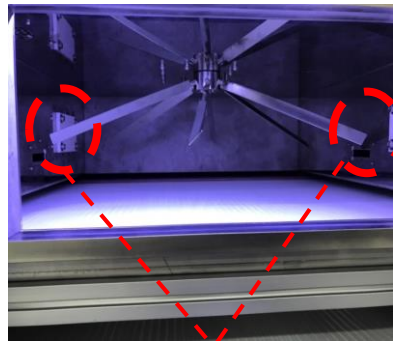


Microwave Process and Equipment Technology **MIRDC**

Introduction

- The design of asymmetrical waveguide distribution not only effectively homogenizes the distribution of microwave field but also reduces microwave retroreflecting back to the waveguide so that the life cycle of the magnetron can be hugely enhanced.
- It gets rid of the traditional method to spread the energy of standing wave on microwave though rotating disk and disturbance sheet so that the microwave equipment can be effectively used on industrial continuous production application.
- **Small width continuous microwave equipment:**
 - Microwave frequency: 2.45GHz
 - Area of microwave action: 60x60cm²
 - Maximum microwave power: 2000W
 - Electric intensity consistency level: $\geq \pm 90\%$
 - Tolerance of temperature control: $< \pm 5\%$
 - Substrate transmission rate: 0~6 m/min
- **Large width continuous microwave equipment:**
 - Microwave frequency: 2.45GHz
 - Area of microwave action: 180x60cm²
 - Maximum microwave power: 6000W
 - Electric intensity consistency level: $\geq \pm 90\%$
 - Tolerance of temperature control: $< \pm 5\%$
 - Substrate transmission rate: 0~6 m/min



Design of asymmetrical microwave implementation

Awards/ Patents

- 2018 Taipei International Invention Show & Technomart, Silver Award
- 6 patents in key equipment and manufacturing process portfolio; 4 in R.O.C., 1 in Mainland China, and 1 in U.S.A.

Industrial Applications/Case Studies

- ◆ It has been applied on the drying of functional dressing mixture, manufacturing process for shoes, cracking of petrochemical materials, recycling of waste fluid, and texture dyeing...
- It has been implemented technical authorization and transfer or industrial services (such as application on microwave heating and drying device/ application on the development of functional dressing mixture curing equipment...)



Cardboard dryer



Vacuum microwave dried fruit equipment



Glass coating curing machine