

## Continuous sintering furnace with rotary hearth.

ENTECH has developed a high temperature furnace with features especially suited for sintering of small ceramic components. This furnace represents a revolution in high temperature sintering as it allows an entirely continuous production process. The handling is PLC-controlled and takes care of charging, rotation and unloading. For charging the piece is picked up from a feed table, and the sintering piece is placed on the same spot as before sintering.

The furnace can be delivered with either single zone or three-zone control. For three zones control the controllers use digital PDSIO master-slave communication. The three zone control results in very good temperature uniformity over the sintering zone.

Especially with shorter cycle times it is advisable to choose the three-zone control. The hearth literally transports heat with its rotation, and with faster rotation this should be compensated for.

The furnace is lined with highest quality lightweight fibre materials graded to 1800°C



View of the sintering furnace. This very simple process results in a continuous production flow.

## TECHNICAL DATA – ECRF 4 / 18

### Continuous Rotating Furnace

<b>Max. temperature:</b>	1750 °C	
<b>Max. working temperature:</b>	1750 °C	
<b>Time for one cycle:</b>	10 – 300 minutes.	
<b>Elements:</b>	Kanthal Super 1900™.	
<b>Connection:</b>	3 x 230 V, 50 Hz AC	
<b>Controller (three zones):</b>	One Eurotherm 2404 P4 as master with digital PDSIO-communication to two Eurotherm 2204 CC operating as slaves. Phase angle fired thyristors, Eurotherm 461. One Eurotherm 2116 operating as policeman.	
<b>Thermocouple:</b>	Type Pt 20%Rh / Pt 40%Rh	
<b>Inside height:</b>	90 mm	<b>Overall height:</b> 1510 mm
<b>Inside width:</b>	65 mm	<b>Width:</b> 810 mm
<b>Diameter at hearth CL:</b>	360 mm	<b>Depth:</b> 1400 mm

**HIGH TEMPERATURE FURNACES** made up to specification. Operating up to 2000 °C in oxidising atmospheres.