Advanced Steam Trap Management System

Dr. Trap®

PM301

Advanced Steam Trap Management System PM 301

Procesador PM310
It processes the data from the detector, displays and stores results.

Detector PM321
It detects the vibration and temperature in steam traps, which is used in their diagnosis.

Software
It can be run on a personal computer. It aggregates and analyzes steam trap data from the processor, identifying faulty steam traps, leaking traps, etc., making it easy to manage all of your traps. It provides detailed charts and graphs. Survey results are transferred from the processor to the computer using the Dr. Trap® management software.

Processor PM310

Detector PM321

NEW

Software SurveyPro Version 3.0

Features PM301

1. **High-speed Diagnosis**
   Each steam trap will be surveyed in less than 10 seconds. A normal trap without any leaks can be tested in only 4 seconds.
2. **Small and lightweight**
   The total weight of the processor and probe is only 580g (1.28lb), which means that it can be carried by a technician for an extended period of time without fatigue.
3. **Simple operation**
   A steam trap can be tested with a single press of the “OP” button on the probe. The processor design requires only simple actions be the operator, making it easy to learn how to use it.
4. **Can be used with high-pressure traps**
   Dr. Trap® can be used to test any trap at a wide range of pressures and at temperatures up to 500°C (932°F).
5. **Extended battery operation**
   The batteries allow approx. 12 hours of continuous operation. There is no need to replace the batteries in the middle of the journey.
6. **Large storage**
   The results of 1,000 steam traps checks can be stored in the processor´s memory.
7. **High-speed automatic analysis**
   The Dr. Trap® software provides automatic analysis and high-speed sorting of the collected data.

Software SurveyPro PM330 V3.0

Software for analyzing the data which had been measured by using the steam trap detector PM321 and for determining the condition of the steam trap. The software is available only in English version.

- Standard and Special versions available
- The new version allows the estimation of CO_2 emissions which correspond to leaking steam traps
- Compatible with Windows XP, Vista and now with Windows 7 32 bit and 64 bit and Microsoft Office 2010 32 bit and 64 bit
- Full data compatibility. Data generated by the previous version (V2.0) can be integrated into the new software*
- The new version comes with an updated list of steam trap models of the main steam trap manufacturers
- The new software allows a better classification of steam traps to various groups and areas inside a plant with the possibility for more detailed analysis of selected groups or areas.

* For more details please contact MIYAWAKI Inc. or an authorized representative.

Hardware	Weight		Sensor		Ambient working temperature		Max. ambient temperature		Power supply	Continuous operating (approximately)	Working survey time	Trap recording capacity
	g	lb	Vibration	Temperature	°C	°F	°C	°F		hours	seconds	Data
Processor PM 310	310 incl. battery and soft case	0.65	Piezo-electro-ceramic accelerometer	Infrared sensor (thermopile)	0 – 40	32 – 104	500	932	2 x 1.2V AA size rechargeable batteries	12 9 hours with the LCDs lit continuously	10 (2 minimum)	1000 maximum
Detector PM 321	270	0.58										

Display: LCD (16 caracteres x 2 líneas)

Software	Medium	Environment					
		Personal Computer	Operating System	Memory (RAM)	Hard disk	Display resolution (pixel)	Display colors
SurveyPro PM330 V3.0	CD-ROM	general-purpose	MS Windows XP, Vista or Windows 7 32 or 64 bits	256 MB or more	50 MB or more	800 x 600 or more	256 or more

Advanced Steam Trap Management System

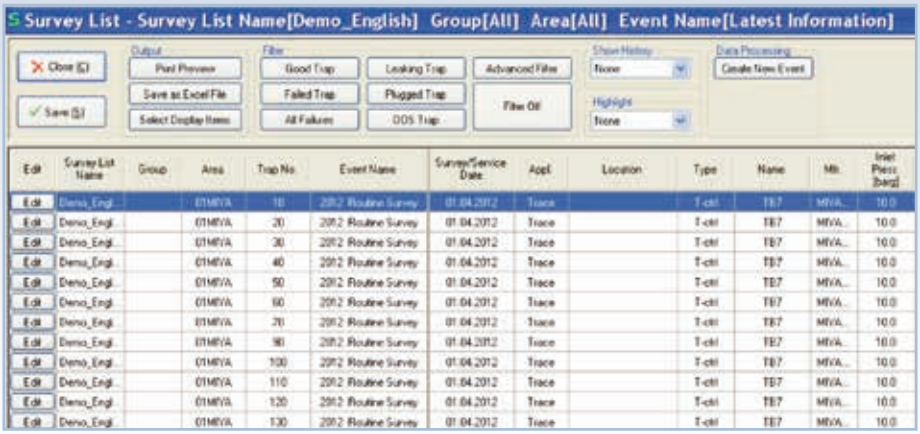
Dr. Trap®

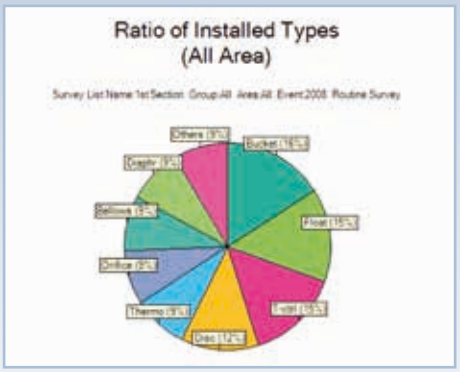
SurveyPro PM330 V3.0

Main Functions - Standard Version

Survey List

Survey lists are automatically generated from the test results of all traps which have been checked. Furthermore, failed steam traps can be extracted from the management log to make a separate list and to show the volume of steam that is leaking.





Data analysis

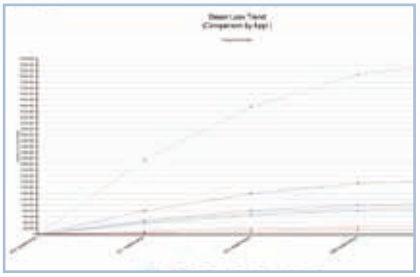
The software can show steam losses and related financial losses by trap type and manufacturer, analysis of C02 emissions which correspond to the steam losses or summaries by type of application or by areas or groups.

Trend Analysis

Results of past steam trap surveys can be compared according to specific users´ criteria. The software can perform the following trend analysis:

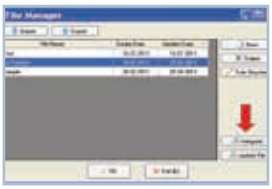
- Failure Rate Trend
- Steam and Money Loss Trends

Or a combination of them. The trends can also be compared and shown by manufacturer, trap type, pressure rating or application.



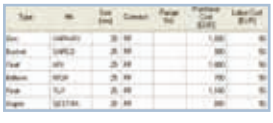
Additional Functions – Special Version

The Special Version includes the functions of the Standard Version plus the following ones:



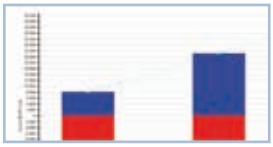
Integration of multiple survey files into a single one.

You can improve your plant analysis by putting together steam trap survey lists of different plant areas or groups into a single one by using the function “Integrate Multiple Files”.



Repair Cost Management.

In addition to steam loss costs, this function takes into account other important costs such as operating costs, trap purchasing costs, inspection costs or repair costs. Very useful for annual budgeting.



Repair Efficiency.

It is the judgment criteria to know whether the Repair Cost has been effectively used or not.

Customized summaries.

The results of the steam trap surveys can be sorted according to the user´s needs so that one can identify which installed traps are not suitable for the application.

Service Period

This function shows the time (in years) between the trap installation date and the trap replacement date.

Average Consumption cost

This function estimates the average consumption cost by taking into account the total repair cost, survey cost, Money loss due to a leak and the Period of Service.

Management of other kind of failures.

It shows the information about other devices that are installed around the steam traps. It allows to include into the survey list items like Failure of Inlet Valve, Failure of Outlet Valve or Failure of other than Valves.