



Competent Technology for:

Chemical, Pharmaceutical,
Food and Animal Food Industry

Ceramic and Insulation
Production

MICROWAVE TECHNOLOGY
STANDARD MICROWAVE DEVICE—FOR RENT

Field of application

Microwave chamber MWT k/6 wk reg. is used only for test purposes.

The chamber uses a microwave suitable coiler plate with left and right turn.

As microwave frequency is used 2450 MHz, usual for European microwave apparatuses.

A waveguide through the top of the applicator is used to bring the microwaves in.

Power can be adjusted steplessly from 0,6 to 6 kW.

Applicator door is closed with a not manipulable limit switch. It avoids the start of the microwave if door is open and stops microwave if door is opened during operation.

For operation a 5-pin switch for 32A is used on the backside. Cooling water will be connected by hose coupling.

Mode of operation

Microwave testing chamber works with a water cooled 6-kW-Magnetron. Reflexions coming from applicator returning to the magnetron will be trapped in a water trap. Reflexions can to be provided additionally by a 3-pin tuner. This combination of tuner and water trap is extreme sure for preliminary tests.

Microwave power is adjustable with a potentiometer in a wide range from 600 W to 6 kW.

Special security equipment avoids starting if cooling water is missing.

For ventilation of the applicator a air fan is mounted onto the head of the applicator.

Tests

Testing product is putted into the applicator on the coiler plate and treated with microwave. Depending on product texture and form suitable support has to be used.

This support has to be microwave suitable. All support has to be neutral in the microwave field. Otherwise the result of the test will be falsified.

A continuous measurement value logging (temperature, weight) directly in the chamber is not possible at the moment. Such equipment could be refitted if necessary. Temperature measurement and gravimetry have to be made outside the applicator.

For testing a microwave leakage detector security will be provided.

Technical Data

Type:	MWT k/6 wk reg., Microwave drier for test purposes
MW-Power:	0,6—6,0 kW
MW-frequency:	2450 MHz
Electrical power:	10 kW
Cooling:	Water, 6 l/min, max. 30°C
Exhaust air system:	450 m ³ /h, in 5 steps
Applicator:	Stainless steel, 800 x 800 x 800 mm
Applicator door:	700 x 500 mm (W x H)
Supporting system:	Coiler plate d=740 mm, microwave suitable plastics
Dimension:	1850 x 850 x 1950 mm (D x W x H)

Photos Front:

left: Plant for rent

right: Magnetron (above), coiler plate (down)

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