

BIOENERGY INNOVATIONS

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# BURNERS AND BOILERS

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KONEPAJA M. PAPPINEN LTD

# BIOENERGY FORERUNNER

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## WHO WE ARE :

- FOUNDED 1981
- BIOENERGY COMPETENCY
- MANUFACTURING AND TESTING OF NOVEL PROTOTYPES
- EXTENSIVE PATENT PORTFOLIO

## WHAT WE DO :

- PROTOTYPE DEVELOPMENT & INNOVATION
- PROBLEM SOLVING & CONSULTING
- CLEAN BIOENERGY TECHNOLOGIES & CHP
- WASTE ENERGY SOLUTIONS



# WOOD PELLETS

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ENERGY CONTENT 4,7 KWH/KG



ASH CONTENT 0,5 %



CO2 NEUTRAL

# COAL

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ENERGY CONTENT 7 KWH/KG



ASH CONTENT 4 %



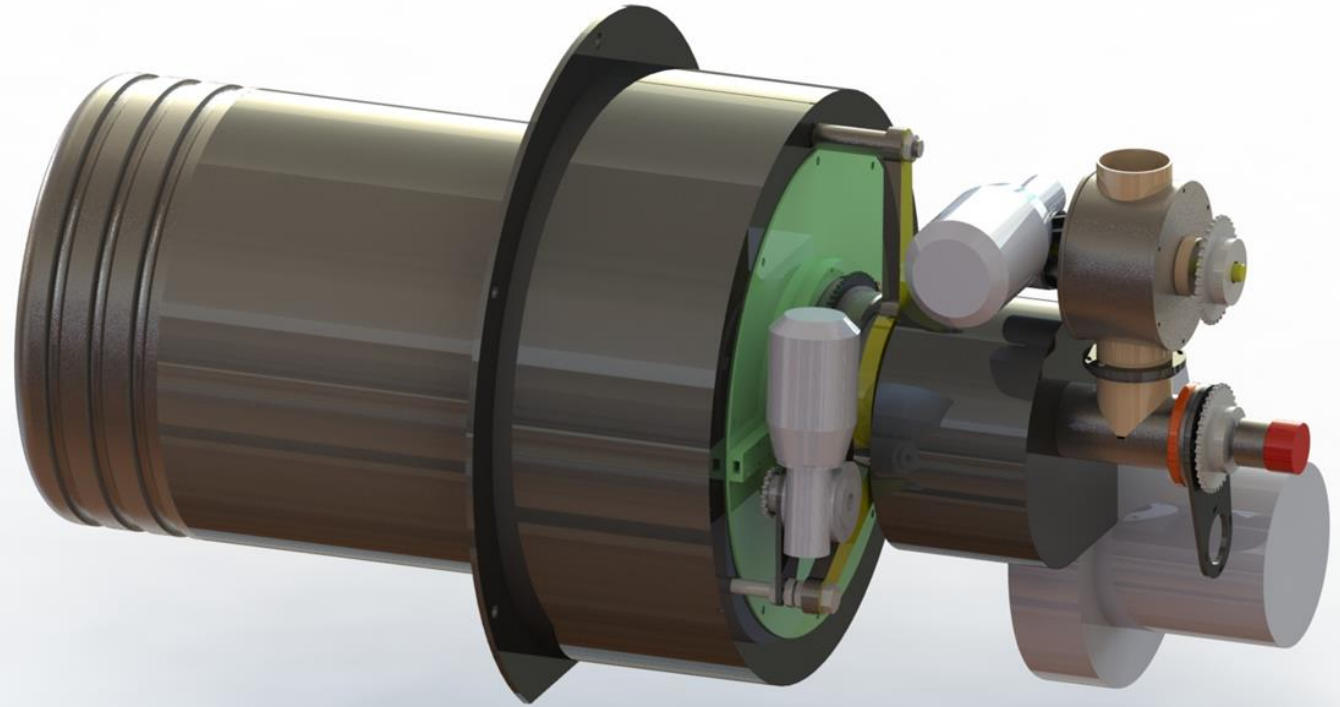
CO2 AND SO2 EMISSIONS





# HylicFlame<sup>®</sup>

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POWER RANGE 30 KW – 1 MW  
EFFICIENCY COEFFICIENT 97 %



LOW EMISSIONS 17 – 60 PPM



PATENT GB 2494403  
PATENT EP 2753878



# HylicFlame<sup>®</sup>

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BURNING TEMPERATURE +950 – 1200 C°



NO NEED TO CLEAN THE BURNING CHAMBER



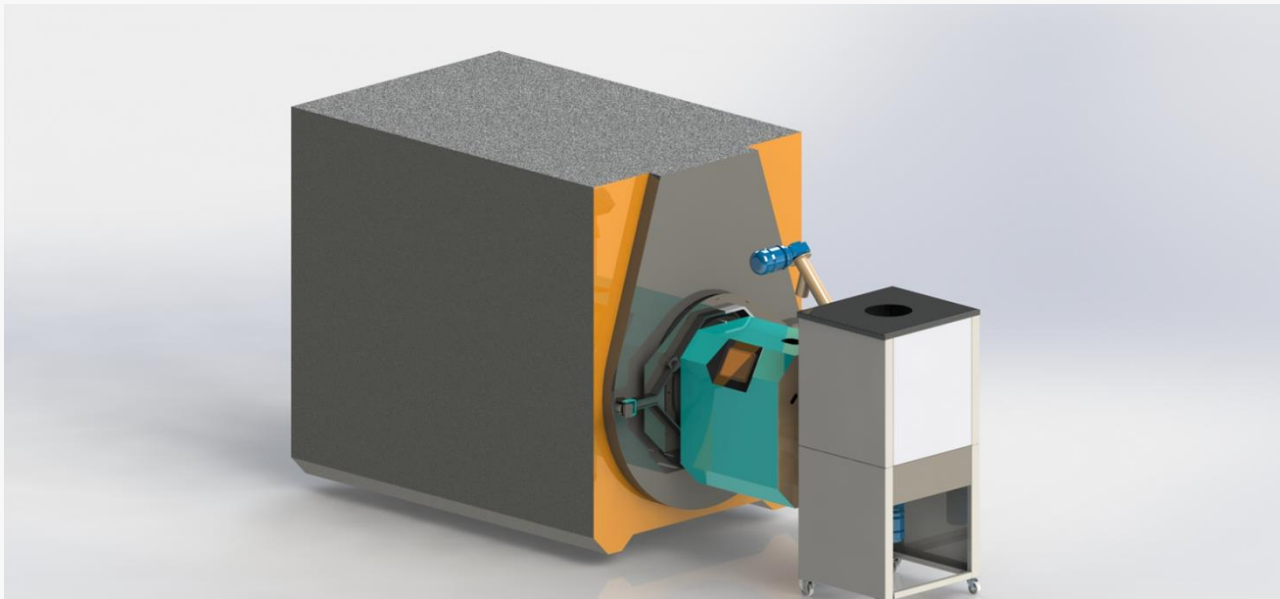
CLEAN CONVECTION SURFACES



# HYLIC STEAM BOILER

FUELED BY WOOD PELLET

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STEAM BOILER PRESSURE 10 BAR

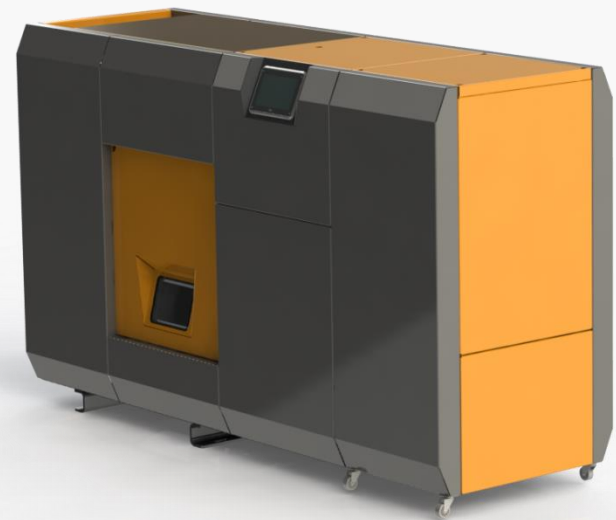


UNDER TESTING : 1MW  
STEAM BOILERS  
10 BAR

# HYLIC HOT WATER BOILER

NEW CONSTRUCTION - POWER RANGE 50 KW – 1 MW

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 FIRE TUBE – FIRE PIPE  
BOILER

 TEMPERATURE MAX +120 C°

 BOILER PRESSURE 1,5 - 4 BAR

# HYLIC HOUSE

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MOVABLE POWER UNIT CONTAINER



VARIOUS SIZES  
UNDER  
DEVELOPMENT



COMBUSTION GAS  
CLEANING TECHNOLOGY  
UNDER DEVELOPMENT





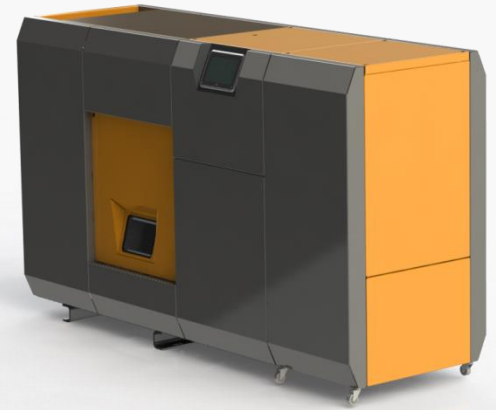
SALO, FINLAND

# HYLICFLAME 1MW PELLETBURNER



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