

# LOADING CALCULATOR - H600w

HYPET Data AS, 6777 Stårheim, tlf. 57 86 24 04/ 40 21 88 94  
 URL: [hypet.com](http://hypet.com) and [hypet.dnsalias.com](http://hypet.dnsalias.com) MAIL: [hypet@hypet.com](mailto:hypet@hypet.com)

The HYPET-Serien was approved by The Norwegian Directorate of Shipping in 1984  
 H600 was approved by DNV in 1995 – Certificate No. A-5333 (latest version is not approved)  
 100% automatic GRAIN calc, Crane calc, Docking calc, Anchor handling calc etc. included

## Traffic light:



Grnlight.

If the **GREEN** light is lightening during loading, then you can thrust that all given stability claims are OK.  
 If the **RED** light is lightening, then one ore more claims are NOT OK. Point to the **RED** light and you will be told what claim is not ok.

**THIS SHALL BE SIMPLE AND SATISFACTORY – AND IT IS!**

## Input:

The screenshot shows a dialog box with various input fields for a tank. Fields include Tank Code, Description, Volume, Sp.Grav, Length, Displacement, LCG, VCG, ICG, and IT. There are also radio buttons for 'IT Option' and 'New TANK CODE' settings.

Easy and simple input for tanks, stand alone weights and room for grain loading.

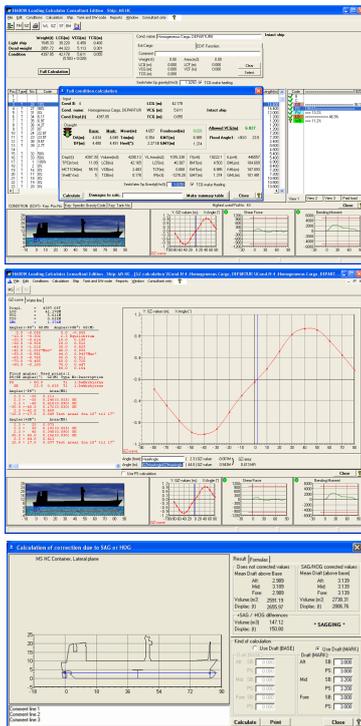
Use: %, V(Volume), T(Tonnes), S(Sounding) or U(Ullage) to communicate with tanks. A load can also be placed at any position giving: Description, Lcg, Vcg and Tcg. In addition you must add an extension for the load if you want to include longitudinal strength calculations.

By using colour codes for different dead weight components (DW-code) like FW, SW, FO, LO etc., you will find a nice overview for all input, split into DW-groups. You select what DW components to be specified inside report. In loading screen picture, at right side, you can see how many % has been loaded for each DW component

The waterline will be updated after each new input.

Data can also be taken from a stand alone container program, H601w. From this program all containers onboard can be exported into H600w. See brochure for H601w.

## Calculation:



All calculation using the ship geometry directly. Therefore, damage calculations are treated in the same way than intact ship. Take a look at the 3D function and study the complete geometry. Select wanted damage (Damage #0 = Intact ship) or make your own damage case. Then calculate the waterline and GZ-curve. At bottom you will always see the waterline and curve for shear forces and bending moment. After pressing the (full calculation)-button you will also see a small GZ-curve at bottom. Select the GZ-icon at left side of the Print-icon and you will see a big GZ-curve. Here you can perform wanted calculations for actual waterline. In these calculations you can refer to variables or functions like this: GZMaxAngle, GetGZMaxAngle(from,to), FloodAngle1-2-3. All variables/ functions to be used you can find by right-click mouse.

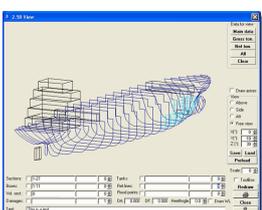
## COLOR CODES

The figure shows three windows for selecting color codes. The first is 'Browse the DW codes' with a table of codes and their weights. The second is 'Select User defined COLOR' for strength graphics. The third is 'Select User defined COLOR' for waterline and healing.

Code	Name	Spgr(m3)	1000t/m3
CS	Confines	1.0000	0.000
CSE	Crew, Stores & Effects	1.0000	0.000
DW	Dead Weight	1.0000	0.000
DW1	Dred Oil	0.9500	59.450
DW2	Dirty Water	1.0500	3.010
FD	Fuel Oil	0.9200	208.100
FW	Fresh Water	1.0000	42.700
HFO	Heavy Fuel Oil	0.9200	0.000
RSB	Ryan Room	1.0000	0.000
LO	Lub Oil	0.9000	20.470
LH	Lift Ladderroom	1.0000	0.000
SL	Sludge tank	0.9500	5.970
V	Void	1.0000	0.000
WB	Water Ballast	1.0250	1648.800

In the picture at left, you can input draughts(SB and PS) in draft mark – aft – mid – fore – and calculate the hydrostatic data for the actual waterline. Corrections will be made due to SAG or HOG. This is important for the surveyor.

## 3D view:



Go inside this picture and study all geometry components used for the ship. Scroll through all sections, app, tanks, damages, floodpoints etc. By scrolling in "Free view" for given X/Y/Z values, you can study all components from any positions. You can also add a heeling waterline into this picture. And for example you can select to see all components defined for Maindata or see components used for Gross or Net tonnage.

**If your ship already has been calculated using HYPET, then I can offer you a fair bid for a loading calculator**