

**Service Information System**

Shutdown SIS

[Previous Screen](#)

◀ Product: MARINE ENGINE  
Model: C280-16 MARINE ENGINE TDX  
Configuration: C280-16 MARINE TDX00001-UP

## **Systems Operation**

### **Marine Monitoring System II**

**Media Number -REN2490-06**

**Publication Date -01/08/2008****Date Updated -11/08/2008**

i01505294

## **RSView Software for Optional Computer**

### **SMCS - 7490**

The system can be equipped with an optional computer. The computer can be used in place of the Panelview screen or the computer can be installed as a separate display. The computer is equipped with RSView software. The RSView program has many of the same features of the Panelview application. The RSView program has the ability to display a trend. The program has the ability to display a data log.

The RSView display consists of three parts. The top of the screen contains an area that displays active alarms. The right side of the display contains the menu buttons for the applications that are specific to RSView. The middle screen is similar to the Panelview screen. Any screens that are different are described in the following sections.

## **RSView Display Screens**

### **Engine Overview**

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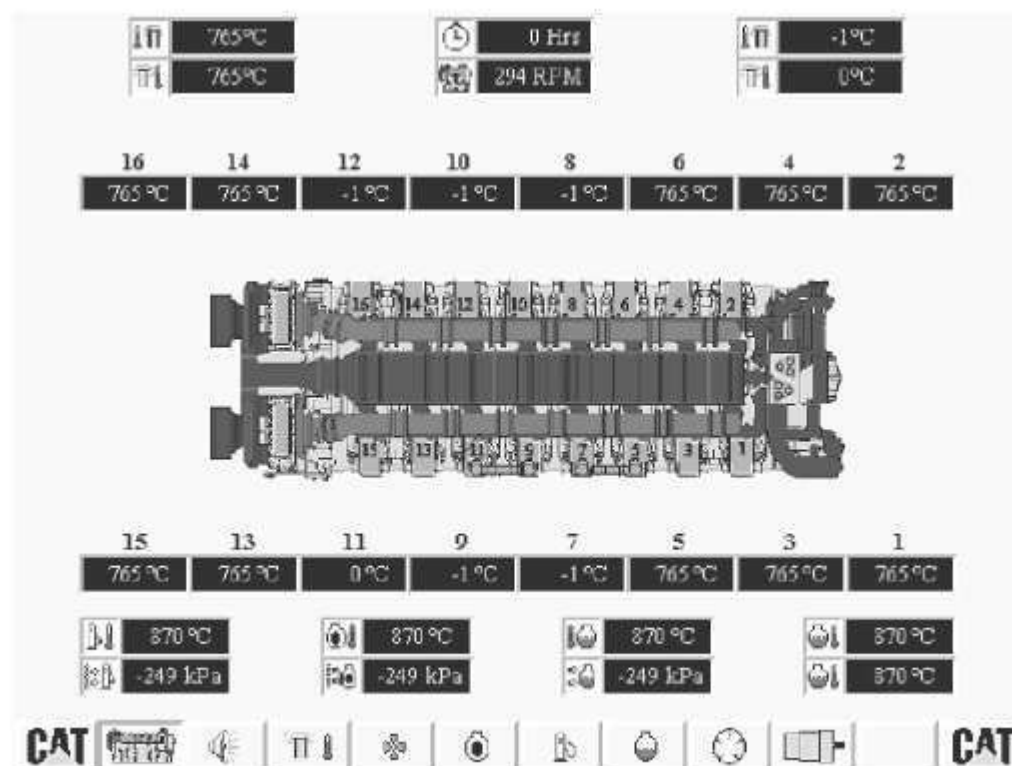


Illustration 1  
Overview screen

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The engine overview is a top view of the engine. This displays the important parameters. The image is based on the configuration of the engine. Optional equipment is displayed on the screen. The component data display has a color code that is assigned for alarm states:

**White** - normal operation

**Cyan** - failure of a sensor

**Yellow** - alarm

**Red** - shutdown

The following data is available from the engine overview:

- Inlet temperature of the turbine
- Outlet temperature of the turbine
- Engine hours
- Engine speed

- Exhaust port temperatures
- Fuel temperature
- Fuel to engine pressure
- Oil to engine temperature
- Oil to engine pressure
- AC/OC inlet temperature
- AC/OC inlet pressure
- Jacket water outlet temperatures
- Fuel rack percentage
- Speed of the Turbine

## Active Alarms

14:42:05		ACTIVE		2/10/2000	
Ack Current		Ack All			
Alarm Date	Alarm Time	Ack Date	Ack Time	Tag	Description
10/2/00	2:41:56 PM	10/2/00	2:41:57 PM	REMOTE I/O RACK 0 MODULE 0 FAULT	
10/2/00	2:41:56 PM	10/2/00	2:41:57 PM	REMOTE I/O RACK 0 MODULE 1 FAULT	
10/2/00	2:41:56 PM			REMOTE I/O RACK 0 MODULE 2 FAULT	
10/2/00	2:41:56 PM	10/2/00	2:41:57 PM	REMOTE I/O RACK 0 MODULE 3 FAULT	
10/2/00	2:41:56 PM	10/2/00	2:41:57 PM	RELAY POWER NOT AVAILABLE ALARM	
10/2/00	2:41:56 PM			SLC CHASSIS SLOT 2 FAULT	
10/2/00	2:41:56 PM			SLC CHASSIS SLOT 3 FAULT	
10/2/00	2:41:56 PM			SLC CHASSIS SLOT 4 FAULT	
10/2/00	2:41:56 PM	10/2/00	2:41:57 PM	SLC CHASSIS SLOT 5 FAULT	
10/2/00	2:41:56 PM			SLC CHASSIS SLOT 6 FAULT	
10/2/00	2:41:56 PM	10/2/00	2:41:57 PM	AUXILIARY SHUTDOWN #2 SHUTDOWN	
10/2/00	2:41:56 PM	10/2/00	2:41:57 PM	CRANKCASE PRESSURE SENSOR FAILURE	
10/2/00	2:41:56 PM	10/2/00	2:41:57 PM	LOW SPEED LOW OIL PRESSURE CONTACTOR FA	
10/2/00	2:41:56 PM	10/2/00	2:41:57 PM	AC/OC PUMP PRESSURE SENSOR FAILURE	
10/2/00	2:41:56 PM	10/2/00	2:41:57 PM	AIR START PRESSURE SENSOR FAILURE	

Illustration 2

g007:

## Active alarms

Press the "active alarms" button in order to enter the "active alarms screen". The screen will display the active alarms, shutdowns, and failures. Alarms are printed in black text with a yellow background. Shutdowns are printed in white text with a red background. Failures in sensors are printed in black text with a cyan background. The color of text is inverted in order to signify the current selection. Colors of background are inverted in order to signify the current selection. The alarms can be acknowledged by pressing the "Ack Current" button. The "Ack All" button will acknowledge all of the alarms.

## System Configuration

### "Operator Configuration Screen"

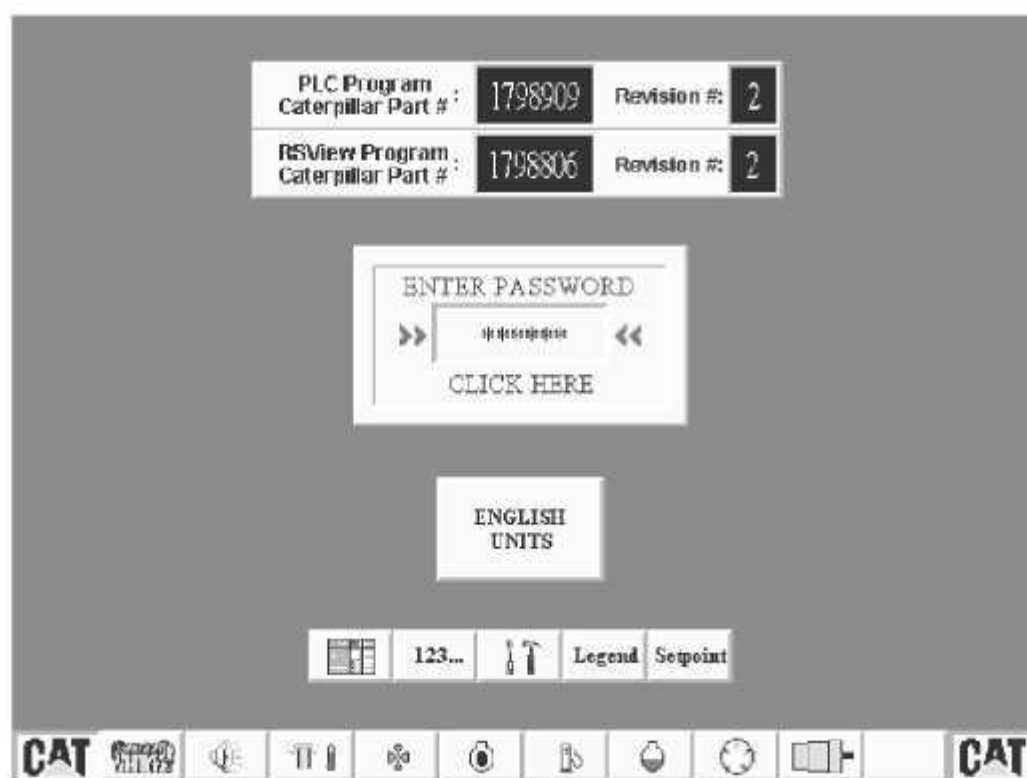


Illustration 3

g007:



Button	Function
	Go to PLC Status Screen
<b>123...</b>	Go to Miscellaneous Screen
	Go to Maintenance Data Screen
<b>Legend</b>	Go to Legend Screen
<b>Setpoint</b>	Go to Set point Screen
<b>ENGLISH UNITS</b>	Application currently displaying English units and data
<b>METRIC UNITS</b>	Application currently displaying Metric units and data
<b>LCD INTENSITY REF.</b>	PanelView LCD Intensity selection button

Illustration 4

g0076

Touch the CAT button in order to enter the "operator configuration screen". The icon is on the lower corners of the overview screen. Touch the display for the password in order to enter the password. The default username is "USER". The default password is "3600". When the correct password is entered, the "engineering configuration screen" will be displayed automatically.

## "Engineering Configuration Screen"

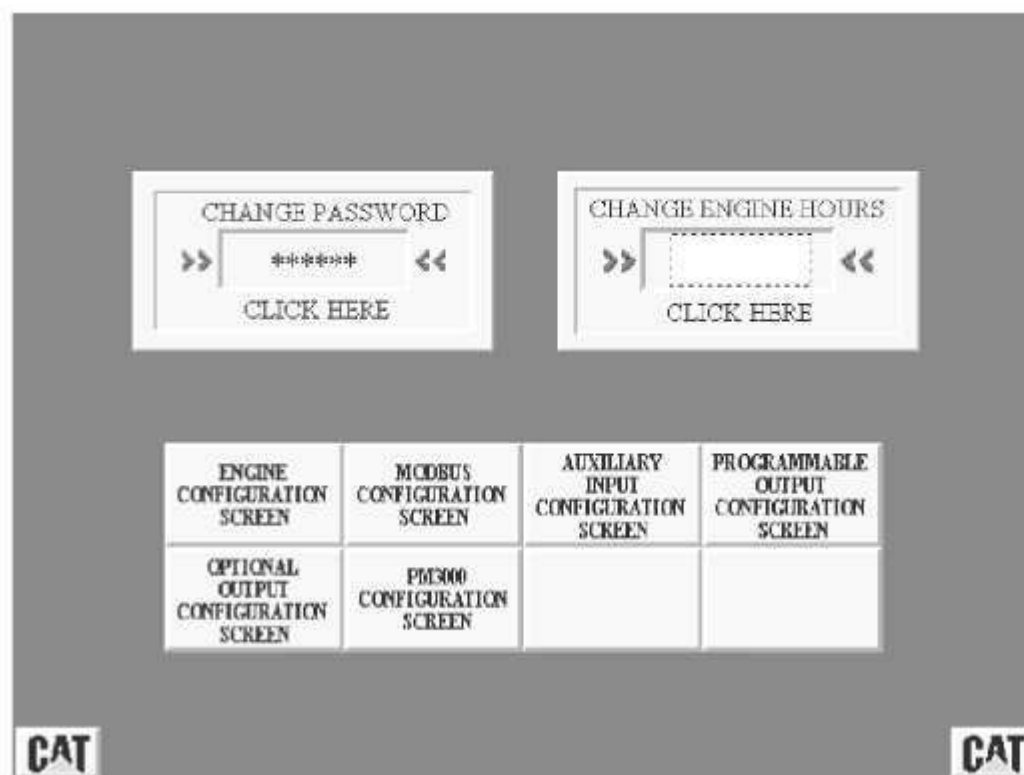


Illustration 5

g007:

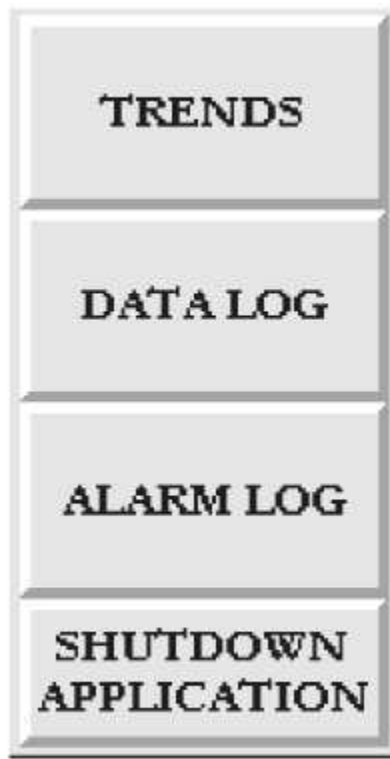
The "engineering configuration screen" allows access to the following configuration screens:

- "Engine configuration screen"
- "Modbus configuration screen"
- "Auxiliary input configuration screen"
- "Programmable output configuration screen"
- "PM3000 configuration screen"
- "Optional output configuration screen"

The password can be changed from the screen. Touch the display for the password in order to modify the password. The engine hours can be changed from the screen. Touch the display for engine hours in order to change the engine hours.

## RSView Specific Features

### Menu Buttons of the RSView Screens



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Illustration 6

g00751426

The menu buttons are located on the right side of the screen. Press the appropriate button in order to go to one of the RSView functions.

- "Trends"
- "Data log"
- "Alarm log"
- "Shutdown application"

### **"Trends" Button**

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Illustration 7

g00751471

Select the "Trends" button in order to move to the menu for trends. The menu allows the operator to perform the following functions:

- View one of the five trends.
- Configure a custom trend.
- Return to the main menu.

Figure 7 shows the menu for a vee engine. The left cylinder bank and the right cylinder bank are shown on separate trends. A in-line engine is shown on one screen. The other trends are not affected by the type of engine.

## **"Data Log" Button**





Illustration 8

g00751493

Select the "Data Log" button in order to move to the menu. The function allows the operator to retrieve previously defined data logs from the hard drive of the computer. There are two data logs. The data logs differ. The frequency of the recording of data and the frequency of the generation of files is different.

When a button for the data logs is pressed, the file folder opens. The files can then be transferred from the hard drive to a floppy disk. All analysis must be performed on a separate machine.

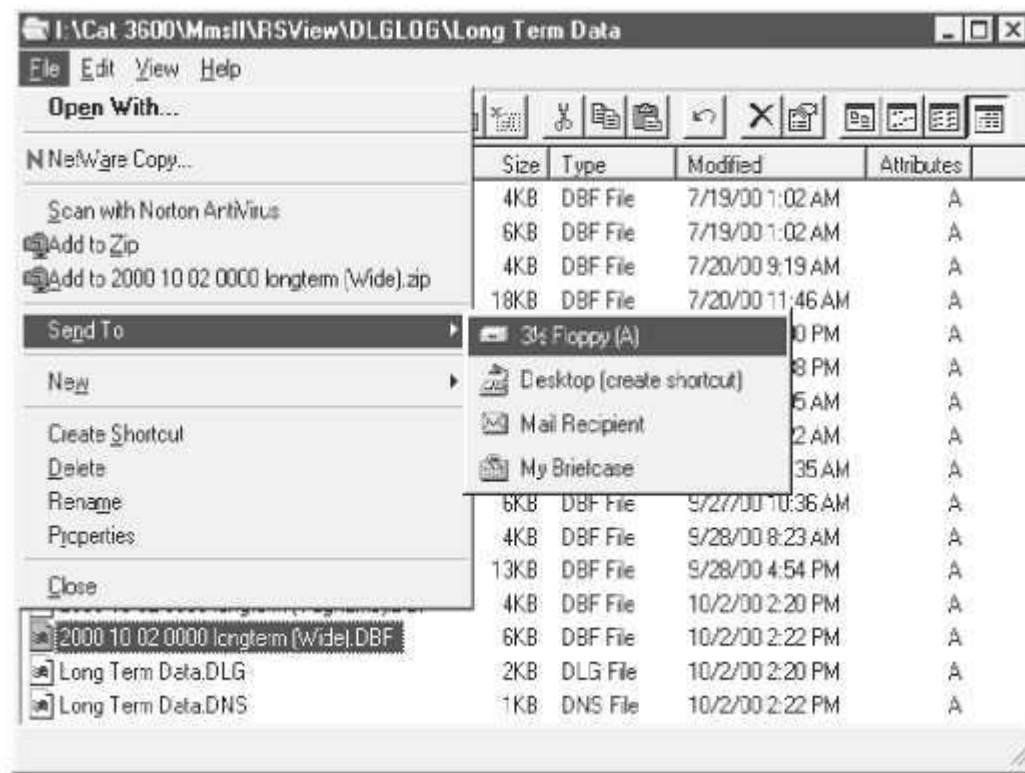
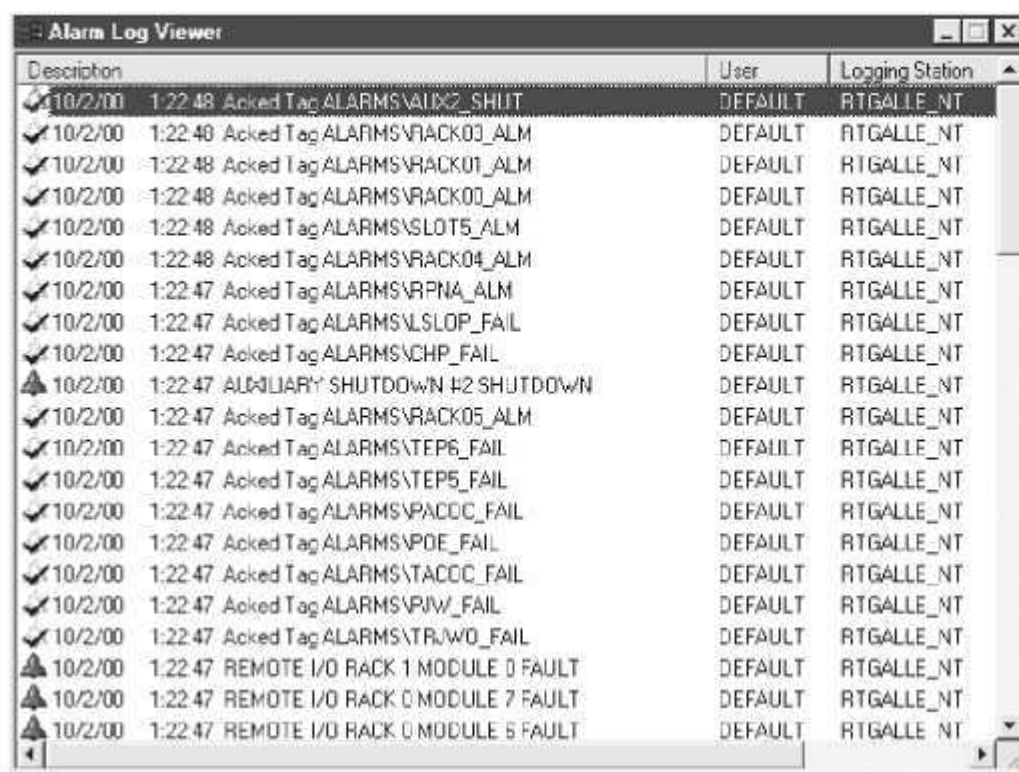


Illustration 9

g007:

## "Alarm Log" Button



Description	User	Logging Station
10/2/00 1:22:48 Acked Tag ALARMS\AUX2_SHUT	DEFAULT	RTGALLE_NT
10/2/00 1:22:40 Acked Tag ALARMS\VRACK03_ALM	DEFAULT	RTGALLE_NT
10/2/00 1:22:48 Acked Tag ALARMS\VRACK01_ALM	DEFAULT	RTGALLE_NT
10/2/00 1:22:48 Acked Tag ALARMS\VRACK00_ALM	DEFAULT	RTGALLE_NT
10/2/00 1:22:48 Acked Tag ALARMS\VSLOT5_ALM	DEFAULT	RTGALLE_NT
10/2/00 1:22:48 Acked Tag ALARMS\VRACK04_ALM	DEFAULT	RTGALLE_NT
10/2/00 1:22:47 Acked Tag ALARMS\VRPNA_ALM	DEFAULT	RTGALLE_NT
10/2/00 1:22:47 Acked Tag ALARMS\VSLOP_FAIL	DEFAULT	RTGALLE_NT
10/2/00 1:22:47 Acked Tag ALARMS\VCHP_FAIL	DEFAULT	RTGALLE_NT
10/2/00 1:22:47 ALIQUARY SHUTDOWN #2 SHUTDOWN	DEFAULT	RTGALLE_NT
10/2/00 1:22:47 Acked Tag ALARMS\VRACK05_ALM	DEFAULT	RTGALLE_NT
10/2/00 1:22:47 Acked Tag ALARMS\STEP6_FAIL	DEFAULT	RTGALLE_NT
10/2/00 1:22:47 Acked Tag ALARMS\STEP5_FAIL	DEFAULT	RTGALLE_NT
10/2/00 1:22:47 Acked Tag ALARMS\VPACC_FAIL	DEFAULT	RTGALLE_NT
10/2/00 1:22:47 Acked Tag ALARMS\VPDE_FAIL	DEFAULT	RTGALLE_NT
10/2/00 1:22:47 Acked Tag ALARMS\VTACC_FAIL	DEFAULT	RTGALLE_NT
10/2/00 1:22:47 Acked Tag ALARMS\VPW_FAIL	DEFAULT	RTGALLE_NT
10/2/00 1:22:47 Acked Tag ALARMS\TRWQ_FAIL	DEFAULT	RTGALLE_NT
10/2/00 1:22:47 REMOTE I/O RACK 1 MODULE 0 FAULT	DEFAULT	RTGALLE_NT
10/2/00 1:22:47 REMOTE I/O RACK 0 MODULE 7 FAULT	DEFAULT	RTGALLE_NT
10/2/00 1:22:47 REMOTE I/O RACK 0 MODULE 6 FAULT	DEFAULT	RTGALLE_NT

Illustration 10

g007:

Select the "Alarm Log" button in order to move to the "Alarm Log Viewer". The viewer displays all alarms that are currently displayed in the log file.

### "Shutdown Application" Button

Select the "Shutdown Application" button in order to close the RSView program. If the button is pressed, the application must be restarted. Select the "HMI" icon within the "Start" menu in order to restart the program.

## RSView Trends

### Air System

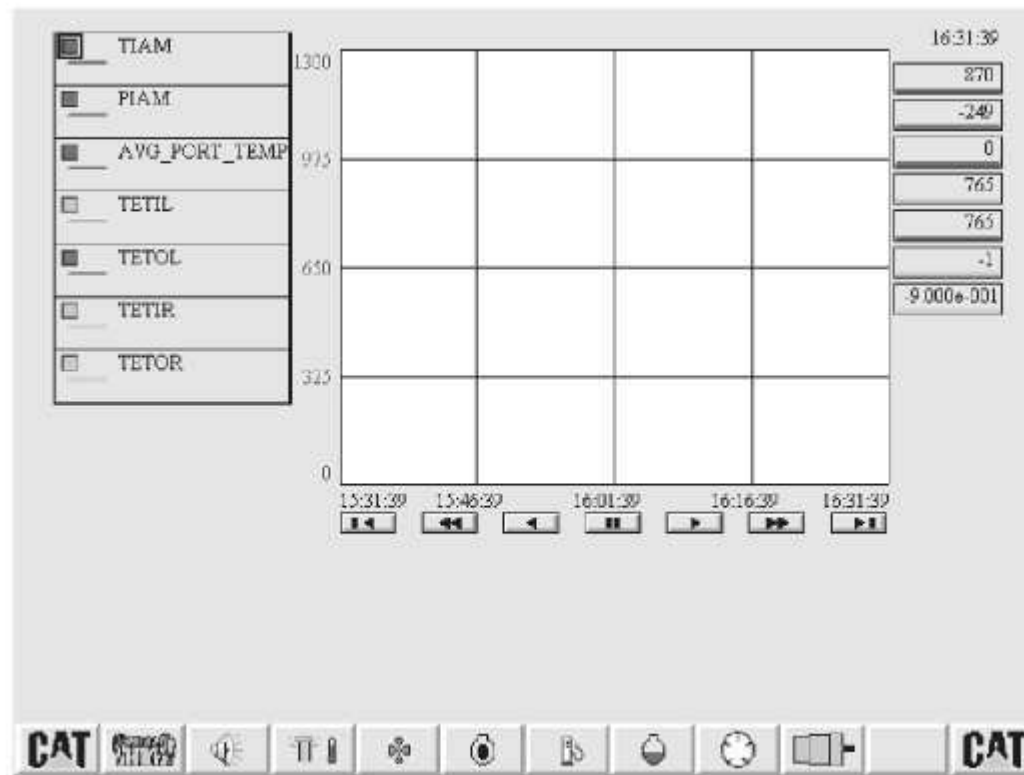


Illustration 11

g007:

The air system trend displays the following information:

- Temperature of the inlet air manifold
- Pressure of the inlet air manifold
- Average exhaust port temperature
- Inlet temperature of the left exhaust turbine or in-line temperature
- Outlet temperature of the left exhaust turbine or in-line temperature
- Inlet temperature of the right exhaust turbine
- Outlet temperature of the right exhaust turbine

One hour of data can be displayed on each screen. The most current data is displayed at the right. The current value of time and the current value of the pen are displayed at the right of the graph. The legend at the left of the graph shows the symbols for each pen and the colors of the pens. Select the pen from the legend in order to display the full name of the pen and the description of the pen.

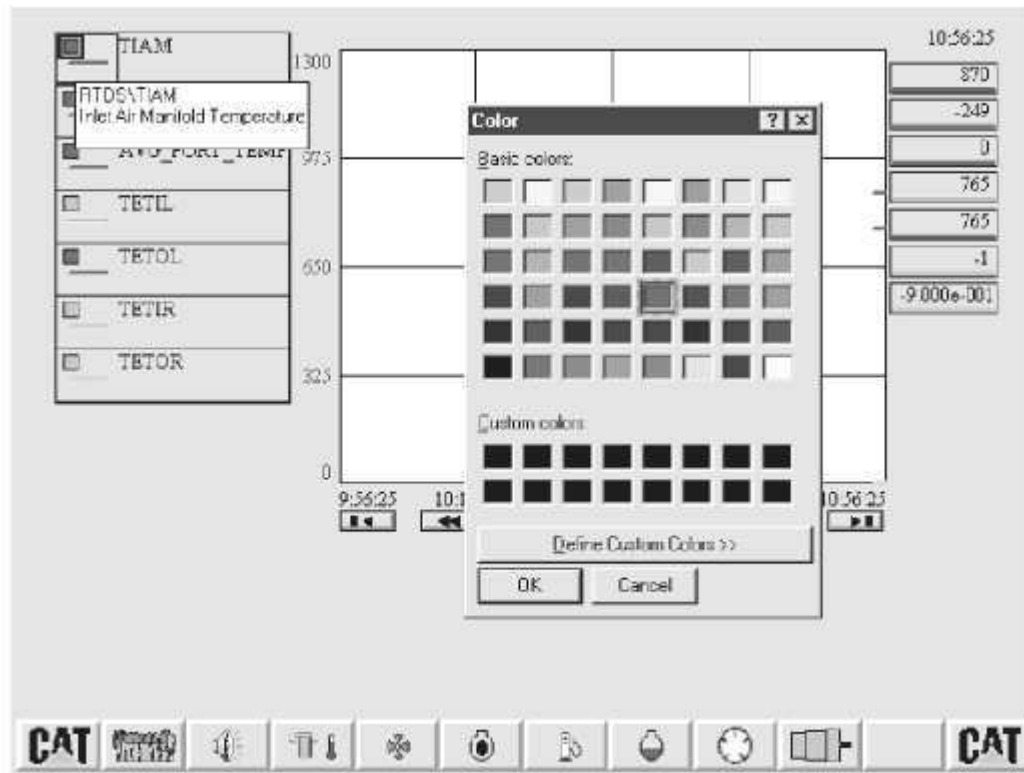


Illustration 12

g007:

Double click on the color of the pen in the legend in order to open the "Color" menu. Select a new color and press the "OK" button in order to accept the changes.

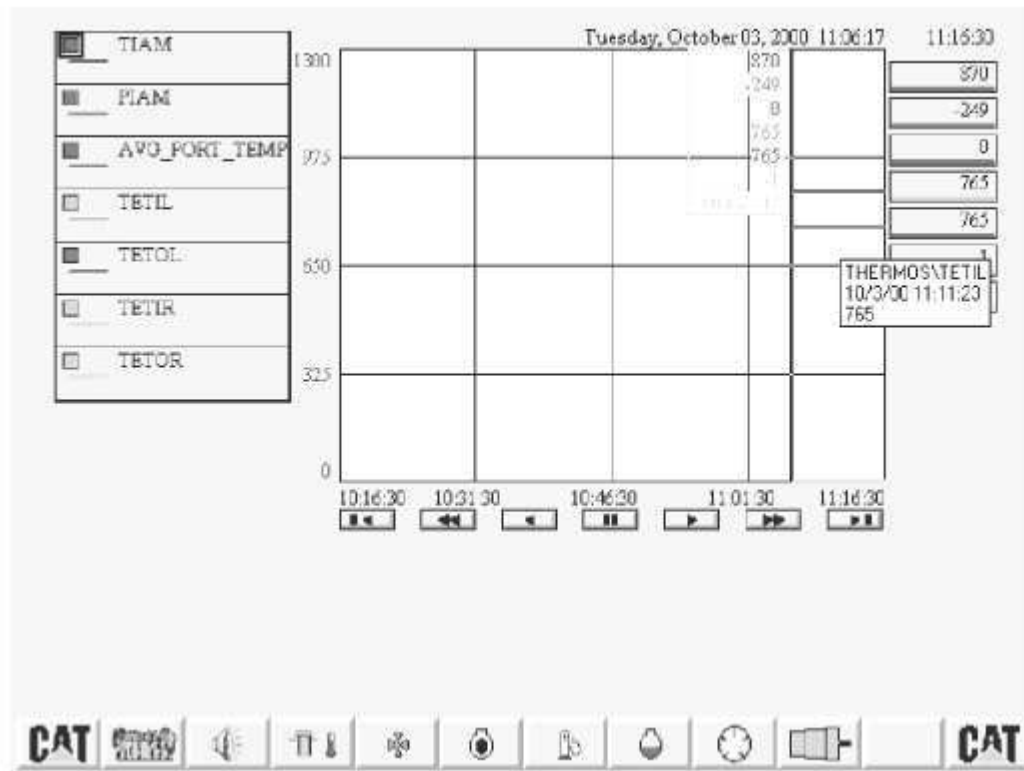


Illustration 13

g007:

Select a point on the graph in order to display the "Value Bar". The "Value Bar" displays the time, the date, and the value of all tags at the location. Position the cursor over any trend line in order to display the following properties of the tag: name, date, time and the value at the point.



- Press the button in order to stop the scrolling of data. Press the button again in order to resume the scrolling of the data.



- Press the button in order to move back for 30 minutes.



- Press the button in order to move back for 60 minutes.



- Press the button in order to view the oldest data for the trend.



**Press the button in order to move forward for 30 minutes.**



- Press the button in order to move back for 60 minutes.



**Press the button in order to view the most recent data for the trend.**

## Cooling System

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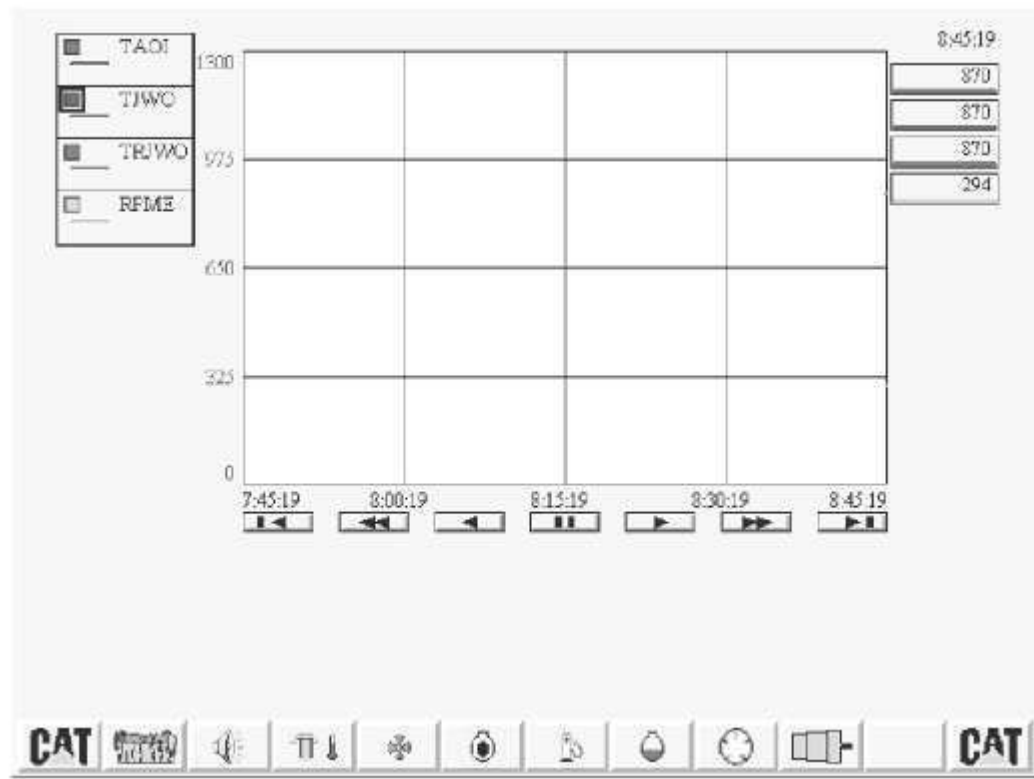


Illustration 14

g007:

The cooling system trend displays the following information:

- AC/OC inlet temperature
- Jacket water outlet temperature
- Redundant jacket water coolant temperature
- Engine speed

## Exhaust System



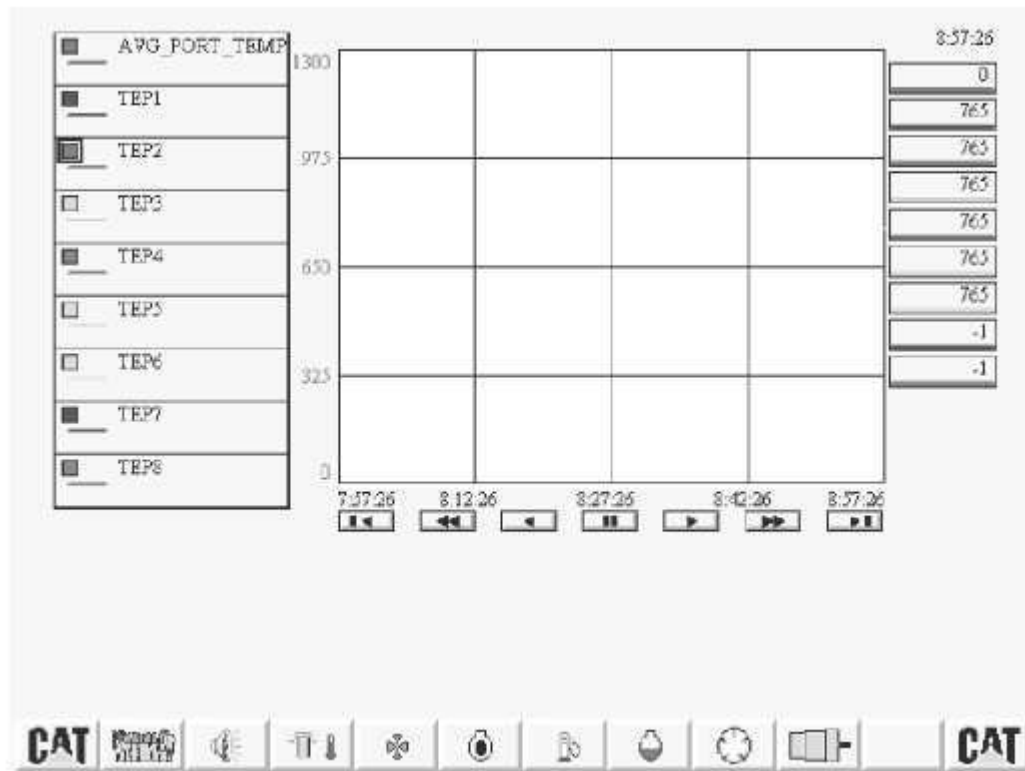


Illustration 15

g007:

The exhaust system trend displays the following information:

- Average exhaust port temperature (1 to 8)
- Exhaust port temperatures for in-line engine
- Odd number exhaust ports 1 to 15 temperatures for left side of vee engine
- Even exhaust ports 2 to 16 temperatures for right side of vee engine

## Fuel System and Oil System

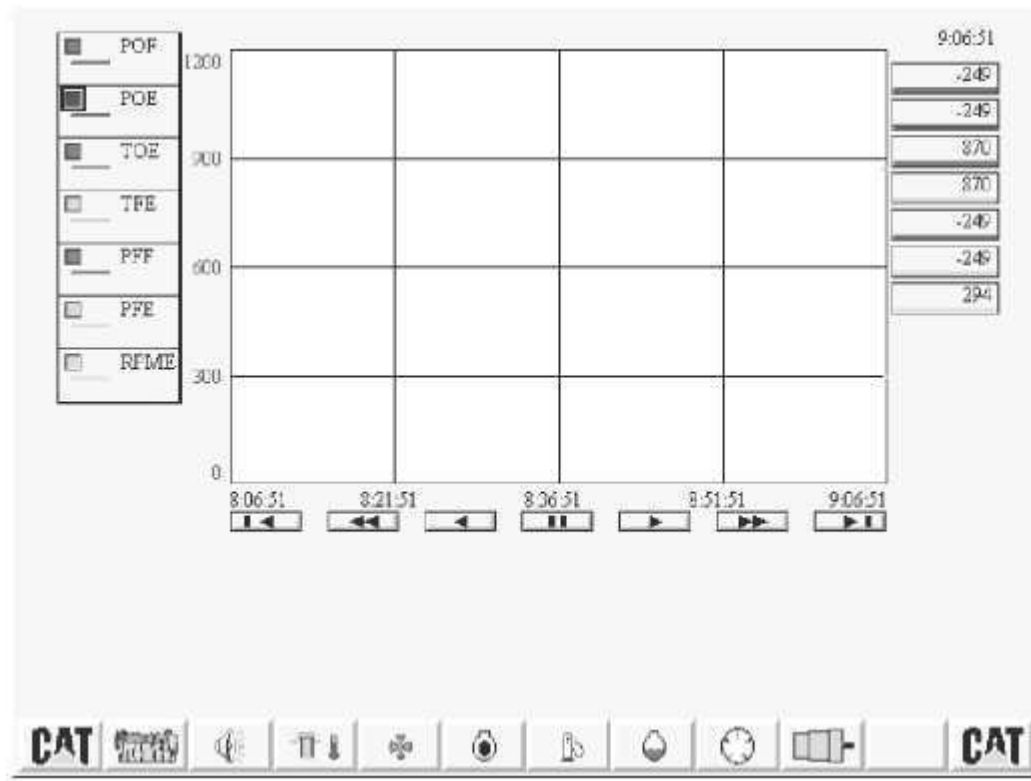


Illustration 16

g007:

The fuel system trend and oil system trend displays the following information:

- Lube oil to filter pressure
- Lube oil to engine pressure
- Lube oil to engine temperature
- Fuel to engine temperature
- Fuel to filter pressure
- Fuel to engine pressure
- Engine speed

## Custom Trend

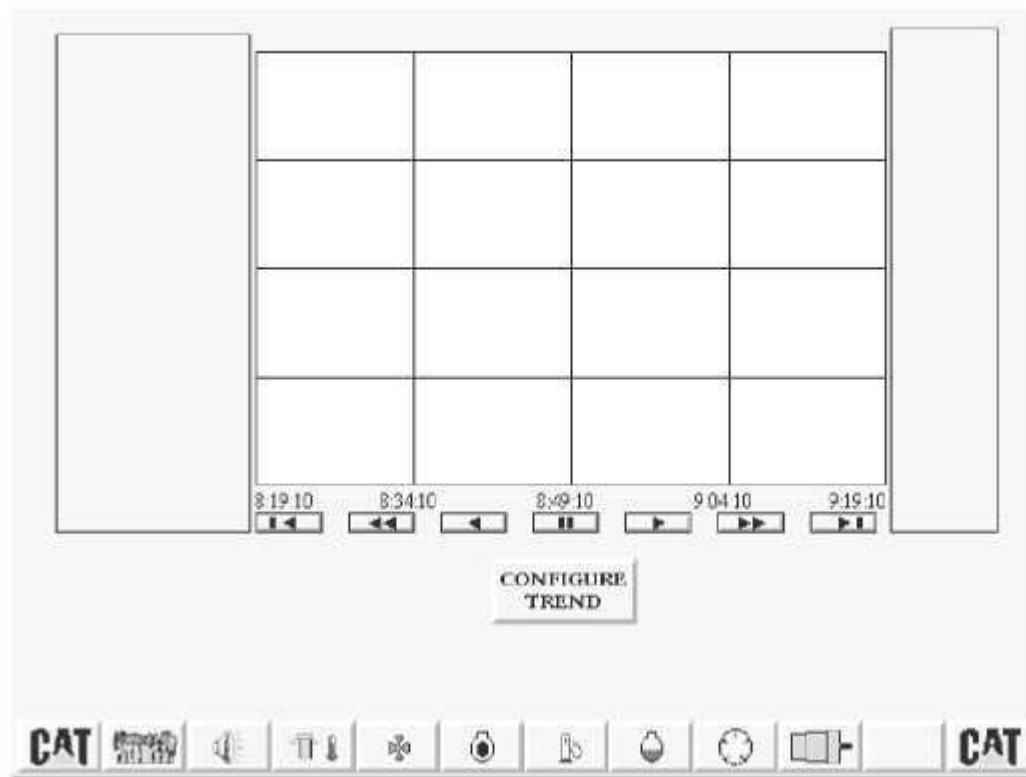


Illustration 17

g007:

Select the "CONFIGURE TREND" button in order to access the "RSTrendX Properties" window.

Select the "Add/Configure Tags" button in order to configure the tags.

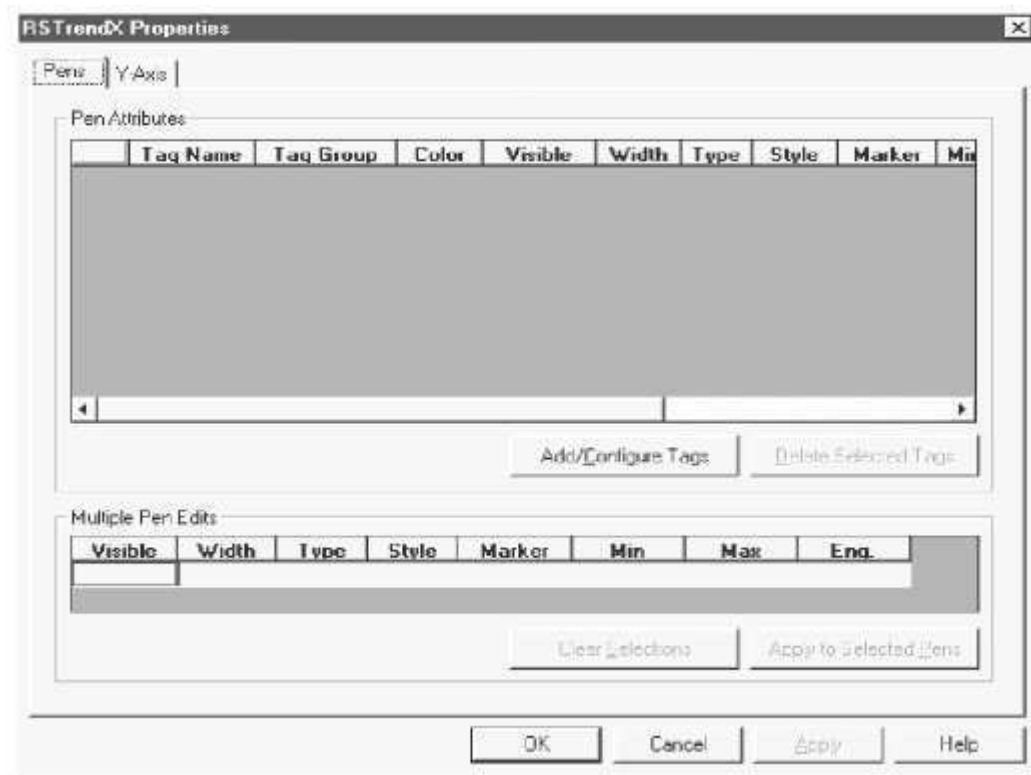


Illustration 18

g007:

Select the "Historical Tag Group" in order to view the historical data. Select the desired "Historical Tag Group". Select the desired tag. Press the "Add" button. Press the "Add All" button in order to add all tags. Remove the tags by using the same procedure with the remove buttons. Select the "OK" button when you are finished in order to return to the "RSTrendX Properties" window.

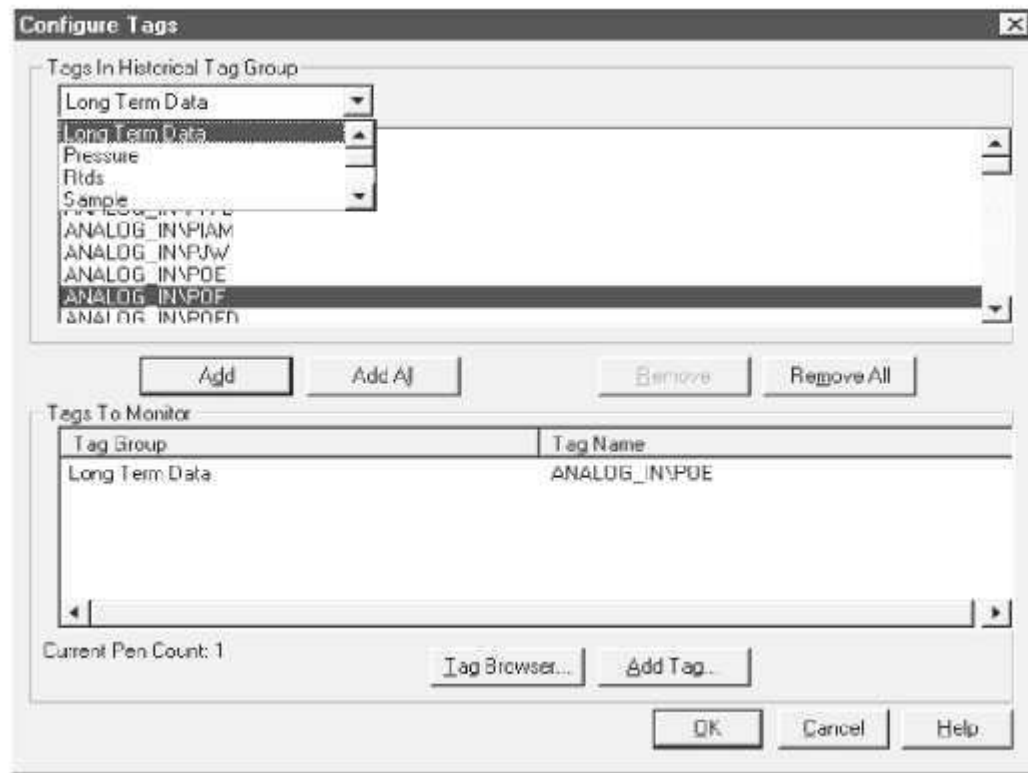


Illustration 19

g007:

The "Tag Browser" is used in order to place additional tags that are not in the data logs. The "Tag Browser" gives access to all tags in RSView. Select the tag folder that is desired. Select the desired tag. Select the "OK" button in order to add the tag to the "Tags To Monitor" window.

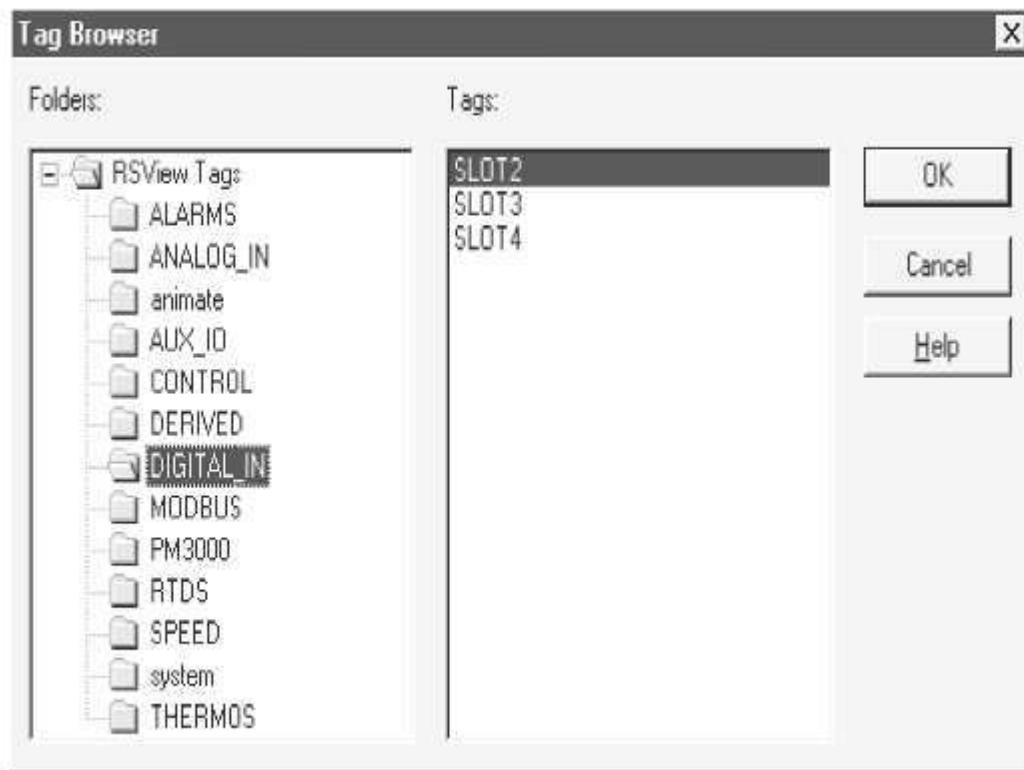


Illustration 20

g007:

Select the "Add Tag" button from the "Configure Tags" window in order to bypass the "Tag Browser". Enter the "Tag Group", the "Tag Name", and any other information that is desired. Select the "OK" button in order to add the tag to the "Tags To Monitor" window.



Illustration 21

g00751853

Select the "Pen Attributes" window in order to modify pens. Select the "Multiple Pen Edits" window in order to modify several pens. "OK" is selected in order to return to the trend screen.

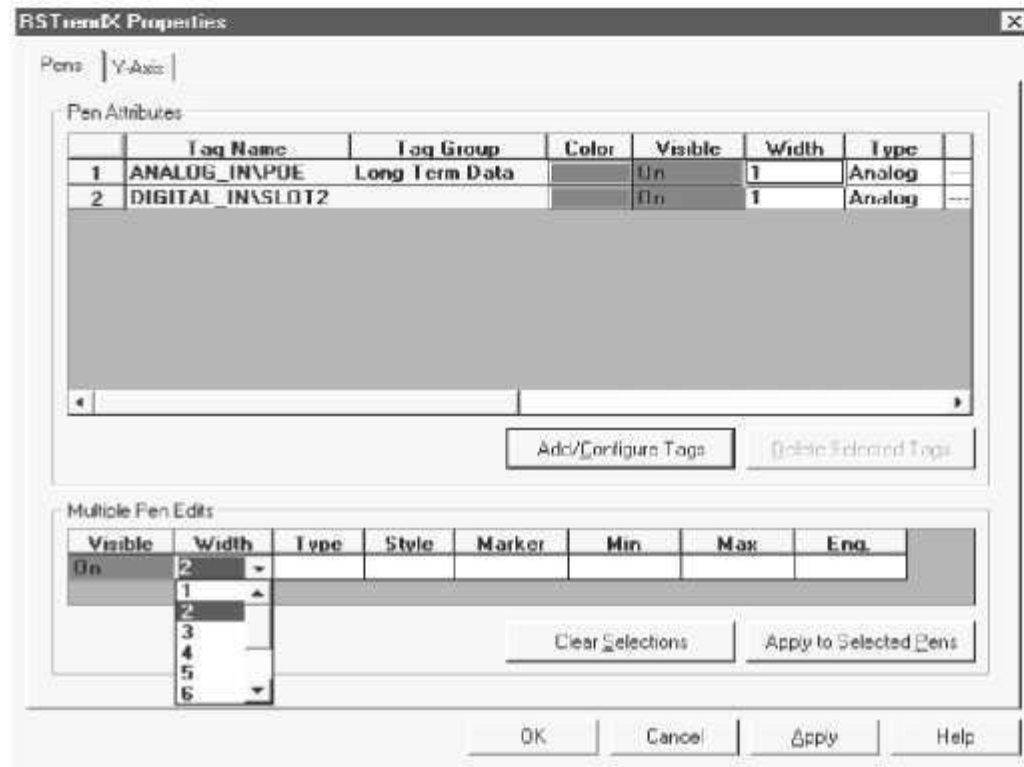


Illustration 22

g00751853

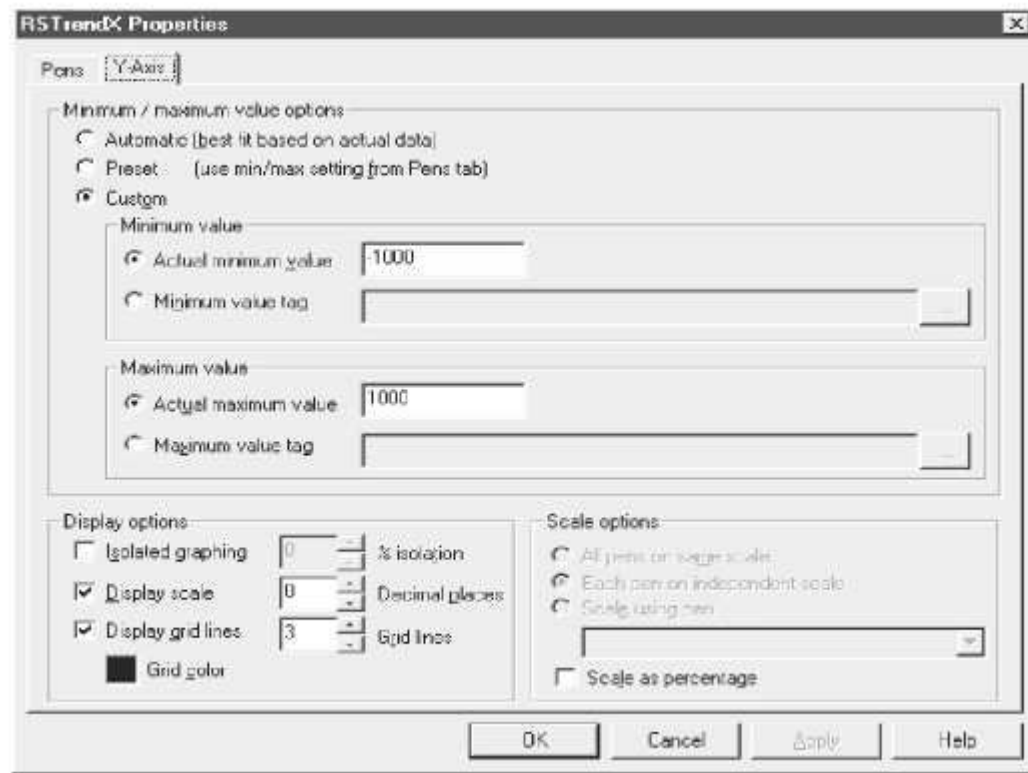


Illustration 23

g007:

The scale of the axis in the "RSTrendX" window is changed by selecting the "Y-axis" button. Select "OK" in order to return to the trend screen.