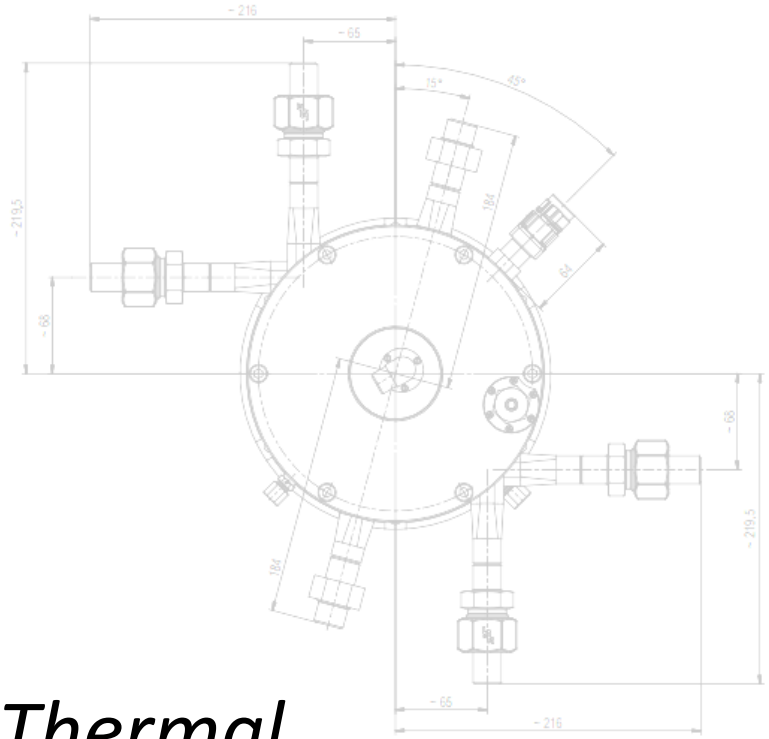
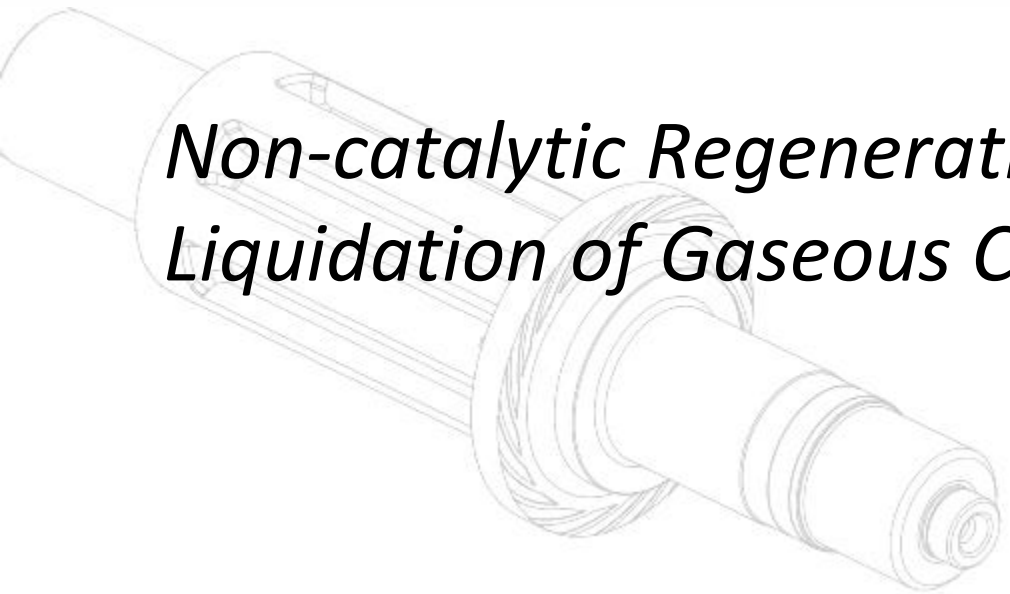
ATEKO a.s.

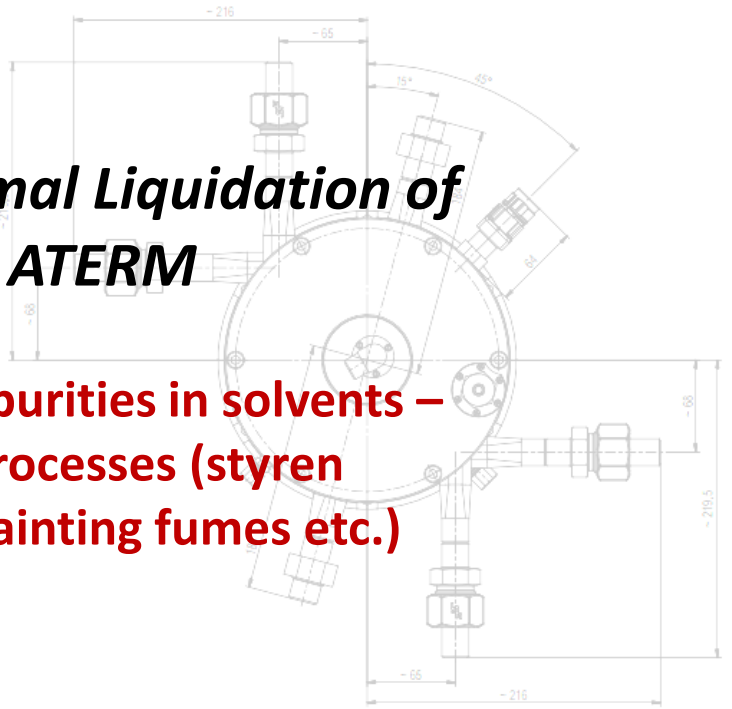
1949 – 2020



Non-catalytic Regenerative Thermal Liquidation of Gaseous Contaminants ATERM



ATERM – Why

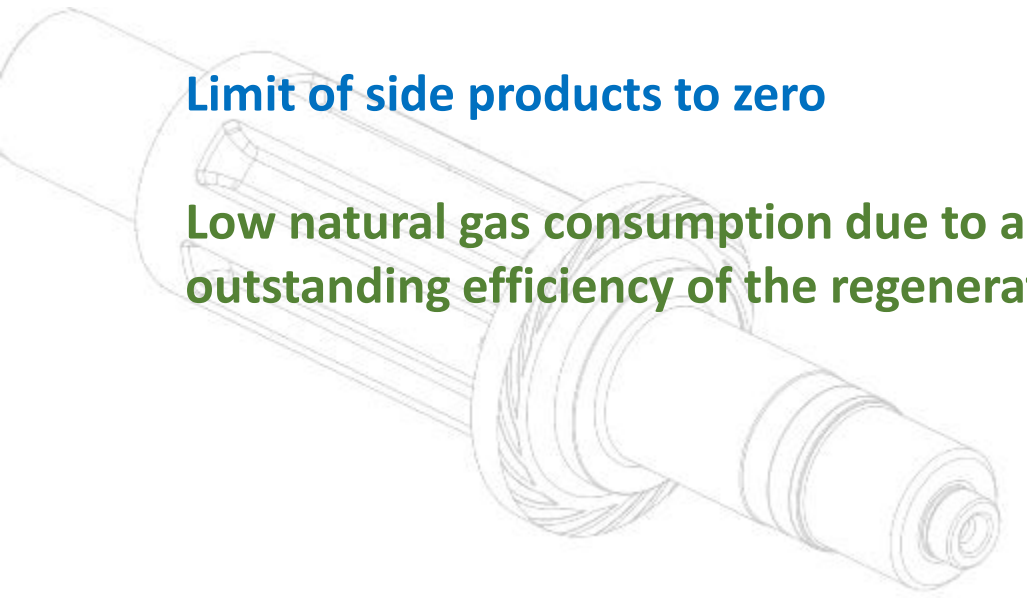


Non-catalytic Regenerative Thermal Liquidation of Gaseous Contaminants ATERM

A need of solution resistant against trace impurities in solvents – catalyst poisoning during catalytic burning processes (styren production, printing machines workshops, painting fumes etc.)

Limit of side products to zero

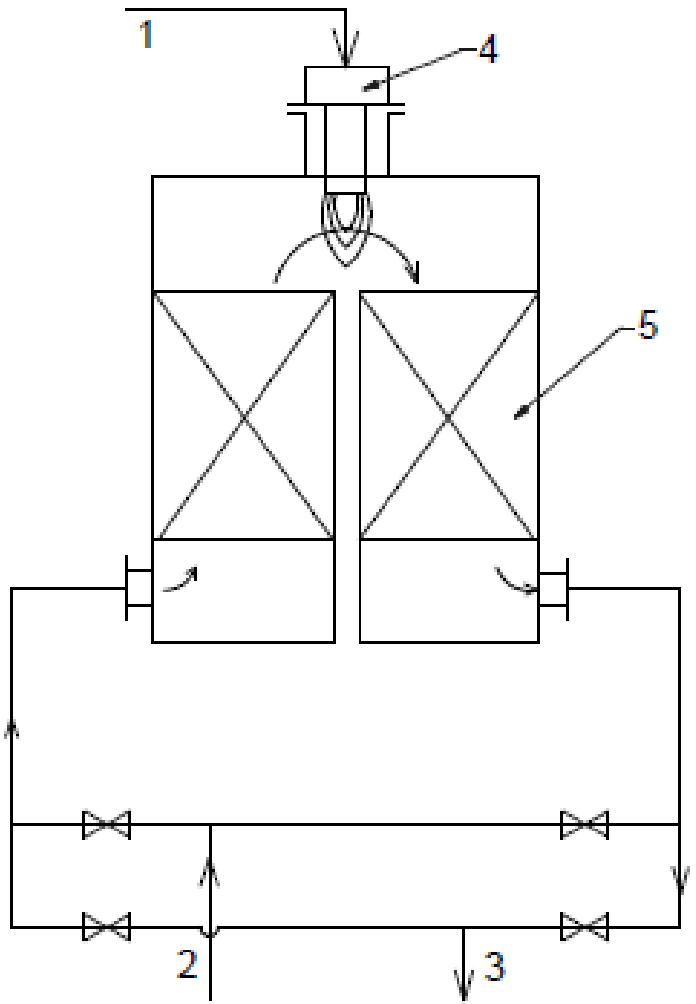
Low natural gas consumption due to a sound thermal insulation and outstanding efficiency of the regeneration heat exchanger



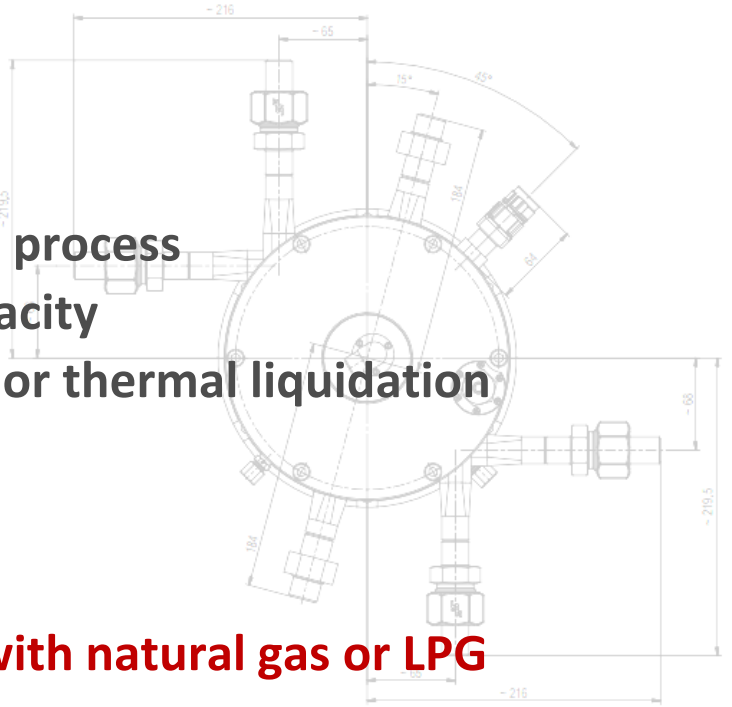
ATERM – How 1

Plant Diagram:

1. Fuel gas
2. Air for purification
3. Purified air
4. Burner
5. Ceramic packing



ATERM – How 2



Technology composition:

Cylindrical reactor – Non-catalytic thermal process

Reactor volume according to required capacity

Two chambers layout – heat recuperation or thermal liquidation

Burning process:

Polluted air inlet into lower part

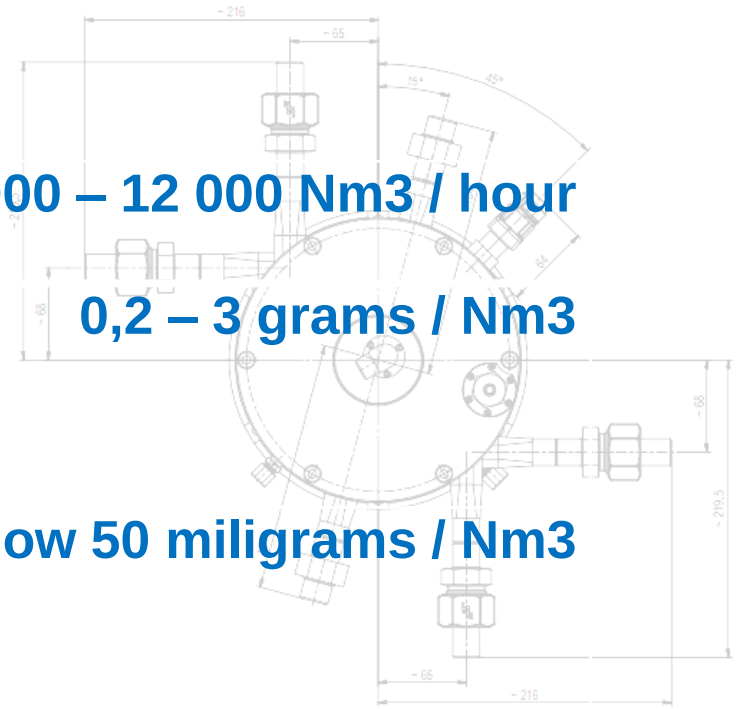
Residual burning in upper part equipped with natural gas or LPG burner

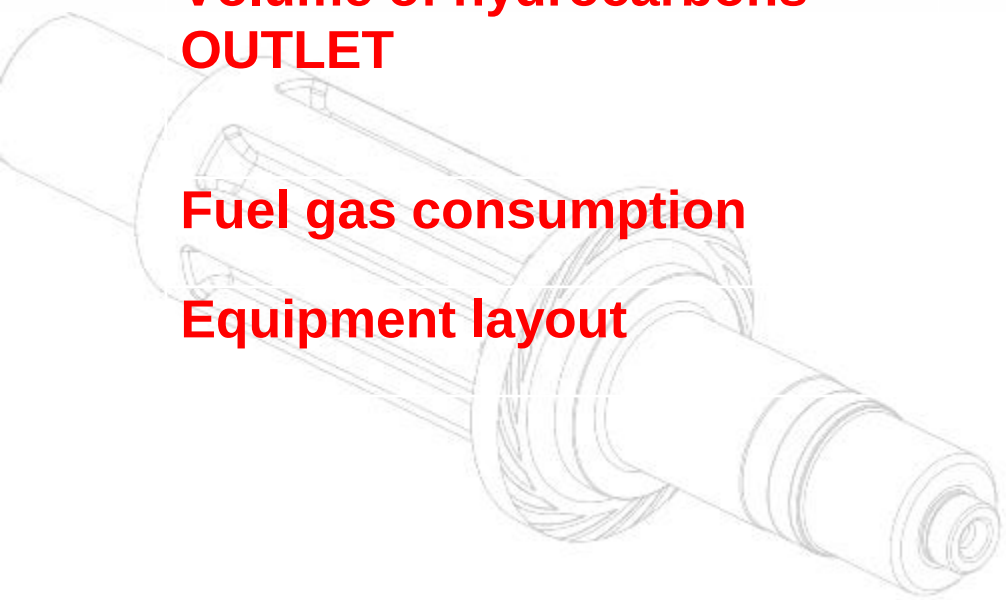
Process heat recuperated in ceramic packing

Autothermic process for CxHy concentration over 1,8 gram/Nm3

ATERM – Technical parameters

Volume of contaminated air	**1 000 – 12 000 Nm3 / hour**
Volume of hydrocarbons – INLET	**0,2 – 3 grams / Nm3**
Volume of hydrocarbons - OUTLET	**Below 50 miligrams / Nm3**
Fuel gas consumption	**According to CxHy content**
Equipment layout	**5 x 8 m area, 4 m height**



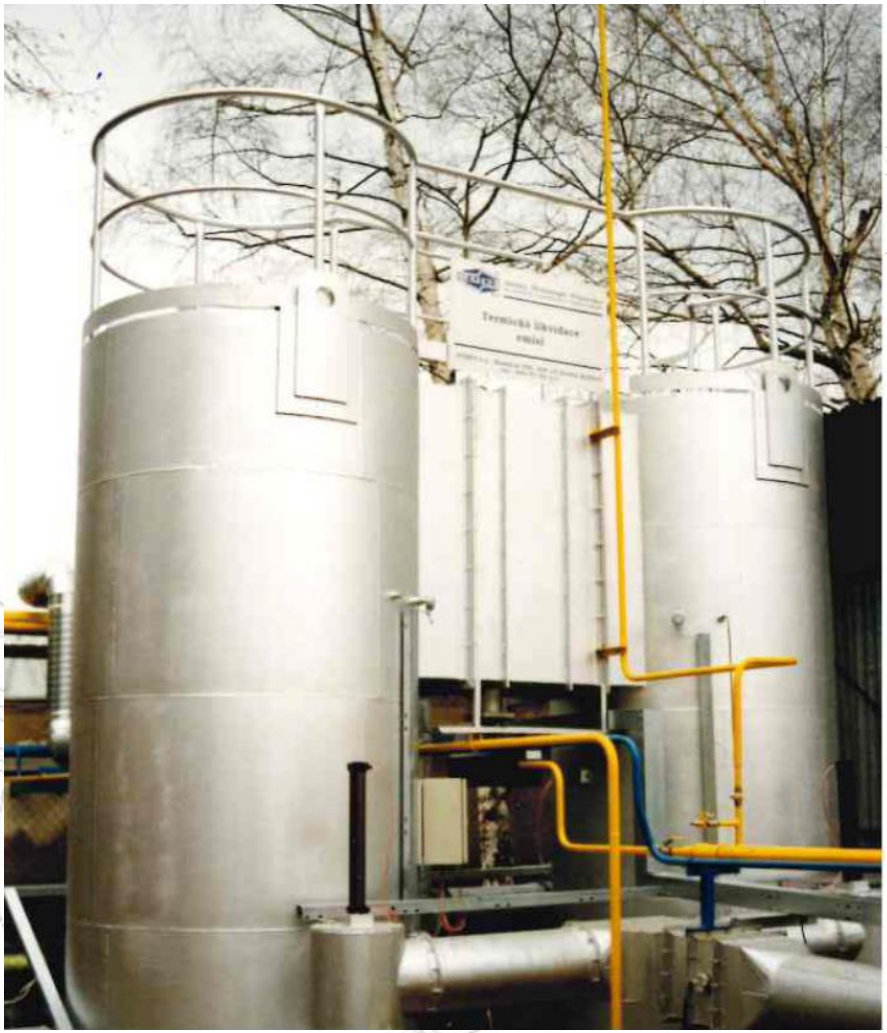


ATERM – Existing Installations 1

Installation, Czech Republic

ATERM – Existing Installations 2

Installation, Czech Republic



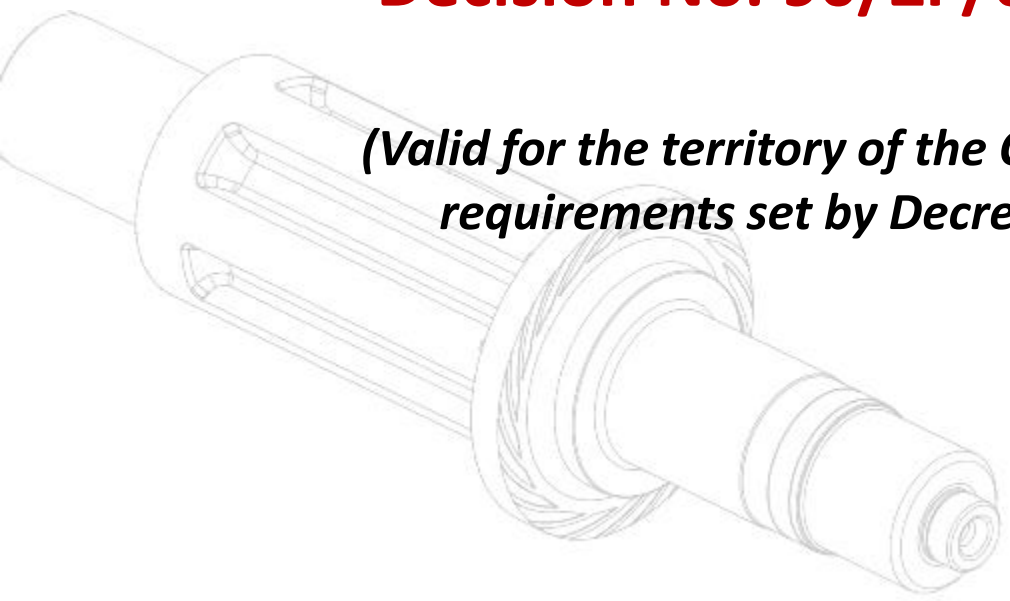
ATERM – Existing Installations 3

Installation, Czech Republic

ATERM – Existing Installations 4

Installation, Czech Republic

ATERM – Approved Technology

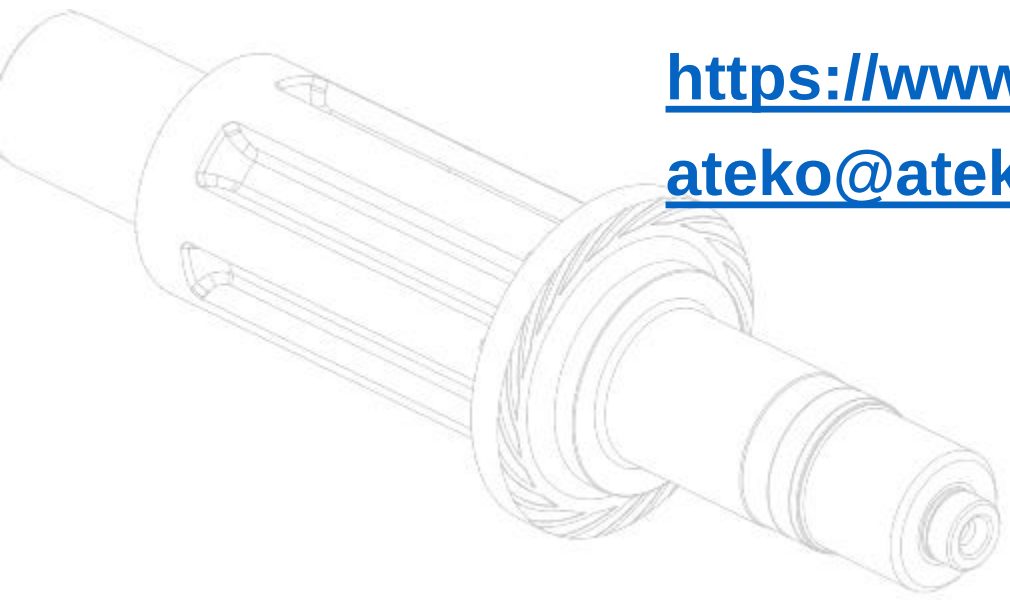


Czech Environmental Inspectorate, Prague:

Decision No. 90/ZP/00/0204/TOM/97

(Valid for the territory of the Czech Republic, efficiency requirements set by Decree No. 117/1997 Coll.)

Thank you for your attention



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