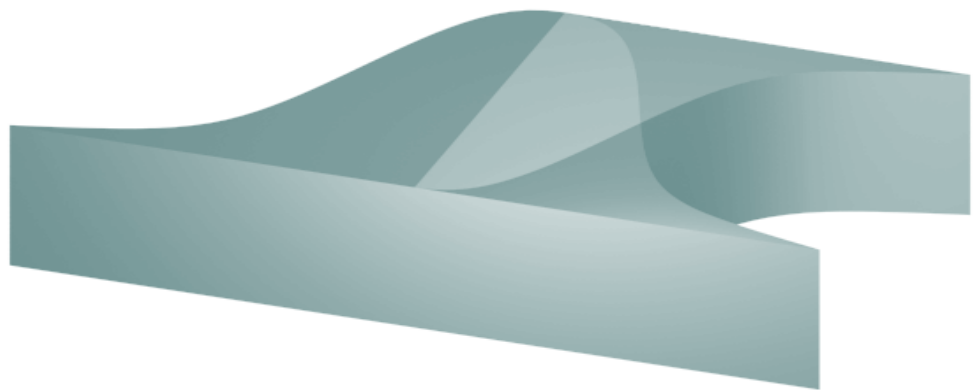


ShipWeight 6.0

Update info



BAS engineering AS
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1 General

1.1 About the update info

The update info will briefly present the new features of ShipWeight 6.0 since the last major update (ver. 5.3).

The paper is divided into two sections; one section concerning updates in AsbuiltWeight and one sections for DesignWeight. Features which are common for both systems will only be presented in the AsbuiltWeight part.

1.2 Installation

To install ShipWeight 6.0, run **Setup.exe** from the CD and follow the instructions on the screen.

Detailed installation instructions are found in chapter 1.4 of the *ShipWeight User's guide*. A PDF-version of the *User's guide* can be found on the installation CD (Documents\swug60.pdf).

2 AsbuiltWeight

2.1 New Tree-view in the Main window

The Main window has been fitted with a tree-view. This is an effective tool for navigating through the breakdown structure.

Weight groups can be opened or closed by pressing + or – buttons or by double-clicking the weight group. When a weight group is marked, information of its subgroups or items will be displayed in the area to the right of the tree view.

The screenshot shows the 'sw001-ShipWeight/Asbuilt' application window. The interface is divided into several sections:

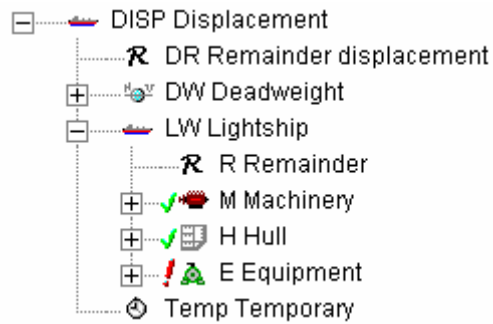
- Project Information:** Project ID: sw001 MS Breeze, Ship type: Anchor Handling Tug. Dimensions: Loa [m]: 82.00, Lpp [m]: 71.00, B [m]: 19.00, D [m]: 9.00, Dm [m]: 9.00, DW [t]: 9.00, T [m]: 7.50, Disp [t]: 67.
- Summary Tables:**

ID	Weight group	Weight [t]	Status	VCO [m]	Status	LCG [m]	Status	TCG [m]	Status	Aft [m]	Fore [m]
DISP	Displacement	1 629 Sum.		6 Sum.		30 Sum.		-0 Sum.		-5	67
LW	Lightship	1 629 Sum.		6 Sum.		30 Sum.		-0 Sum.		-5	67
M	Machinery	230 Sum.		2 Sum.		27 Sum.		-0 Sum.		1	53
M1	Machinery main-components	191 Sum.		2 Sum.		25 Sum.		-0 Sum.		1	49

ID	Subgroup	Weight [t]	Status	VCO [m]	Status	LCG [m]	Status	TCG [m]	Status	Aft [m]	Fore [m]
M1.R	Remainder machinery										
M1.1	Diesel-engine for prop.	77 Sum.		2 Sum.		37 Sum.		0 Sum.		30	44
M1.2	Steam-engine for prop.										
M1.3	Other engine for prop.										
M1.4	Gear system	41 Sum.		2 Sum.		22 Sum.		0 Sum.		17	45
M1.5	Propel system	54 Sum.		2 Sum.		9 Sum.		0 Sum.		1	36
M1.6	Fast vessel prop. syst.										
M1.7	Foil, sail, rig & mast										
M1.8	Boilers, steam & gas gen.	2 Sum.		5 Sum.		43 Sum.		-3 Sum.		38	49
M1.9	Aggr. & gen. el.prod.	17 Sum.		4 Sum.		28 Sum.		-1 Sum.		15	48
- Tree View:** A hierarchical tree view on the left side, showing the breakdown structure. It includes categories like DISP (Displacement), DW (Deadweight), LW (Lightship), M (Machinery), H (Hull), and E (Equipment). The 'M1.4 Gear system' is currently selected and highlighted.
- Data Table:** A table on the right side showing detailed data for the selected 'M1.4 Gear system' subgroup.

Subgrp./Item	Weight [t]	VCO [m]	LCG [m]	TCG [m]	Aft [m]	Fore [m]
1 Main reduction gear 1 compl.	19.570	2.000	21.510	4.310	17.280	25.740
2 Main reduction gear 2 compl.	19.550	2.000	21.520	-4.290	17.290	25.750
3 Speed up gear 1 fi-fi pump	1.030	2.360	40.280	4.150	35.760	44.800
4 Speed up gear 2 fi-fi pump	1.030	2.390	40.270	-4.110	35.740	44.790
M1.4 Gear system	41.180	2.019	22.453	0.013	17.280	44.800



The weight groups in the tree view have been fitted with icons. The icons serve the purposes of showing the type and status of the weight groups.



The weight group types are:

	Remainder
	Deadweight
	Lightweight
	Machinery
	Hull
	Equipment
	Temporary

The status of a weight groups may be set to:

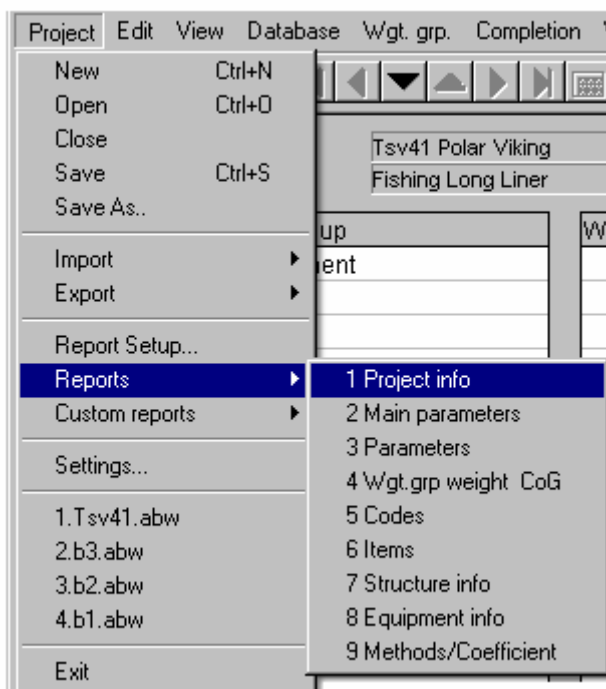
	Checked
	Unchecked
(no icon)	Neutral

To set the status, simply right-click the weight group in the tree view. Alternatively select one of the options on the *Checking* menu.

2.2 Reports

A set of standard reports may now be accessed directly from the *Projects* menu. Earlier these were found in the *Report setup* dialog. The available reports are:

- 1 Project info
- 2 Main parameters
- 3 Parameters
- 4 Wgt.grp weight CoG
- 5 Codes
- 6 Items
- 7 Structure info
- 8 Equipment info
- 9 Methods/Coefficients



By selecting one of the options, the report is opened in the *Print Preview* dialog.

2.4 The Code envelopes dialog

The new *Code envelope* dialog offers a convenient way of checking the items tagged to a user defined code structure. To open the dialog, select *Code envelopes* on the *View* menu.

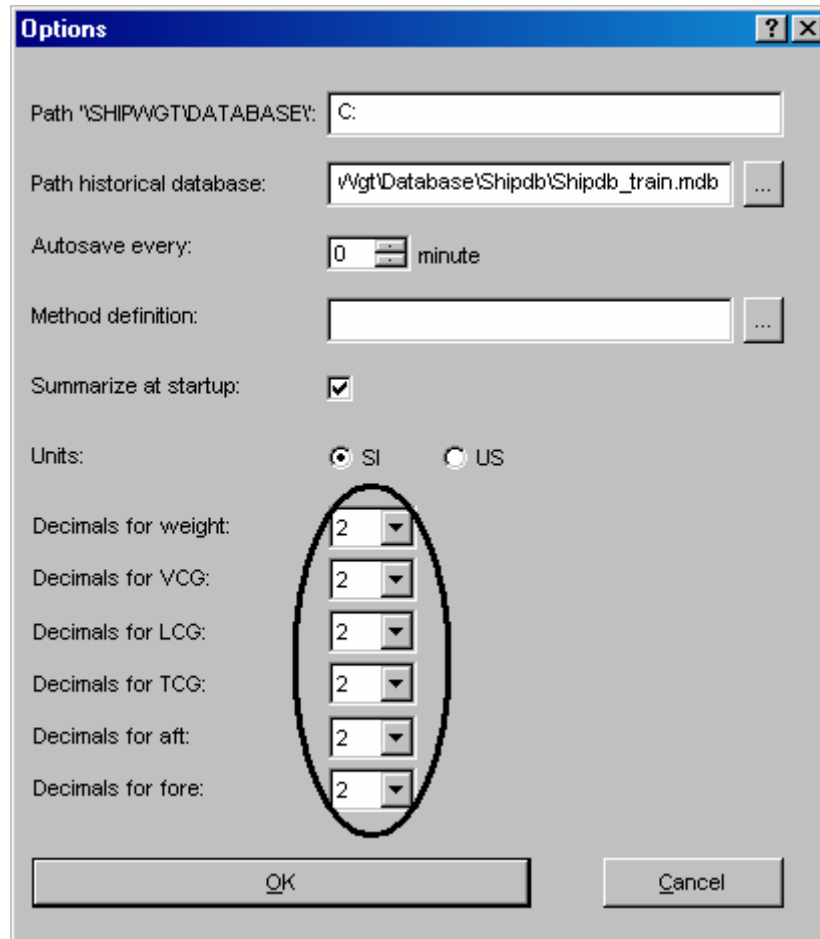
The dialog is divided into two parts: a tree view for browsing the code structure on the upper part, and the plot area on the lower part. By selecting one of the groups in a code structure, the items tagged to this group will be plotted both in the XY-plane and the XZ-plane. In the plot each item is represented by a number. The items are also listed.

The dialog box 'Code envelopes' has tabs for Section, Area, Module, Function, Discipline, Phase, Status, and Installation. The tree view shows a hierarchy: M1 - Module 1, M2 - Module 2, M3 - Module 3, and M4 - Module 4 (selected). The XZ-plane plot shows 23 numbered points. The XY-plane plot shows the same 23 numbered points. The table below the plots lists the following items:

Pos./Item	Wgt [t]	LCG [m]	TCG [m]	VCG [m]
1. E1.10.7.2 Ink piping on main deck	0.210	9.210	0.010	8.110
2. E1.10.1.7 Fresh water cargo pump	0.610	12.600	0.300	2.100
3. E1.10.1.6 Fuel cargo	0.100	13.100	0.500	1.500
4. E1.10.1.5 Fuel water DO cargo	0.140	13.130	2.500	2.000
5. E1.10.1.4 Ballast water pump	0.620	13.160	-0.500	2.250
6. E1.10.1.2 Oceanographic piping	3.460	13.500	0.000	5.500
7. E1.10.1.8 Fuel oil cargo pump	0.650	15.000	-0.000	2.710
8. E1.10.7.1 Ink piping on main deck	1.000	17.870	0.000	8.550
9. E1.10.4.3 Fuel cargo next to the eng room	2.110	18.910	1.500	2.300
10. E1.10.7.3 Piping in engine room	3.800	19.570	0.150	3.340
11. E1.10.4.1 Brake system piping	1.430	20.560	-0.200	2.620
12. E1.10.1.10 Liquid in double pump	0.950	21.000	-2.300	1.440
13. E1.10.1.9 Liquid in pump	0.950	21.000	2.300	1.440
14. E1.11.2.3 Ocean flow piping	0.530	23.110	-1.500	7.410
15. E1.11.2.1 Filter holder main deck	1.300	23.110	0.000	7.500
16. E1.11.2.2 Filter and flanges	0.800	23.100	0.000	7.200
17. E1.10.1.2 Agitator in mid tank 2	0.340	25.000	-1.500	2.100
18. E1.10.1.1 Agitator in mid tank 1	0.300	25.000	2.010	2.100
19. E1.1.4.2 Manholes to tank	1.120	25.610	0.010	3.000
20. E1.1.4.1 Manholes to mid tank	0.380	26.500	0.010	6.610
21. E1.10.1.3 Agitator in mid tank 3	0.300	28.250	2.010	2.100
22. E1.11.2.4 Tank in piping in eng room	4.020	41.700	-0.010	5.200
23. E1.10.4.4 Fuel cargo next piping eng room	0.430	42.070	-3.500	1.500

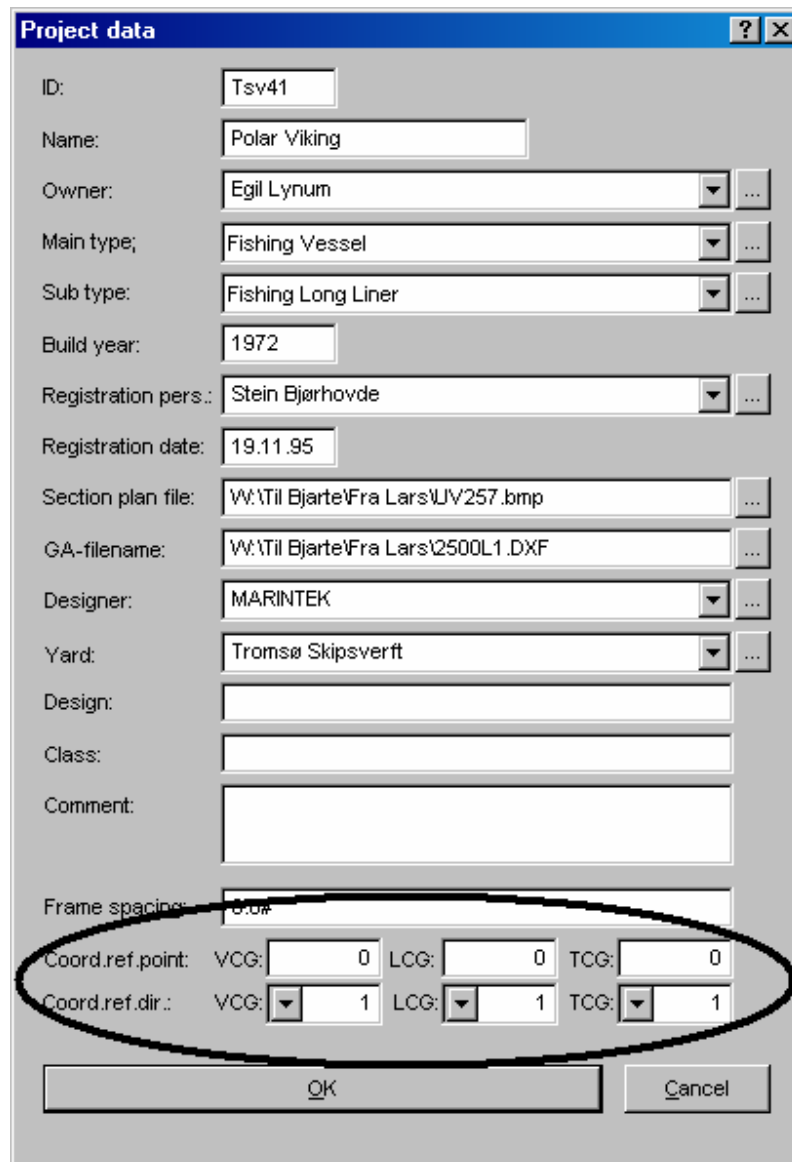
2.5 Options dialog

The *Options* dialog has been extended to include *Decimals for VCG, LCG TCG, aft and fore*. This sets the number of decimals shown in the main window grids.



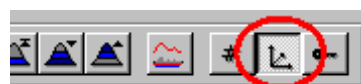
2.6 Secondary coordinate system

By entering data for *Coord.ref.point* and *Coord.ref.direction* in the *Project data* dialog, a secondary coordinate system may be defined. The *Coord.ref.point* X, Y and Z values define the origin of the alternative coordinate system. The positive direction of the axes is set by *Coord.ref.direction*.



ID:	Tsv41
Name:	Polar Viking
Owner:	Egil Lynum
Main type:	Fishing Vessel
Sub type:	Fishing Long Liner
Build year:	1972
Registration pers.:	Stein Bjørhovde
Registration date:	19.11.95
Section plan file:	W:\Til Bjarte\Fra Lars\UV\257.bmp
GA-filename:	W:\Til Bjarte\Fra Lars\2500L1.DXF
Designer:	MARINTEK
Yard:	Tromsø Skipsverft
Design:	
Class:	
Comment:	
Frame spacing:	0.0#
Coord.ref.point:	VCG: 0 LCG: 0 TCG: 0
Coord.ref.dir.:	VCG: 1 LCG: 1 TCG: 1

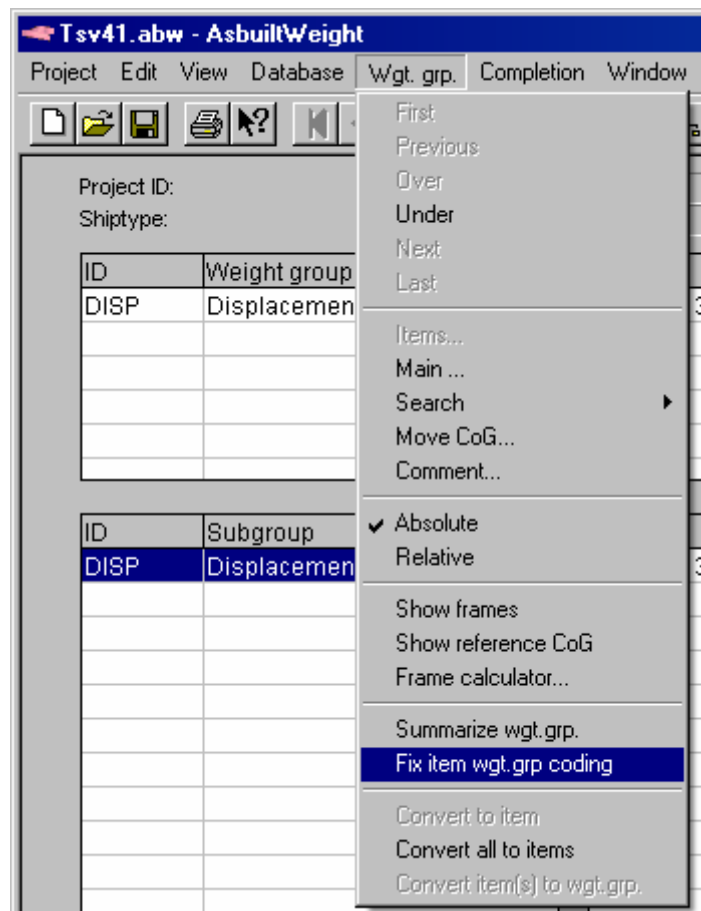
To turn on the secondary coordinate system, select *Show reference CoG* on the *Wgt.grp* menu or press the equivalent button on the toolbar. While the reference CoG is active, the CoG values in the grid will turn red.



2.7 Fix item weight group coding

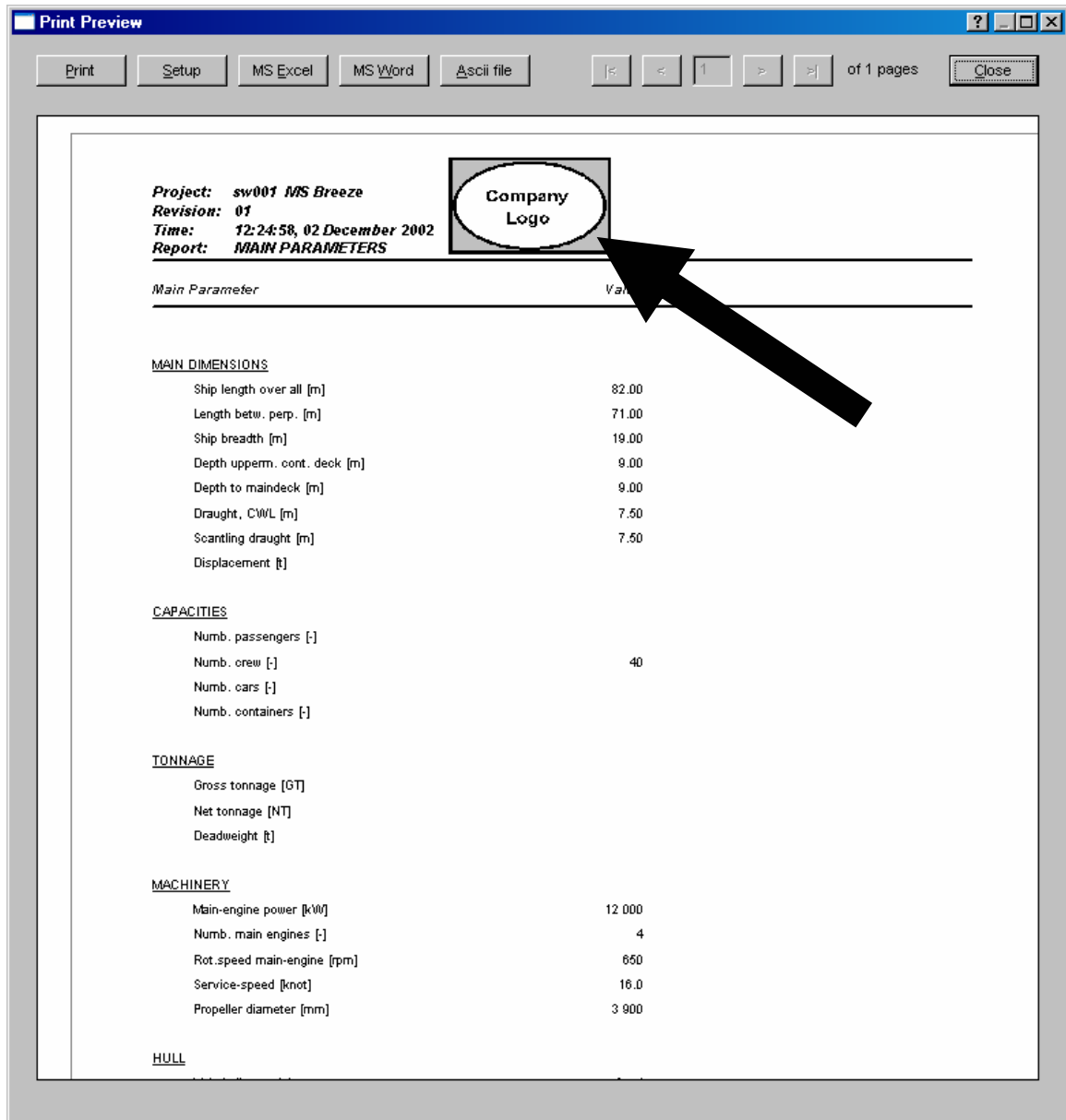
On the *Wgt.grp.* menu a new function called *Fix item wgt.grp. coding* has been added. This function moves items with incorrect weight group code to the *Remainder* weight group. Parameter values may be lost in the process.

It may be useful to run this function after importing items from a spreadsheet.



2.8 Company logo in reports

From version 6.0 it is possible to add your company logo to all reports created in ShipWeight. Simply create a bitmap of your logo with the name COMPANY.BMP and store it on the same folder as the Design.exe is located (usually C:\Program Files\Shipwgt\Design)

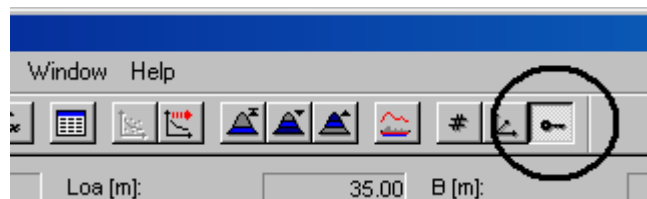


3 DesignWeight

3.1 Freezing the above weight group

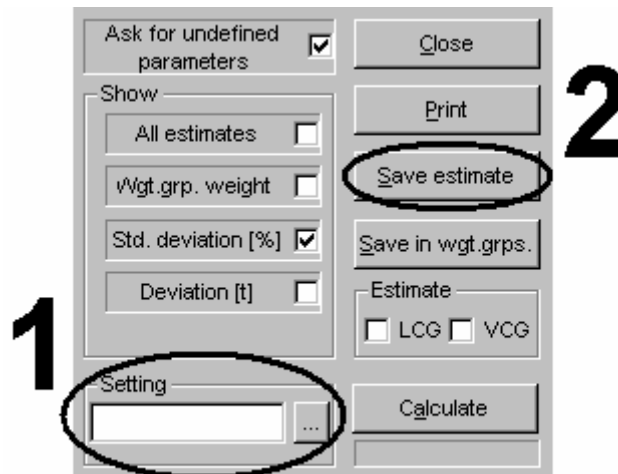
From version 6.0 it is possible to keep the value of the weight group over unchanged while estimating. This is done by adjusting the Remainder according to the new estimate.


To activate this mode, select *Freeze wgt.grp. over* on the *Estimate* menu or press the corresponding button in the main window (key-symbol).



3.2 Saving settings in the Auto estimation dialog

The settings of the *Auto estimation* dialog can easily be saved for later use. First enter the name in the *Setting* field (marked with circle 1), then press the *Save estimate* (marked with circle 2).



To retrieve a saved setting, press the  button (...) by the *Setting* field. This will open the *Auto estimation setting* dialog. Select one of the saved settings from the list to the right, and press ok to apply the settings to the *Auto estimation* dialog.

Auto estimation setting

Setting

Description:

Detail level:

Method:

Coefficient:

Show

All estimates

Weight group weight

Std.deviation

Deviation

Estimate

VCG

LCG

Ask for parameters

Main wgt.grp.:

Sister ship:

Weight groups: Reference ships: Ship types:

6 Offshore Vess
600 Supply Vess
601 Supply Vess
602 Supply Vess
603 Supl. V./Anc
604 Supply Vess

Wgt.grp.	Weight[t]	Std.dev.[t]	VCG[m]	Std.dev.[m]	LCG[m]	Std.dev.[m]
DISP Displacement	5 435.408	-1.000				
E Equipment	1 432.485	-1.000				
H Hull	3 428.997	-1.000				
LW Lightship	5 435.408	-1.000				

Default 1
Main param. 1

3.3 Generate Default Coefficient

The default coefficients are to be used if the basis for other coefficients is none-existing or not satisfactory.

The *Generate Default Coefficient* dialog is a tool for obtaining these coefficients. To open this dialog, select *Coefficients* and *Generate...* on the *Database* menu.

