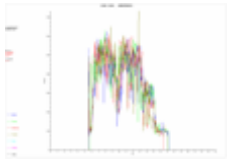
iiTRAK – INTRODUCTION



IVR
SCD
V
FREQ

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

What is the iiTRAK

- **iiTRAK is a Measuring tool**
  - **Logs the status of the compressor room for 7 days**
  - **Shows the air demand of a customer**
  - **Gives info about the energy consumption of the customer**
  - **Makes it possible to simulate on a better fitted compressor room**
  - **Creates a report that shows the saving potential of the customer**

- **Flexible Measuring system**
  - **Measures up to 8 compressors**
    - The measurement can include 1 frequency driven compressor
  - **No distance limitation**
    - 1 iiTRAK per compressor (distance between compressors is not a limitation)
    - Battery powered (no cabling to an external power supply)
  - **Robust / professional / Unbranded casing**
    - 4 iiTRAK's are stored in a genuine peli case
    - Professional looks
    - Small, Light weighted
    - Case is including batteries
  - **Compact Flash Card**
    - No limitted in memory (depending on the CF card used)
  - **Easy to install**
    - 1 cable for 1 leg of incoming power
  - **Lots of other possibilities**
    - 4-20 mA input makes it possible to register flow / pressure / temperature / quality of the air

What is the iiTRAK

- **What do I need to make the iiTRAK work**
  - **Software**
    - ME BOX CONFIGURATOR
    - Activation key for ME BOX CONFIGURATOR
    - ACMBPG95 + Compressor Database
  - **Hardware**
    - iiTRAK / Batteries / Compact Flash
    - Compact Flash Card Reader

- **Where do I find this**
  - **Software**
    - The software can be found on the MBP
    - Activation key is published every 2 months on the MBP
  - **Hardware**
    - iiTRAK / Batteries / Compact Flash Card can be ordered at ASC (see next slide)
    - Compact Flash Card Reader needs to be ordered separately

- **Distributors can access this technology BUT**
  - Training & support needs to be given by the Customer Center
  - Software needs to be installed for the Distributor
  - Activation key is available on the MBP so Distributor needs MBP access to use the programm

What is the iiTRAK

- **How do I order the iiTRAK**
  - 1 Peli Case with 4 iiTRAKs (Product Number : [1623 1260 00])
  - 1 Standalone iiTRAK (Product Number : [1623 0026 00])

- **What is in the Box**
  - 4 iiTRAK's

  - 16 AA batteries

  - 4 Compact Flash Cards

*** The CF card reader is not included in the box

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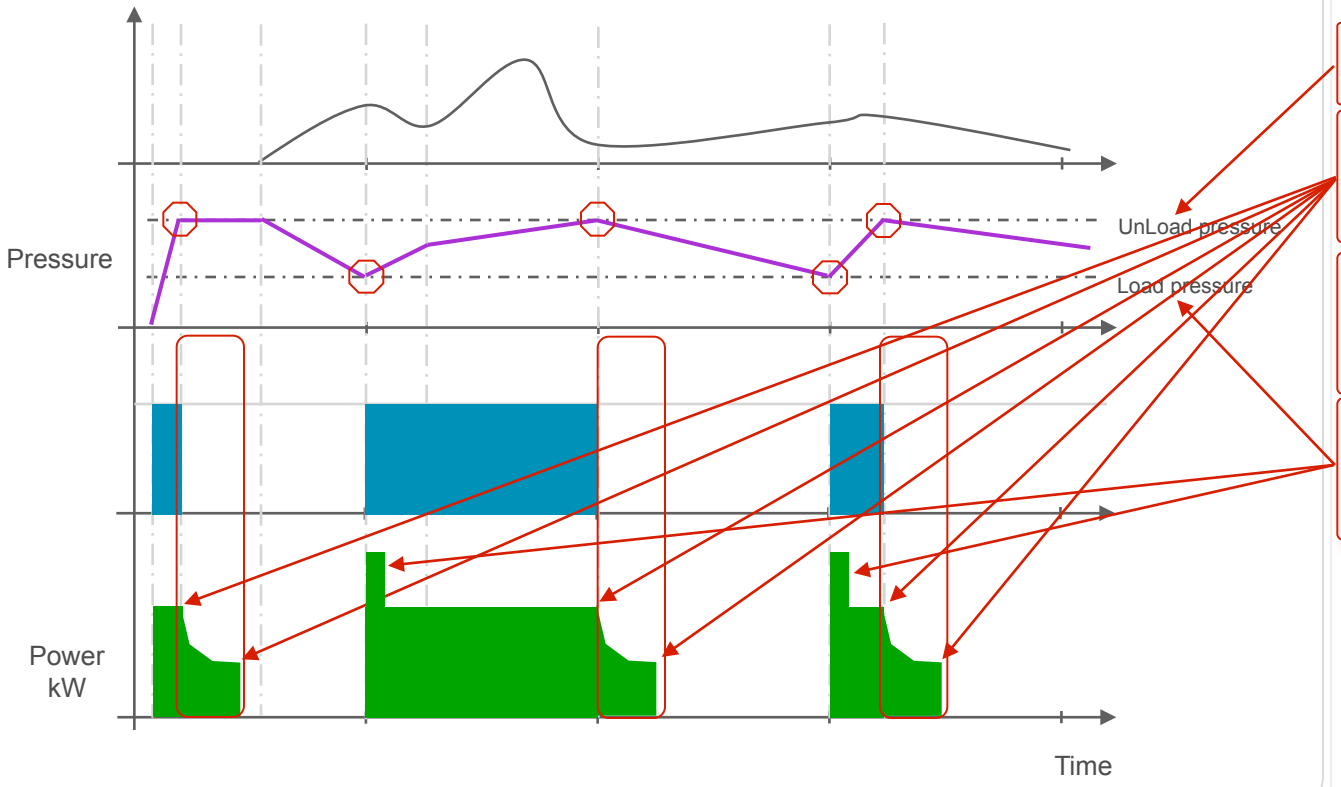
Why do I need the iiTRAK

- **Energy consumption of different technologies**
  - **Load/Unload – ELECTRO PNEUMATIC**



-Compressor produces air until the Unload pressure is reached

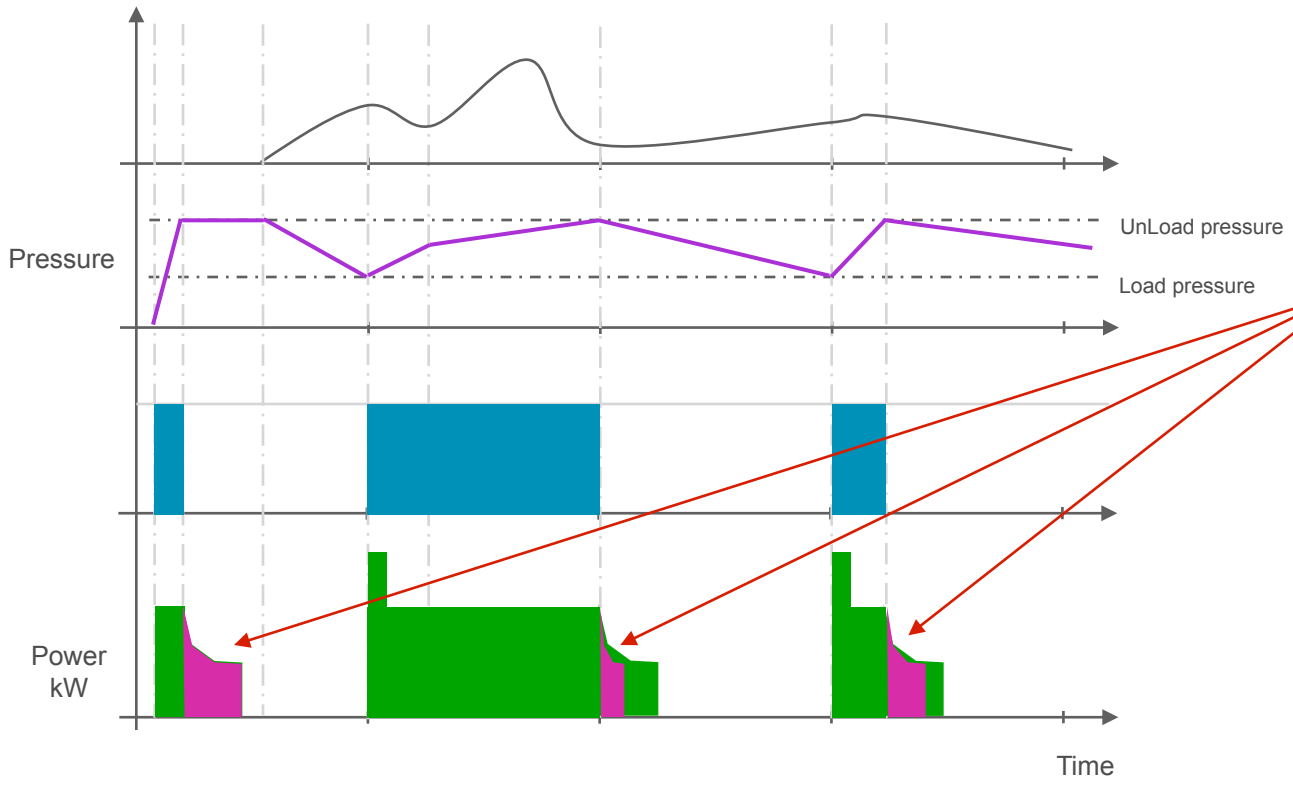
- When Unload pressure is reached compressor goes in unload and then after x minutes in stop status

- While being in unload, the compressor continues consuming energy while not producing any compressed air

-When load pressure is reached, the compressor starts up again absorbing a huge peack of energy

Why do I need the iiTRAK

- **Energy consumption of different technologies**
  - **Load/Unload – ELECTRONIC CONTROLLER**

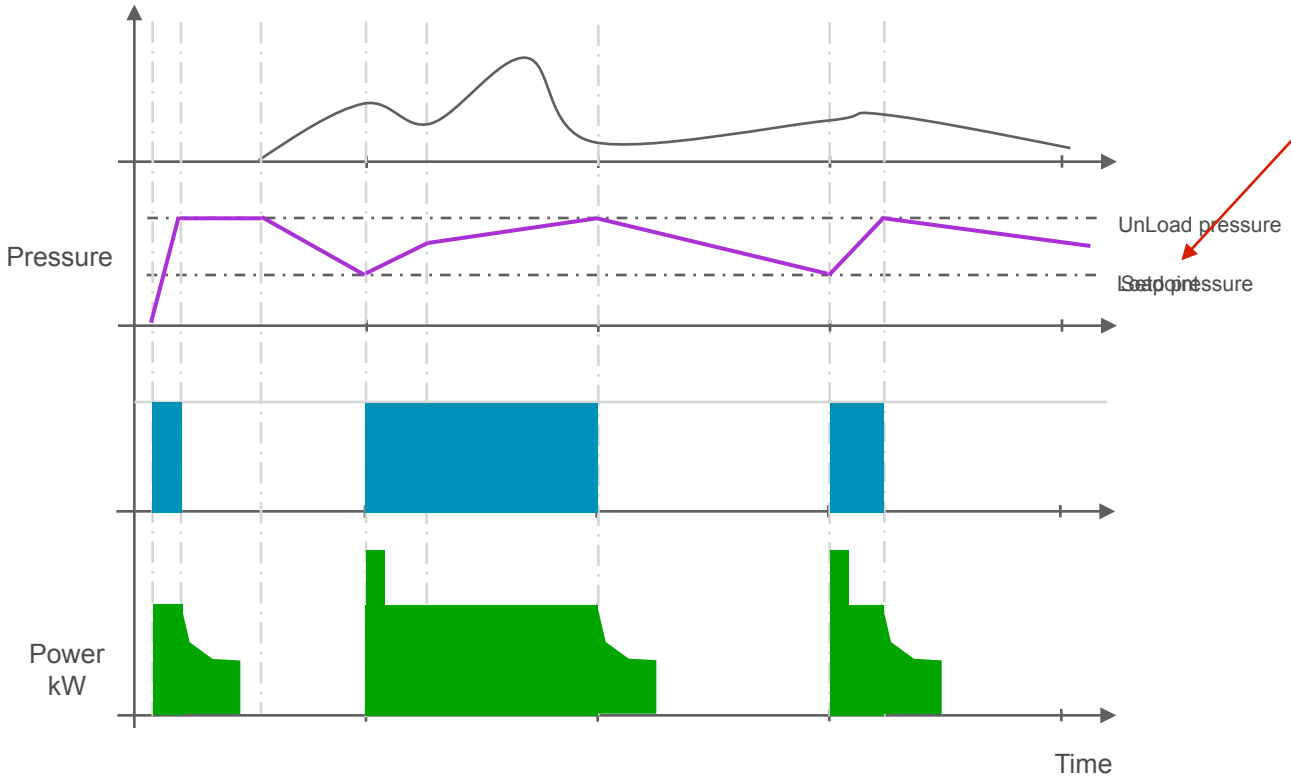


- The controller analyses the past in order to reduce the energy consuption by reducing the unloaded time of the compressor

- The controller tries to stop the compressor as soon as possible and depending on the number of cycles and the loaded time of the past periods the controller can reduce this unloaded time or not (instead of having a fixed unload time of 6 minutes per cycle)

Why do I need the iiTRAK

- **Energy consumption of different technologies**
  - **Frequency driven compressor**



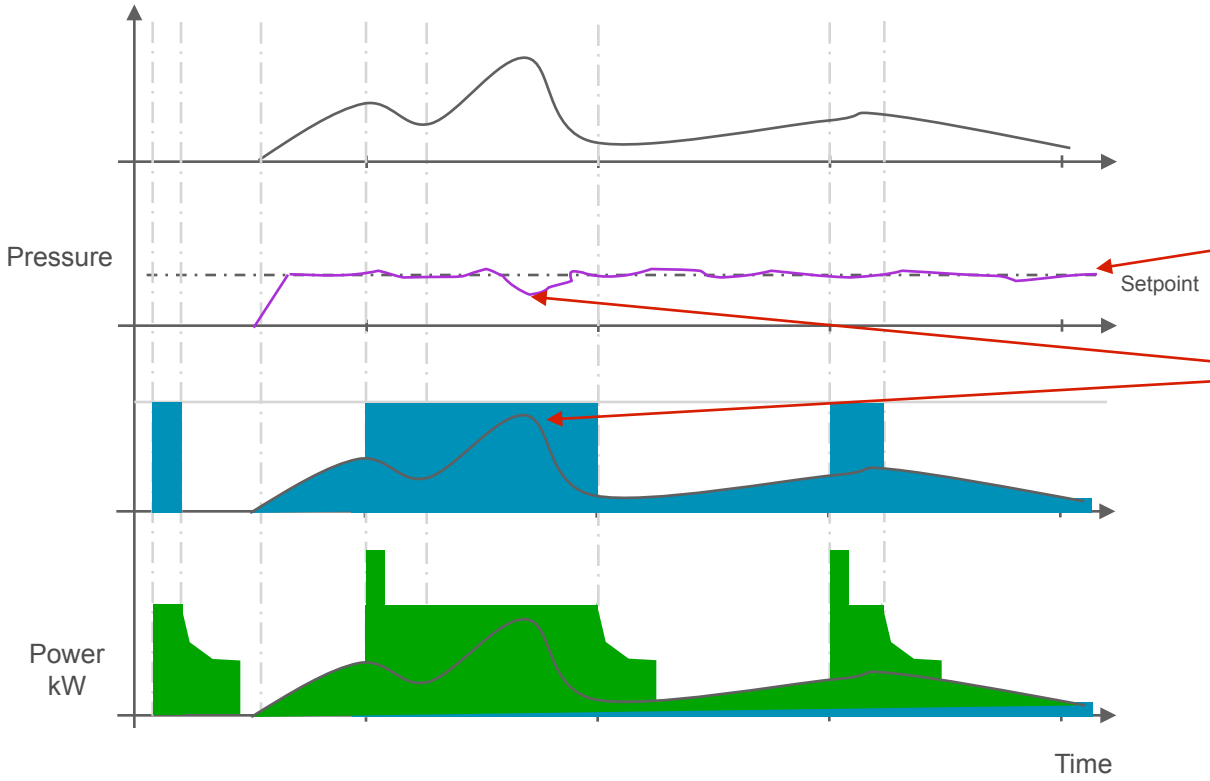
- For frequency driven compressors we do not work with a pressureband but with a setpoint

- The motor of the compressor is addapting his speed to the demand in order to keep a stable pressure equal to the setpoint

- When the pressure drops, the speed of the motor and at the same moment the compressed air flow increases

Why do I need the iiTRAK

- **Energy consumption of different technologies**
  - **Frequency driven compressor**



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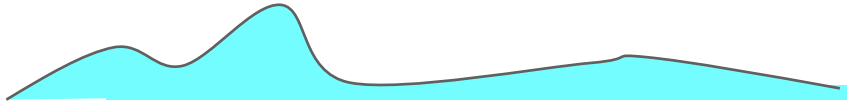
Why do I need the iiTRAK

- **Energy consumption of different technologies**
  - **Comparison of the 3 technologies**

LOAD / UNLOAD COMPRESSOR
With electro pneumatic control

LOAD / UNLOAD COMPRESSOR
With electronic controller

FREQUENCY DRIVEN COMPRESSOR



- If we compare the 3 technologies we see that the Frequency driven compressors are more efficient in a lot of applications.

- Energy consumtion is a huge part of the life cycle cost of the machine (it can represent up to 75% of the total cost of of ownership of the compressor)

- Keeping this in mind, it is important to quote the right compressor for the right application. In a lot of applications the Frequency driven compressor is the right compressor. The iiTRAK measurements help you showing this to the customer

Why do I need the iiTRAK

- **With the iiTRAK I can:**
  - **Invite the customer for 2 meetings and opening the discussion**
    - It is not always easy to go to customers. With the iiTRAK you give him a good reason to ask you to come. Discuss the potential over the phone and he will beg you for a measurement.
  - **Show the saving potential**
    - Every customer knows that his compressor room is expensive but none of them are able to express the saving potential in money
  - **Show the payback on the needed investment**
    - This gives you directly a perfect opportunity to make a quotation and show how fast the money is re-gained by the energy saving of a frequency driven compressor
  - **Start a commercial discussion based on facts and figures**
    - Energy consumption
    - Number of running hours
    - Numbers of cycles of his compressors
    - Number of unloaded hours (wasted energy)
  - **Talk in a concrete way, using terms the customer understands**
    - Saving potential
    - Showing the amount in €/year
    - Payback calculation in months / years
  - **Make the customer aware of**
    - The total energy cost of his compressor room
    - The wasted energy due to leakages
    - The saving potential by reducing the pressure band
    - The saving potential by investing in newer (“energy efficient”) technologies

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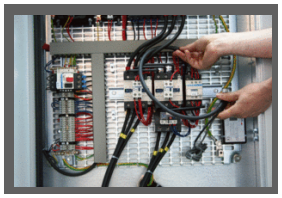
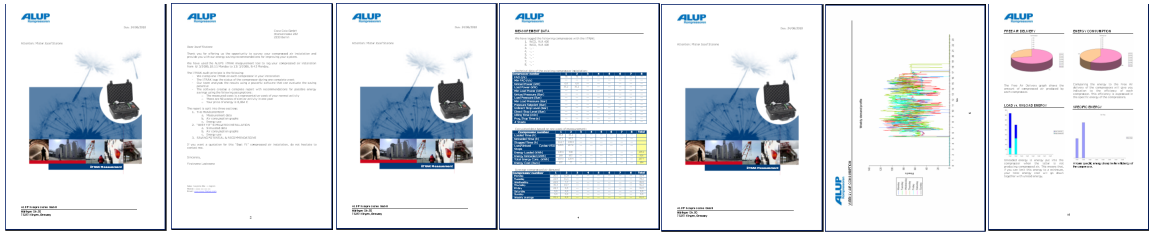
How does it work





STEP 1
Install the iiTRAK

STEP 2
Wait for 1 week

STEP 3
Uninstall the iiTRAK

STEP 4
Analyse the measurement

STEP 5
Quote and sell a compressor (with the help of the measurement repport)

Tips-Best Practices:
Measurements can be sold for about 600€. If the customer orders a new compressor within a period of time (usually 6 months), the price of the measurement is taken into reduction of the cost of the compressor

How does it work

- **iiTRAK principle**

- **The Logger**
  - Logs the current absorbed by the compressor(s)
- **The software**
  - Transforms the current into statusses (Load / unload / stopped / 5%, 10%, 15% loaded …)
  - Converts the status into a flow graph
  - Calculates the numbers of
    - Running hous
    - Unloaded hours
    - Stopped hours
    - Number of running cycles
  - Simulates with other (“best fitted”) compressor installation
  - Creates a repport showing the saving potential
    - Depending on the cost of electricity
    - Depending on the operating weeks
- **The user**
  - Quotes the best fitted compressor(s)
  - Calculates the pay-back on the investment
  - Integrates his quote into the repport
- **The customer**
  - Buys the “bets fitted” compressor installation