

# $WOIM\Lambda$

CORPORATION

BROCHURE

wasteWOIMA® Product Family



## Modular waste WOIMA® Product Family THE STANDARDIZED WASTE-TO-ENERGY POWER PLANT

Municipal Solid Waste (MSW), the more refined refuse-derived fuels (RDF, REF, SRF) and other waste fractions are available in abundance everywhere in the world. They create interesting business opportunities in reuse, recycling and incineration for energy. WOIMA offers three different *waste*WOIMA® products in the 10 to 20 MW<sub>fuel</sub> range, which enable the customer to choose the right product based on waste fuel input or power output requirements. They are further optimized for the WI BREF or EU ETS plant size limitations.

All the *waste*WOIMA® power plant products are based on a similar pre-engineered, prefabricated and modular structure enabling safe and fast delivery and fast erection anywhere in the world. They offer unmatched scalability and flexibility to fit the customer needs. Standardized products and documentation save time and money during project development and implementation, as well as ensure premium product quality.

Our adaptable delivery models, ranging from WOIMA*line* boiler island Design&Supply to full *waste*WOIMA® power plant EPC, provide the basis for a cost-efficient and successful project supply. These leave the customer room to source the desired materials and services locally. Simple maintenance processes and advanced automation require very little manpower to operate the plant. The *waste*WOIMA<sup>®</sup> power plant is a robust and modular medium-scale power plant built on a simple concrete base slab. The plant is designed for a 25-year lifespan in the harshest of conditions. Optional housing protects the plant against the elements. Up to four WOIMA*lines* can be interconnected to scale the plant capacity up (or down). Thus, with the *waste*WOIMA15 model, combinations of 15, 30, 45 and 60 MW<sub>fuel</sub> are possible. The *waste*WOIMA10 and *waste*WOIMA20 expand up to 40 and 80 MW<sub>fuel</sub> respectively.

All modules are optimized for efficient material usage, maximum performance, cost-efficient logistics and easy installation. The modular structure enables fast plant relocation and eventual decommissioning. Module production and testing at workshop ensures the highest quality and derisks the project by minimizing work on site.

## KEY FEATURES

Product	waste WOIMA10	waste WOIMA15	waste WOIMA20
Fuel Power (MW)	10	15	20
Thermal Power (MW)	8.8	13.3	17.7
Efficiency (%)	88.0	88.4	88.5
Steam Output (tph) - 400°C @ 40bar(g)	12.0	18.0	24.0
Electricity Output			
Electricity Output (MW) - gross	2.4	3.7	5.0
Electricity Self-consumption (MW)	0.4	0.5	0.7
Electricity Output (MW) - net	2.0	3.2	4.3
CHP Output (Gross)			
Thermal Power (MW) - heating	6.7	10.0	13.5
Thermal Power (MW) - cooling	4.0	6.0	8.0
Electricity Output (MW)	1.8	2.4	2.8
CHP Output (Net)			
Thermal Power (MW) - heating	6.7	10.0	13.5
Thermal Power (MW) - cooling	4.0	6.0	8.0
Electricity Output (MW)	1.4	1.9	2.2
₩aste Fuel Feed (tpd)			
MSW Low Quality (7.5 MJ/kg)	115	173	230
MSW High Quality (10 MJ/kg)	86	130	173
RDF (13 MJ/kg)	66	100	133
SRF (16 MJ/kg)	54	81	108
Regulatory Match			
WIBREF (waste quantity <3 tph)	X		
WIBREF (emissions)	×	×	×
EUETS	×	х	×



### **KEY FACTS**

- Easy to build; established on a concrete slab of 1,500 5,000 m<sup>2</sup>
- Erection and commissioning within four months of delivery
- Simple operation; robust and proven technology
- Safe operation under any conditions
- Easy exchange of broken or worn-out plant components
- Remote monitoring of plant performance
- Capable of producing electricity and thermal energy for heating or cooling
- Complies with the EU Emission Standards
- Fulfills EU Power Plant Efficiency Requirements (R1)





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