



GENERAL INFORMATION

Microwave pyrolysis system for processing thick-walled CFRP components in a semi-continuous operation mode. Volumetric heating up to approx. 400 – 600 °C under inert atmospheres (e.g. N₂, Ar, CO₂). Integrated system for extraction and condensation of pyrolysis gases and oils, enabling material or energy recovery. Designed for gentle matrix decomposition while preserving continuous carbon fibers, with scalable architecture for industrial applications.

FEATURES

- Water-cooled
- Dual frequency: 2450 MHz and 915 MHz
- High efficiency magnetron system
- Low noise SMPS with low ripple anode current for high reliability
- High field homogeneity
- Sensors for process monitoring (H₂ gas detector, IR camera for process control, inert gas control, temperature monitoring air in and out)

SPECIFICATION

Electrical and Technical Data

Output power, frequency	6 kW, 2.45 GHz and 5 kW, 915 MHz
Supply voltage	3 x 400 V AC, +N+PE, 50 Hz
Total connected load	ca. 18 kVA
Current consumption	27,8 A

Cooling

Water cooling

Water flow	min. 35 l/min
Inlet water temperature	20 °C - 25 °C
Inlet Pressure	min. 5 bar - 6 bar

Mechanical Data

Dimensions of housing (WxHxD)	2403 mm x 3190 mm x 2126 mm
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