User guide
Entis Pro Profile utility for Windows 7
PREFACE

This manual describes the use of Profiles in combination with the Entis Pro system for Windows 7 Professional. It has been written for the operators as well as system supervisors to provide them with all the information required.

Safety and prevention of damage

Notes:

Have been used throughout this manual to bring special matters to the immediate attention of the reader.

Additional information

Please do not hesitate to contact Enraf or its representative if you require additional information. Refer also to the list of related documents in Appendix.

Legal aspects

The information in this manual is copyright property of Enraf B.V., Netherlands.

Enraf B.V. disclaims any responsibility for personal injury or damage to equipment caused by:

- Deviation from any of the prescribed procedures;
- Execution of activities that are not clearly documented;

Additional Information

Please do not hesitate to contact Enraf or its representative if you require additional information.
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INTRODUCTION

The primary Profiles usage is to create profiles of a selected tank and show a graphical display of the density and/or temperature variation through the product in a tank. Multiple Profiles window instances can run simultaneously on a station.

The user has a number of options to make different kind of profiles such as:

Density profile
Used to measure the average density value.

The 854 level gauge is commanded to start a density measurement. The density measurement (optional in the 854 servo gauge) moves the displacer through the product in the tank and determines the density at 10 equidistant points. After completion of the command the average density is calculated.

Density and temperature profile
Determines a density and temperature profile of all the product in the tank.

Combined profile
Measures the water interface and determines a density profile.

Combined profile (Incl. Temperature)
Measures the water interface and determines a density and temperature profile.

Temperature profile
From the average temperature probe all 16 temperature and level values are requested. After completion of the command the average temperature is calculated.

Interface Profile
An Interface profile command starts a density measurement between two specified levels.

The interface profile measurement (optional in the 854 servo gauge) moves the displacer through the product in the tank and determines the density at 10 equidistant points between the two specified levels. After completion of the command the 10 measured density values the average density is calculated.

The user can define whether the density dip is upwards or downwards. On request the Task will start to carry out the measurements to make a profile and stores the data in an ASCII file. For each profile a single ASCII file will be made.
INSTALLATION PROCEDURE

Before starting the installation procedure shut down the Entis Pro system and Log on as an Administrator.

- Insert the Profiles CD into your CD ROM drive. The AutoPlay window pops up if AutoPlay for CD is enabled. Select Run setup.exe to start the installation. (If AutoPlay is disabled run setup.exe from the CD via the Explorer).

- Press the Yes button to confirm the User Account Control dialog. (Only if User Account Control is enabled).

- Press OK to Start Setup.exe. Next the installation target folder pops up. The recommended folder is C:\ProgramFiles\Entis Pro\Profiles.

Please ensure that the Entis Pro system is shut down and you are logged on as an administrator before proceeding.
Installation Procedure

- Click on the button to install the profiles program in the recommended directory.

The “Choose Program Group” window will appear.

The “Program group” must be: Entis Pro
For “Existing groups” select: Entis Pro
Press **Continue** to continue with the set-up procedure. A progress bar will be displayed.

![Progress Bar](image)

After completion of the loading procedure press on **OK**.

![OK Button](image)

**Data folder Permissions**

Permissions must be granted for writing Profiles data to the C:\ProgramData\Enraf\Entis Pro\Profiles\Data folder.

Entis Pro users must have permission for writing data in the ProgramData\Enraf\Entis Pro\Profiles\Data folder. Typically the required permissions are already made during the installation of Entis Pro.

Follow the next steps to check the permissions.

- Right mouse click the C:\ProgramData\Enraf\Entis Pro folder, select Properties and select the Security tab.
- Select the group Entis Pro users (e.g. L_Entis Pro, see the Entis Pro Installation guide)
- Check if permissions are: Modify, Read & Execute, List Folder Contents, Read and Write for the Entis Pro users group.
Ini files

In order to communicate with Entis Pro the Profiles program makes use of an ini-file. If the Profiles program is installed for the first time, proceed as follows:

- Copy the “Profiles.ini” file from the ProgramFiles\Entis Pro\Profiles folder to a different location where access is not denied (e.g. desktop).

- Open the copied file with Notepad and modify the file as required. The file contents are printed below. In this file, everything behind the ; sign is regarded as comment.

- Copy the modified file to the ProgramFiles\Entis Pro\Profiles folder again. (Overwrite the existing file).

Make sure that the decimal separator in the ini-file and Region and Language (additional) settings of Windows are configured equal to the gauge (item DP).
Profiles General

This text file gives you an explanation of the tank selection data to be entered for each tank.

[Profiles General]
default Path=c:\ProgramData\Enraf\Entis Pro\Profiles\Data

; [TK_01] tank name as in Entis Pro
; Gauge Address = 01B instrument field address ("01") and Type of instrument : (TOI:"B")
; Gauge Number = 1 Gauge number in CIU Plus (1:50)
; CIU Plus RTU = 41 Modbus RTU address of CIU Plus (decimal)
; Decimal Separator = . Decimal separator as specified in Instrument ("." r ,")

; Level Dimension of instrument as follows:
; ( 1 capital character: "M" = metres,
; "F" = feet,
; "I" = inches,
; "P" = fractions.

;!!! No comments allowed after settings

Tank selection data

For all tanks you want to create or view a profile for a block of tank data has to be programmed (see example). Multiple blocks can be made by using the copy, paste and edit function. All data required for these blocks can be retrieved via the Ensite Pro program.

Example:

[TK_01]
GaugeAddress=01B
GaugeNumber=1
CIUPlusRTU=41
DecimalSeparator=.
LevelDimension=M
PROFILES

Introduction

The window enables the user to specify the type of profile required. This can be either a density and/or a temperature profile. The temperature profile is optional for all profiles (when allowed according to type of Temperature element).

A Density profile and Combined profile can be done upwards and downwards.

Starting the profiles

The profiles can only be started if the Entis Pro program is operational.

The profiles can be started via the “Start button>All Programs>Entis Pro>Profiles”.

This application has two tabs (Create and View).

The create tab will be displayed.

Create Tab

![Create Tab](image-url)
How to create a profile

- Click on the Group / Tank selection icon.
- Select a group from the tree view. Individual tanks can be selected from the combo box in the tool bar.
- Select in the “Set-up profile pane” the dip to be performed.

Set-up profile pane

This pane allows you to select one of the profiles to be performed.

Density Profile Dip

- Select to execute a density dip. Only for 854 type gauges with density option. The density dip can be executed upwards or downwards. Default is downwards.

Combined Profile Dip

- Click on this radio button to issue a combined profile dip. This dip measures the water interface and executes a density dip. Default is upwards.

Temperature Profile

- Click on this radio button to start a temperature profile.

Interface Profile

- Click on this radio button to issue an interface profile command. An interface profile measures the density between two specified levels.
- Enter the Lowest and Highest level.

Advanced set-up Pane

The section ‘Filename’ can be used to change the default profile filename.

Dip Upwards

This radio button is default activated when selecting the Combined Profile dip.

Dip Downwards

This radio button is default activated when selecting the Density Profile dip.

Temperature profile included

Select this option in case a temperature profile is required in addition to the density dip.
Profiles

File name Pane

This pane can be used to change the default profile file name.

Automatic filename generation (default)

When selecting this check box the file name will be generated automatically. The definition of the name is as follows:

Tank name + Profile type + Date + Time + Extension.

Tank name = as used in Entis Pro
Profile type = Density
              Combined
              Temperature
              Density & Temp
              Combined & Temp
              Interface
              Interface & temperature

Date & Time = profile start date & time
Extension = .prfl

Path

Default C:\ProgramData\Enraf\Entis Pro\Profiles\Data

Filename

See Automatic file name generation.

The filename will be generated and contains date and time with a resolution of a minute. When desired the user can define the filename manually.

Start

With this button user can start the profile. A progress bar will be displayed

Cancel

With this button the profile measurement can be cancelled. When the user aborts the profile by pressing ‘Cancel’ the following Warning message will appear.
On successful execution of a profile, a progress bar will be displayed. The user will be warned if a command cannot be sent to the gauge for some reason.

**View Tab**

The “View” tab automatically displays the latest profile of the tank selected in the TANKNAME combo box. In the section “Cursor Data” the user can read out the points in the graph.

The scaling for the graph is done automatically. The automatic scaling is using the maximums and minimums of the used data. The system dimensions will be used. Online changes of dimensional units are not supported.

A stored profile (file) can graphically be displayed on screen.

The scaling for the graph is done automatically. The automatic scaling is using the maximums and the minimums of the measured data.

The task has two graphs, one for density (and observed & referenced density) and one for temperature.
The first graph displays observed density. The reference density will only be displayed in case the temperature is measured (combined profile dip and a density profile dip).

Both graphs include 2 auxiliary lines, which represent water level and product level. The application automatically interpolates the data between the points to give a good estimate of the data values. A mouse can be used to a point in the graphic. In the cursor field the value will be displayed.

By pressing this button the “Open File Window” will pop-up and a stored file can be selected and displayed.

Open file Window

By pressing this button the displayed profile will be printed.

Backup

It is recommended making a backup of the profile.ini files.

Remarks

- The Profiles program is a standalone application. This implies that in an Entis Pro Hot Stand-by configuration it will not be switched over from the operating to the stand-by system. In case of Hot Stand-by configuration it is recommended to install the program on the operating and the stand-by system. If you copy the profiles ini. file from the operating system to the stand-by system CIU Plus RTU address has to be changed.
- The Profiles program can only be used for innage tanks.
HOW TO UNINSTALL

- Open My computer
- Open Control Panel.
- Select Add/Remove Programs utility.
- Select Profiles.
- Press Add/Remove. The system has now been completely un-installed.

*Removing the Profiles program will not remove the Ini file.*
Related documents

Instruction manual Entis Pro
Configuration manual Entis Pro
Instruction manual Ensite Pro Configuration tool