



For a sustainable future.

**Bio-fuel pellet utilization in heat production,
Finnish experience, examples and practices**

**Finnish Energy Day
Ukraine, Kiev
Managing Director Petteri Korpioja
Ariterm Oy
14.9.2016**

Start presentation

Ariterm Oy is the leading company in Pellet Heating Center design & manufacturing in Finland (1MW-8MW)

Ariterm's key strengths:

Performance

- High efficiency & low own electricity consumption
- Rapid reaction to the effect changes in network (can be compared to dust burning solutions)
- Clean combustion process

High Quality in all operations

- Pressure vessels are produced according to PED-directives H- and H1-modules.
- Boilers are available up to 10bar devices (175°C)
- Demanding quality system gives a positive impact to the disciplined process to the all operations in the company (engineering, manufacturing, documentation, technical support etc.)

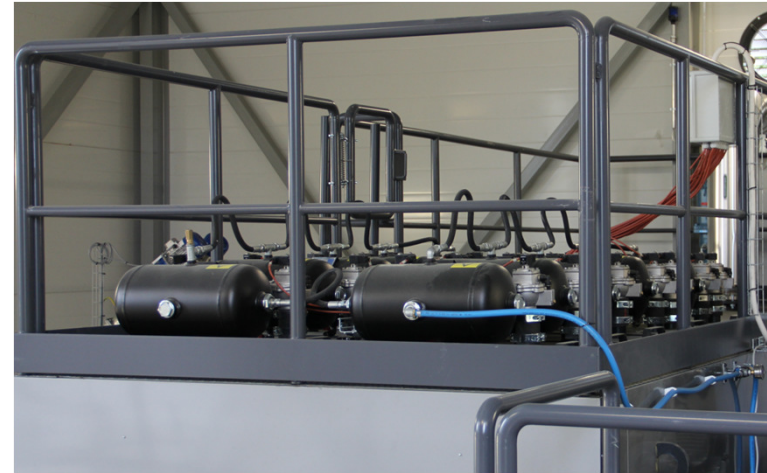
Biojet Multi -burner

- Moving grate
- Fully Water cooled (up to 20bar)
- Accurate combustion air distribution
- Power range 300kW-2MW
- Automatic ignition
- Enables fast ramp up and ramp down time – feasible for replacing oil & gas in peak load use



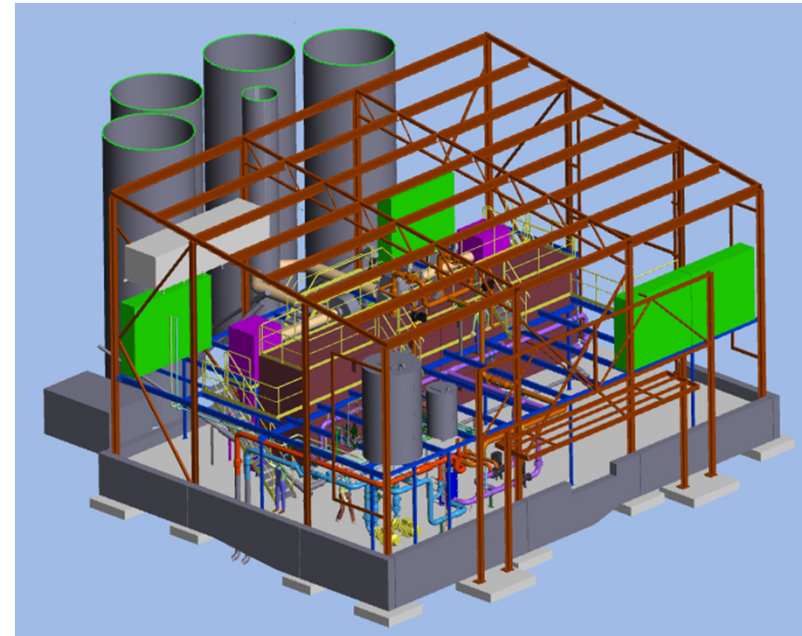
Ariterm Bioboilers

- Power Range 120kW – 4MW
- Pressure classes 4bar (135°C) , 6bar (150°C) and 10bar (175°C)
- Ash removal is made by screws
- Automatic convection cleaning
- Controlling of flue gas temperature is made by the automatic by-passing mechanisms in the convection part.



- 8MW (installed at the site)
- 6MW (installed at the site)
- 4MW (system delivery to the existing building)
- 3MW+2MW Oil, (Pre-manufactured heating centrer)
- 3MW (Pre-manufactured heating centrer)
- 1,5MW (Pre-manufactured heating centrer)
- 1MW (Pre-manufactured heating centrer)

- 2*4MW boilers
- 4*2MW burners
- Pressure class 6bar
- Chimney 45m
- Automatic cleaning
- Flue gas equipment
- Silos 4*74m³
- Ash tanks 2*5m³
- Siemens automation
 - Control PLC Siemens ET200 IM 151-9 PN/DP F-CPU
 - User interface Siemens Simatic HMI TP700 Comfort (15")
 - Frequency converters Siemens Sinamics G120C



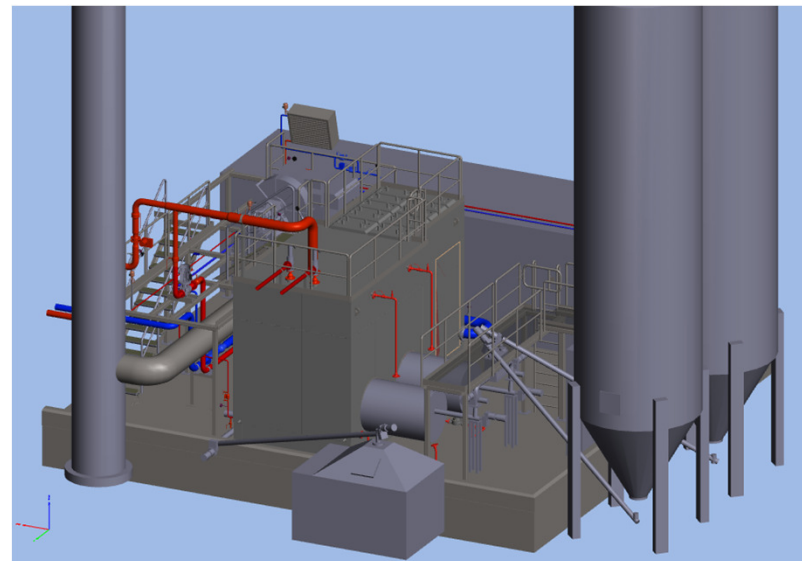
- 2*3MW boilers
- 4*1,5MW burners
- Power Range
200 kW – 6 MW



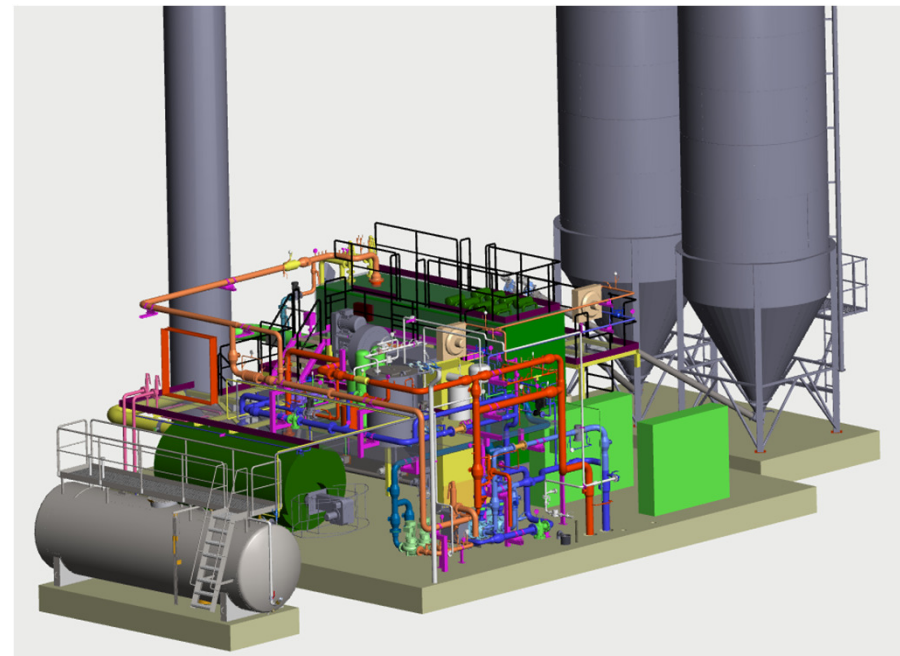
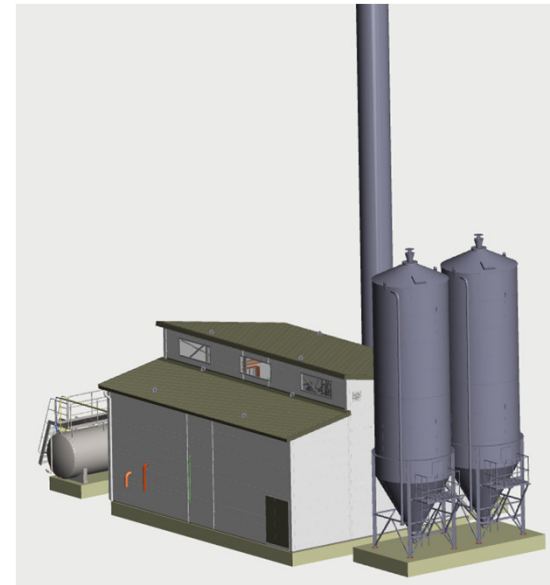
System delivery to the existing building

-Boiler 4MW (10bar)

-Burners 2*2000kW

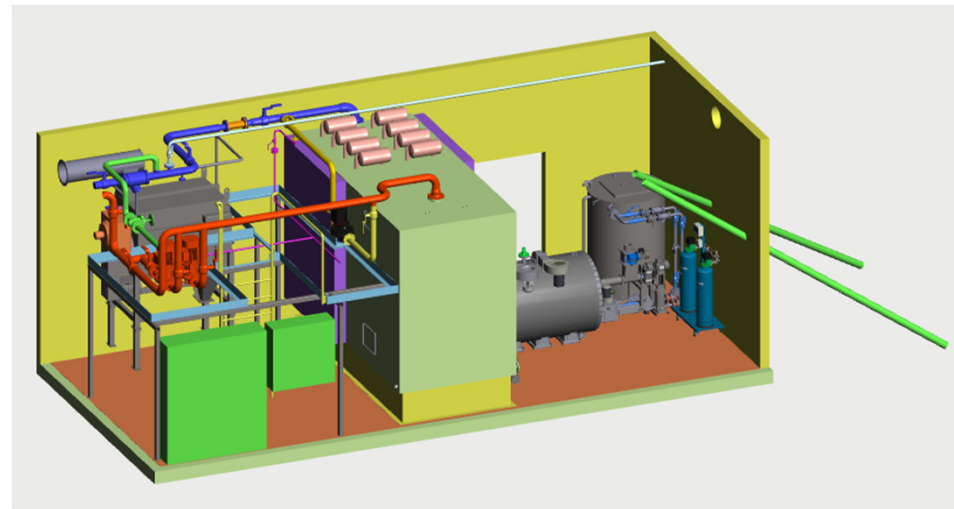


-Boiler 6bar (connection to the heating network with heat exchanger), oil boiler 16bar

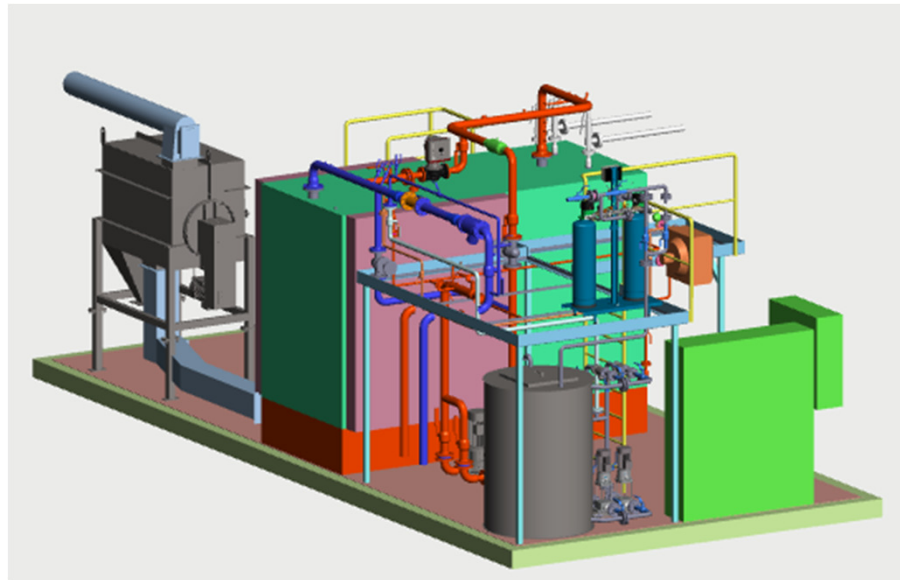




1,5MW



1MW



Case Example Leppäkosken Lämpö 6 MW

- [Video](#)



Ariterm Oy is looking for the partners, who could operate as Sales Partner & Main Contractor in Ukraine.

Ariterm would be a part of this network by producing boilers and burners etc. and also giving it's engineering know-how

Potential partners can be for example company, who is expert at one or more expertize area:

- *Steel Structure Manufacturing
- *Piping
- *Electrical installation
- *Automation
- *Plant Engineering
- *Project Management

If you are interestred, please contact to:

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