

Operating Instructions

Tankvision Professional NXA85

Tank Gauging
Movements System Configuration





A0023555

- Make sure the document is stored in a safe place such that it is always available when working on or with the device
- Avoid danger to individuals or the facility: read the "Basic safety instructions" section carefully, as well as all other safety instructions in the document that are specific to working procedures

The manufacturer reserves the right to modify technical data without prior notice. The Endress+Hauser sales organization will supply you with current information and updates to these instructions.

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1 About this document


1.1 Document function

This manual should support during the configuration of Tankvision Professional NXA85. It deals with the setup of the Movements package.

1.2 Target audience

Beside basic PC operating knowledge no special training is needed to perform the Tankvision Professional System operations. Nevertheless it is recommended receiving a training on the system by Endress+Hauser.

1.3 Software versions and certification

 Due to the certification process with weights and measures agencies, the latest software version might only be certified at a later stage. Also some features might be incompatible with the weights and measures regulations and can therefore not be combined.

1.4 Symbols

1.4.1 Safety symbols

DANGER

This symbol alerts you to a dangerous situation. Failure to avoid this situation will result in serious or fatal injury.

WARNING

This symbol alerts you to a potentially dangerous situation. Failure to avoid this situation can result in serious or fatal injury.

CAUTION

This symbol alerts you to a potentially dangerous situation. Failure to avoid this situation can result in minor or medium injury.

NOTICE

This symbol alerts you to a potentially harmful situation. Failure to avoid this situation can result in damage to the product or something in its vicinity.

1.4.2 Symbols for certain types of information

Tip

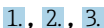
Indicates additional information



Reference to documentation



Notice or individual step to be observed

 1., 2., 3.

Series of steps



Result of a step

1.4.3 Symbols in graphics

1, 2, 3, ...

Item numbers

1., 2., 3.

Series of steps


A, B, C, ...

Views

1.4.4 List of abbreviations


- ETF
Estimated time to finish
- GOV
Gross Observed Volume
- GSV
Gross Standard Volume
- TOV
Total Observed Volume

1.5 Documentation

 For an overview of the scope of the associated Technical Documentation, refer to the following:

- *Device Viewer* (www.endress.com/deviceviewer): Enter the serial number from the nameplate
- *Endress+Hauser Operations app*: Enter serial number from nameplate or scan matrix code on nameplate.

The following document types are available in the Downloads area of the Endress+Hauser website (www.endress.com/downloads), depending on the device version:

Document type	Purpose and content of the document
Technical Information (TI)	Planning aid for your device The document contains all the technical data on the device and provides an overview of the accessories and other products that can be ordered for the device.
Brief Operating Instructions (KA)	Guide that takes you quickly to the 1st measured value The Brief Operating Instructions contain all the essential information from incoming acceptance to initial commissioning.
Operating Instructions (BA)	Your reference document The Operating Instructions contain all the information that is required in various phases of the life cycle of the device: from product identification, incoming acceptance and storage, to mounting, connection, operation and commissioning through to troubleshooting, maintenance and disposal.
Description of Device Parameters (GP)	Reference for your parameters The document provides a detailed explanation of each individual parameter. The description is aimed at those who work with the device over the entire life cycle and perform specific configurations.
Safety instructions (XA)	Depending on the approval, safety instructions for electrical equipment in hazardous areas are also supplied with the device. These are an integral part of the Operating Instructions.  The nameplate indicates which Safety Instructions (XA) apply to the device.
Supplementary device-dependent documentation (SD/FY)	Always comply strictly with the instructions in the relevant supplementary documentation. The supplementary documentation is a constituent part of the device documentation.

1.6 Change history

BA00394G_13.10

- 18.0.0
- Initial version

BA00394G_14.14

- 18.0.2 and 18.0.3
- New layout; Enhanced Product, Tank and Movement functionality

BA00394G_15.16

- 18.0.2 and 18.0.3
- New features

BA00394G_16.17

- 18.1.1
- Unification of the W&M and the non W&M software packages.

BA00394G_17.25-00

- 18.1.1
- Minor changes

2 Basic safety instructions

2.1 Requirements for the personnel

The personnel for installation, commissioning, diagnostics and maintenance must fulfill the following requirements:

- ▶ Trained, qualified specialists must have a relevant qualification for this specific function and task.
- ▶ Are authorized by the plant owner/operator.
- ▶ Are familiar with federal/national regulations.
- ▶ Before starting work, read and understand the instructions in the manual and supplementary documentation as well as the certificates (depending on the application).
- ▶ Follow instructions and comply with basic conditions.

The operating personnel must fulfill the following requirements:

- ▶ Are instructed and authorized according to the requirements of the task by the facility's owner-operator.
- ▶ Follow the instructions in this manual.

2.2 Intended use

2.2.1 Intended use of Tankvision Professional NXA85 software

Tankvision Professional is specifically designed for operators of bulk storage facilities, marketing terminals, refineries and pipelines. It is designed to handle all the data acquisition, supervisory control and monitoring required in a single fully integrated solution.

Tankvision Professional integrates all major types of tank measurement instruments into one system.

All measured and calculated tank parameters are accessible to your tank farm and terminal operators as well as to connected host systems.

Multi-user operation is provided by the inbuilt Web Server offering the opportunity to access data at any connected location (local/remote) e.g. for administrative and accounting purposes.

2.3 IT security

The manufacturer warranty is valid only if the product is installed and used as described in the Operating Instructions. The product is equipped with security mechanisms to protect it against any inadvertent changes to the settings.


IT security measures, which provide additional protection for the product and associated data transfer, must be implemented by the operators themselves in line with their security standards.

3 Incoming acceptance and product identification

3.1 Incoming acceptance

On receipt of the delivery:

1. Check the packaging for damage.
 - ↳ Report all damage immediately to the manufacturer.
Do not install damaged components.
2. Check the scope of delivery using the delivery note.
3. Compare the data on the nameplate with the order specifications on the delivery note.
4. Check the technical documentation and all other necessary documents, e.g. certificates, to ensure they are complete.

 If one of the conditions is not satisfied, contact the manufacturer.

3.2 Product identification

The following options are available for identification of the software:

- Nameplate specifications
- Order code with breakdown of the software features on the delivery note
- Enter serial numbers from nameplates in *Device Viewer*
(www.endress.com/deviceviewer): All information about the software is displayed.

For an overview of the technical documentation provided, enter the serial number from the nameplate in the *Device Viewer* (www.endress.com/deviceviewer).

3.2.1 Nameplate


The information that is required by law and is relevant to the product is shown on the nameplate, e.g.:

- Manufacturer identification
- Product name
- Order code
- Extended order code
- Serial number
- Barcode

3.2.2 Manufacturer address

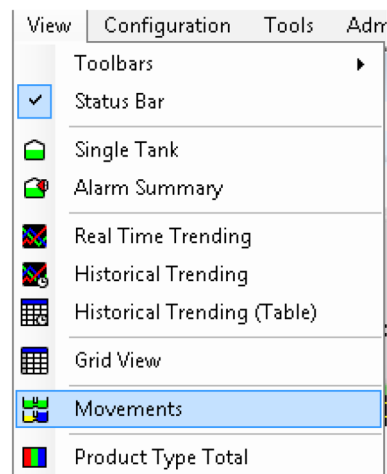
Endress+Hauser SE+Co. KG
Hauptstraße 1
79689 Maulburg, Germany
Place of manufacture: See nameplate.

3.2.3 Order code and product version

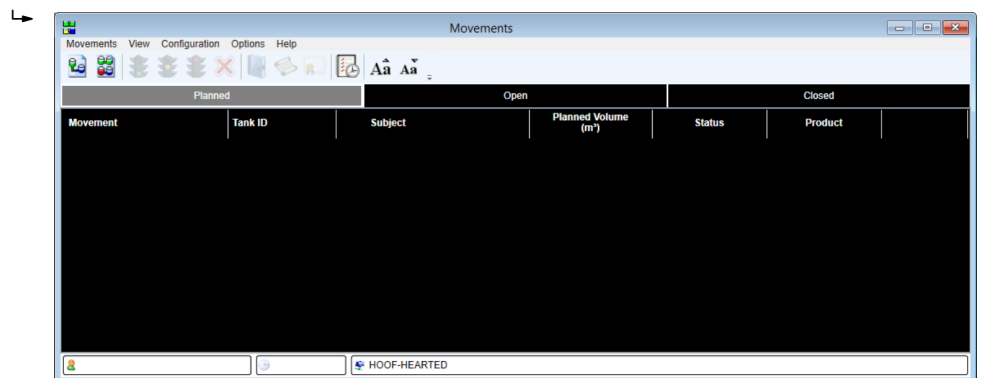
 To find out the version of your software, enter the order code indicated on the nameplate in the search screen at the following address:
www.products.endress.com/order-ident

4 Movements Configuration Introduction

The movements system within the tank gauging software is used to plan, open, suspend and close movements.



- To open the **Movements** Summary screen in Tankvision Professional click **View** → **Movements**.



5 System Settings

The **System Settings** screen is accessed from the **Movements** Summary screen by selecting the **System Settings** entry from the **Configuration** menu.

5.1 General Settings

5.1.1 Show details for each movement in a new window

If this box is ticked, a new window is opened every time a request to view a movement's details is made. Otherwise, only one details window is created and only details of the last selected movement are displayed.

5.1.2 Monitor Movements By

When viewing a movement in the detail window, this option dictates what quantity will be used to display the progress of the movement. Most of the options are self-evident, the **Movement Target Type** changes the selected monitoring quantity based on how the movement was configured.

The options are:

- **Movement Target Type**
- **GOV**
- **TOV**
- **GSV**
- **Weight**
- **Mass**

5.1.3 Tank Contents Colour

This drop-down list allows configuration of the way that tank graphics are to be displayed on the details window:

- **Use System Settings** - Use the flag from the Tankvision Professional system settings
- **Use Product Colour** - Use the colour defined for the product that the tank contains
- **Use Flow Colour** - Use Blue if the tank level is going up, Brown if the tank level is going down, or Green if the tank is static

5.1.4 Alarm Set Points Override

This drop-down list allows configuration of the way that the default alarm set points are overridden:

- **Tank** - Alarm set points can be overridden for individual tanks
- **Movement Class** - Alarm set points can be overridden for different movement classes


5.2 Archive

If this box is ticked, movements will be automatically deleted from the system after the entered number of days.

5.3 New Movements

The settings in this section affect the New Movement Wizard.

- **Default Product** - The product that is initially selected on the **Movement Details** page of the New Movement Wizard
- **Quick Transfer Class** - The movement class that movements configured using the quick transfer screen are given
- **Default Movement Target Type** - The default quantity type used to plan movements
- **Include Notes Page** - If set, the user will be presented with the opportunity to enter some notes on the movement during the creation process
- **Include timed activities** - If set, the user will be prompted to add timed activities to the movement during the creation process.

 Note the default movement target type must be selected as one of the movement target types to be offered to users.

 Note that these setting only affect movements created after the settings are changed, not ones already created.

5.4 Operation

The operation settings are an expandable group that is initially contracted when the window opens.

- Expand the group to access the settings.

↳

⬆ Operation

☒ Enter manual data for subject tank when changing status

☒ Amend planned quantity for subject when opening

☒ Enter manual data for movement tank when changing status

☒ Amend planned quantity for movement tank when opening


☐ Enter manual data for tank when changing status of timed activity

☐ Amend planned time for activity when opening


☐ Suspend and reopen all open movements at

If the:

- **Enter manual data for subject tank when changing status** box is ticked - The user will be shown a screen allowing the manual data figures for the associated tanks to be entered when opening, suspending, reopening or closing movement subjects.
- **Amend planned quantity for subject when opening** box is ticked - The user will be shown a screen allowing the planned quantities to be amended when opening or reopening movement subjects.

 If the planned quantity would take the tank associated with the movement subject above the maximum operating level or below the minimum operating level, the screen will be displayed anyway.

- **Enter manual data for movement tank when changing status** box is ticked - The user will be shown a screen allowing the manual data figures for the associated tanks to be entered when opening, suspending, reopening or closing movement tanks.
- **Amend planned quantity for movement tank when opening** box is ticked - The user will be shown a screen allowing the planned quantities to be amended when opening or reopening movement tanks.

 If the planned quantity would take the tank associated with the movement subject above the maximum operating level or below the minimum operating level, the screen will be displayed anyway.

- **Enter manual data for tank when changing status of timed activity** box is ticked - The user will be shown a screen allowing the manual data figures for the associated tanks to be entered when opening, suspending, reopening or closing timed activities.
- **Amend planned time for activity when opening** box is ticked - The user will be shown a screen allowing the planned time to be amended when opening or reopening timed activities.
- **Suspend and reopen all open movements at {0}** box is ticked - All open movements will be automatically suspended and reopened at the entered time. The normal use for this is to allow the inventory figures to be broken down into figures for each day the movement is open by suspending and reopening all open movements at midnight.

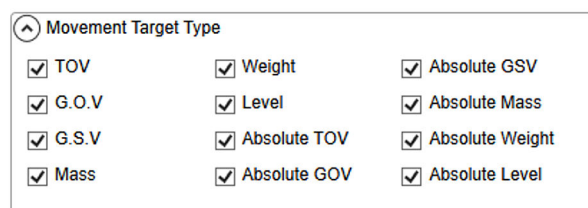
When you close the movement, the screen to set the manual data for the tank will be presented, there is a calculator button on the reference density entry box.

1. Click the calculator button.
↳ This will offer you the movement density calculation screen.
2. Enter an observed density for the movement cargo and the average density is returned from the calculation screen to the manual data screen.
3. Close the manual data screen to finish the movement and the manual density value for the tank is updated.

5.5 Movement Target Types

The movement target types are an expandable group that is initially contracted when the dialogue opens.

1. Expand the group to access the settings.

Movement Target Type		
<input checked="" type="checkbox"/> TOV	<input checked="" type="checkbox"/> Weight	<input checked="" type="checkbox"/> Absolute GSV
<input checked="" type="checkbox"/> G.O.V	<input checked="" type="checkbox"/> Level	<input checked="" type="checkbox"/> Absolute Mass
<input checked="" type="checkbox"/> G.S.V	<input checked="" type="checkbox"/> Absolute TOV	<input checked="" type="checkbox"/> Absolute Weight
<input checked="" type="checkbox"/> Mass	<input checked="" type="checkbox"/> Absolute GOV	<input checked="" type="checkbox"/> Absolute Level

2. Tick the movement target types that you wish operators to use when configuring movements and transfers. You must select the movement target type that matches your choice of default movement target type.

These settings just control the target types offered during the configuration of movements and transfers, they do not:

- Limit the choice of fill, empty or strip, which have implied movement target types associated with their use
- Alter the chosen movement target types of previously configured movements
- Cause "absolute" types to appear in situations where their use is precluded

6 Alarm Defaults

The **Default Alarm Configuration** screen is accessed from the **Movements** Summary screen by selecting the **Alarm Defaults** entry from the **Configuration** menu.

This screen is used for entering the default values for alarms. Once a movement has been created, the alarm settings for that movement can be amended using the **Edit Alarm Configuration** option.



See the Movements System Operation manual BA00395G for more details.

6.1 Movement Alarms

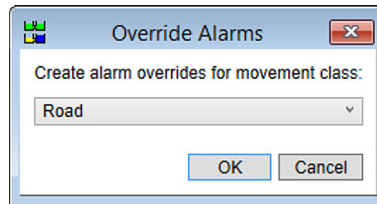
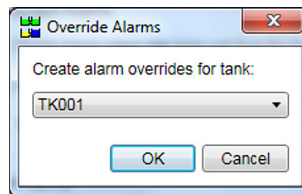
The settings in this section are used to configure the alarms for a complete movement.

- If the **Raise alarm when the total net flow for the movement exceeds** box is ticked, an alarm will be raised for the movements when the total flow for all open receipt tanks on the movement is difference from the total flow for all open load tanks on the movement by more than the entered amount.
- If the **Reraise active flow alarms every {0} minutes** box is ticked, active low flow alarms and reverse flow alarms will be raised at the entered time period. If this box is not ticked, low flow alarms are automatically reset when the flow from the tank rises above the entered threshold and will be reraised when the flow from the tank next drops below the threshold. Similarly reverse flow alarms are automatically reset when the flow from the tank drops below the entered threshold and are reraised when the flow from the tank rises above the threshold.
- The **Raise low flow alarms for** drop-down list allows configuration of the direction for which low flow alarms are to be raised.

6.2 Tank Alarms

Default values for tank alarms can be set on a global basis, but can also be overridden for specific tanks or movement classes, see option **System Settings**.

1. A new set of overrides can be added by clicking on the **Add** button.
 - ↳ This will cause a new screen to be displayed allowing selection of the tank for which overrides are to be set:



The tank or movement class for which overrides are to be set should be selected from the drop-down list.

2. Click the **OK** button to add the new set of overrides to the list.

Similarly a set of overrides can be removed by selecting the override in the list and then clicking the **Remove** button.

The individual settings have the following effect:

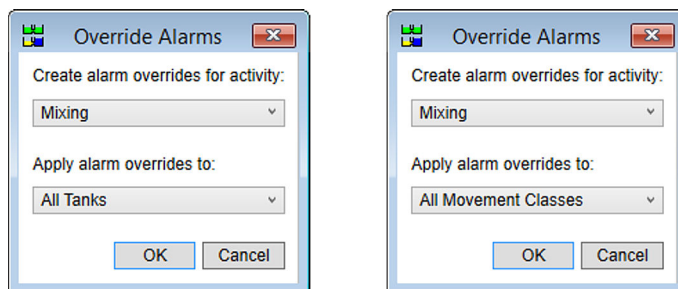
- If the **First time to target alarm** box is ticked an alarm will be raised for a movement tank when the estimated time to finish for that tank falls below the entered value. By default this is an alarm of low severity.
- If the **Second time to target alarm** box is ticked an alarm will be raised for a movement tank when the estimated time to finish for that tank falls below the entered value. By default this is an alarm of high severity.
- The **Hysteresis for time to target alarms** field controls when the time to target alarms are reset. If an anomaly in the flow rate causes the time to target alarms to be raised prematurely by causing an incorrect calculation of the estimated time to finish, they will be reset when the estimated time to finish exceeds the entered threshold by the hysteresis amount.
- If the **First approaching target alarm** box is ticked an alarm will be raised when the product level in the tank differs from the target level by less than the entered value. By default this is an alarm of low severity.
- If the **Second approaching target alarm** box is ticked an alarm will be raised when the product level in the tank differs from the target level by less than the entered value. By default this is an alarm of high severity.
- If the **Raise alarm when target level is achieved** box is ticked an alarm will be raised when the product level in the tank reaches the target level. By default this is an alarm of high severity.
- If the **Target level exceeded alarm** box is ticked an alarm will be raised when the product level in the tank exceeds the target level by the entered value. By default this is an alarm of critical severity.
- The **Hysteresis for target level alarms** box controls when the target level alarms are reset. If an anomaly in the product level reading causes the target level alarms to be raised prematurely, they will be reset when the difference between the product level and target level exceeds the entered value for that alarm plus the hysteresis value.

- If the **Low flow alarm** box is ticked an alarm will be raised if the flow rate for the tank falls below the entered threshold, unless the movement tank has been open for less than the entered time.
- If the **Reraise active flow alarms** box is ticked (see "Movement Alarms") this alarm will be reraised at the specified time interval for as long as the flow rate for the tank remains below the entered threshold.
- If the **Reraise active flow alarms** box is not ticked, the alarm will be raised once when the flow rate falls below the entered threshold. The alarm will not be reraised unless the flow rate rises above the entered threshold and then falls below it again.
- If the **Reverse flow alarm** box is ticked an alarm will be raised if the flow rate for the tank is in the wrong direction by more than the entered threshold, unless the movement tank has been open for less than the entered time.
- If the **Reraise active flow alarms** box is ticked (see "Movement Alarms") this alarm will be reraised at the specified time interval for as long as the flow rate for the tank remains above the entered threshold in the wrong direction.
- If the **Reraise active flow alarms** box is not ticked, the alarm will be raised once when the flow rate rises above the entered threshold in the wrong direction. The alarm will not be reraised unless the flow rate falls below the entered threshold in the wrong direction and then rises above it again.
- If the **Disable alarm** box is ticked, a reverse flow alarm will not be raised until after the flow has exceeded the entered flow rate in the correct direction. This is to prevent false alarms caused by initial flow of product when valves are opened.

6.3 Timed Activity Alarms

Default values for timed activity alarms can be set on a global basis, but can also be overridden for specific tanks or movement classes and/or timed activities.

1. A new set of overrides can be added by clicking on the **Add** button.
 - ↳ This will cause a new screen to be displayed allowing selection of the timed activity and tank for which overrides are to be set:



The timed activity and tank or movement class for which overrides are to be set should be selected from the drop-down lists.

2. Click the **OK** button to add the new set of overrides to the list.

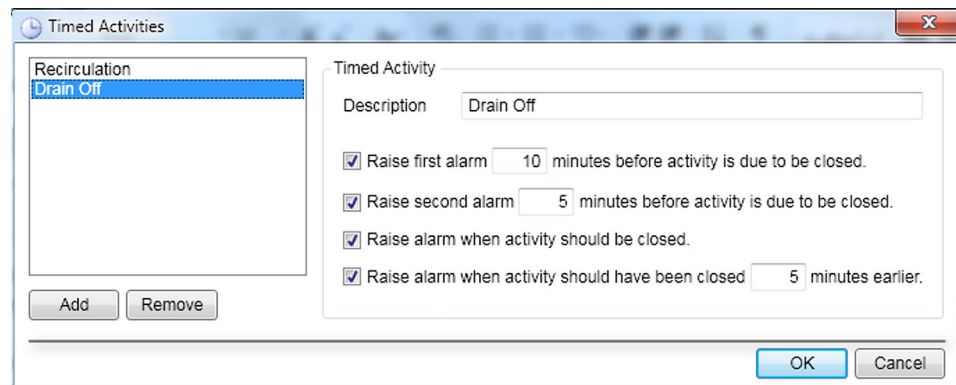
Similarly a set of overrides for a timed activity/tank combination can be removed by selecting the entry in the list and then clicking the **Remove** button.

The individual settings have the following effect:

- If the **First alarm** box is ticked an alarm will be raised for a timed activity when the time remaining for that activity falls below the entered value. By default this is an alarm of low severity.
- If the **Second alarm** box is ticked an alarm will be raised for a timed activity when the time remaining for that activity falls below the entered value. By default this is an alarm of high severity.
- If the **Raise alarm when activity should be closed** box is ticked an alarm will be raised when the timed activity should be completed (based on the planned time).
- If the **Overdue alarm** box is ticked an alarm will be raised for a timed activity when the time the activity has been open exceeds the planned time by more than the entered amount.

7 Timed Activities

The **Timed Activities** screen is accessed from the **Movements** Summary screen by selecting the **Timed Activities** entry from the **Configuration** menu.



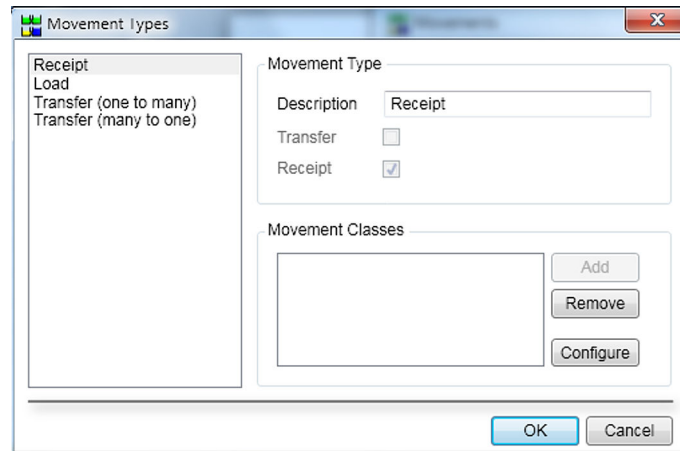
The screenshot shows the 'Timed Activities' window. On the left, there is a list box containing 'Recirculation' and 'Drain Off', with 'Drain Off' selected. Below the list are 'Add' and 'Remove' buttons. On the right, the 'Timed Activity' section shows the 'Description' as 'Drain Off'. Below this, there are four checked options with associated time values: 'Raise first alarm' (10 minutes), 'Raise second alarm' (5 minutes), 'Raise alarm when activity should be closed.', and 'Raise alarm when activity should have been closed' (5 minutes earlier). At the bottom right are 'OK' and 'Cancel' buttons.

This screen is used for creating, deleting and editing timed activities.

- ▶ To create a new timed activity, click the **Add** button.
 - ↳ A new activity will be added to the list as the currently selected entry. Details of the new activity can then be edited.
- ▶ To remove a timed activity, select the activity to be removed in the list of activities and then click the **Remove** button.
- ▶ To edit a timed activity, select the activity to be edited in the list of activities.
 - ↳ The current values for the activity will be displayed on the right hand part of the screen and can be edited as required.

8 Movement Types

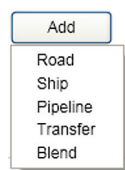
The **Movement Types** screen is accessed from the **Movements** Summary screen by selecting the **Movement Types** entry from the **Configuration** menu.



This screen is used for editing movement types. There are 4 movement types:

- **Receipt**
- **Load**
- **Transfer (one to many)**
- **Transfer (many to one)**

1. To edit a movement type, select the movement type from the list of movement types.
 - ↳ The current values for the movement type will be displayed on the right hand part of the screen. Although the **Description** can be edited, the movement type can still be determined using the **Transfer** and **Receipt** fields which are not editable.
2. To associate a movement class with the currently selected movement type, click the **Add** button.
 - ↳ A list of the currently configured movement classes will be displayed:



3. Select the movement class to be associated with the currently selected movement type from the list.
 - ↳ The movement class will then be added to the list of movement classes associated with the currently selected movement type.
4. To disassociate a movement class from the currently selected movement type, select the movement class in the list of associated movement classes and click the **Remove** button.
5. To edit available movement classes, click the **Configure** button.
 - ↳ This will display the **Movement Classes** screen (see section "Movement Classes").



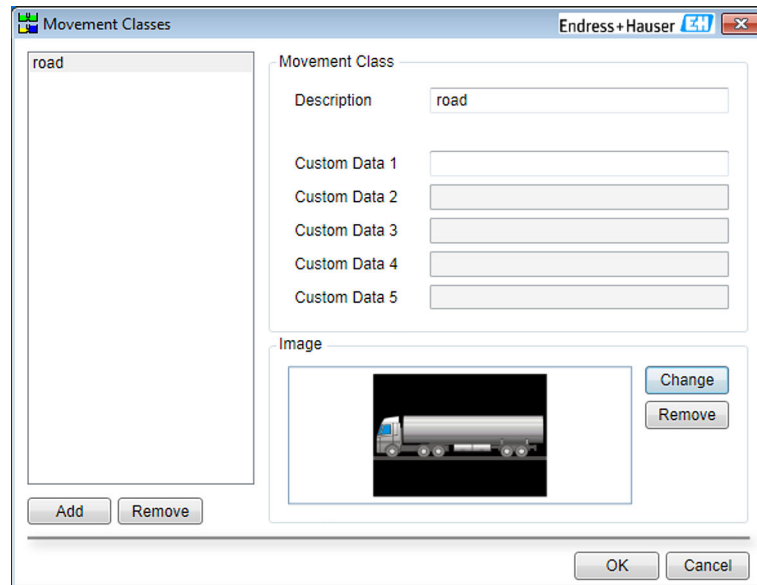
Movement types cannot be used unless they are associated with a movement class which has been pre-configured. Failure to do this will lead to erratic behavior within the movements application.

This is particularly relevant to the simple tank to tank transfer where the movement class is not shown. It is still imperative that the movement types for transfer (one to many and

many to one) are associated with a movement class e.g. transfer, or blend or something similar.

9 Movement Classes

The **Movement Classes** screen is accessed from the **Movements** Summary screen by selecting the **Movement Classes** entry from the **Configuration** menu or by clicking the **Configure** button on the **Movement Types** screen (see section "Movement types").



This screen is used for creating, deleting and editing movement classes.

Creating a movement class

- ▶ To create a new movement class, click the **Add** button under the list of existing movement classes.
 - ↳ A new movement class will be added to the list as the currently selected entry. Details of the new movement class can then be edited.

Deleting a movement class

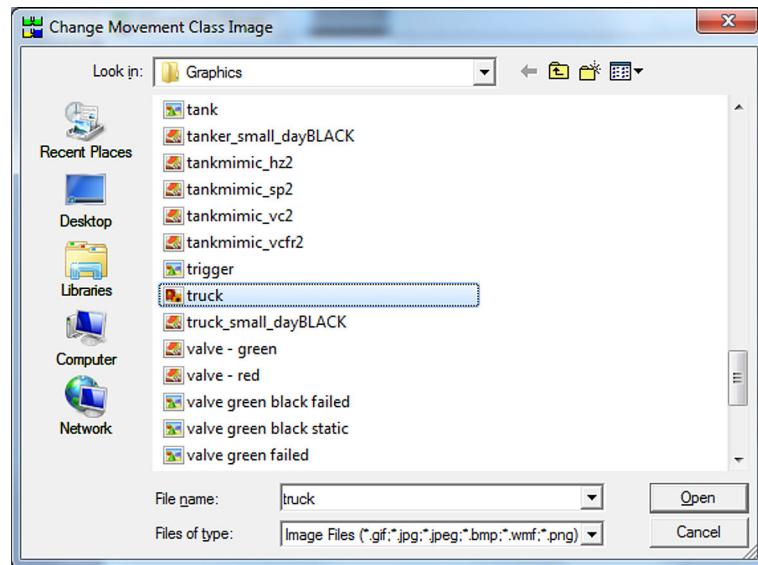
- ▶ To remove a movement class, select the movement class to be removed in the list of movement classes and then click the **Remove** button under the list of movement classes.

Editing a movement class

- ▶ To edit a movement class, select the movement class to be edited in the list of movement classes.
 - ↳ The current values for the movement class will be displayed on the right hand part of the screen and can be edited as required.

Movement Class Parameters

- **Description** - A description of the movement class
- **Custom Data {0}** - The caption to be displayed next to the corresponding custom data field in the movement header
- **Image** - The text on the button in the image area will be **Add** if the movement class does not currently have an image associated with it, or **Change** if it does. Clicking this button will display a file selection screen:

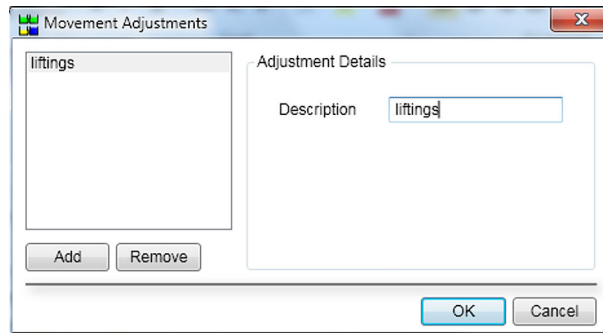


- Navigate to the file to be used as the image for the movement class and then click the **Open** button.

Image - If the **Remove** button in the image area is clicked, the image for the movement class will be removed.

10 Adjustments

The **Movement Adjustments** screen is accessed from the **Movements** Summary screen by selecting the **Adjustments** entry from the **Configuration** menu



This screen is used for creating, deleting and editing adjustments.

Creating an adjustment

- ▶ To create a new adjustment, click the **Add** button.
 - ↳ A new adjustment will be added to the list as the currently selected entry. Details of the new adjustment can then be edited.

Deleting an adjustment

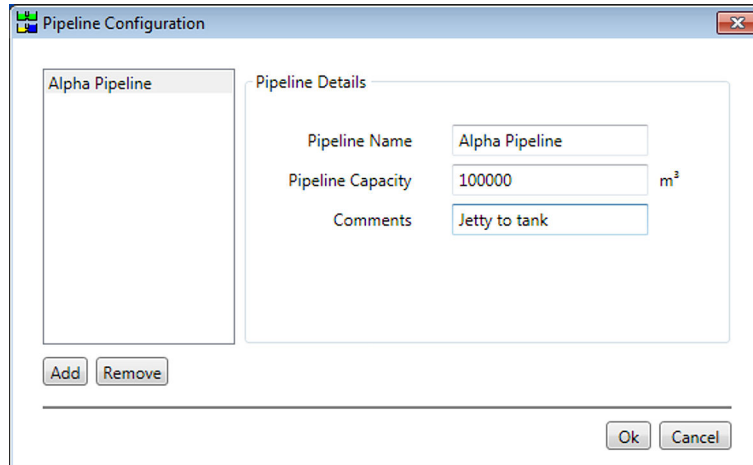
- ▶ To remove an adjustment, select the adjustment to be removed in the list of adjustments and then click the **Remove** button.

Editing an adjustment

- ▶ To edit an adjustment, select the adjustment to be edited in the list of adjustments.
 - ↳ The current values for the adjustment will be displayed on the right hand part of the screen and can be edited as required.

11 Pipeline Configuration

The **Pipeline Configuration** screen is accessed from the **Movements** Summary screen by selecting the **Pipeline Config** entry from the **Configuration** menu.



This screen is used for creating, deleting and editing pipelines.

Creating a new pipeline

- ▶ To create a new pipeline, click the **Add** button.
 - ↳ A new pipeline will be added to the list as the currently selected entry. Details of the new pipeline can then be edited.

Removing a pipeline

- ▶ To remove a pipeline, select the pipeline to be removed in the list of pipelines and then click the **Remove** button.

Editing a pipeline

- ▶ To edit a pipeline, select the pipeline to be edited in the list of pipelines.
 - ↳ The current values for the pipeline will be displayed on the right hand part of the screen and can be edited as required.

12 Maintain View

The columns displayed in the summary views and historical view can be changed or reordered along with the order that the movement records are displayed in.

To modify a view on the summary screen, make sure that the view to be changed is the view being displayed and then select **Maintain View** from the **Options** menu.

To modify the view on the **Historical Movements** screen, simply select **Maintain View** from the **Options** menu. The following screen will be displayed:

12.1 General

If the **Display movement subjects which are not tanks** box is ticked then movement subjects which are not tanks will be displayed in the view.

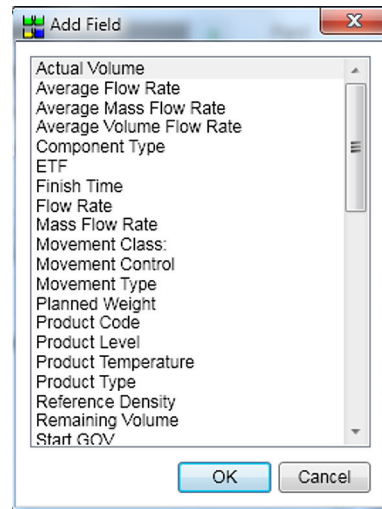
If the box is not ticked then only movement subjects which are tanks will be displayed in the view.

12.2 Fields

The fields section contains a list of the fields currently displayed in the view. The fields that have a gray background are fields that cannot be reordered or removed.

Adding a new field

1. To add a new field to the list, click the **Add** button.
 ➤ A screen containing a list of available fields will be displayed:





2. Select the field to be added and click the **OK** button.

Removing a field

- To remove a field from the list, select it and then click the **Remove** button.

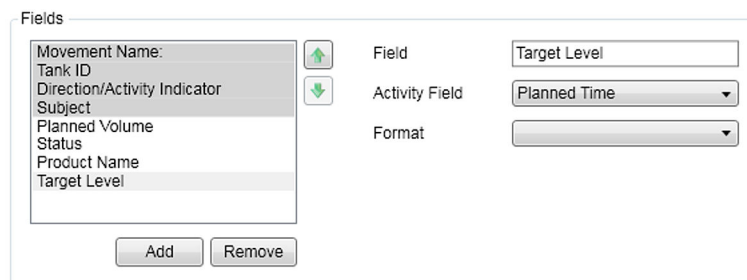
Moving a field up and down

1. To move a field up the list (left in the view), select it and click the  button.
2. To move a field down the list (right in the view), select it and click the  button.

Further configurations

For some fields it is possible to configure them further:

If a field is only applicable to a tank (for example **Target Level**), an alternative field can be selected for entries that are timed activities:



If a field contains a date/time value, a format can be specified:

Fields

Movement Name:
Tank ID
Direction/Activity Indicator
Subject
Planned Volume
Status
Product Name
Target Level
Start Time

↑

↓

Add Remove

Field

Start Time

Format

21/02/2011
21 February 2011
21 February 2011 09:15
21 February 2011 09:15:28
21/02/2011 09:15
21/02/2011 09:15:28
09:15
09:15:28

If a field contains a time span value, a format can be specified:

Fields

Movement Name:
Tank ID
Direction/Activity Indicator
Subject
Planned Volume
Status
Product Name
Target Level
Start Time
ETF

↑

↓

Add Remove

Field

ETF

Format

54:32
54:32:10

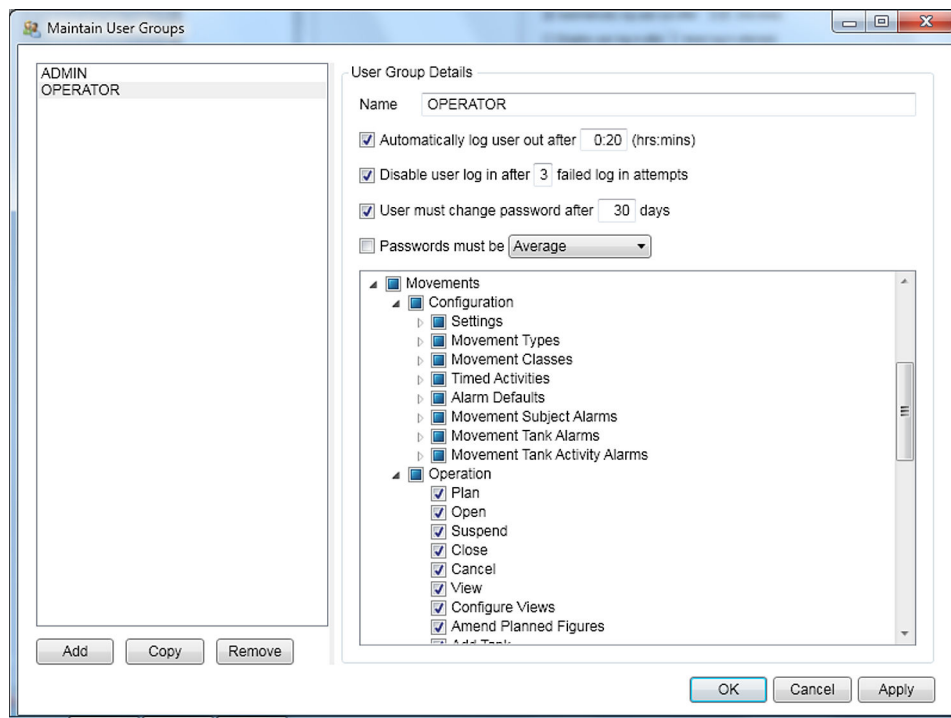
12.3 Sorts

If the **Keep components for each movement together** box is ticked, the rows for each movement will be kept together and the entire movement will be sorted according to the sort criteria.

The sort criteria are set by selecting a field from the drop-down list of fields and then selecting the order from the corresponding drop-down list. Up to 5 fields can be chosen as sort criteria.

13 Security

The access rights for the movements system are set on a user group basis. For the access rights to be applied to a specific user they must be a member of the given user group. The access rights are maintained using the **Maintain User Groups** option from the **Security** menu on the Tankvision Professional Home Page.



The access rights relating to the movements system all come under the **Movements** entry in the access rights list (see above). To amend the access rights for a user group, select the relevant user group from the list of user groups and then tick and untick the relevant boxes in the access rights list.

13.1 Configuration

13.1.1 Settings

- **View** - This option should be ticked if members of the user group are allowed to view the **System Settings** screen (see section "System Settings")
- **Edit** - This option should be ticked if members of the user group are allowed to edit the Movement settings

13.1.2 Adjustments

- **View** - This option should be ticked if members of the user group are allowed to view the **Movement Adjustments** screen (see section "Adjustments")
- **Edit** - This option should be ticked if members of the user group are allowed to edit **Adjustment Details**.
- **Add** - This option should be ticked if members of the user group are allowed to create new adjustments.
- **Remove** - This option should be ticked if members of the user group are allowed to remove adjustments.

13.1.3 Alarm Defaults

- **View Movement Alarms** - This option should be ticked if members of the user group are allowed to view the default movement alarm settings on the **Default Alarm Configuration** screen (see section "Alarm Defaults")
- **Edit Movement Alarms** - This option should be ticked if members of the user group are allowed to edit the default movement alarm settings
- **View Tank Alarms** - This option should be ticked if members of the user group are allowed to view the default tank alarm settings (see section "Tank Alarms") on the **Default Alarm Configuration** screen
- **Edit Tank Alarms** - This option should be ticked if members of the user group are allowed to edit the default tank alarm settings
- **Add Tank Alarm Override** - This option should be ticked if members of the user group are allowed to create new tank override alarm settings
- **Remove Tank Alarm Override** - This option should be ticked if members of the user group are allowed to remove tank override alarm settings
- **View Timed Activity Alarms** - This option should be ticked if members of the user group are allowed to view the default timed activity alarm settings on the **Default Alarm Configuration** screen
- **Edit Timed Activity Alarms** - This option should be ticked if members of the user group are allowed to edit the default timed activity alarm settings
- **Add Timed Activity Alarm Override** - This option should be ticked if members of the user group are allowed to create new timed activity override alarm settings
- **Remove Timed Activity Alarm Override** - This option should be ticked if members of the user group are allowed to remove timed activity override alarm settings

13.1.4 Movement Classes

- **View** - This option should be ticked if members of the user group are allowed to view the **Movement Classes** screen (see section "Movement Classes")
- **Edit** - This option should be ticked if members of the user group are allowed to edit movement class details
- **Add** - This option should be ticked if members of the user group are allowed to create new movement classes
- **Remove** - This option should be ticked if members of the user group are allowed to remove movement classes

13.1.5 Movement Subject Alarms

- **View** - This option should be ticked if members of the user group are allowed to view the alarm settings for movement subjects
- **Edit** - This option should be ticked if members of the user group are allowed to edit the alarm settings for movement subjects

13.1.6 Movement Tank Activity Alarms

- **View** - This option should be ticked if members of the user group are allowed to view the alarm settings for timed activities on movements
- **Edit** - This option should be ticked if members of the user group are allowed to edit the alarm settings for timed activities on movements

13.1.7 Movement Tank Alarms

- **View** - This option should be ticked if members of the user group are allowed to view the alarm settings for movement tanks
- **Edit** - This option should be ticked if members of the user group are allowed to edit the alarm settings for movement tanks

13.1.8 Timed Activities

- **View** - This option should be ticked if members of the user group are allowed to view the **Timed Activities** screen (see section "Timed Activities")
- **Edit** - This option should be ticked if members of the user group are allowed to edit timed activity details
- **Add** - This option should be ticked if members of the user group are allowed to create new timed activities.
- **Remove** - This option should be ticked if members of the user group are allowed to remove timed activities

13.2 Operation

- **Movement Certificate**
 - **Modify** - Permits a user to modify the movement certificate data, for instance to add independent dips from a third party
 - **View** - Permits a user to view and print the movement certificate
- **Simple** - Options applying to the simple movements. If using the full movements package it is recommended to disable these options
- **Add Tank** - This option should be ticked if members of the user group are allowed to add extra tanks to movements
- **Add Timed Activity** - This option should be ticked if members of the user group are allowed to add extra timed activities to movements
- **Amend Planned Figures** - This option should be ticked if members of the user group are allowed to amend planned figures
- **Cancel** - This option should be ticked if members of the user group are allowed to cancel movements
- **Close** - This option should be ticked if members of the user group are allowed to close movements
- **Configure Views** - This option should be ticked if members of the user group are allowed to configure views (see section "Maintain View")
- **Edit Movement Header** - This option should be ticked if members of the user group are allowed to edit the header details of movements
- **Movement Log** - This option should be ticked if members of the user group are allowed to view movement logs
- **Open** - This option should be ticked if members of the user group are allowed to open movements
- **Plan** - This option should be ticked if members of the user group are allowed to plan movements
- **Suspend** - This option should be ticked if members of the user group are allowed to suspend movements
- **View** - This option should be ticked if members of the user group are allowed to view movements
- **View Historical Movements** - This option should be ticked if members of the user group are allowed to view the **Historical Movements** screen
- **View History** - This option should be ticked if members of the user group are allowed to view the history of movements.

13.2.1 Tank Limits

- **Plan Above Max Operating Figures** - This option should be ticked if members of the user group are allowed to plan movements that would take tanks above their maximum operating level or volume
- **Plan Below Min Operating Figures** - This option should be ticked if members of the user group are allowed to plan movements that would take tanks below their minimum operating level or volume
- **Open Above Max Operating Figures** - This option should be ticked if members of the user group are allowed to open movements that would take tanks above their maximum operating level or volume
- **Open Below Min Operating Figures** - This option should be ticked if members of the user group are allowed to open movements that would take tanks below their minimum operating level or volume

14 Glossary

Load	Product is taken from a tank to a place outside the site.
Receipt	Product arrives from outside the site to be stored in a tank on site.
Transfer	Product is moved between two or more storage vessels on the site.
ETF	Estimated time to finish.
Actual Volume	The volume transferred since the movement was opened.
Planned Volume	The volume to be transferred by the movement.
Subject	The movement subject is the tank or transport which will receive or export the whole of the planned volume.



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