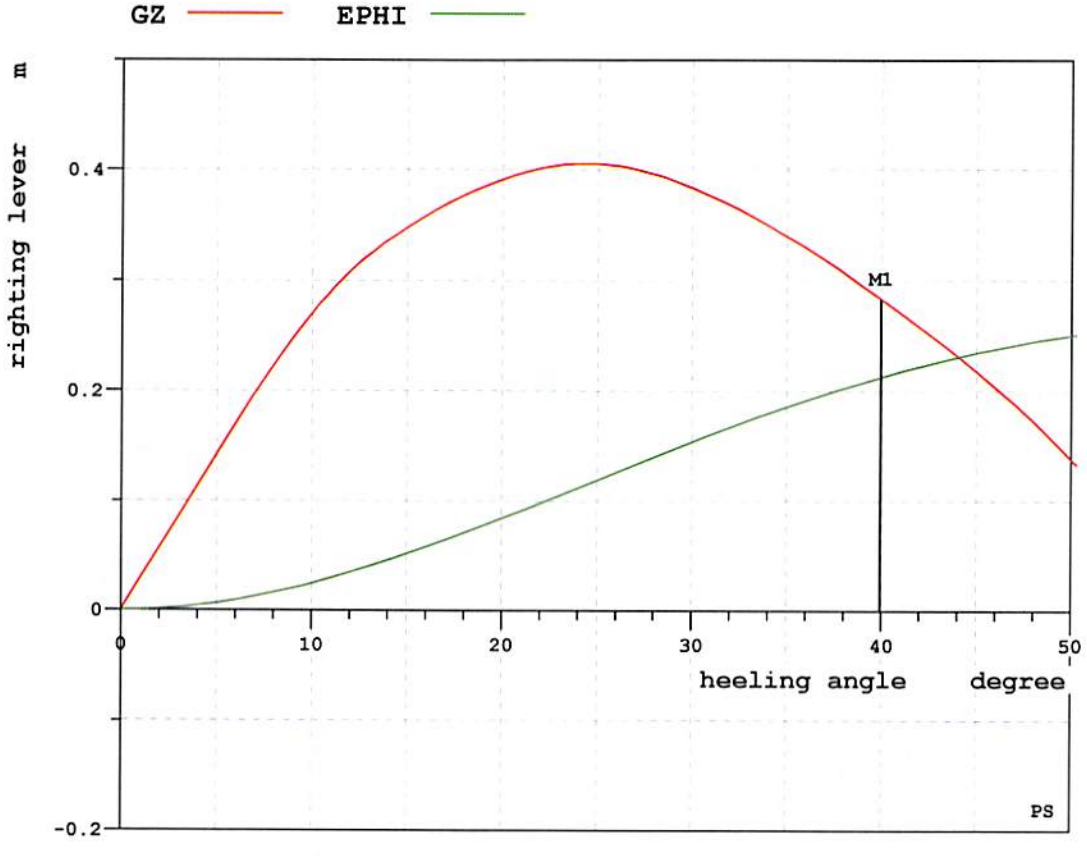
| PHASE | NAME | DESCRIPTION | SIDE | CONNECT | FL.ANGLE degree | FL.HEIGH m |
|---|---|---|---|---|---|---|
| EQ | OPE1 | Engine air inlet | PS | | 84.23 | 4.03 |

INITIAL/DAMAGE CASE I21/D7 SUMMARY OF CRITERIA STATUS

| PHASE | SIDE | CRITERION | DESCRIPTION | REQ. | ATT. | UNIT | STATUS |
|---|---|---|---|---|---|---|---|
| EQ | PS | FMAW_DAM_M. | Deck edge not immersed | 0.000 | 1.736 | m | OK |
| EQ | PS | FMAW_DAM_R. | Varalaita aukkoon | 0.300 | 4.032 | m | OK |
| EQ | PS | FMAW_DAM_M. | Max heel 10 degrees | 10.000 | 0.000 | deg | OK |
| EQ | PS | FMAW_DAM_R. | Positive range at least 1. | 15.000 | 57.241 | deg | OK |
| EQ | PS | FMAW_DAM_M. | Max GZ at least 0.1m | 0.100 | 0.405 | m | OK |
| EQ | PS | FMAW_DAM_D. | Pinta-ala 0.015 mrad | 0.015 | 0.111 | mrad | OK |




COMPARTMENT FILLING AND FLOATING POSITION, LOAD/DAMAGE CASE I21/D7




GZ-CURVE IN EQUILIBRIUM STAGE, LOAD/DAMAGE CASE I21/D7

I= 5
INICASE= I21_ICE
INITIAL CASE I21_ICE ----------

| INIT | | I21_ICE |
|---|---|---|
| T0 | m | 1.081 |
| TR0 | m | -0.110 |
| HEEL0 | degree | 0.0 |
| DSP0 | t | 58.4 |
| GM0 | m | 1.468 |

DAMAGE CASE D7
DAMAGED COMPARTMENTS

| DAMAGE CASE DESCRIPTION | COMPARTMENT | PERM. | VOLUME m3 | XCG m | YCG m | ZCG m |
|---|---|---|---|---|---|---|
| D7 | R7 | 0.95 | 10.7 | 17.33 | 0.00 | 1.48 |

INITIAL/DAMAGE CASE I21_ICE/D7 FLOATING POSITION

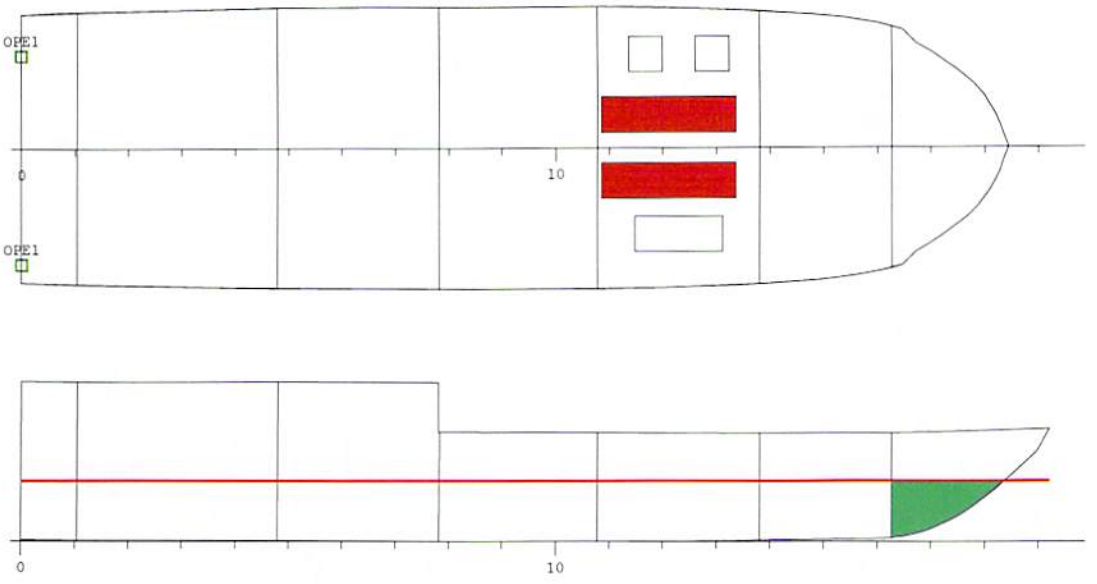
| CASE | PHASE | T m | TR m | HEEL degree | MINGM m | GZMAXR m | MARG.LINE m |
|---|---|---|---|---|---|---|---|
| I21_ICE/D7 | EQ | 1.08 | -0.11 | 0.0 | 1.228 | 0.39 | 1.71 |
| I21_ICE/D7 | EQ | 1.11 | 0.05 | 0.0 | 1.382 | 0.38 | 1.71 |

INITIAL/DAMAGE CASE I21_ICE/D7 IMMERSION ANGLE AND DOWNFLOODING HEIGHT OF OPENINGS
EQUILIBRIUM CONDITION AFTER FLOODING

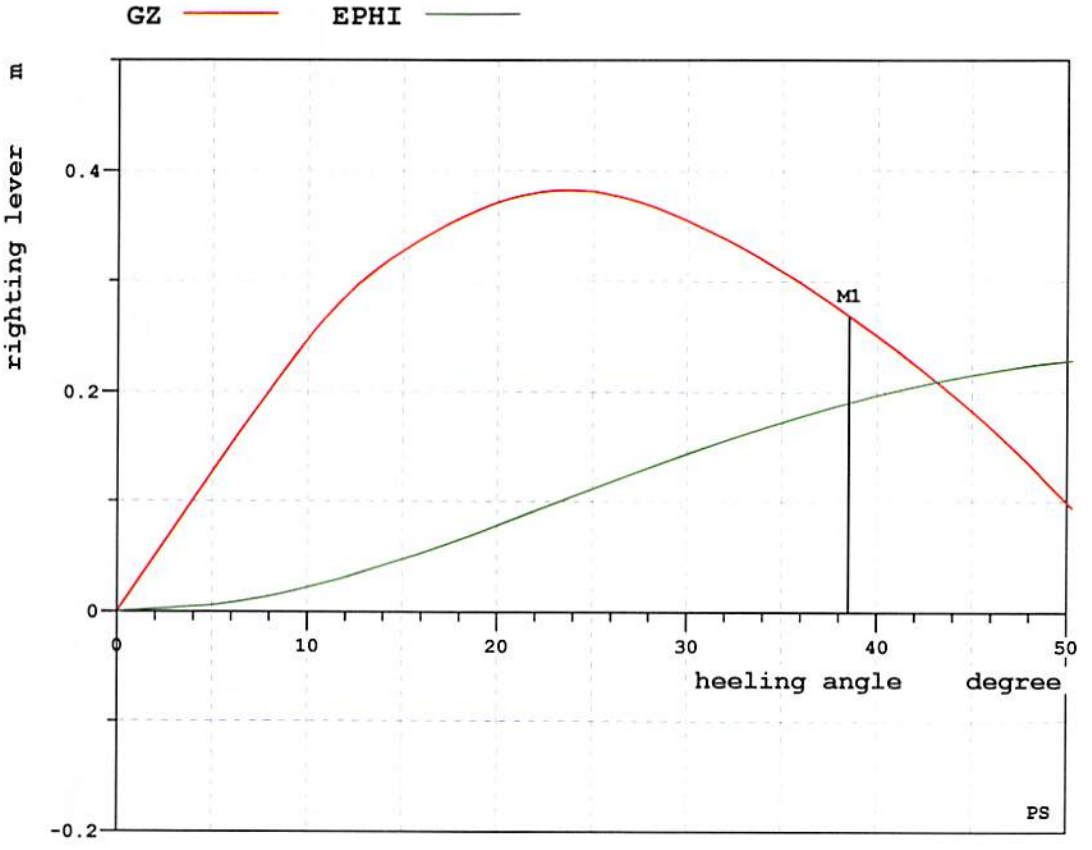
| PHASE | NAME | DESCRIPTION | SIDE | CONNECT | FL.ANGLE degree | FL.HEIGH m |
|---|---|---|---|---|---|---|
| EQ | OPE1 | Engine air inlet | PS | | 82.38 | 3.97 |

INITIAL/DAMAGE CASE I21_ICE/D7 SUMMARY OF CRITERIA STATUS

| PHASE | SIDE | CRITERION | DESCRIPTION | REQ. | ATT. | UNIT | STATUS |
|---|---|---|---|---|---|---|---|
| EQ | PS | FMAW_DAM_M. | Deck edge not immersed | 0.000 | 1.707 | m | OK |
| EQ | PS | FMAW_DAM_R. | Varalaita aukkoon | 0.300 | 3.973 | m | OK |
| EQ | PS | FMAW_DAM_M. | Max heel 10 degrees | 10.000 | 0.000 | deg | OK |
| EQ | PS | FMAW_DAM_R. | Positive range at least 1. | 15.000 | 55.155 | deg | OK |
| EQ | PS | FMAW_DAM_M. | Max GZ at least 0.1m | 0.100 | 0.383 | m | OK |
| EQ | PS | FMAW_DAM_D. | Pinta-ala 0.015 mrad | 0.015 | 0.087 | mrad | OK |




COMPARTMENT FILLING AND FLOATING POSITION, LOAD/DAMAGE CASE I21_ICE/D7




GZ-CURVE IN EQUILIBRIUM STAGE, LOAD/DAMAGE CASE I21_ICE/D7

I= 6
INICASE= I2_ICE
INITIAL CASE I2_ICE ----------

| INIT | | I2_ICE |
|---|---|---|
| T0 | m | 1.021 |
| TR0 | m | -0.332 |
| HEEL0 | degree | 0.0 |
| DSP0 | t | 53.9 |
| GM0 | m | 1.525 |

DAMAGE CASE D7
DAMAGED COMPARTMENTS

| DAMAGE CASE DESCRIPTION | COMPARTMENT | PERM. | VOLUME m3 | XCG m | YCG m | ZCG m |
|---|---|---|---|---|---|---|
| D7 | R7 | 0.95 | 10.7 | 17.33 | 0.00 | 1.48 |

INITIAL/DAMAGE CASE I2_ICE/D7 FLOATING POSITION

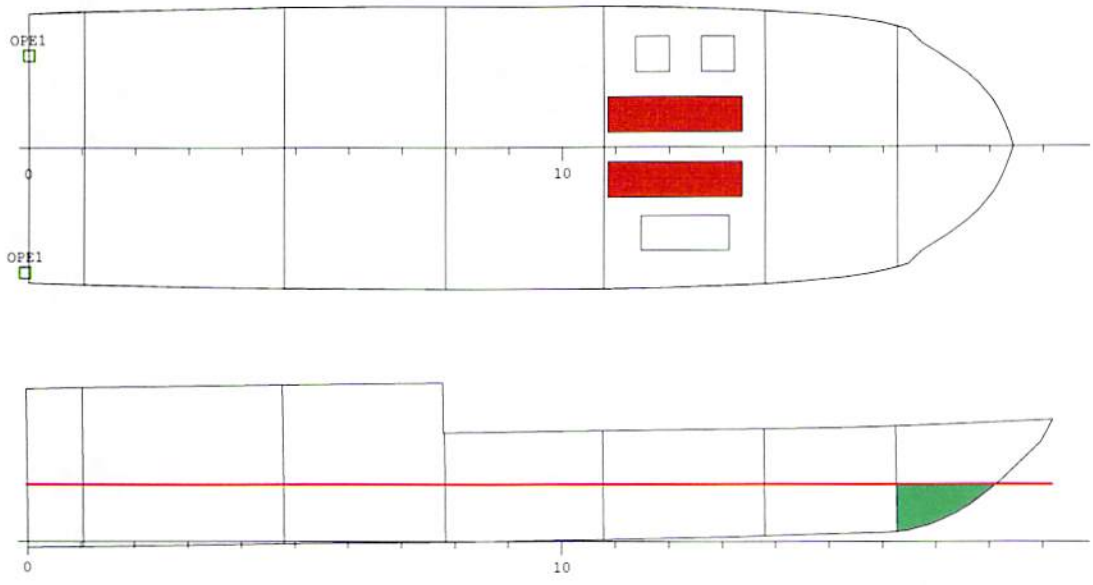
| CASE | PHASE | T m | TR m | HEEL degree | MINGM m | GZMAXR m | MARG.LINE m |
|---|---|---|---|---|---|---|---|
| I2_ICE/D7 | EQ | 1.02 | -0.33 | 0.0 | 1.272 | 0.38 | 1.66 |
| I2_ICE/D7 | EQ | 1.04 | -0.23 | 0.0 | 1.371 | 0.38 | 1.69 |

INITIAL/DAMAGE CASE I2_ICE/D7 IMMERSION ANGLE AND DOWNFLOODING HEIGHT OF OPENINGS
EQUILIBRIUM CONDITION AFTER FLOODING

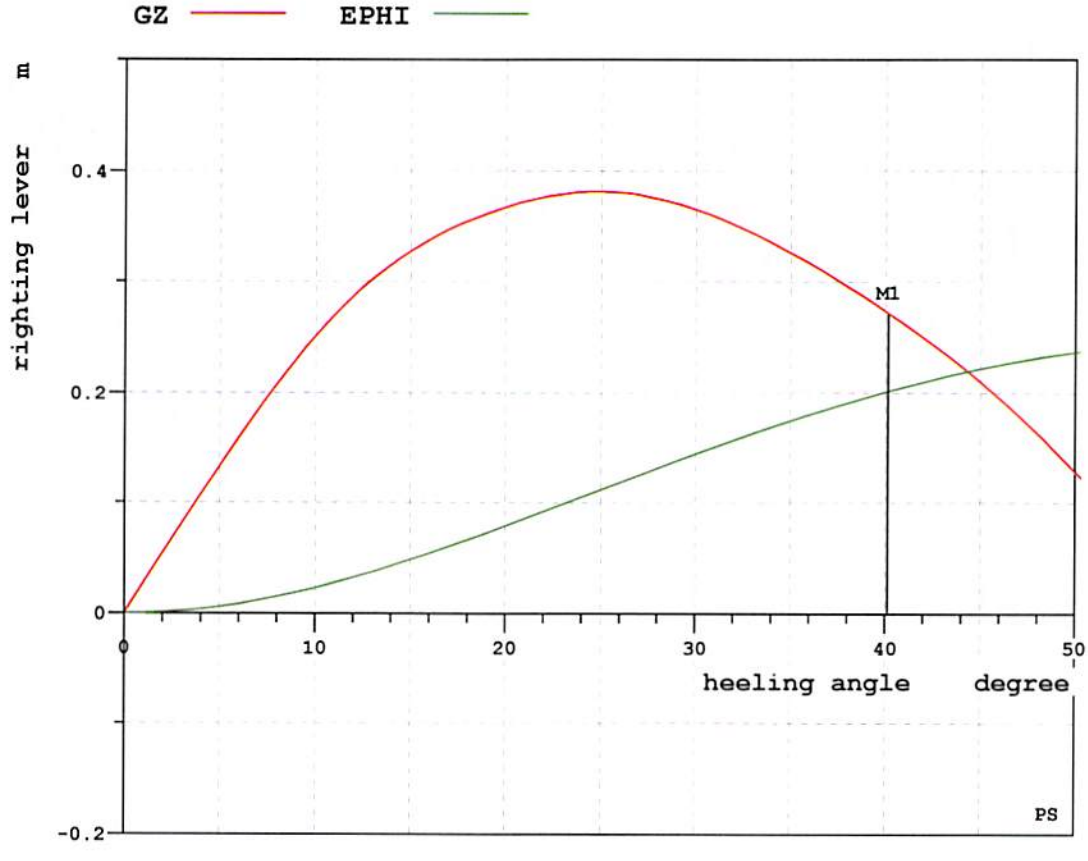
| PHASE | NAME | DESCRIPTION | SIDE | CONNECT | FL.ANGLE degree | FL.HEIGH m |
|---|---|---|---|---|---|---|
| EQ | OPE1 | Engine air inlet | PS | | 79.34 | 3.91 |

INITIAL/DAMAGE CASE I2_ICE/D7 SUMMARY OF CRITERIA STATUS

| PHASE | SIDE | CRITERION | DESCRIPTION | REQ. | ATT. | UNIT | STATUS |
|---|---|---|---|---|---|---|---|
| EQ | PS | FMAW_DAM_M. | Deck edge not immersed | 0.000 | 1.690 | m | OK |
| EQ | PS | FMAW_DAM_R. | Varalaita aukkoon | 0.300 | 3.905 | m | OK |
| EQ | PS | FMAW_DAM_M. | Max heel 10 degrees | 10.000 | 0.000 | deg | OK |
| EQ | PS | FMAW_DAM_R. | Positive range at least 1. | 15.000 | 56.582 | deg | OK |
| EQ | PS | FMAW_DAM_M. | Max GZ at least 0.1m | 0.100 | 0.381 | m | OK |
| EQ | PS | FMAW_DAM_D. | Pinta-ala 0.015 mrad | 0.015 | 0.139 | mrad | OK |




COMPARTMENT FILLING AND FLOATING POSITION, LOAD/DAMAGE CASE I2_ICE/D7




GZ-CURVE IN EQUILIBRIUM STAGE, LOAD/DAMAGE CASE I2_ICE/D7

I= 7
INICASE= I3
INITIAL CASE I3 ----------

| INIT | | I3 |
|---|---|---|
| T0 | m | 0.955 |
| TR0 | m | -0.345 |
| HEEL0 | degree | 0.0 |
| DSP0 | t | 48.4 |
| GM0 | m | 1.707 |

DAMAGE CASE D7
DAMAGED COMPARTMENTS

| DAMAGE CASE DESCRIPTION | COMPARTMENT | PERM. | VOLUME m3 | XCG m | YCG m | ZCG m |
|---|---|---|---|---|---|---|
| D7 | R7 | 0.95 | 10.7 | 17.33 | 0.00 | 1.48 |

INITIAL/DAMAGE CASE I3/D7 FLOATING POSITION

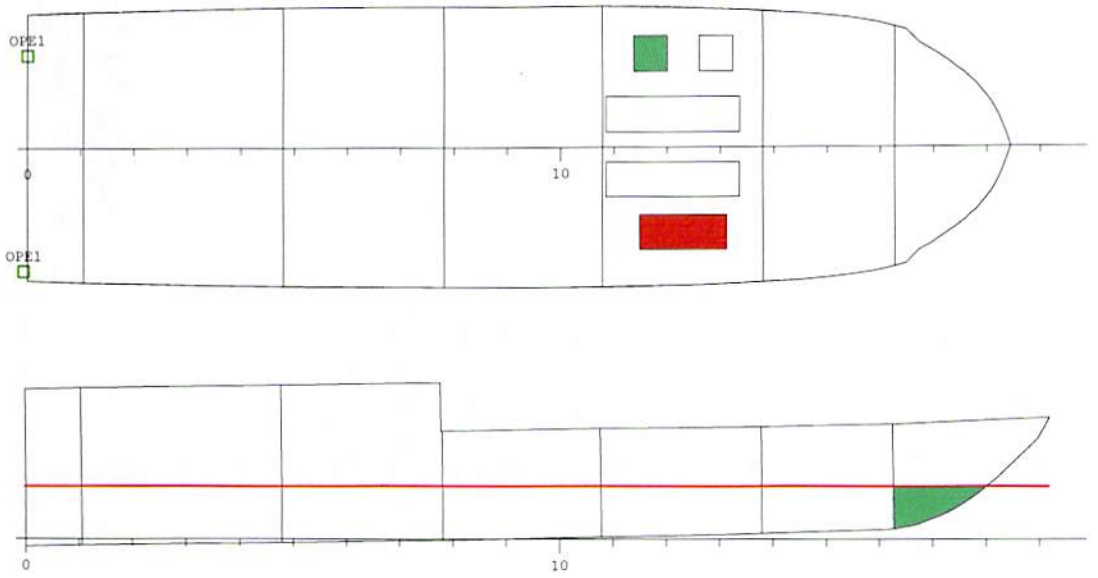
| CASE | PHASE | T m | TR m | HEEL degree | MINGM m | GZMAXR m | MARG.LINE m |
|---|---|---|---|---|---|---|---|
| I3/D7 | EQ | 0.96 | -0.34 | 0.0 | 1.467 | 0.38 | 1.72 |
| I3/D7 | EQ | 0.97 | -0.26 | 0.0 | 1.551 | 0.39 | 1.74 |

INITIAL/DAMAGE CASE I3/D7 IMMERSION ANGLE AND DOWNFLOODING HEIGHT OF OPENINGS
EQUILIBRIUM CONDITION AFTER FLOODING

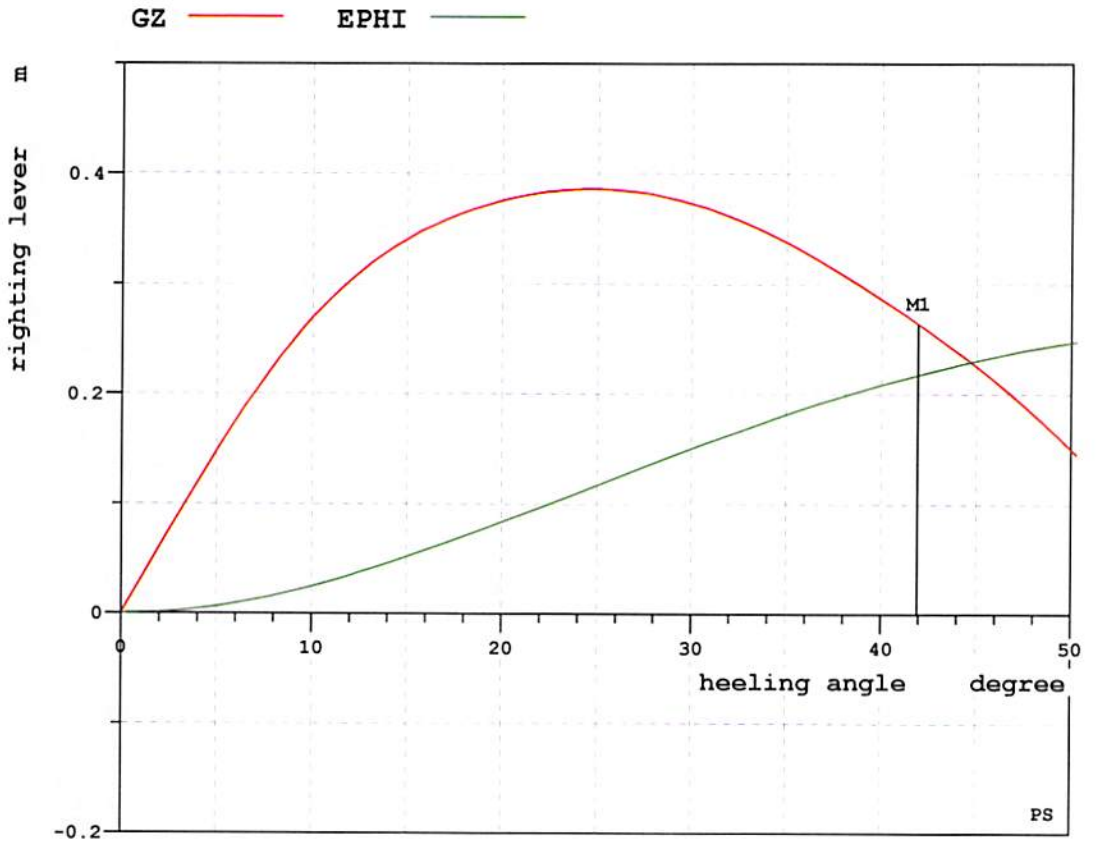
| PHASE | NAME | DESCRIPTION | SIDE | CONNECT | FL.ANGLE degree | FL.HEIGH m |
|---|---|---|---|---|---|---|
| EQ | OPE1 | Engine air inlet | PS | | 80.75 | 3.96 |

INITIAL/DAMAGE CASE I3/D7 SUMMARY OF CRITERIA STATUS

| PHASE | SIDE | CRITERION | DESCRIPTION | REQ. | ATT. | UNIT | STATUS |
|---|---|---|---|---|---|---|---|
| EQ | PS | FMAW_DAM_M. | Deck edge not immersed | 0.000 | 1.743 | m | OK |
| EQ | PS | FMAW_DAM_R. | Varalaita aukkoon | 0.300 | 3.957 | m | OK |
| EQ | PS | FMAW_DAM_M. | Max heel 10 degrees | 10.000 | 0.000 | deg | OK |
| EQ | PS | FMAW_DAM_R. | Positive range at least 1. | 15.000 | 57.695 | deg | OK |
| EQ | PS | FMAW_DAM_M. | Max GZ at least 0.1m | 0.100 | 0.386 | m | OK |
| EQ | PS | FMAW_DAM_D. | Pinta-ala 0.015 mrad | 0.015 | 0.143 | mrad | OK |




COMPARTMENT FILLING AND FLOATING POSITION, LOAD/DAMAGE CASE I3/D7




GZ-CURVE IN EQUILIBRIUM STAGE, LOAD/DAMAGE CASE I3/D7

I= 8
INICASE= I31
INITIAL CASE I31 ----------

| INIT | | I31 |
|---|---|---|
| T0 | m | 1.018 |
| TR0 | m | -0.112 |
| HEEL0 | degree | 0.0 |
| DSP0 | t | 52.9 |
| GM0 | m | 1.653 |

DAMAGE CASE D7
DAMAGED COMPARTMENTS

| DAMAGE CASE DESCRIPTION | COMPARTMENT | PERM. | VOLUME m3 | XCG m | YCG m | ZCG m |
|---|---|---|---|---|---|---|
| D7 | R7 | 0.95 | 10.7 | 17.33 | 0.00 | 1.48 |

INITIAL/DAMAGE CASE I31/D7 FLOATING POSITION

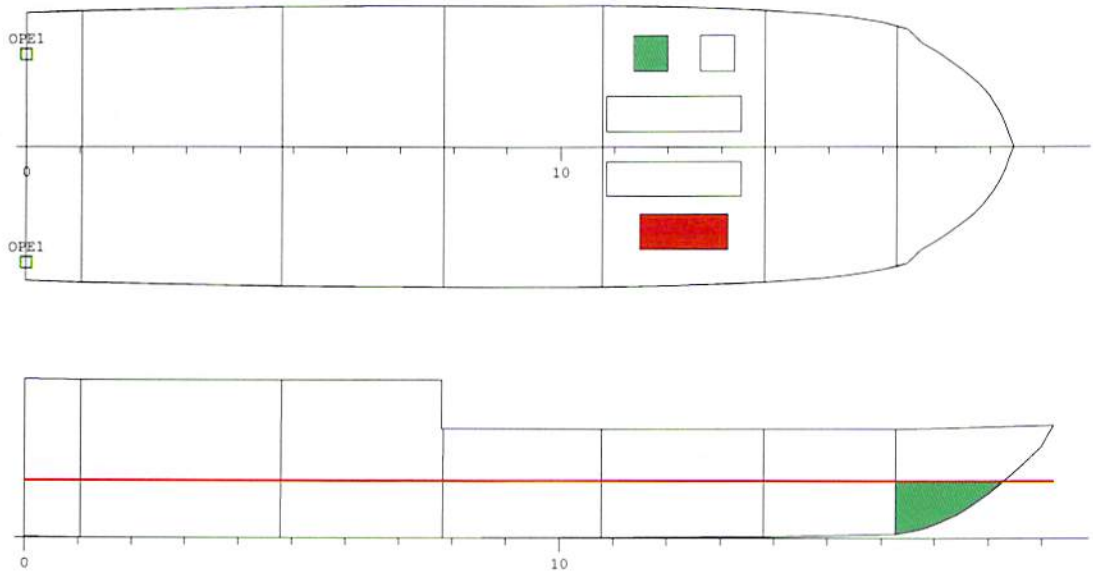
| CASE | PHASE | T m | TR m | HEEL degree | MINGM m | GZMAXR m | MARG.LINE m |
|---|---|---|---|---|---|---|---|
| I31/D7 | EQ | 1.02 | -0.11 | 0.0 | 1.418 | 0.39 | 1.77 |
| I31/D7 | EQ | 1.04 | 0.02 | 0.0 | 1.561 | 0.39 | 1.79 |

INITIAL/DAMAGE CASE I31/D7 IMMERSION ANGLE AND DOWNFLOODING HEIGHT OF OPENINGS
EQUILIBRIUM CONDITION AFTER FLOODING

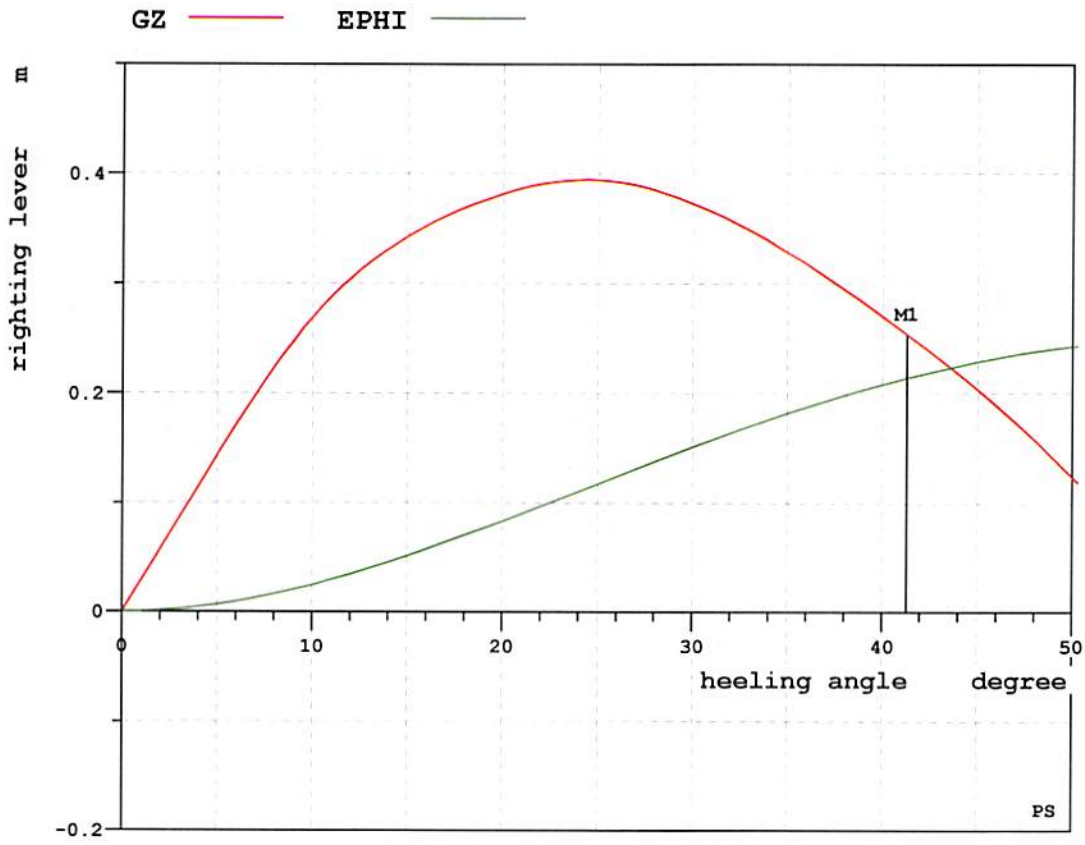
| PHASE | NAME | DESCRIPTION | SIDE | CONNECT | FL.ANGLE degree | FL.HEIGH m |
|---|---|---|---|---|---|---|
| EQ | OPE1 | Engine air inlet | PS | | 83.93 | 4.03 |

INITIAL/DAMAGE CASE I31/D7 SUMMARY OF CRITERIA STATUS

| PHASE | SIDE | CRITERION | DESCRIPTION | REQ. | ATT. | UNIT | STATUS |
|---|---|---|---|---|---|---|---|
| EQ | PS | FMAW_DAM_M. | Deck edge not immersed | 0.000 | 1.790 | m | OK |
| EQ | PS | FMAW_DAM_R. | Varalaita aukkoon | 0.300 | 4.028 | m | OK |
| EQ | PS | FMAW_DAM_M. | Max heel 10 degrees | 10.000 | 0.000 | deg | OK |
| EQ | PS | FMAW_DAM_R. | Positive range at least 1. | 15.000 | 56.483 | deg | OK |
| EQ | PS | FMAW_DAM_M. | Max GZ at least 0.1m | 0.100 | 0.394 | m | OK |
| EQ | PS | FMAW_DAM_D. | Pinta-ala 0.015 mrad | 0.015 | 0.094 | mrad | OK |




COMPARTMENT FILLING AND FLOATING POSITION, LOAD/DAMAGE CASE I31/D7




GZ-CURVE IN EQUILIBRIUM STAGE, LOAD/DAMAGE CASE I31/D7

I= 9
INICASE= I31_ICE
INITIAL CASE I31_ICE ----------

| INIT | | I31_ICE |
|---|---|---|
| T0 | m | 1.061 |
| TR0 | m | -0.149 |
| HEEL0 | degree | 0.0 |
| DSP0 | t | 56.7 |
| GM0 | m | 1.480 |

DAMAGE CASE D7
DAMAGED COMPARTMENTS

| DAMAGE CASE DESCRIPTION | COMPARTMENT | PERM. | VOLUME m3 | XCG m | YCG m | ZCG m |
|---|---|---|---|---|---|---|
| D7 | R7 | 0.95 | 10.7 | 17.33 | 0.00 | 1.48 |

INITIAL/DAMAGE CASE I31_ICE/D7 FLOATING POSITION

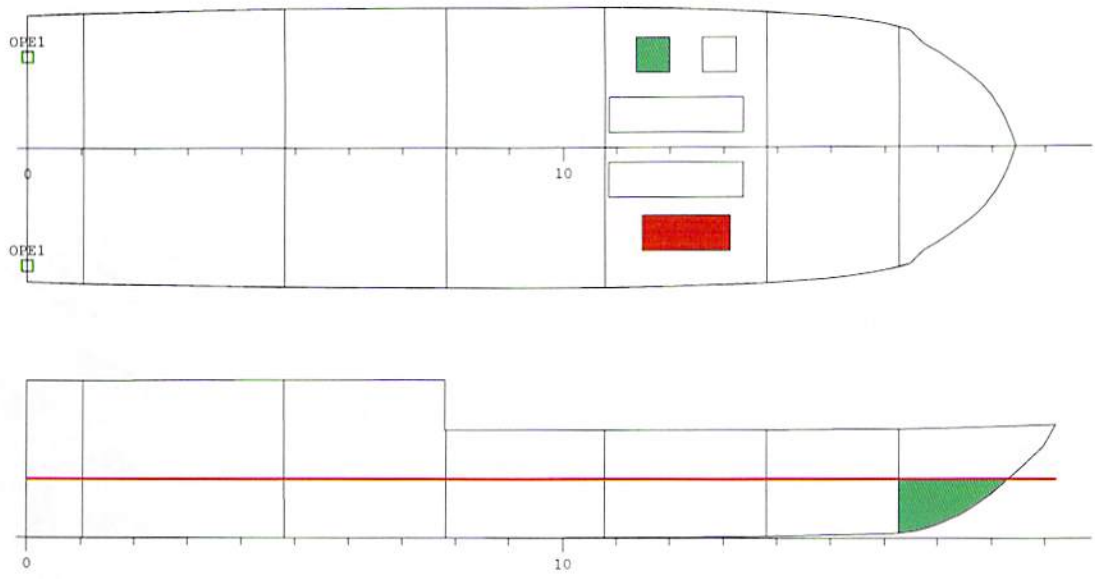
| CASE | PHASE | T m | TR m | HEEL degree | MINGM m | GZMAXR m | MARG.LINE m |
|---|---|---|---|---|---|---|---|
| I31_ICE/D7 | EQ | 1.06 | -0.15 | 0.0 | 1.266 | 0.37 | 1.71 |
| I31_ICE/D7 | EQ | 1.09 | -0.01 | 0.0 | 1.409 | 0.37 | 1.75 |

INITIAL/DAMAGE CASE I31_ICE/D7 IMMERSION ANGLE AND DOWNFLOODING HEIGHT OF OPENINGS
EQUILIBRIUM CONDITION AFTER FLOODING

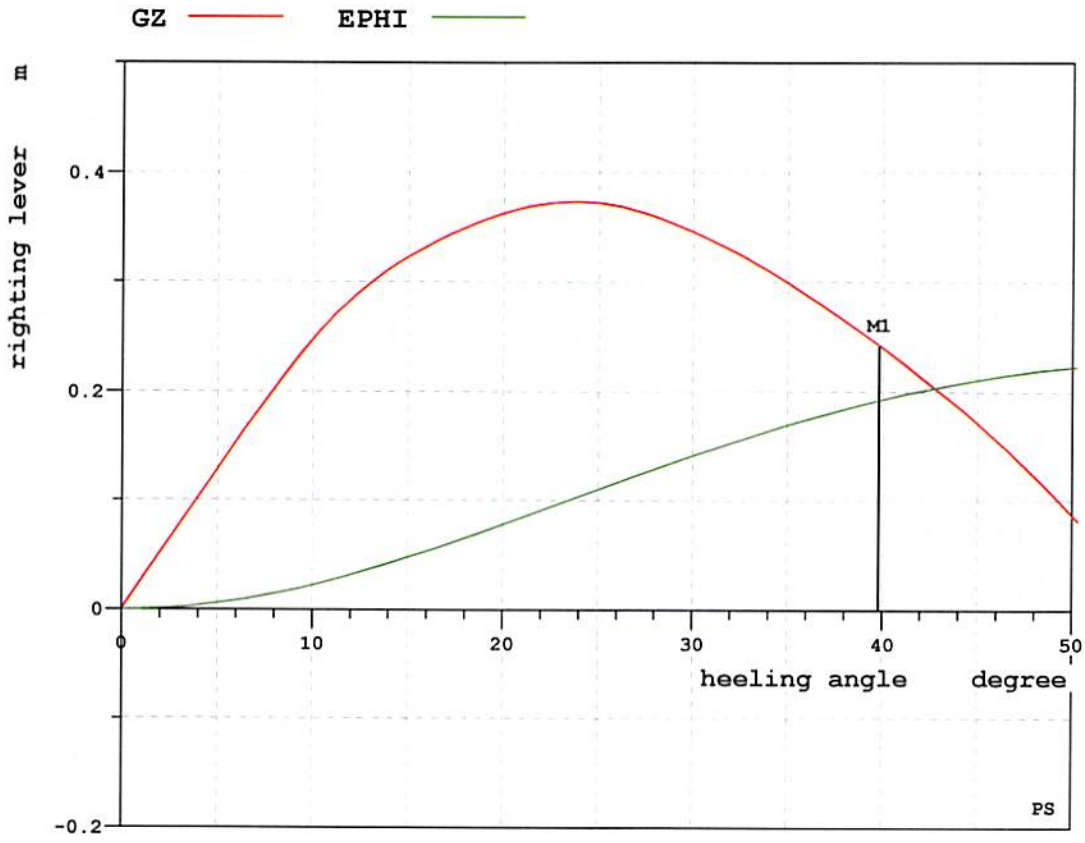
| PHASE | NAME | DESCRIPTION | SIDE | CONNECT | FL.ANGLE degree | FL.HEIGH m |
|---|---|---|---|---|---|---|
| EQ | OPE1 | Engine air inlet | PS | | 82.08 | 3.97 |

INITIAL/DAMAGE CASE I31_ICE/D7 SUMMARY OF CRITERIA STATUS

| PHASE | SIDE | CRITERION | DESCRIPTION | REQ. | ATT. | UNIT | STATUS |
|---|---|---|---|---|---|---|---|
| EQ | PS | FMAW_DAM_M. | Deck edge not immersed | 0.000 | 1.754 | m | OK |
| EQ | PS | FMAW_DAM_R. | Varalaita aukkoon | 0.300 | 3.969 | m | OK |
| EQ | PS | FMAW_DAM_M. | Max heel 10 degrees | 10.000 | 0.000 | deg | OK |
| EQ | PS | FMAW_DAM_R. | Positive range at least 1. | 15.000 | 54.454 | deg | OK |
| EQ | PS | FMAW_DAM_M. | Max GZ at least 0.1m | 0.100 | 0.373 | m | OK |
| EQ | PS | FMAW_DAM_D. | Pinta-ala 0.015 mrad | 0.015 | 0.073 | mrad | OK |




COMPARTMENT FILLING AND FLOATING POSITION, LOAD/DAMAGE CASE I31_ICE/D7




GZ-CURVE IN EQUILIBRIUM STAGE, LOAD/DAMAGE CASE I31_ICE/D7

I= 10
INICASE= I3_ICE
INITIAL CASE I3_ICE ----------

| INIT | | I3_ICE |
|---|---|---|
| T0 | m | 0.999 |
| TR0 | m | -0.378 |
| HEEL0 | degree | 0.0 |
| DSP0 | t | 52.2 |
| GM0 | m | 1.528 |

DAMAGE CASE D7
DAMAGED COMPARTMENTS

| DAMAGE CASE DESCRIPTION | COMPARTMENT | PERM. | VOLUME m3 | XCG m | YCG m | ZCG m |
|---|---|---|---|---|---|---|
| D7 | R7 | 0.95 | 10.7 | 17.33 | 0.00 | 1.48 |

INITIAL/DAMAGE CASE I3_ICE/D7 FLOATING POSITION

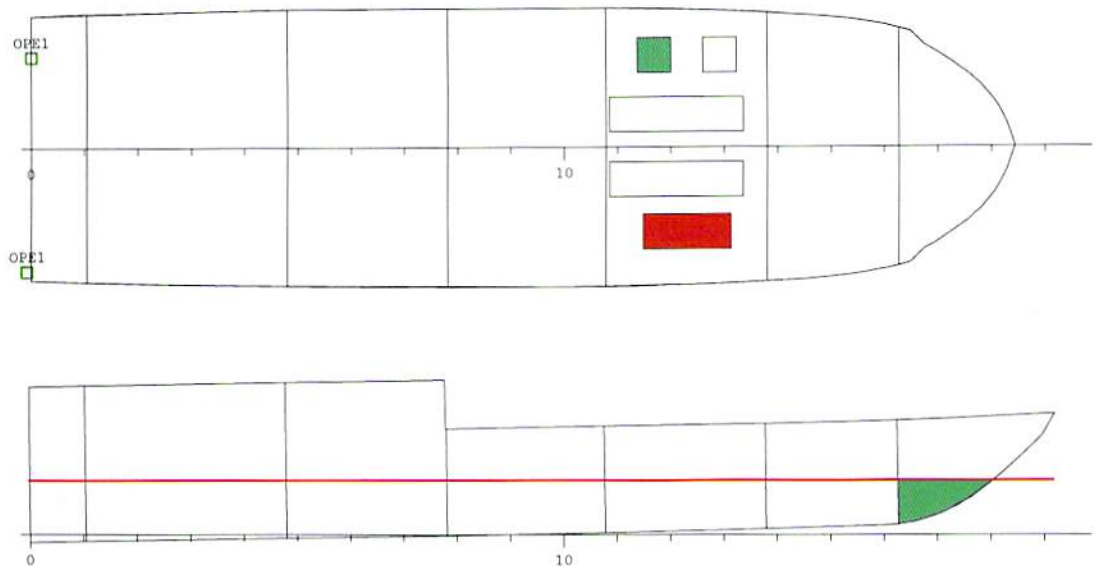
| CASE | PHASE | T m | TR m | HEEL degree | MINGM m | GZMAXR m | MARG.LINE m |
|---|---|---|---|---|---|---|---|
| I3_ICE/D7 | EQ | 1.00 | -0.38 | 0.0 | 1.310 | 0.36 | 1.66 |
| I3_ICE/D7 | EQ | 1.02 | -0.29 | 0.0 | 1.396 | 0.37 | 1.68 |

INITIAL/DAMAGE CASE I3_ICE/D7 IMMERSION ANGLE AND DOWNFLOODING HEIGHT OF OPENINGS
EQUILIBRIUM CONDITION AFTER FLOODING

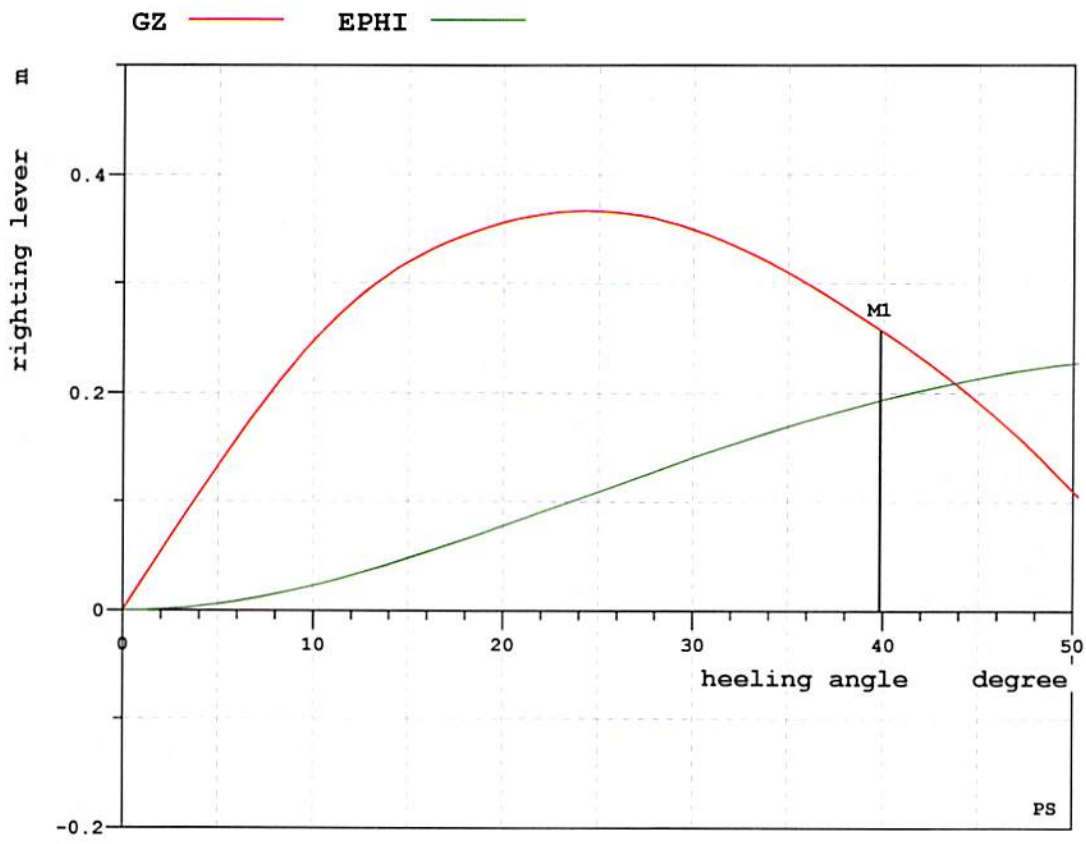
| PHASE | NAME | DESCRIPTION | SIDE | CONNECT | FL.ANGLE degree | FL.HEIGH m |
|---|---|---|---|---|---|---|
| EQ | OPE1 | Engine air inlet | PS | | 78.99 | 3.90 |

INITIAL/DAMAGE CASE I3_ICE/D7 SUMMARY OF CRITERIA STATUS

| PHASE | SIDE | CRITERION | DESCRIPTION | REQ. | ATT. | UNIT | STATUS |
|---|---|---|---|---|---|---|---|
| EQ | PS | FMAW_DAM_M. | Deck edge not immersed | 0.000 | 1.685 | m | OK |
| EQ | PS | FMAW_DAM_R. | Varalaita aukkoon | 0.300 | 3.900 | m | OK |
| EQ | PS | FMAW_DAM_M. | Max heel 10 degrees | 10.000 | 0.000 | deg | OK |
| EQ | PS | FMAW_DAM_R. | Positive range at least 1. | 15.000 | 55.638 | deg | OK |
| EQ | PS | FMAW_DAM_M. | Max GZ at least 0.1m | 0.100 | 0.367 | m | OK |
| EQ | PS | FMAW_DAM_D. | Pinta-ala 0.015 mrad | 0.015 | 0.120 | mrad | OK |




COMPARTMENT FILLING AND FLOATING POSITION, LOAD/DAMAGE CASE I3_ICE/D7




GZ-CURVE IN EQUILIBRIUM STAGE, LOAD/DAMAGE CASE I3_ICE/D7

CORIOLIS
UTVECKLINGS AB

TRANSPORTSTYRELSEN
Göteborgs sjöfartsinspektionsområde
Ink. 2011 -11- 02
Dnr: .....

2011-09-29
CORIOLIS AB

TRANSPORT STYRELSEN
Gothenburg Maritime Inspectorate Office
GODKÄND/APPROVED
Med avseende på/With respect to
FRIBORD
Under förutsättning att givna anmärkningar iakttages
Upon condition that the remarks made are observed
Name
Date 2010-01-10 Dnr TTS 2011-2020

# Arbetsbåten "ASKHOLMEN" ; Reg.bet. SIUD

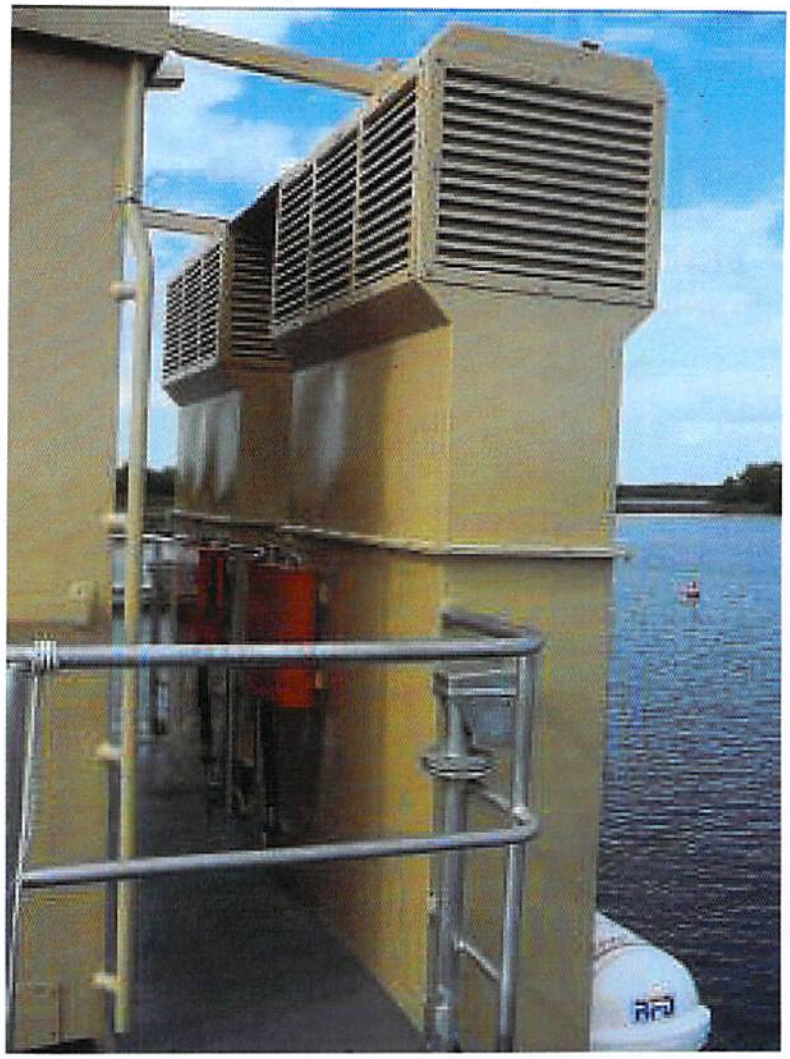
## FRIBORDSPLAN
## Fotografier och Specifikation

**Utgåva B**

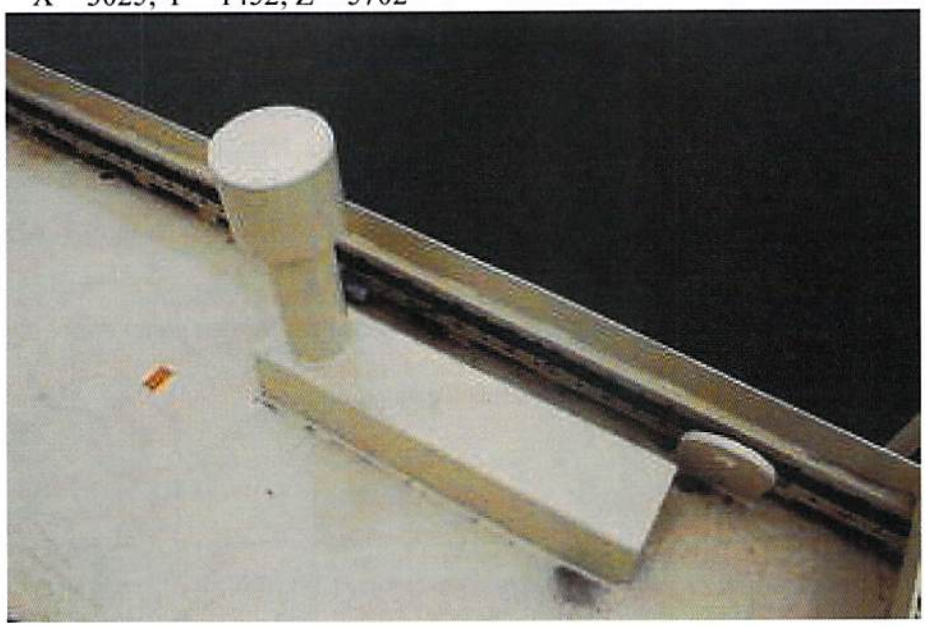
Referensritning: Ritn.nr 102-1 utg.B - Fribordsplan

**NOT:**
Koordinater X, Y och Z avser flödningspunkternas minst gynsamma position m.a.p flödning i krängt läge.
Exempel 1: Ett fönster på ett tvärskeppsskott anges med Y-koordinat extremt bordvarts.
Exempel 2: En serie fönster på ett långskeppsskott anges med X-koordinat för den punkt där. flödning kan förväntas ske först.
Exempel 3: Z-koordinat för ett fönster anges med fönstrets lägsta punkt.

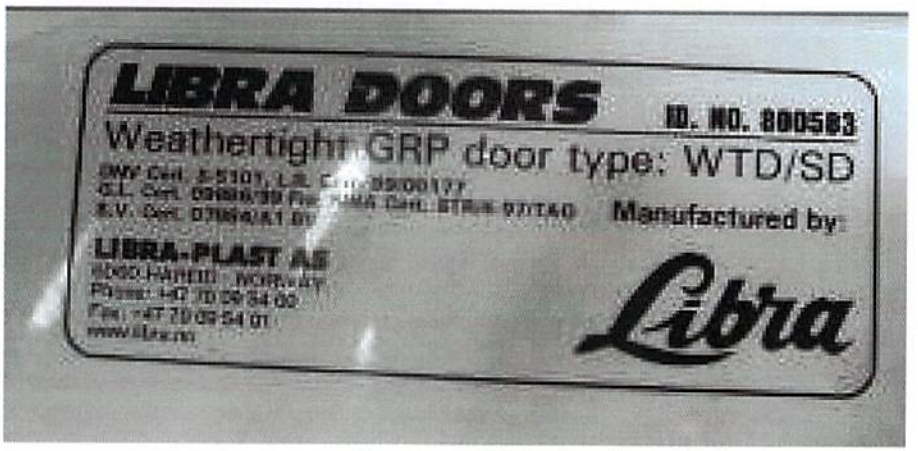
1. Ventilation – Maskinrum (SB + BB sida)
X = -173; Y = 1678; Z = 5088



2. Ventilation – Styrhytt (SB sida)
X = 3025; Y = 1452; Z = 5702



3. Dörr till Styrhytt (SB sida)
X = 4452; Y = 1730; Z = 3387  Tröskelhöjd: 450 mm



4a, 4c, 4e & 4f. Fönster i Överbyggnad/Styrhytt; SB-sida, Front & Akterskott

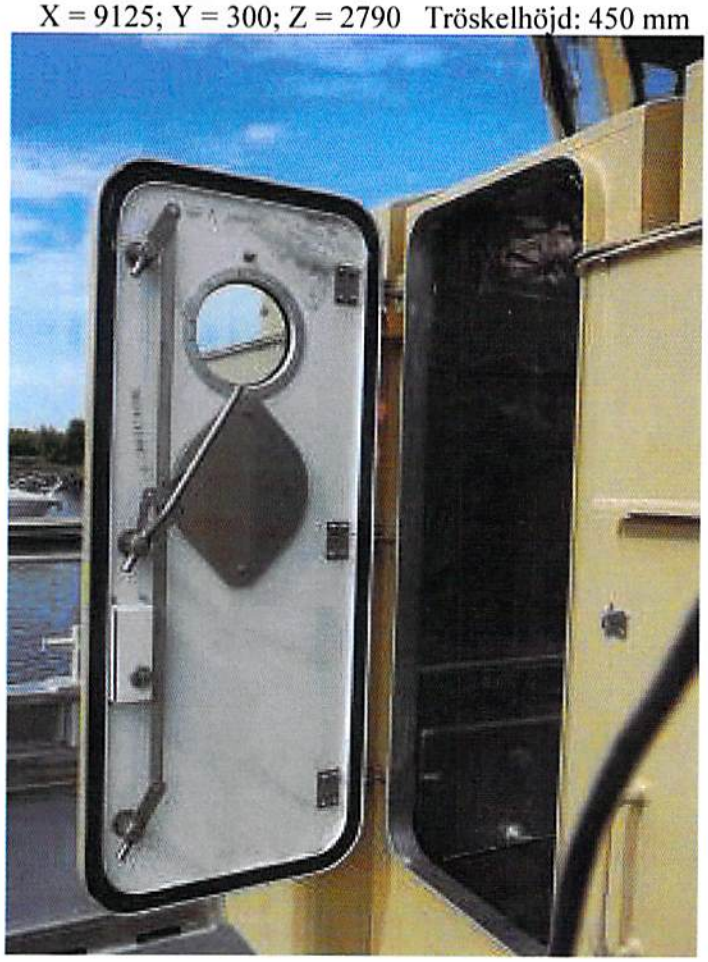
4a: X = 3460; Y = 1735; Z = 4800
4c: X = 6670; Y = 1770; Z = 4830
4e: X = 7590; Y = 1550; Z = 4830
4f: X = 865; Y = 1230; Z = 4330

4b, 4d, 4e & 4f. Fönster i Överbyggnad/Styrhytt; BB-sida, Front och Akterskott

4b: X = 3460; Y = 1735; Z = 4330
4d: X = 6300; Y = 1770; Z = 4830
4e: X = 7590; Y = 1550; Z = 4830
4f: X = 865; Y = 1230; Z = 4330

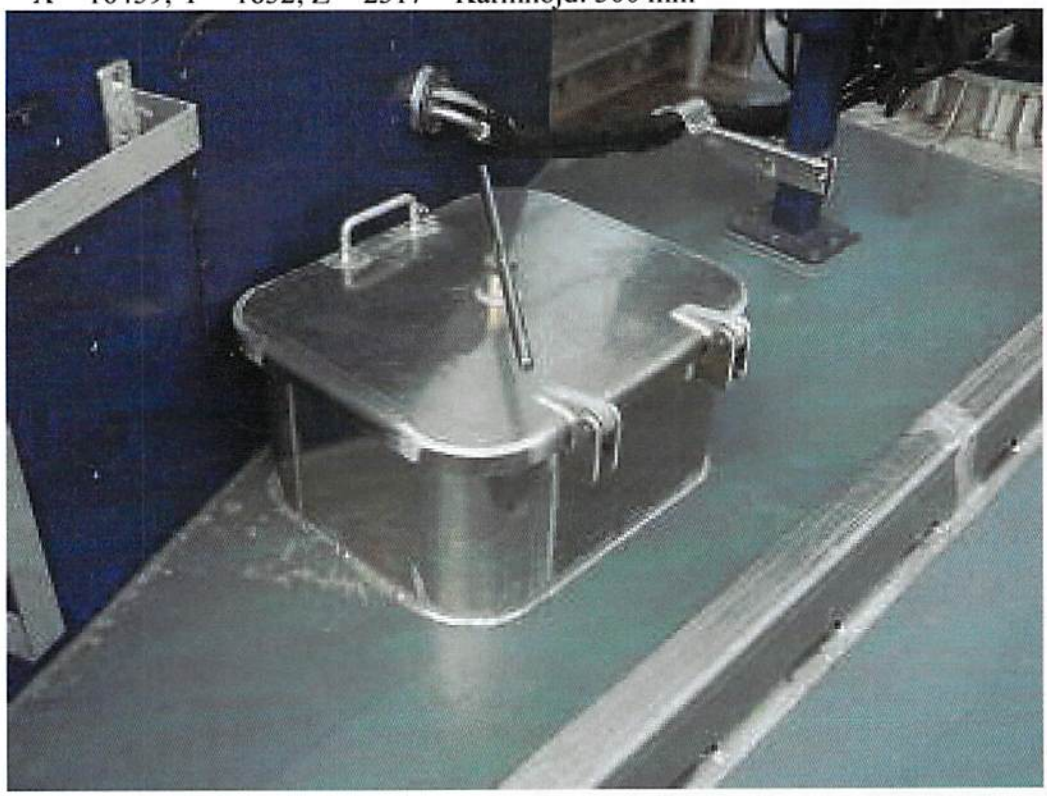
5. Ventilation till Jetutrymme (SB + BB sida)
X = 78; Y = 2031; Z = 3822

6. Dörr i CL till Tekniskt utrymme
X = 9125; Y = 300; Z = 2790  Tröskelhöjd: 450 mm

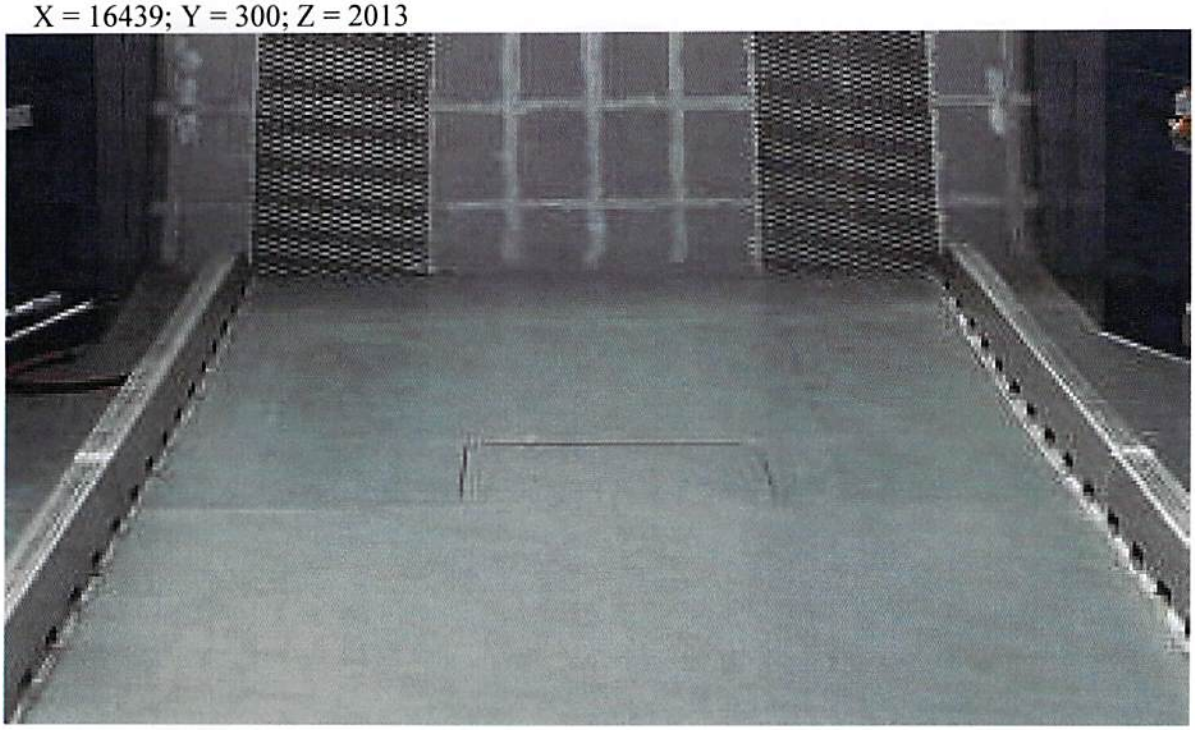


7. Ventilation till Förpik (SB + BB sida)
X = 18595; Y = 1709; Z = 3085

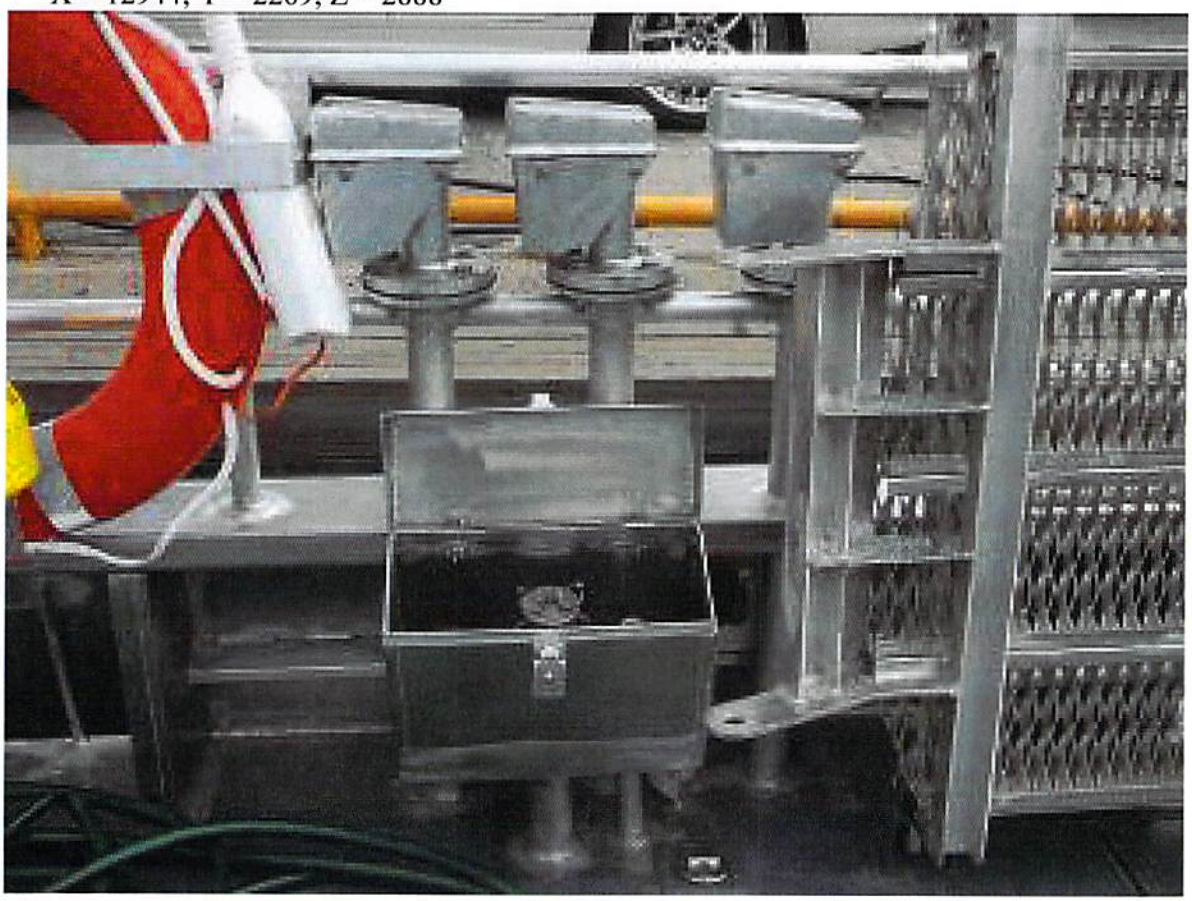
8. Lucka (med karm) till Förpik (SB sida)
X = 16439; Y = 1832; Z = 2317 Karmhöjd: 300 mm



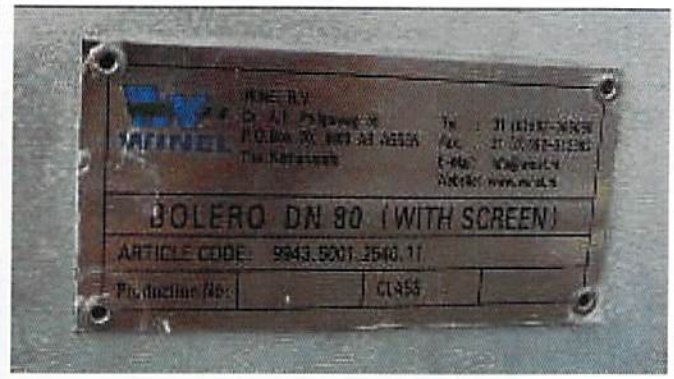
9. Lucka i CL (flush, bultad) till Förpik
X = 16439; Y = 300; Z = 2013



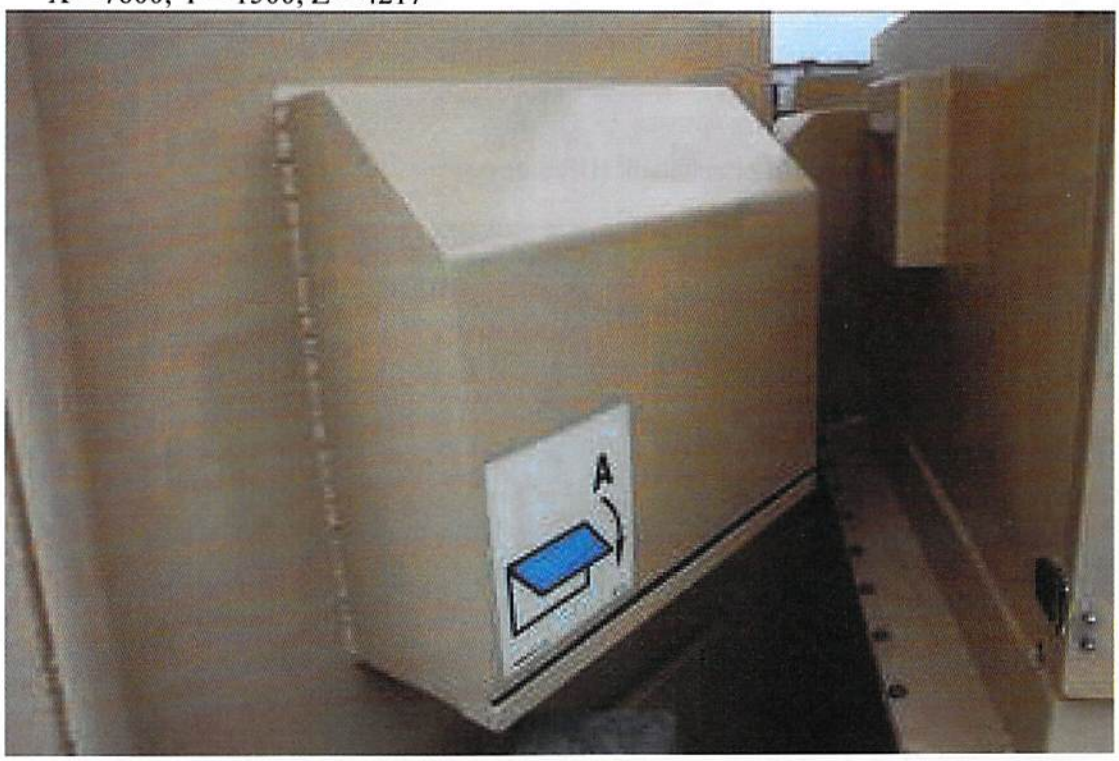
10. Bränslepåfyllning, Luftrör till bränsletank (BB sida)
X = 12944; Y = 2269; Z = 2888



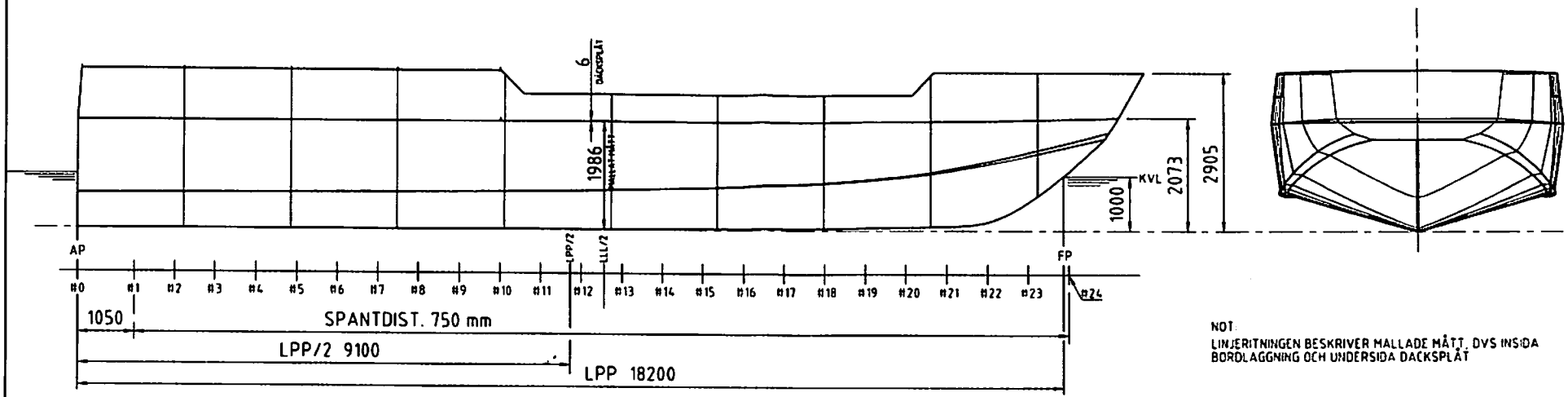
11. Ventilation till Tekniskt utrymme (SB + BB sida)
X = 7485; Y = 1600; Z = 3860



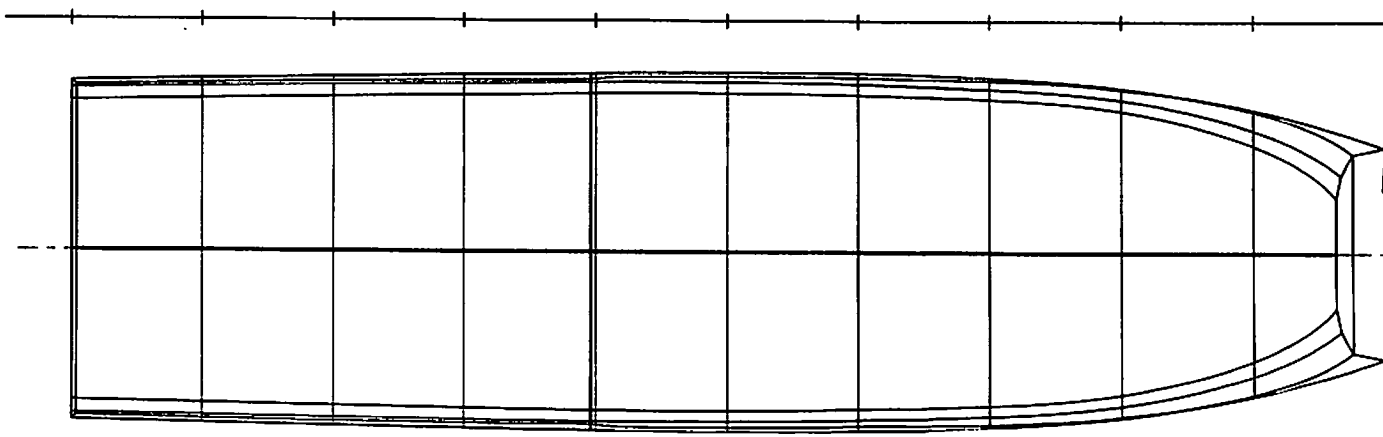

12. Luftintag till Defrosteranläggning (SB + BB sida)
X = 7600; Y = 1500; Z = 4217



| Flödningspunkt | Beskrivning | Antal | Specifikation |
|---|---|---|---|
| 1 | Ventilation till Maskinrum | 2 | Stängningsanordning: Ingen |
| 2 | Ventilation till Styrhytt | 1 | Stängningsanordning: Ingen |
| 3 | Dörr till Styrhytt | 1 | Type: LIBRA, Weathertigth, GRP |
| 4a | Fönster i Överbyggn. Akter; SB | 1 | Type: Aluminiumram, glaslist, ej öppningsbart<br>Size: 660x260<br>Thickness: Laminerat; 4+4 |
| 4b | Fönster i Överbyggn. Akter; BB | 3 | Type: Aluminiumram, glaslist, ej öppningsbart<br>Size: 660x740<br>Thickness: Laminerat; 4+4 |
| 4c | Fönster i Styrhytt-sida; SB | 2 | Type: Aluminiumram, glaslist, ej öppningsbart<br>Size: 730x740<br>Thickness: Laminerat; 4+4 |
| 4d | Fönster i Styrhytt-sida; BB | 3 | Type: Aluminiumram, glaslist, ej öppningsbart<br>Size: 730x740<br>Thickness: Laminerat; 4+4 |
| 4e | Fönster i Styrhytt-Front | 4 | Type: Aluminiumram, glaslist, ej öppningsbart<br>Size: 820x805<br>Thickness: Laminerat; 6+6 |
| 4f | Fönster i Överbyggnad - Akterskott | 2 | Type: Aluminiumram, glaslist, ej öppningsbart<br>Size: 660x740<br>Thickness: Laminerat; 4+4 |
| 5 | Ventilation till Jetutrymme | 2 | Stängningsanordning: Backventil, Winel-Bolero |
| 6 | Dörr till Tekniskt utrymme | 1 | Type: LIBRA, Vädertät, GRP |
| 7 | Ventilation till Förpik | 4 | Stängningsanordning: Backventil, Winel-Bolero |
| 8 | Lucka (med karm) till Förpik | 1 | Typ/Storlek: Vädertät, 600 x 600, Karm: 300 mm |
| 9 | Lucka (flush, bultad) till Förpik | 1 | Typ/Storlek: Vädertät, 600 x 600, Bultad, Flush |
| 10 | Bränslepåfyllning, Luftrör Bränsletank | 1 | Stängningsanordning: Backventil, Winel-Bolero |
| 11 | Ventilation till Tekniskt utrymme | 1 | Stängningsanordning: Backventil, Winel-Bolero |
| 12 | Luftintag till Defrosteranläggning | 1 | Stängningsanordning: Vädertätt spjäll |




NOT
LINJERITNINGEN BESKRIVER MALLADE MÅTT, DVS INSIDA BORDLAGGNING OCH UNDERSIDA DACKSPLÅT




Bilaga till skrivelse
Enclosure to letter
TRANS STYRELSEN
Datum/Date 2012-01-10
Dnr TSS 2011-2026

TRANSPORTSTYRELSEN
Göteborgs sjöfartsinspektionsområde
Ink. 2011 -08- 31
Dnr:

## HUVUDDIMENSIONER

LÄNGD ÖVER ALLT, LOA 21.36 m
LÄNGD (FRIBORD), LLL 19.44 m
LÄNGD MELLAN PERP., LPP 18.20 m
MALLAD BREDD, Bm 5.40 m
MALLAT DJUP, Dm 1.986 m @ (LPP/2)

| ITEM | Q'TY | DESCRIPTION | PART NO |
|---|---|---|---|

| | | | |
|---|---|---|---|
| Datum/Date 110824 | Konstr./Designed MHJ | CAD | CORIOLIS UTVECKLINGS AB |
| Datum/Date | Kontr./Checked | Skala/Scale 1:75 | TEL +46 31 511500 FAX +46 31 515353 |

ARBETSBÅTEN "ASKHOLMEN"
LINJERITNING
(förtydl.av ritn. "Askholmen_228_Linjer.DWG"

Grupp/Group

Ritn.nr/Dwg no 100-1 | Rev. A

Filnamn/Filename 100-1

Toleranser där ej annat anges SMS 715 medel, SMS 723 klass A
Tolerances unless otherwise specificated (DIN 7168 medium, DIN 8570 class A)

| REV | ALTERATION | DATE | SIGN |
|---|---|---|---|
| | | | |

FILENAME:

AutoCAD