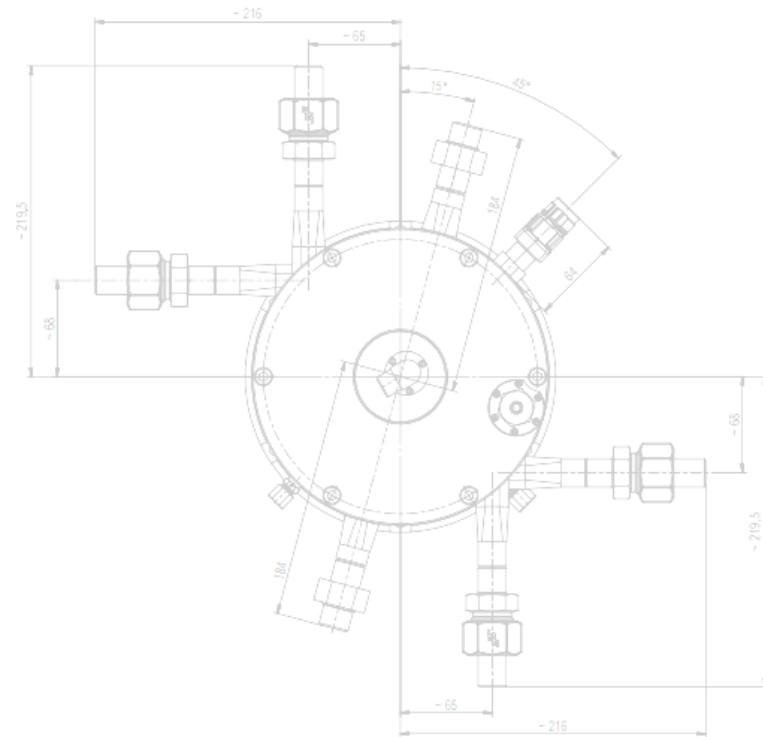


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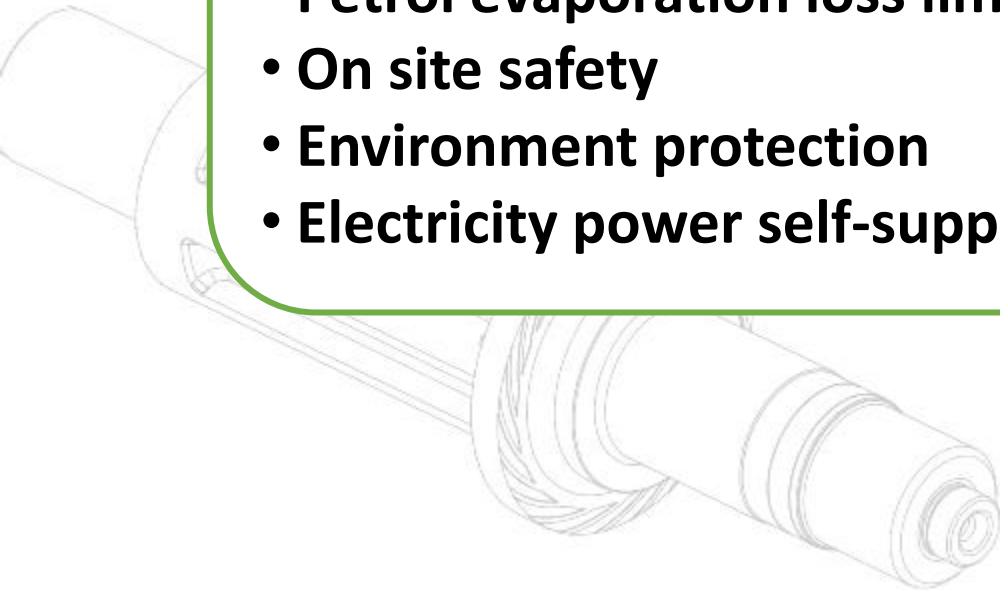
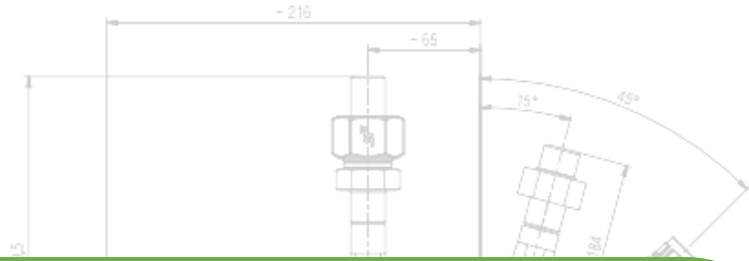
*A Company Introduction
Petrol Vapor Recovery*



Petrol Vapor Recovery – Why

Reason For A New Technology Research and Deployment:

- **Petrol evaporation loss limitation**
- **On site safety**
- **Environment protection**
- **Electricity power self-supply**



Petrol Vapor Recovery – How

Stage 1:

- 1. Cooled gasoline is used for reducing of hydrocarbon content in absorption column**
- 2. Gasoline is pumped from the underground storage tank through a system of recuperation exchangers and evaporators**
- 3. Cooled gasoline is fed in the absorption column
Gasoline vapor is absorbed into the gasoline**
- 4. The gasoline is returned by gravity to the second part of the underground tank from the absorption column**
- 5. To ensure continuity of operation of the unit, the first-stage equipment is doubled and is operated in absorption and defrost mode**

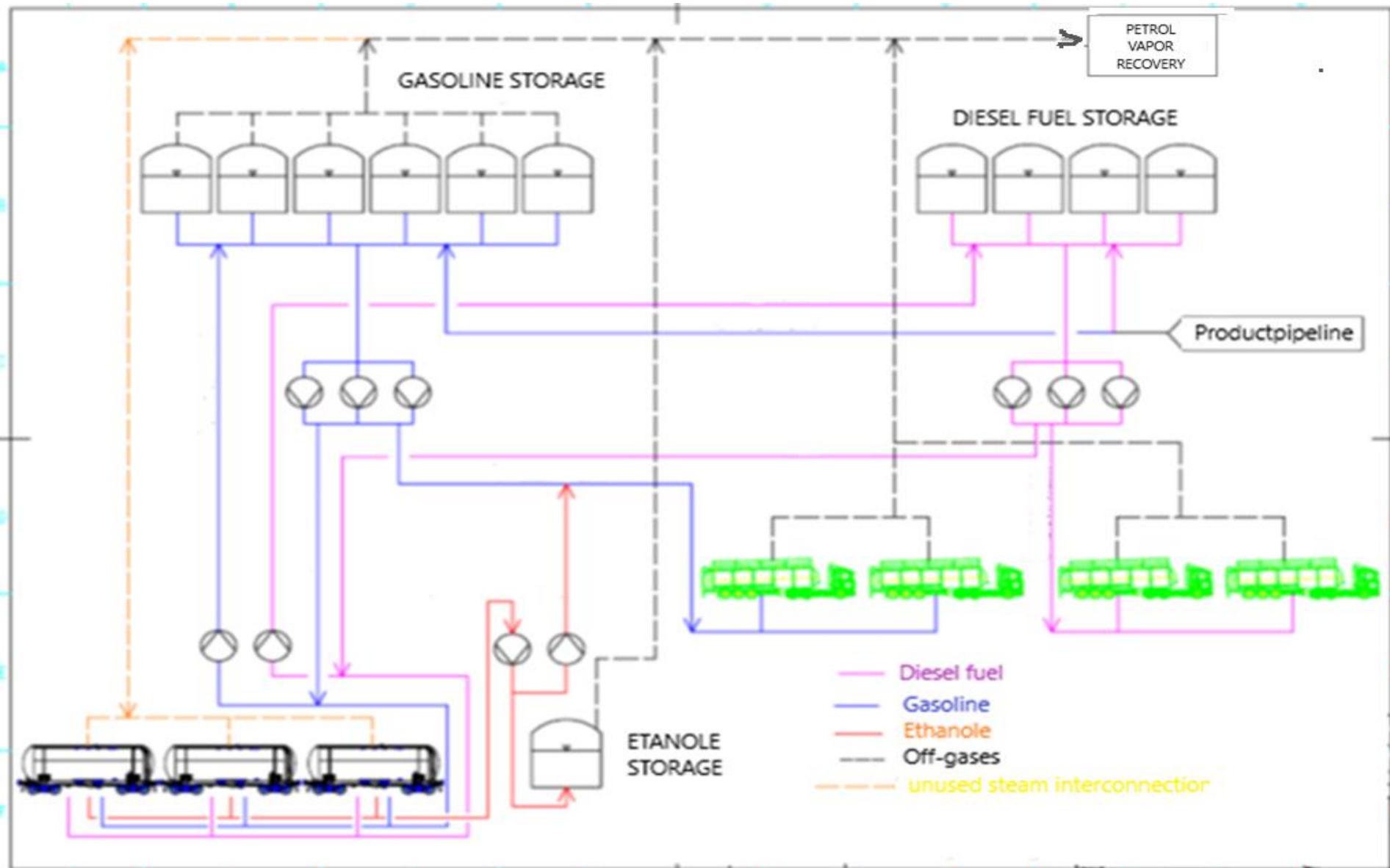


Petrol Vapor Recovery – How

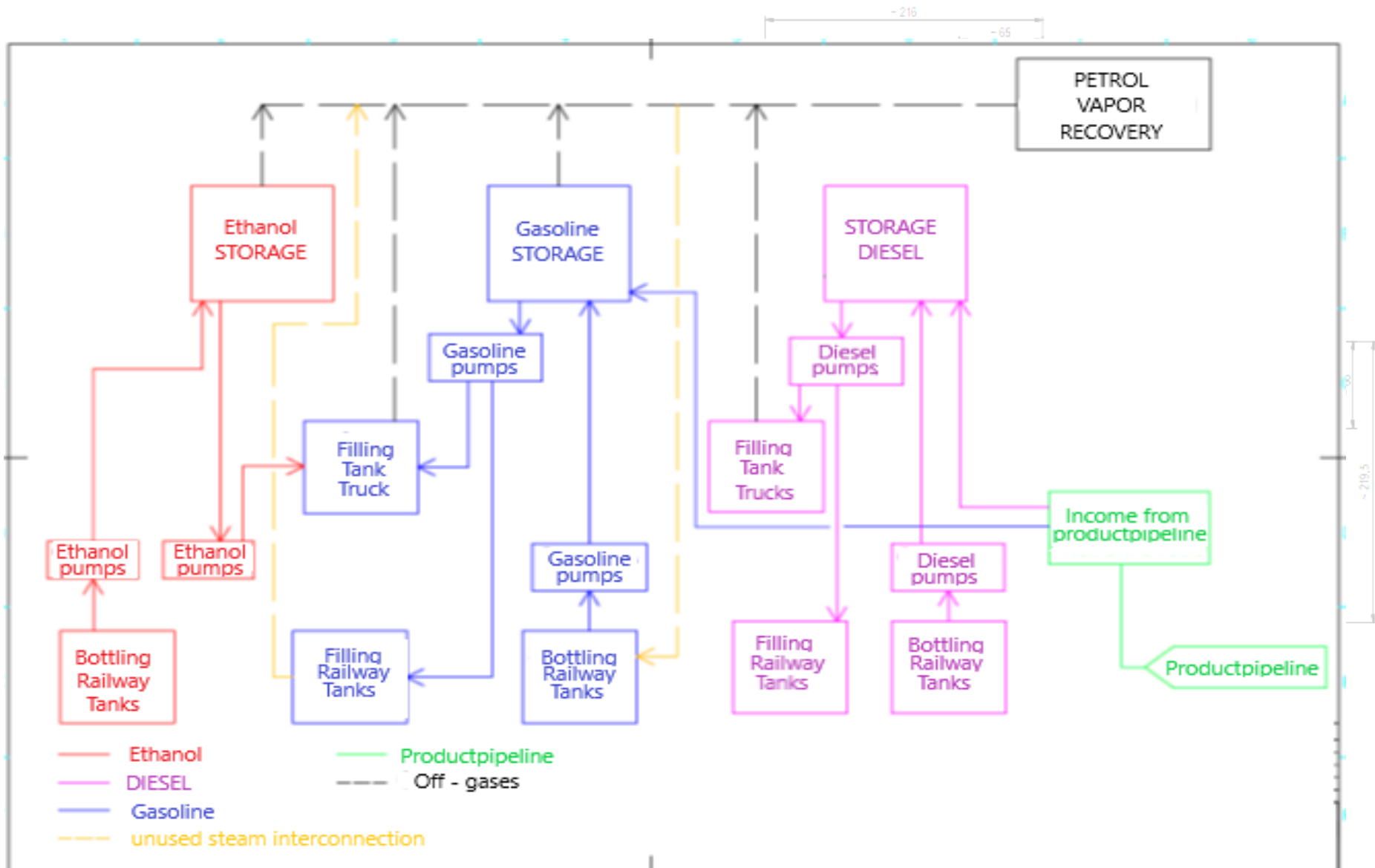
Stage 2:

- 1. The gasoline vapour from the 1st stage of the technology is fed to the Generator sets**
- 2. Electricity is produced in Generator sets from gasoline vapour**
- 3. Electricity is used for self-consumption**
- 4. Emission limit of gasoline vapour is achieved by generator sets 150 mg TOC /m³**

Petrol Vapor Recovery – PFD



Petrol Vapor Recovery – BFD



Control System:

**Ensuring of automatic operation of the technology
Monitoring, visualizing and measuring variable
parameters and control machines, equipment and
fittings.**

**Equipping the main machines with its own control
system**

**Measurement of temperatures, pressures, liquid
levels, flows, vibrations.**



Engineering Scope:

- **Current status on site**
- **Principles and parameters of future system**
- **Thermodynamics of the process**
- **Technology definition**
- **Operating substances**
- **Energy and auxiliary substances**
- **Evaluation of current problems**
- **Evaluation of current equipment (if any)**
- **Machinery equipment setting**
- **Insulation**
- **Pipelines**
- **Civil works (cranes, scaffolding etc.)**

- 216
- 65

- 68
- 219,5

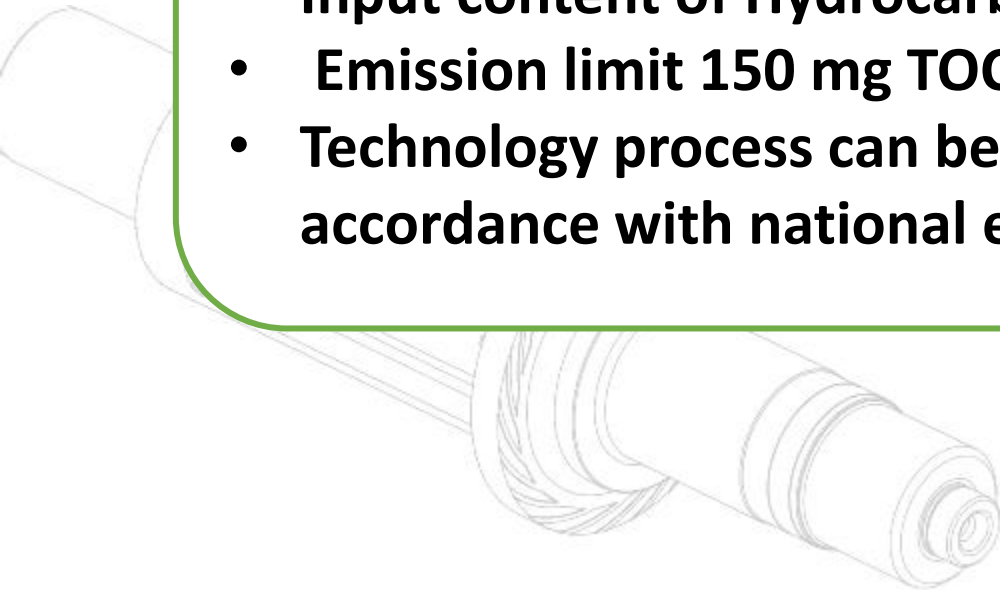
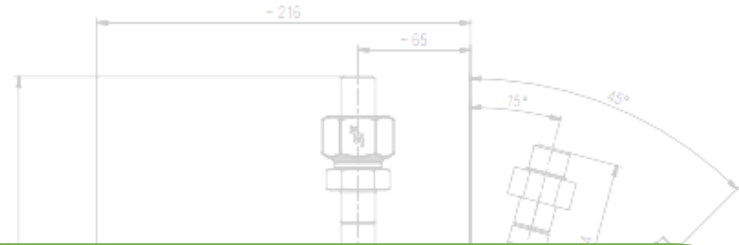
Engineering Scope (continued):

- **Measurement and Control system**
- **Hierarchy**
- **Remote control**
- **Particular control subsystems**
- **Control concept**
- **List of measurement loops for physical quantities**
- **Scope of delivery**
- **Preparatory work**
- **Security precautions**
- **Official examinations**
- **Applicable standards**
- **Quotation**

Petrol Vapor Recovery – System Output

System Output Available:

- **300 –800 Nm³ processed vapour/hour**
- **Input content of Hydrocarbons 1000 g/m³**
- **Emission limit 150 mg TOC /m³ (Czech Republic)**
- **Technology process can be customized in accordance with national emission limits**



Petrol Vapor Recovery – Czech Republic Installations

CEPRO, Hnevice, CZ – RBP 600

- ✓ *Maximum processed vapor volume 720 Nm³ /hour,*
- ✓ *Efficiency 80 – 95 %*



Petrol Vapor Recovery – Czech Republic Installations

CEPRO, Mstetice, CZ – RBP 600

✓ *Maximum processed vapor volume 720 Nm³ /hour,*

✓ *Efficiency 80 – 95 %*



Petrol Vapor Recovery – Czech Republic Installations

CEPRO, Strelice, CZ – RBP 600

✓ *Maximum processed vapor volume 720 Nm³ /hour,*

✓ *Efficiency 80 – 95 %*



Petrol Vapor Recovery – Czech Republic Installations

CEPRO, Tremosna, CZ – RBP 800

✓ *Maximum processed vapor volume 840 Nm³ /hour,*

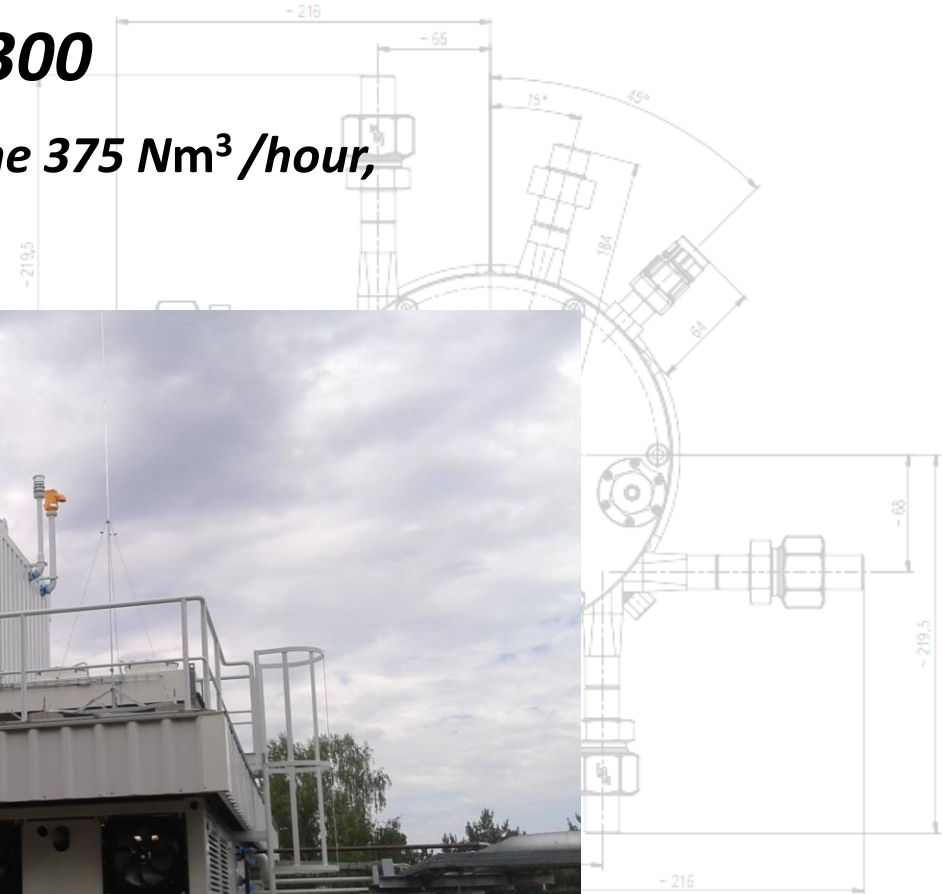
✓ *Efficiency 80 – 95 %*



Petrol Vapor Recovery – Czech Republic Installations

CEPRO, Vcelna, CZ – RBP 300

- ✓ *Maximum processed vapor volume 375 Nm³ /hour,*
- ✓ *Efficiency 81 – 95 %*



Petrol Vapor Recovery – By the end ...

Overall Results:

- **Petrol Vapor Recovery Technology available as a Turn-key solution**
- **Design process and manufacture technology verified**
- **Theoretical models verified by real measurement**
- **Applicable standards are met**
- **Customization available according to customer national standards**
- **20 years of experience with latest innovation**

Thank you for your attention

<http://www.ateko.cz>

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