



### Frontloader **ME 45/13**

⊕	Volume	<b>45 litres</b>
⊙	Int. dimensions (w x d x h)	<b>350 x 500 x 250 mm</b>
⊞	Power	<b>13 kW</b>

## Technical data

### ☰ Overview

Product group	<b>Kiln</b>
Design	<b>Frontloader</b>
Type	<b>ME series</b>

### ⏻ Energy

Energy type	<b>Electrical</b>
Power	<b>13 kW</b>
Supply	<b>19 A</b>
Voltage	<b>3/N/PE 400V AC</b>
Connection	<b>CEE 32 A</b>

### ⊕ Dimensions

Volume	<b>45 litres</b>
Int. dimensions (w x d x h)	<b>350 x 500 x 250 mm</b>
Ext. dimensions (W x D x H)	<b>1000 x 1300 x 1400 mm</b>
Weight	<b>268 kg</b>

### ☆ Equipment

Insulation	<b>2-layer</b>
Heating	<b>3-side</b>
Heating elements	<b>Support rods</b>

## Besondere Merkmale

### Torsion-resistant welded steel housing

The housing consists of a torsion-resistant welded construction. Each furnace is manufactured by hand and leaves the factory after undergoing extensive quality controls.

### Corrosion protection due to stainless steel in-frame ventilation

The fully in-frame ventilated steel construction contributes to low external temperatures and combined with stainless steel components provides effective protection against corrosion.

### Durable textured paint finish

The high-quality light-grey RAL 7035 textured coating protects the furnace body and steel construction.

### Robust parallel swing door allows for safe opening

The convenient operation of the (downwards opening) parallel swing door allows for easy opening. The solid hinge and spring support ensure smooth operating procedures even when opening the hot furnace while the process is running.

### Flexible door sealing allows for thorough door closing

A flexible insulating cord ensures a seal between the door and the furnace opening. Minor unevenness can be corrected and the door can be closed flush with the furnace.

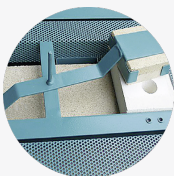
### Stainless steel door frame protects against the effects of heat

The door frame is reinforced with stainless steel sheets and protects the construction against the effects of heat.



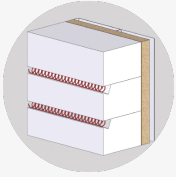
#### Air supply handle

The manual air supply handle ensures the best possible ventilation of the furnace interior.



#### Exhaust air flap handle

The manual exhaust air flap handle is available for the controlled removal of gases and hot exhaust air.



### **Efficient 2-layer insulation structure**

A sophisticated 2-layer insulation structure allows for required temperatures to be achieved using less energy. High energy efficiency can be achieved even in continuous use.

### **First-class useful volume**

All insulating materials are processed precisely and carefully. Lightweight firebricks in the firing chamber are characterised by a high insulation value and good thermal shock resistance.

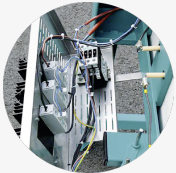
### **Covered heating elements on the floor**

A high-quality SiC plate protects heating elements mounted on the floor. The SiC plate guarantees good heat transfer and at the same time protects the heating elements from damage.



### **Unique system prevents particles falling onto the products**

ROHDE uses a unique concept of mortar-free lightweight firebricks combined with R-SiC ceiling supports preventing cracks and particles falling onto the products.



### **Easy-to-maintain switchgear mounted at the back of the furnace**

The switchgear is mounted at the back of the furnace and can be easily maintained and accessed.

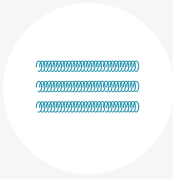


### **Integrated safety due to door contact switch**

A door contact switch automatically isolates the heating elements from the power supply when the kiln opens. The integrated overtemperature protection prevents damage to electrical components.

### **Low-wear contactors for control**

The furnace is controlled by low-wear, durable contactors.

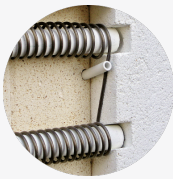


### 3-side heating allows for good heat distribution

All-around heating (on the side walls) combined with floor heating results in very good heat distribution throughout the firing chamber.

### Durable heating elements made of “Kanthal A1”

We are committed to minimal surface load and precise manufacture when dimensioning “Kanthal A1” heating elements, so a long service life is guaranteed.

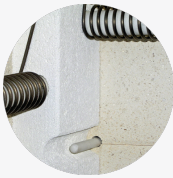


### Heating elements securely mounted on support rods

Heating elements are mounted in protected position on Sillimantin support rods and achieve ideal heat radiation and facilitate easy replacement of heating elements.

### Heating elements can be easily accessed and serviced

An easy-to-access detachable cover for heating element connections allows the effortless replacement of heating elements.



### Precise temperature measurement with the “Type S” thermocouple

The installed PtRhPt thermocouple (type S) is protected against damage and guarantees exact temperature measurement at all times.



### The “CEE 32 A” connector allows for easy connection

The standardised CEE 32 A connector allows for easy connection and quick and safe start-up.

### Components from well-known manufacturers contribute to long service life

We only obtain our electric components from well-known manufacturers (e.g. SIEMENS, MOELLER, WEIDMÜLLER, RITTAL).

### Furnace construction in accordance with DIN EN 746-1

The unit is constructed and manufactured in accordance with DIN EN 746-1 Industrial Thermoprocessing Equipment.

### **Switchgear design in accordance with DIN EN 60519**

The switchgear is designed in accordance with DIN EN 60519 Safety in Installations for Electroheating.

### **2-year warranty despite intense use**

We deliberately refuse to reduce the warranty period despite commercial furnaces being used intensely except parts that are subject to wear.