





# Frontloader ELS 480 S

(***)	Volume
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O Int. dimensions (w x d x h)

O Power

C Tanw \*

480 litres 640 x 770 x 995 mm 32 kW 1290°C

\* Application temperature for long-term and continuous use.

# **Technical data**

# (≡) Overview

Product group	Kiln
Design	Frontloader
Туре	ELS-S series

Energy type	Electrical
Power	32 kW
Supply	47 A
Voltage	3/N/PE 400V AC
Connection	CEE 63 A

# Dimensions

Volume	480 litres
Int. dimensions (w x d x h)	640 x 770 x 995 mm
Ext. dimensions (W x D x H)	1060 x 1420 x 1970 mm
Weight	800 kg

# Equipment

(b) Energy

Insulation	3-layer
Heating	5-side
Heating elements	Support rods
Control	ST 310





1290<sup>®</sup>C



# Long-term application temperature Tapp 1290°C

The kiln is designed for long-term and continuous use at temperatures up to 1290°C which makes it suitable for applications such as bisque, earthenware, onglaze and stoneware firing as well as high-temperature stoneware, soft paste porcelain firings. These applications correspond to Seger Cone 8 or Orton Cone 9.

#### Confirmed achievement of the application temperature.

Thanks to the precise calculation and quality of the heating elements, the specified operating temperature is safely reached. Additionally, the high-quality insulation concept ensures minimal heat losses of the kilns.



Cognitive Connectivity with the ROHDE myKiln App

This kiln can be connected to the ROHDE myKiln app using the included controller and enjoy all the advantages of the "digital firing program".



# Power supply through a "CEE 63 A 5-Pol." plug connection

The standardised CEE 63 A connector allows for easy connection and quick and safe start-up. With this plug connection, furnaces with an output of up to 43 kW can be operated.



## **High-quality heating elements**

With the heating elements made from "Kanthal A1" we attach great importance to a low surface load and a careful production. The heating elements are reliable and durable thanks to a sufficient reserve capacity in the calculation.



## **Ergo Load System ELS**

Das Ergo-Load-System ELS bezeichnet Kammeröfen mit einem Schubboden zum Ausfahren. Der Ofenboden kann wie eine Schublade ausgefahren werden und ermöglicht damit ein ergonomisches und rückenschonendes Beladen von drei Seiten. Zwei hydropneumatische Dämpfer bremsen den Wagen kurz vor Erreichen der Endposition sanft ab. Die zusätzliche Bremsfunktion arretiert den Ofenboden sicher in jeder beliebigen Position.







## Careful sealing of the door

The seal between the door and the outer bricks is ensured by a flexible insulating cord. This insulating cord closes the high-quality polished sealing surfaces in the cooler area around the front row of bricks and reduces the escape of thermal energy and radiation.



#### Air supply slide

The fresh air supply into the firing chamber can be regulated manually with the air supply slide installed as standard on the underside of the furnace. Among other things, this removes residual moisture and combusted substances from the firing chamber or accelerates the cooling phase. In some models, the air supply slides can optionally be equipped with a servomotor and can thus be controlled automatically via the furnace control.



#### Exhaust air flap handle

The manual exhaust air flap handle is available for the controlled removal of gases and hot exhaust air. With the exhaust air flap handle and a generously designed exhaust air opening in the furnace ceiling, the escape of hot exhaust air can be controlled manually. Ventilation or cooling can be adapted very precisely to the required process using the slide mechanism. In some models, the exhaust air flap handles can optionally be equipped with a servomotor and can thus be controlled automatically via the furnace control.



## Safety – Safety switch

The safety switch, which is installed on the door of the furnace, interrupts the circuit to the heating elements when the door is opened and thus prevents live components from being touched.



#### Safety - Over-temperature protection

The integrated overtemperature protection prevents damage to electrical components. The electronic over-temperature protection is a safety routine in the control system, which can avoid a malfunction of the furnace and thus prevent damage to the electrical system.



## 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.







# Unique system prevents particles from falling onto the products

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



# 5-side heating allows for good heat distribution

Heating from 5 sides (side walls, back wall, door and floor) results in very good heat distribution throughout the firing chamber.



# Heating elements securely mounted on support rods

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



# **High-quality heating elements**

We only use high-quality Kanthal A1 wire for the heating elements. In addition to a solid calculation with sufficient power reserves, careful processing in the manufacture of the heating elements is crucial for long service life. This leads to reliable and highly efficient heating elements as well as low spare part costs.



# Plug-in control system

All ROHDE furnaces are connected to the control system via a standardised plug connection (CPC 14 or CPC 19). This enables quick and easy installation and simplifies the replacement of the control system during servicing.







# 3-year warranty

We produce each kiln by hand and keep to strict quality guidelines. Therefore, we offer a voluntary 36-months warranty to extend legal warranty regulations.