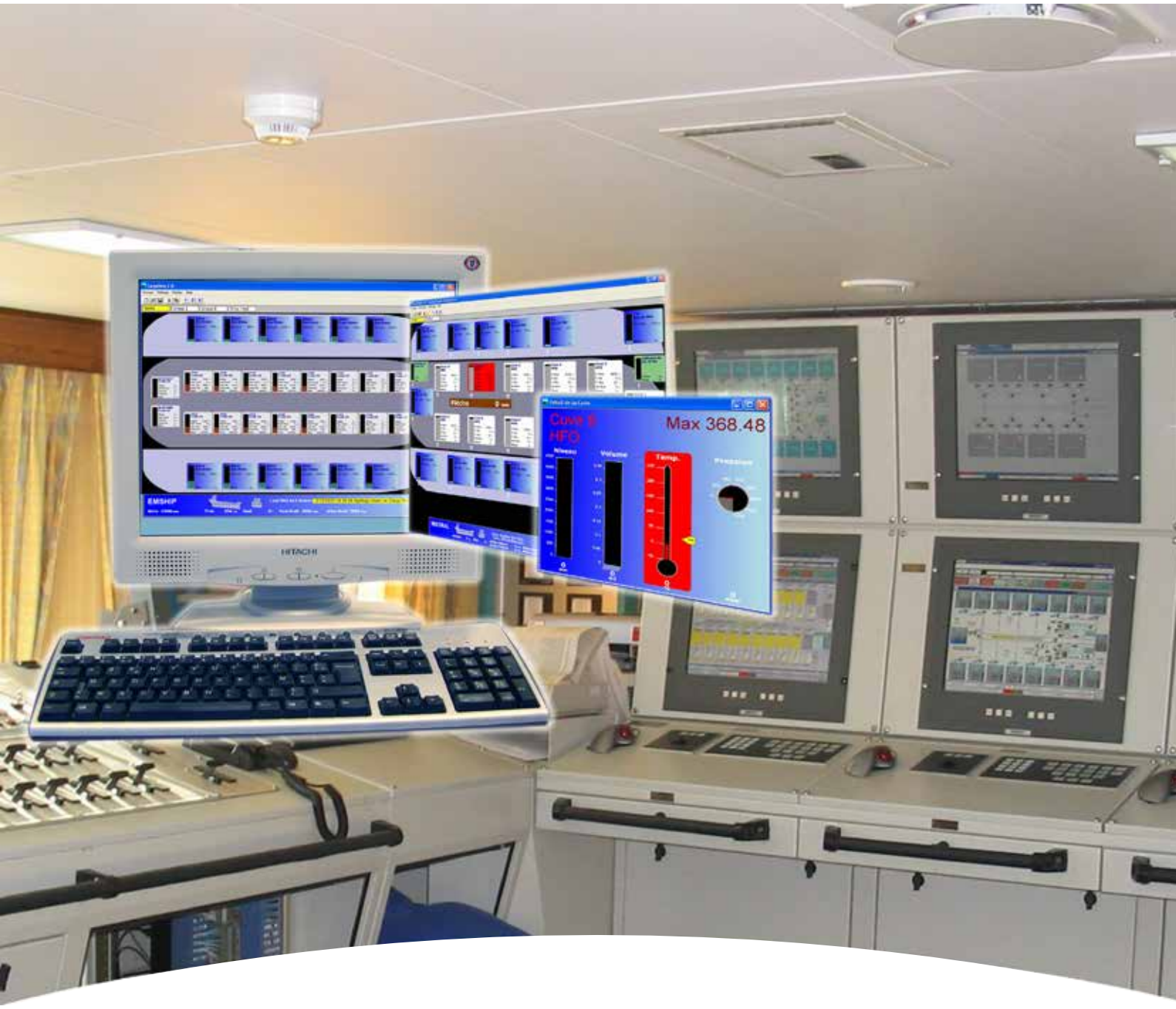
The Tankers' Liquid Cargo Parameters

Honeywell



CargoBoss 2.0

Maintenance Manual

SAS au Capital de 2 158 244 €- 444 871 933 R.C.S. Bourges - APE : 2651B
Headquarter : 9, rue Isaac Newton - 18000 Bourges - France

The Tankers' Liquid Cargo Parameters
Maintenance Manual

CargoBoss 2.0

1st *Edition*
Released February 2013

TABLE OF CONTENTS

1. INTRODUCTION 4

2. PRESENTATION OF THE SOFTWARE 4

3. PASSWORDS 4

Enter a password 5

Cancel all the authorizations currently granted 5

Change down the authorizations 5

Change passwords 5

4. SETTINGS 5

Open the property window for a page or the lower strip 6

Create a new page 6

Create widgets and organize a page 7

Create a text widget 7

Create a gauge widget 8

Create a tank widget 9

Create a binary digit widget 9

Create a ship widget 10

Move widgets from one page to another 10

Delete widgets 10

Delete a page 10

5. MAINTENANCE 11

Open the window "Configuration" 11

Allocate characteristics of the tanks 12

Allocate characteristics of the radars 12

6. CHANGE THE VESSEL PARAMETERS 12

7. REPORTS 13

8. PERSONAL NOTES 14

1. INTRODUCTION

This manual is issued specifically for CargoBoss 2.0 software. It contains detailed instructions for setting the software and personalizing its graphical interface. It is especially dedicated to the commissioning and to the engineers ensuring the maintenance of the software with the CargoBoss Configurator application.

The instructions for using the software (operator level) are described in the technical manual. The instructions for installing the software are described in the setup guide.

2. PRESENTATION OF THE SOFTWARE

CargoBoss 2.0 software receives the data coming from the system for processing the tankers' liquid cargo parameters, processes and displays them on the Windows® graphical interface.

CargoBoss 2.0 software can communicate with the following systems:

- TA 840-I for the first generation systems,
- TA3840C for the last generation systems.

CargoBoss 2.0 software is composed of two applications:

- The database server, collecting the measurements transmitted by the system for processing the data,
- The graphical interface displaying the data and allowing to key-in the operational conditions.

3. PASSWORDS

Some of the CargoBoss 2.0 software functions are protected by one of the four password levels:

- User password, level 1: management of the alarm limits,
- User password, level 2: opening or creating a voyage,
- Administrator password, level 3:
  - Administration of the lower level passwords,
  - Key-in of operational conditions,
  - Management of the product library,
  - Management of the tank categories library,
  - Modification of the vessel name,
  - Selection of the radars ullage mode "auto" or "manual",
  - Stop the database server,
- Commissioning engineer password, level 4: access to the advanced functions of commissioning.

The administrator can change passwords of levels 1 to 3, at any time.

By default, the passwords are set to “**ems1**”, “**ems2**” and “**ems3**” for levels 1, 2 and 3.

To work at the commissioning level, please use the following process.

Enter a password

Key-in of a password for a level allows direct access to all the functions protected by this level or by a lower level.

A password, level 1, 2 or 3 can be keyed-in according to one of the following methods:

- In the menu bar, select the desired menu and command,
- Enter the password of level requested, then click OK.

or

- In the **Settings** menu, select **Set Password Level**,
- Enter the password of level requested, then click OK.

or

- In the toolbar, click the button giving the desired level 1, 2, 3.
- Enter the password corresponding, then click OK.

The password, level 4, is entered according to the following method:

- In the **Settings** menu, select **Set Password Level**,
- Enter the password of the requested level, then click OK.

Cancel all the authorizations currently granted

The authorizations attached to a keyed-in password remain valid until they are cancelled.

1. In the **Settings** menu, select **Clear Password Level**.

or

In the toolbar, click the button 0.

The access to all the relevant functions is again forbidden.

Change down the authorizations

The authorizations attached to a keyed-in password can be changed down, clicking the button of a lower password 0, 1, 2 or 3 in the toolbar.

Change passwords

1. In the **Settings** menu, select **Change Password**.
   A dialog box "Password level 3" is displayed (except if this password is already activated).
2. Key-in the administrator password level 3, then click OK.
   A dialog box is displayed, enabling to enter one or more passwords; the keyed-in characters are represented by stars.
3. Key-in the new password(s), then click OK.

4. SETTINGS

The **Settings** menu enables to configure, create and delete different personalized pages for the graphical user interface at the time of the commissioning and maintenance, after having keyed-in the engineer password level 4. It also makes it possible to configure the lower strip.

Note: when using the CargoBoss 2.0 software for the first time, some pages already exist (tanks, ships…) but the widgets put on these pages are not organized yet. It is then possible to lay out them in the vessel outline and to set them according to the vessel configuration.

Open the property window for a page or the lower strip

1. In the title bar, click right the button of the page.

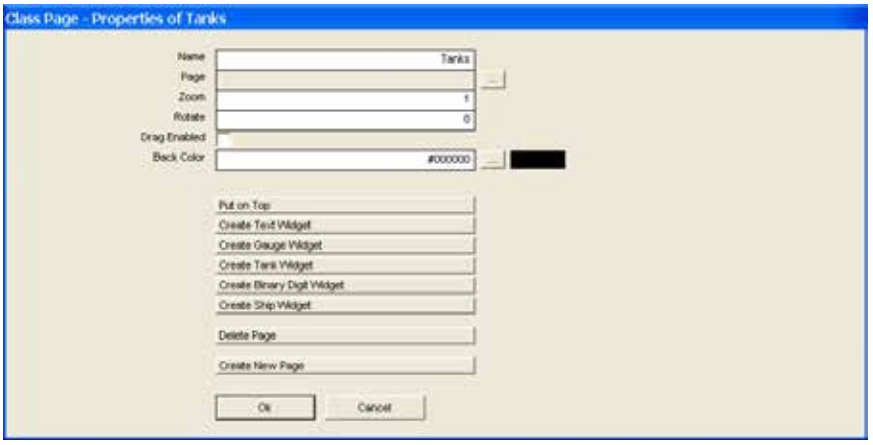
or

In the display area, click right the background.

or

In the lower strip, click right the background.

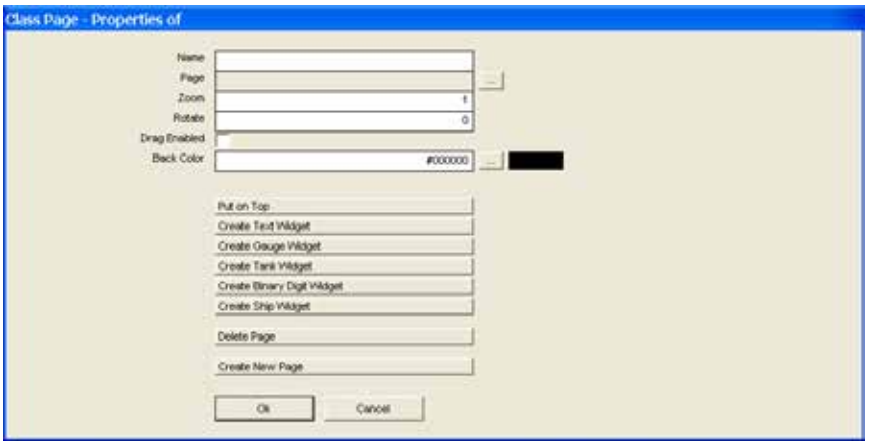
A window of properties of this page appears.



From this window, it is possible to create a new page, delete the selected page, organize a page or the lower strip.

Create a new page

1. Open the property window of a page.
2. From this window, click Create New Page.
   A page button is created in the title bar.
3. Click right this button.
   The window of properties of the new page appears.



4. Key-in the name of the page and its appearance properties.
5. Create the required widgets for this page and organize them.
6. Click OK to record this information. The new page appears.

Create widgets and organize a page

It is possible to create as many widgets as necessary for an existing page, a new page or the lower strip. The widgets can also be moved from one page to another.

1. Open the property window of a page. The following widgets can then be created:
   - text widget,
   - gauge widget,
   - tank widget,
   - binary digit widget,
   - ship widget.
2. Create the required widgets and position them on the page or lower strip.

Note: the "Drag enabled" box must be checked to enable the drag-and-drop of the widgets. When a page is completed, the "Drag enabled" box must imperatively be unchecked before delivering the software.

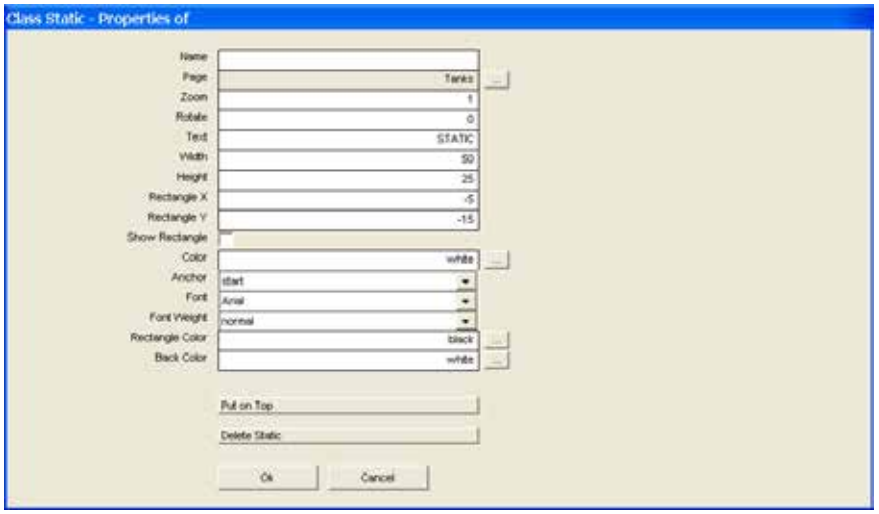
The different property windows of the widgets have the same functions "Zoom" and "Rotate". The zoom value enables to define the size of the widget on the page, and the rotate value its inclination. It must be entered in $1/100^{e}$ degrees (e.g.: 4500 for 45°).

3. In the **Voyage** menu, select **Exit** to record this new configuration.

Note: widgets are always created "on top" of the others. It is possible to make a previous widget on top of a new one by clicking on its "Put on top" button.

Create a text widget

1. Click Create Text Widget.
   "Static" appears on the page.
2. Click right on word "Static".
   A window of properties for the text widget appears.



3. Key-in the text, select the properties to format it and define the page on which this text must appear.
4. Click OK to record this information. The text widget appears.

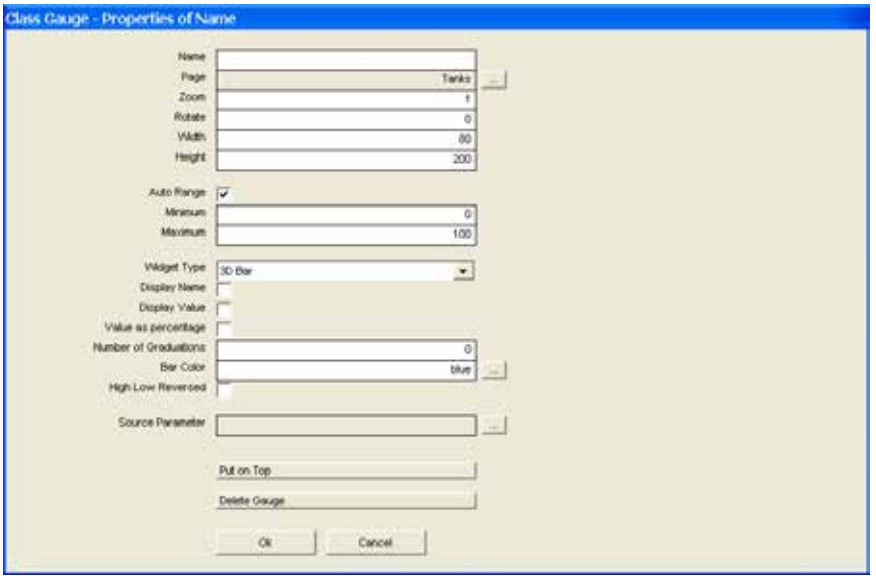
Some additional parameters:

"Show rectangle" may be used to display a rectangle around the text

"Anchor" may be used to justify the text

Create a gauge widget

1. Click Create Gauge Widget.
   By default, a bargraph appears on the page.
2. Click right on the bargraph.
   A window of properties for the gauge widget appears.



3. Select the format properties for the widget, define the page on which this gauge must appear and link it with a measurement.
4. Click OK to record this information. The formatted gauge widget appears.

Some additional parameters:

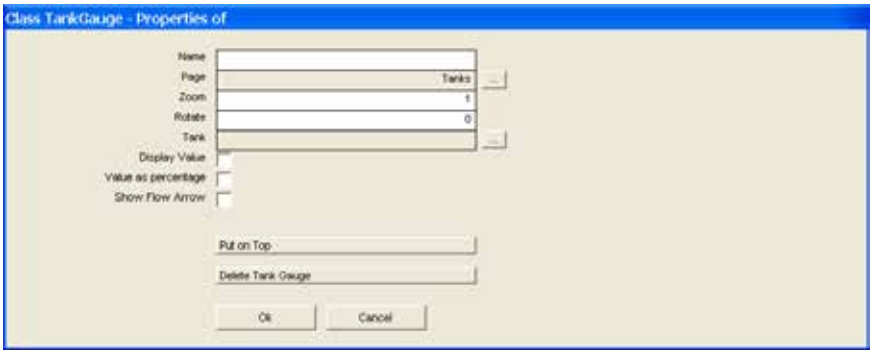
"Auto range". When checked, the minimum and maximum values will be overwritten by the minimum and maximum values of the source parameter.

"High Low reversed". When checked, the level alarm label logic is reversed (when the value is low, it is called a "high" alarm).

"Source parameter". The widget must be associated to a physical parameter to display its value.

Create a tank widget

1. Click Create Tank Widget.
   A box materializing the tank appears on the page.
2. Click right on the box.
   A window of properties for the tank widget appears.



3. Select the format properties for the box, define the page on which this box must appear and link it with a transmitter.
4. Click OK to record this information. The box appears.

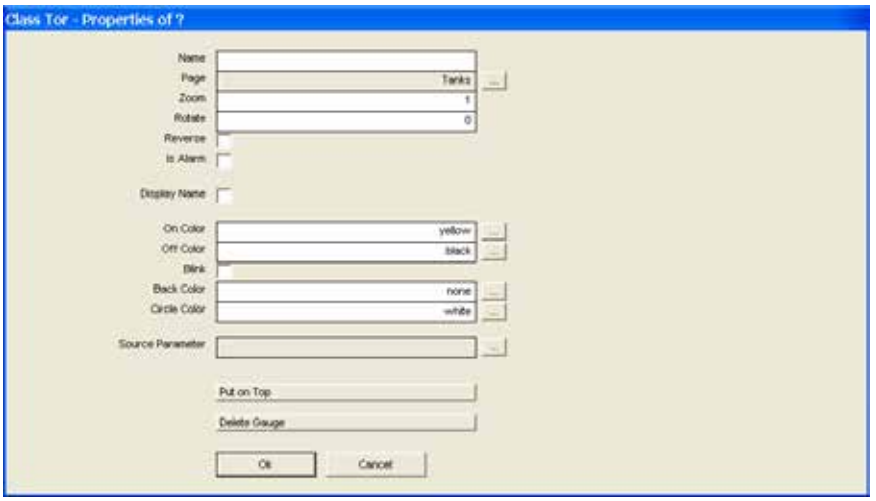
   Note: the specifications of this box (data, tank category, default product) are defined in the "Tank categories library" option, refer to the technical manual.

Some additional parameters:

"Show Flow Arrow". When checked, a green or red arrow will be displayed on the widget to indicate the way of cargo flow.

Create a binary digit widget

1. Click Create Binary Digit Widget.
   A circle appears on the page.
2. Click right on the circle.
   A window of properties for the binary digit widget appears.



3. Select the format properties for the circle, define the page on which this circle must appear and link it with a data.
4. Click OK to record this information. The formatted binary digit widget appears.

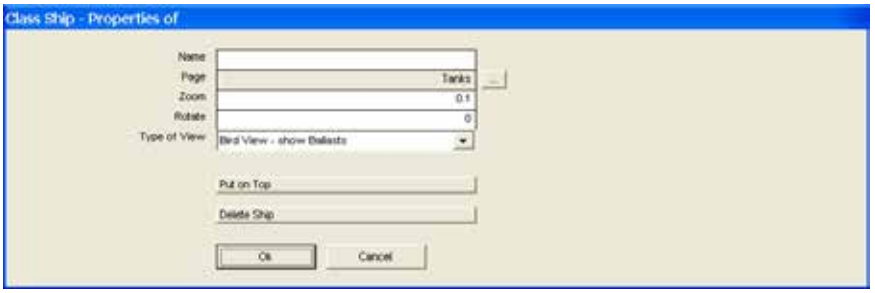
Some additional parameters:

"Reverse". When checked, a 0 value will lit the digit on, instead of being lit it off.

"Is Alarm". When checked, an alarm is triggered when the digit is lit.

Create a ship widget

1. Click Create Ship Widget.
   A vessel outline appears on the page.
2. Click right on the outline.
   A window of properties for the ship widget appears.



3. Select the properties for the outline and define the page on which this outline must appear.
4. Click OK to record this information. The formatted outline appears.

Some additional parameters:

"Type of view" will change the graphical display of the widget.

Move widgets from one page to another

1. In the title bar, click the button of the page to be displayed.
2. Select the widget to be moved and click right.
   The window of properties specific to the widget appears.
3. Select the page on which the widgets must be moved by clicking the button ... located next to the "Page" line.
4. Confirm the modification by clicking OK. The widget appears on the destination page.

Delete widgets

1. In the title bar, click the button of the page to be displayed.
2. Select the widget to be deleted and click right.
   The window of properties specific to the widget appears. The "Delete..." button located in the bottom right of this window enables to delete the selected widget.

Delete a page

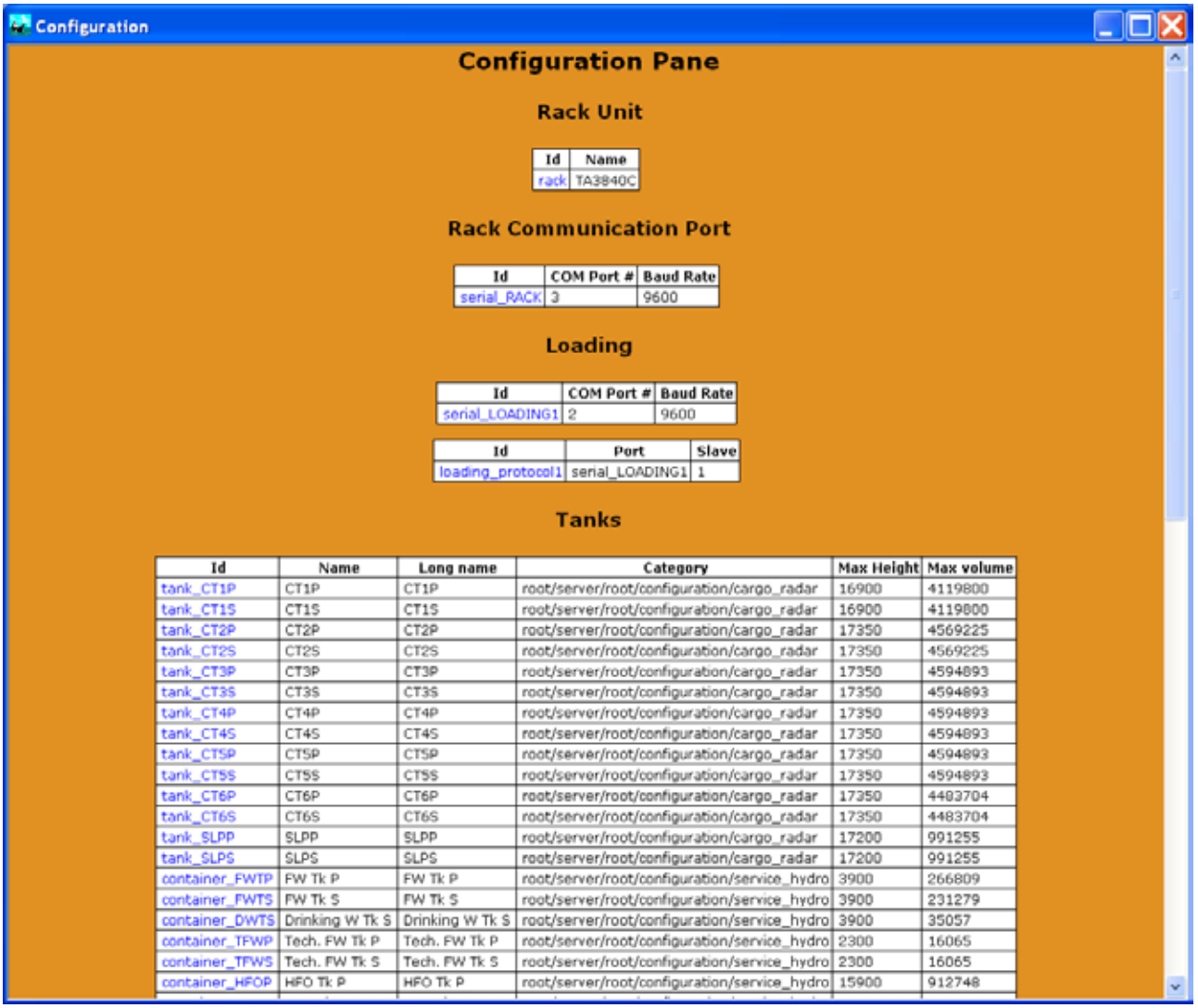
1. Open the property window of a page.
2. From this window, click Delete Page.
   The page is then deleted in the title bar.

5. MAINTENANCE

Characteristics of each tank and transmitter, as well as the specifications of the processing system must be entered in the CargoBoss 2.0 software at the time of the commissioning or have to be modified during the life of the vessel in the event of conceptual evolution. These operations must be carried out from the CargoBoss Configurator application. Note that the CargoBoss server must be running for this to work.

Open the window "Configuration"

1. In the C : \ Program files \ Honeywell Marine \ CargoBoss 2 folder, double-click CargoBoss Configurator.
   A window "Configuration" appears and displays specifications of the processing system, tanks and radars.
   *Note: the **Maintenance** option of the **Settings** menu also gives access to this window. However, this way is not recommended, the normal interface being able not to open after a faulty configuration.*

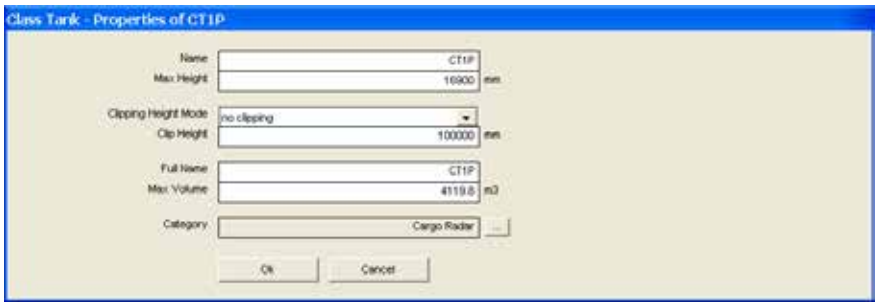


From this window, it is possible to change the name of the processing system, port COM protocol, to allocate characteristics of each tank and allocate characteristics of each radar.

*Note: the access to these characteristics can also be carried out from the **Settings** menu, by selecting **Tanks Configuration** or **Radars Configuration**.*

Allocate characteristics of the tanks

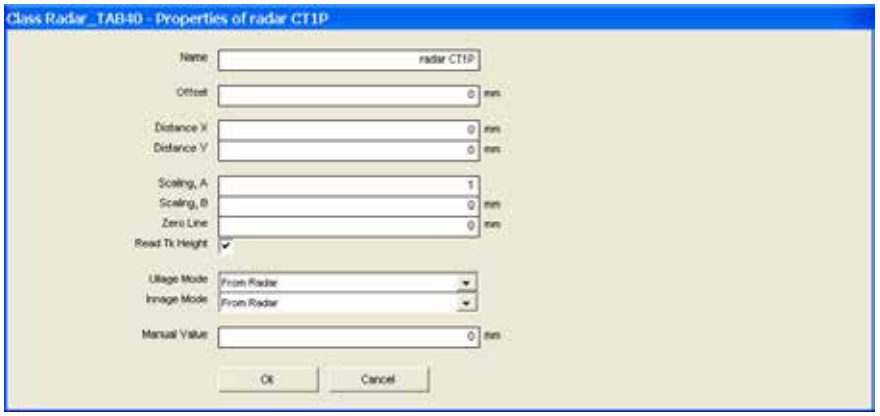
1. Open the window "Configuration".
2. Click the name of the tank to be modified.
   A window of properties of this tank appears.



3. Key-in dimensions of the tank, allocate a name and a tank category to it.
4. Click [OK] to record this information.
   Display is updated in the window "Configuration".

Allocate characteristics of the radars

1. Open the window "Configuration".
2. Click the name of the radar to be modified.
   A window of properties of this radar appears.

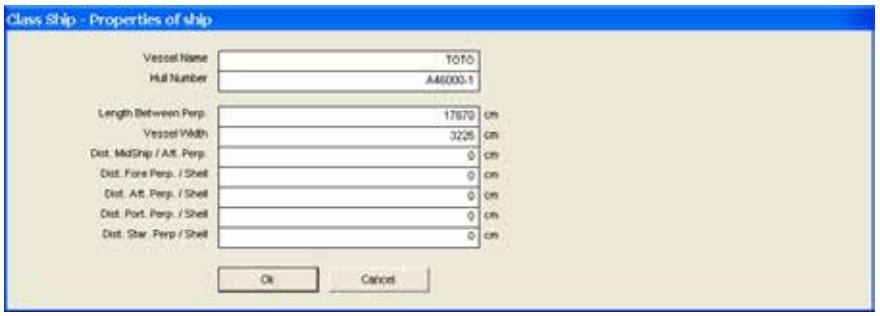


3. Key-in the properties for measurement and correction of the radar.
4. Click [OK] to record this information.
   Display is updated in the window "Configuration".

6. CHANGE THE VESSEL PARAMETERS

Parameters of the vessel (name and dimensions) must be entered in the CargoBoss 2.0 software at the time of the commissioning. During the life of the vessel, only its name and its hull number can be changed by the operator (password level 3).

1. In the **Settings** menu, select **Ship Settings** or **Vessel Name**.
   A window of properties of the vessel appears.



2. Key-in the name of the vessel and its dimensional characteristics.
3. Click [OK] to record this information.
   The new name appears in the lower strip.

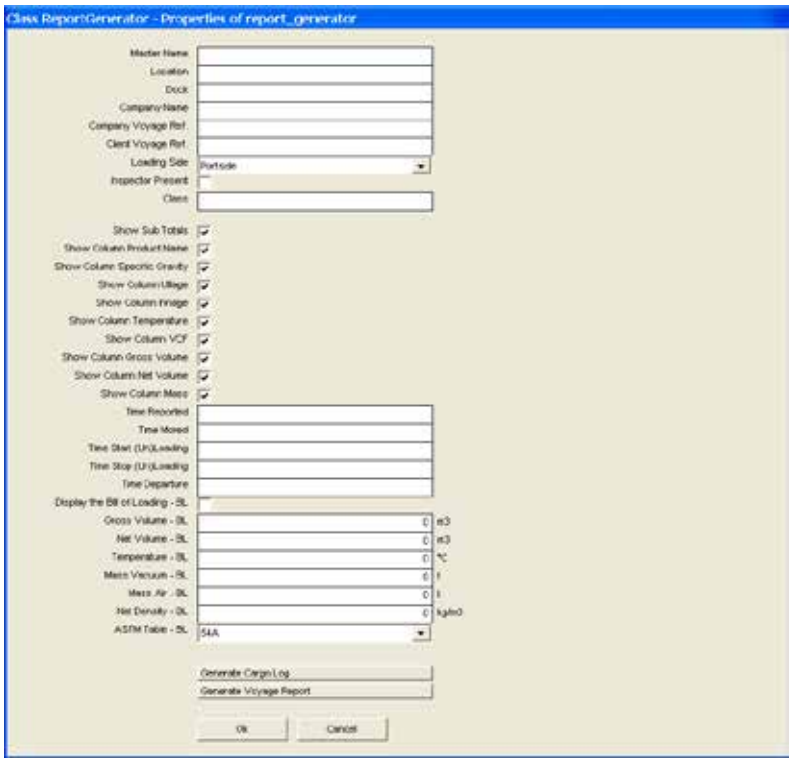
7. REPORTS

At any time, a report can be generated by the operator to be consulted and/or printed on paper and saved in a computer file. Information contained in this report is defined at the time of the commissioning.

1. In the **Voyage** menu, select **Generate Reports**.

   or

   In the toolbar, click [▤].
   A window of properties of the report appears.



2. Check the boxes corresponding to each value and characteristic appearing in the cargo report. Other personalized information appearing in the report heading, "Bill of loading" and "Times" part, is keyed-in by the administrator (password level 3) when printing a cargo or voyage report.
3. Click [OK] to record these selections.

8. PERSONAL NOTES

Honeywell Marine SAS
9, Rue Isaac Newton
18000 Bourges
France
Tel + 33 (0) 2 48 23 79 01
Fax + 33 (0) 2 48 23 79 03
E-mail: contact.marine@honeywell.com
www.honeywellprocess.com

MM5017E-rev02-ENG
February 2013
© 2013 Honeywell International Inc.