



High Temperature Burners

# Radiant cup burner

RC burner

**It has high emissivity and proximity heating for complete combustion is possible.**

## Feature

The cup material consists of a lightweight refractory (ceramic wool molded product), and after ignition, it quickly radiates infrared rays from the surface of the cup portion and at the same time it generates high temperature heat flow by flame.

### 1 It is a burner with high emissivity

Because the cup shape is designed to be suitable for surface radiation, radiant heating including the furnace wall can be done.

### 2 Proximity heating is possible

Since the flame is completely burned at the burner cup surface, proximity heating can be performed, and a more compact design is possible.

### 3 Easy to install because it is lightweight

Because lightweight refractories are used, the burner is lightweight.

### 4 The heating direction is flexible

Upward, downward, sideways and heating direction are free.

### 5 Heat crack is difficult to enter

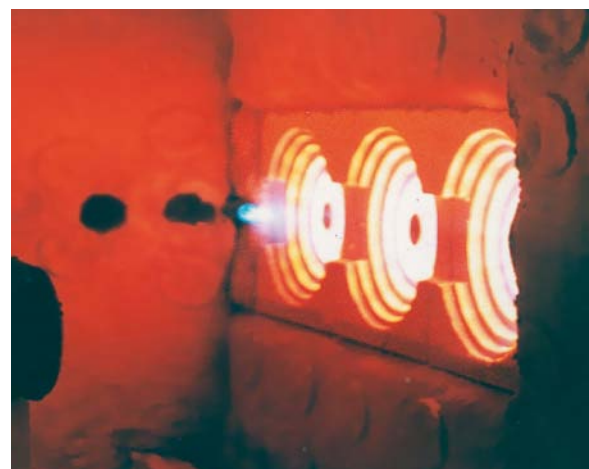
Because it is a molded article of ceramic fiber, heat cracks hardly enter even downward heating, and it is rich in durability.

### 6 Auto ignition and combustion safety devices can be installed

By installing automatic ignition and burning safety equipment, operability and safety are further improved.(It is a special product.)

### 7 Turndown ratio can be up to 1:3

Turndown ratio 1:3 is possible at furnace temperature 1,000 °C.



## Main Usage

- Lehr furnace of glass bottle
- Hardening of steel
- Metal heating

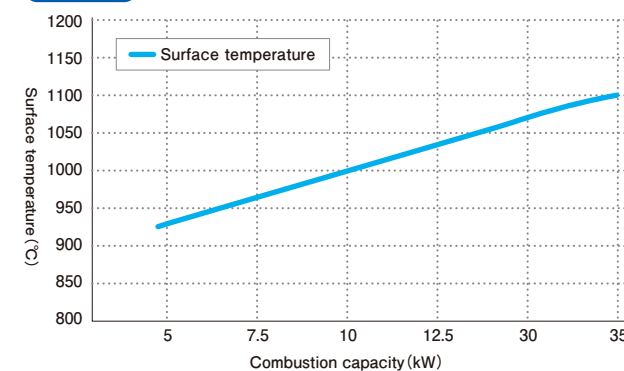
## Specifications

Model	RC-5	RC-15	RC-30
Maximum combustion quantity (kW)	5.8	17.4	34.9
Burner gas pressure (kPa)	Low pressure	Low pressure	Low pressure
Burner air pressure (kPa)	4	4	4

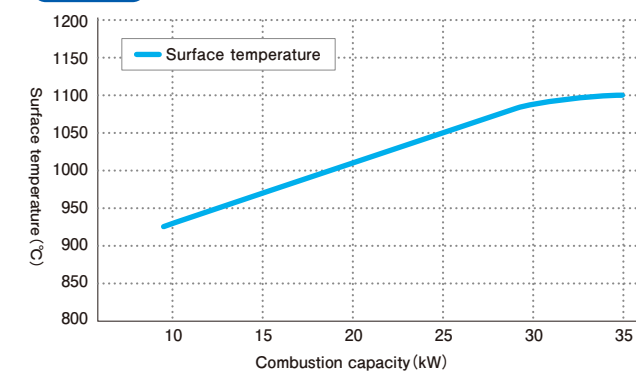
## Data

### Combustion capacity - Surface temperature (open test)

#### RC-15

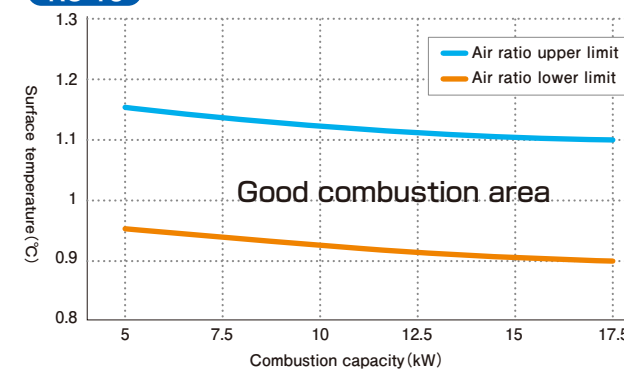


#### RC-30

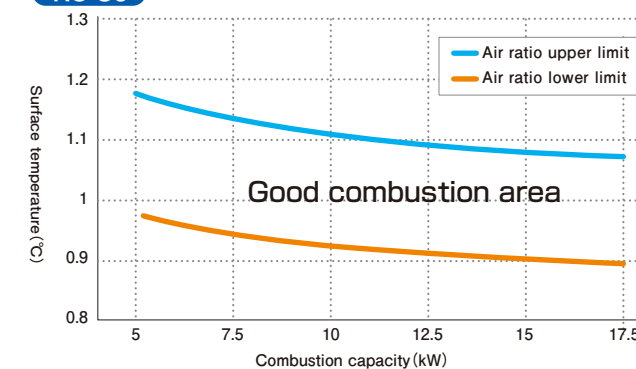


### Good combustion area (Test in the furnace)

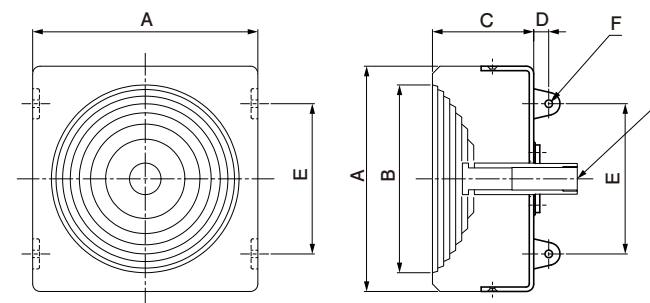
#### RC-15



#### RC-30

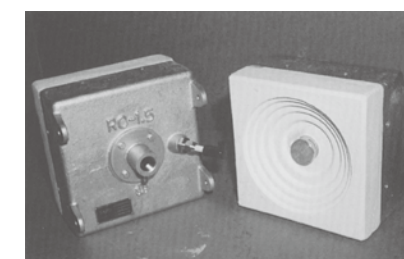
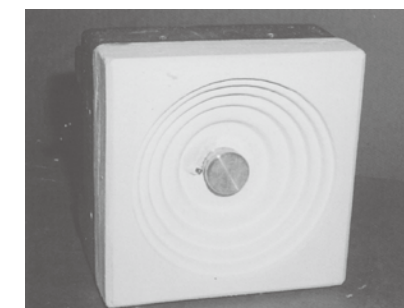


## Overall size



Model		RC-5	RC-15	RC-30
Overall size (mm)	A*	118	233	303
	B(φ)	85	190	250
	C	115	125	135
	D	15	20	20
	E	40	150	200
Mounting bolt hole(mm)	F	4×φ10	4×φ10	4×φ10
Connecting size (Rc)	G (mixing gas)	1/2	3/4	1

\* The dimension A is overall size of the fiber. Overall size of the main body casting case are several millimeters larger than this.



## Handling Precautions

- 1 Do not put a shut off cock between the mixer and the burner.
- 2 Make sure that the distance from the mixer is not taken long, and make pressure loss as small as possible.