

ME BOX Configurator

• STEPS to export the data to ACMBPG95

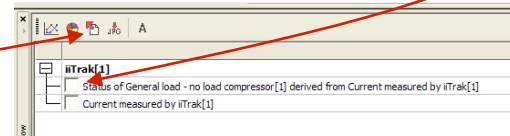
1. Select one (or more) of the functions

- « Status of General Load-No load Compressor »
- « Status of General VSD – Modulating Compressor »
- « Status of General VSD no unloader »

The selection order is important for the export. First function selected will be exported as the first machine of ACMBPG95.

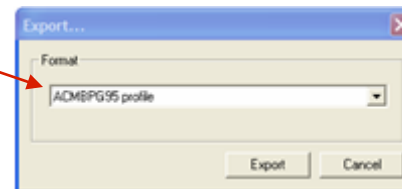
2. Click on the Export

2



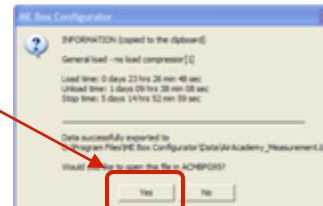
3. Chose the ACMBPG95 profile

3



4. Chose to open ACMBPG95

4



SHOW ANIMATION



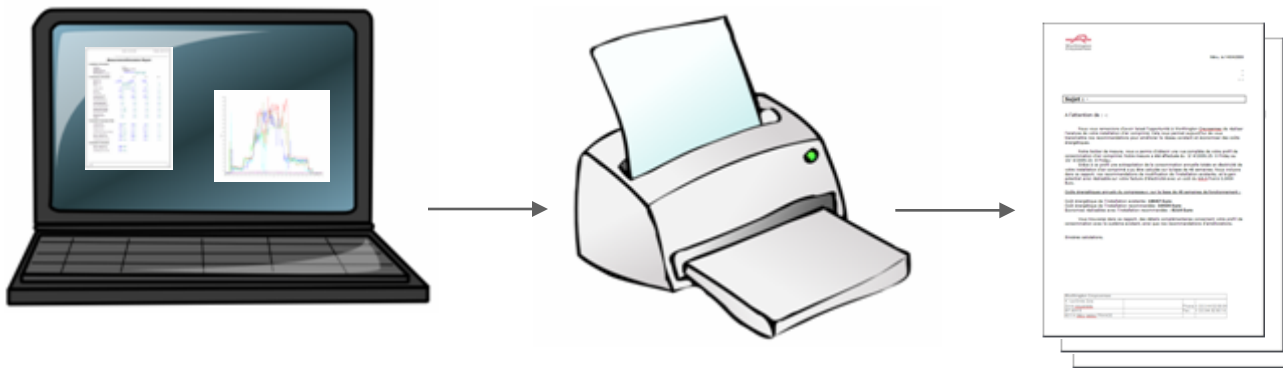
Agenda

- Goal of the training
- What is the iiTRAK
- Why do I need the iiTRAK
- How does it work
- ME BOX CONFIGURATOR
- **ACMBPG95**
- Datasheet
- Graph
- Simulation
- Report
- Summary



ACMBPG95

- **Used for the following tasks**
-
- **Import a Measurement**
 - **Visualize the weekly Air demand**
 - **Visualize the energy consumption**
 - **Simulate with other compressor room**
 - **Generate a complete report of the measurement**



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ACMBPG95

• Steps to INSERT TECHNICAL DATA

1. Click on Edit Installed System Icon



2. Fill in Airnet Info

3. Fill in Comp1 to 8 info

4. Fill in Report info

5. Click on OK

The screenshot shows the 'Compressor Types Entry' dialog box. The steps are indicated by numbered callouts:

- 1. Click on Edit Installed System Icon (shown separately above the dialog).
- 2. Fill in Airnet Info (points to the 'Air Net' field).
- 3. Fill in Comp1 to 8 info (points to the grid of compressor fields: Comp.1, Comp.2, Comp.3, Comp.4, Comp.5, Comp.6, Comp.7, Comp.8).
- 4. Fill in Report info (points to the 'Report Info' field).
- 5. Click on OK (points to the 'OK' button).

The dialog box contains the following fields and sections:

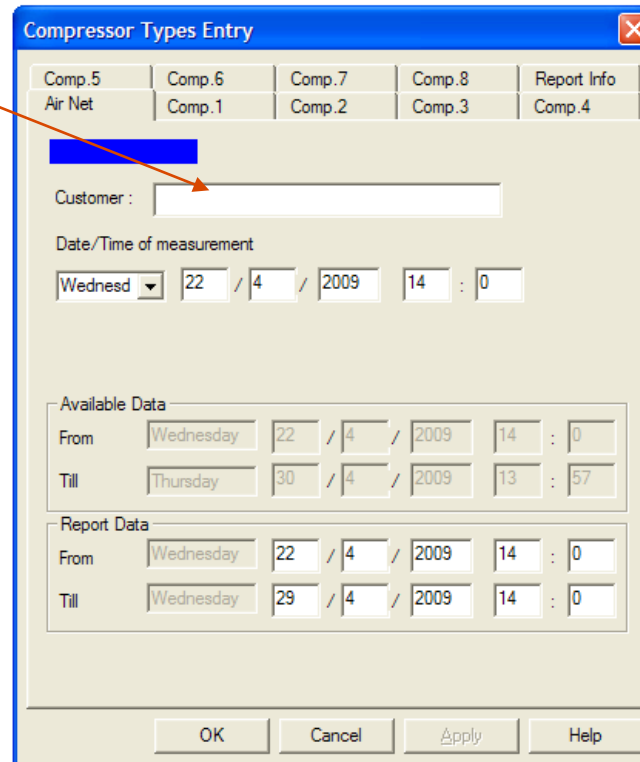
- Compressor Grid:** A table with 8 columns: Comp.1, Comp.2, Comp.3, Comp.4, Comp.5, Comp.6, Comp.7, Comp.8.
- Customer:** A text input field.
- Date/Time of measurement:** A date and time picker showing Wednesday, 22/4/2009, 14:00.
- Available Data:** A section with 'From' (Wednesday, 22/4/2009, 14:00) and 'Till' (Thursday, 30/4/2009, 13:57) date and time pickers.
- Report Data:** A section with 'From' (Wednesday, 22/4/2009, 14:00) and 'Till' (Wednesday, 29/4/2009, 14:00) date and time pickers.
- Buttons:** OK, Cancel, Apply, and Help.



ACMBPG95

- AIRNET

1. Customer Name



Compressor Types Entry

Comp.5	Comp.6	Comp.7	Comp.8	Report Info
Air Net	Comp.1	Comp.2	Comp.3	Comp.4

Customer :

Date/Time of measurement

Wednesd / 22 / 4 / 2009 14 : 0

Available Data

From Wednesday 22 / 4 / 2009 14 : 0

Till Thursday 30 / 4 / 2009 13 : 57

Report Data

From Wednesday 22 / 4 / 2009 14 : 0

Till Wednesday 29 / 4 / 2009 14 : 0

OK Cancel Apply Help



ACMBPG95

- COMP1 to COMP8

1. Name = Brand
2. Designation = Type of machine
3. Type = Controller type
4. Unloaded Power
= Absorbed Power at NoLoad
5. Loaded Power
= Absorbed Power at Full Load
6. Capacity = FAD (in l/s)

The screenshot shows the 'Compressor Types Entry' dialog box. It has a title bar with a close button. Below the title bar is a grid of tabs: Comp.5, Comp.6, Comp.7, Comp.8, Report Info, Air Net, Comp.1, Comp.2, Comp.3, Comp.4. The 'Comp.1' tab is selected. The main area contains the following fields:

- Name :** (Callout 1)
- Designation :** (Callout 2)
- ☐ AC Z-compr.
- Type :** Elektronikon Load/Unload Compressor (Callout 3)
- Package Power [kW]**
 - Unloaded Power : 0.0 (Callout 4)
 - Min Loaded Power : 0.0
 - Loaded Power : 0.0
- Capacity [l/s]**
 - Min Capacity : 0.0
 - Capacity : 0.0 (Callout 6)
- Start/Stop**
 - Idling Time (min.) : 0
 - Prog. stop time (s) : 0 (Callout 5)
 - Nr. of Starts : 0
 - /hour
 - /day
- Pressure Settings [bar]**
 - Unloading Pressure : 0.0
 - Loading Pressure : 0.0
 - Min Loading Pressure : 0.0
 - Direct Stop Level : 0.0
 - Indirect Stop Level : 0.0
 - Setpoint : 0.0

At the bottom are buttons: OK, Cancel, Apply, Help.



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- **REPORT INFO**

- **Customer Company Info**

1. Name
2. Street address
3. City
4. Postal Code

- **Customer Contact person Info**

5. Name
6. Title

- **Report Info**

7. Subject = Subject of the letter
8. Energy Price = Cost of 1 kWh
9. Operating weeks/year

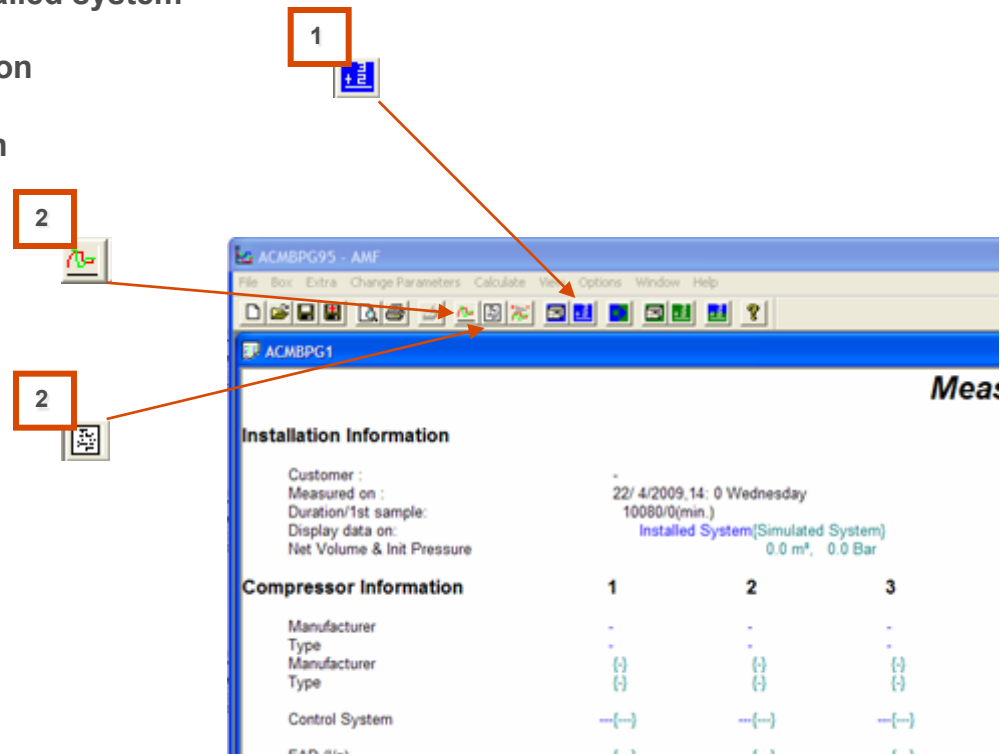
The screenshot shows a software dialog box titled "Compressor Types Entry". It contains several input fields organized into sections. A table at the top lists compressor types: Air Net, Comp.1, Comp.2, Comp.3, Comp.4, Comp.5, Comp.6, Comp.7, Comp.8, and Report Info. Below this, the "Customer Company" section has fields for Name (1), Street Address (2), City (3), and Postal Code (4). The "Customer Contact Person" section has fields for Name (5) and Title (6). The "Report Info" section has fields for Subject (7), Energy Price (8) with radio buttons for Euro and \$, and Operating weeks per year (9). The dialog box has OK, Cancel, Apply, and Help buttons at the bottom.



ACMBPG95

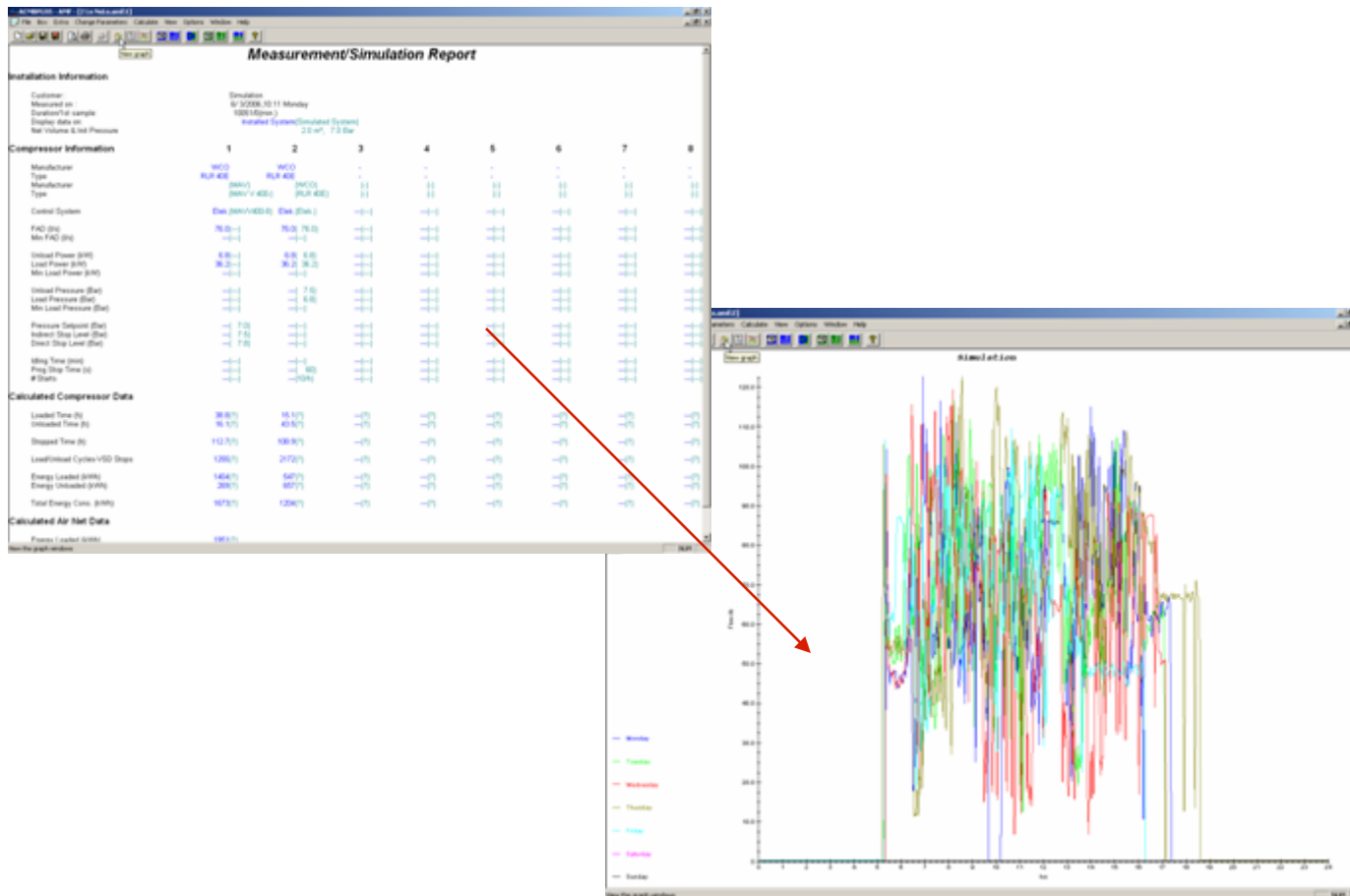
- ANALYSE DATA AND GRAPH

1. Click on Calculate Installed system
2. Click on View Graph Icon
3. Click on View Data Icon



ACMBPG95

• INSERT TECHNICAL DATA & ANALYSE



SHOW ANIMATION



ACMBPG95

- **Functionnalités in ACMBPG95**

- **File handling**

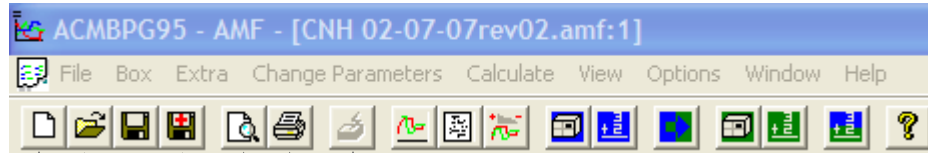
- New Measurement
- Open a measurement
- Save a Measurement
- Save a Measurement As

- **Printer Options**

- Preview
- Print

- **Download Options**

- Get data from the Box

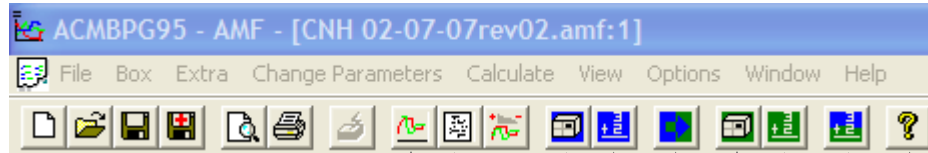


The download option not needed for the iiTRAK measurements



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- **Functionnalités in ACMBPG95**



- **View Options**

- View Graph
- View Datasheet
- Graph Options

- **Installed System Options**

- Edit
- Calculate

- **Copy Installed to Simulated Data**

- **Simulated System options**

- Edit
- Calculate

- **Calculate both (edit and simulation)**

- **HELP**



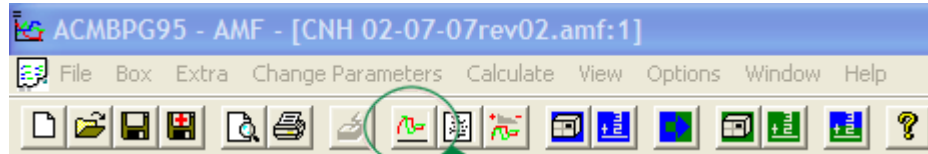
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- **Graph**
- Simulation
- Repport
- Summary

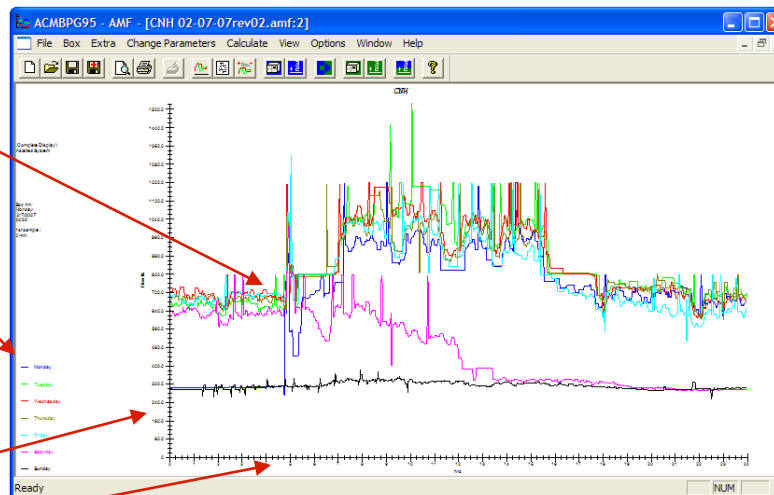


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- VIEW OPTIONS - GRAPH**



- 1day = 1 line
- Color definition
- 7 lines = 1 week



- Consumption axis = l/s
- Time axis = 24 hours

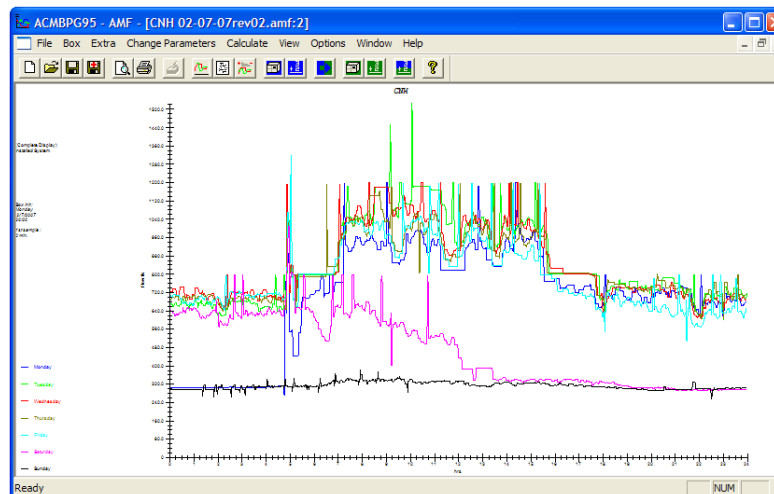


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- **VIEW OPTIONS - GRAPH**

- **What can I see on this particular graph?**

- **24/7 (day and night air demand)**
- **Weekend demand is low**
- **Probable production 5,5 days a week**
- **Highest production**
 - 5/7 from 7 am to 16 pm
- **Production peaks**
 - Between 1200 & 1500 l/s
- **High production level**
 - 1200 l/s
- **Peak fluctuation**
 - 400 to 500 l/s
- **Sunday consumption**
 - LEAKAGES
 - SMALL AIR CONSUMERS
- **Base LOAD = 640 l/s**



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VIEW OPTIONS - DATASHEET

What can I see on this particular graph?

COMPRESSOR INFORMATION

- Measurement on 4 compressors
- All 4 with electronic controller
- FAD
- UNLOADED POWER
- LOADED POWER

CALCULATED COMPRESSOR DATA

- Loaded Time
- Unloaded Time
- Stopped Time
- = 168 - (Loaded + Unloaded Time)
- Load Unload Cycles
- Energy Loaded

- = Loaded Time x Load power
- Energy Unloaded

- <> Unloaded Time x Unload Power
- Total Energy Consumption

- = Energy Loaded + Energy Unloaded

CALCULATED AIRNET DATA

- ENERGY LOADED
- ENERGY UNLOADED
- TOTAL ENERGY CONSUMPTION

Version 7.43 JAN 2008 Tuesday, June 16, 2009

Measurement/Simulation Report

Installation Information

Customer : CHH
 Measured on : 2/7/2007 20: 0 Monday
 Duration/1st sample : 10080/0(min.)
 Display data on : Installed System

Compressor Information

	1	2	3	4
Manufacturer	AC GA132	AC GA132	AC GA132FF	AC GA132FF
Type				
Manufacturer Type				
Control System	Elek.	Elek.	Elek.	Elek.
FAD (l/s)	401.0	401.0	401.0	401.0
Min FAD (l/s)	---	---	---	---
Unload Power (kW)	37.0	37.0	37.0	37.0
Load Power (kW)	147.0	142.0	142.0	147.0
Min Load Power (kW)	---	---	---	---
Unload Pressure (Bar)	---	---	---	---
Load Pressure (Bar)	---	---	---	---
Min Load Pressure (Bar)	---	---	---	---
Pressure Setpoint (Bar)	---	---	---	---
Indirect Stop Level (Bar)	---	---	---	---
Direct Stop Level (Bar)	---	---	---	---
Idling Time (min)	---	---	---	---
Prog Stop Time (s)	---	---	---	---
# Starts	---	---	---	---

Calculated Compressor Data

	1	2	3	4
Loaded Time (h)	21.4	76.0	119.6	68.2
Unloaded Time (h)	9.4	31.7	10.9	0.1
Stopped Time (h)	137.2	60.3	37.5	99.8
Load/Unload Cycles-VSD St	345	814	483	7
Energy Loaded (kWh)	3149	10795	16978	10022
Energy Unloaded (kWh)	571	1676	712	7
Total Energy Cons. (kWh)	3721	12471	17690	10029

Calculated Air Net Data

Energy Loaded (kWh)	40944
Energy Unloaded (kWh)	2967
Total Energy Cons. (kWh)	43911

15:09 1/1



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ACMBPG95

- **SIMULATION**

- **Based analyze of**
 - The graph
 - The datasheet
 - The needs of the customer
- **You will select the “best fitted” compressor(s)**
- **Now you can simulate on this “best fitted” compressor room**

Version 7-AS (July 2008)

Tuesday, June 16, 2009

Measurement/Simulation Report

Installation Information

Customer

Measurement on

Simulation on

Display data as:

Compressor Information

4C

2

3

4

Manufacturer

GA132

GA132

GA132P

GA132P

Compressor

GA132

GA132

GA132P

GA132P

Control System

EWK

EWK

EWK

EWK

FAC (Hz)

480.0

480.0

480.0

480.0

Rev FAC (Hz)

...

...

...

...

Unload Power (kW)

37.0

37.0

37.0

37.0

Unload Power (hp)

50.0

50.0

50.0

50.0

Brk Load Pressure (Bar)

...

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...

...

Load Pressure (Bar)

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Brk Load Pressure (Bar)

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Load Pressure (Bar)

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Pressure Setpoint (Bar)

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Control Stop Level (Bar)

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Control Stop Level (Bar)

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Stop Time (min)

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Stop Time (min)

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Stop Time (min)

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Stop Time (min)

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...

Calculated Compressor Data

Load Time (h)

2.4

76.0

118.8

68.2

Unload Time (h)

3.4

13.7

19.3

1.1

Stopped Time (h)

137.2

83.3

27.5

89.8

Load/Unload Cycles (VSD Stops)

344

463

463

463

Energy Load/Unload (kWh)

2540

10786

10786

10786

Energy Load/Unload (kWh)

251

1225

1212

1212

Total Energy Cycles (kWh)

3721

12471

17999

10022

Calculated Air Net Data

Energy Load/Unload (kWh)

40664

...

...

...

Energy Load/Unload (kWh)

2007

...

...

...

Total Energy Cycles (kWh)

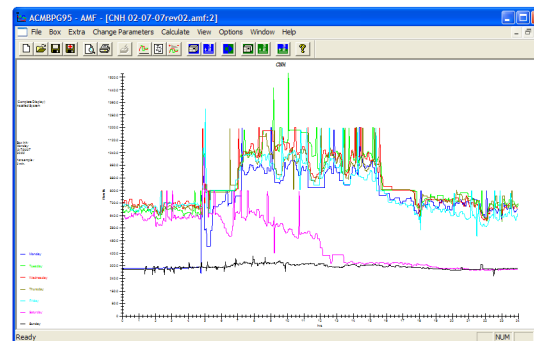
43011

...

...

...

15/19



***** In the next training we will learn more on how to choose the “best fitted” compressor room**



ACMBPG95

- SIMULATION**

- 2 Ways of working**

- Start on the existing installation



- Start from scratch



- The choice between the 2 ways is dependant on the pre-analyse**

- Discussion is the key of
 - A good customer relationship
 - A good and accurate measurement

