

# What are the frequencies for microwave applications?

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Because of the wide range of microwave applications, especially in the field of communications, the International Radio Regulatory Commission has specified the division of frequencies in order to avoid mutual interference. The frequencies allocated to industrial, scientific, and medical applications are 433 MHz, 915 MHz, 2450 MHz, 5800 MHz, and 22125 MHz, which are used separately from communication frequencies. At present, the common frequencies used for industrial heating in China are 915 MHz and 2,450 MHz. The choice of microwave frequency and power can be determined according to the shape, material and moisture content of the material to be heated.

Industrial microwave equipment technical parameters

Model: LD-130

Frequency: 2450±50 (MHz)

Microwave output power: 130 (Kw)

Input voltage: 380 (V)

Motor power: 2.1 frequency adjustment

Fan power: 8 (KW)

Cavity size: 16.0x1.5x0.6(L\*W\*H)(m)

Equipment size: 18.0x1.5x2.7(L\*W\*H)(m)

Equipment weight: 6.5 (T)

Cavity material: industrial grade stainless steel

Microwave leakage limitation: ?1 (mW/cm<sup>2</sup>)

Cabinet temperature: 45 (°C)

Ambient temperature: seasonal temperature

Relative humidity: 85%

Industrial microwave equipment Features

1. Selective heating. Since water molecules are best for microwave absorption, the portion with a high water content absorbs more microwave power than the portion with lower water content. This is the characteristic of selective heating, which allows uniform heating and uniform drying.
- 2, energy efficient. The microwave directly acts on the material, so there is no additional heat loss, the air in the furnace and the corresponding container will not heat, so the thermal efficiency is extremely high, the production environment is also obviously improved, and the electricity can be saved by 30% compared with the far infrared heating. .
3. Short time and high efficiency. Microwave heating is a process in which the object to be heated itself becomes a heating element and does not require heat conduction. The microwave penetrates the inside and outside of the object from all sides while simultaneously achieving uniform heating of the object in a short time, which greatly shortens the drying time.
- 4, microwave drying equipment is easy to control, advanced technology. Compared with the conventional method, the device is ready to use; without thermal inertia, the operation is flexible and convenient; the microwave power is adjustable, and the transmission speed is adjustable. In microwave heating, drying, no waste water, no waste gas, is a safe and harmless high-tech.