



# PAPYEX® FHT

Graphite plates for thermal protection in high temperature furnaces.

## ■ Applications:

- Thermal and physical protection of vacuum or atmosphere controlled furnaces.
- Interface material for hot compression process, fusion moulds for glass, ceramic or metals.
- Flexible heating elements.

## ■ Product description

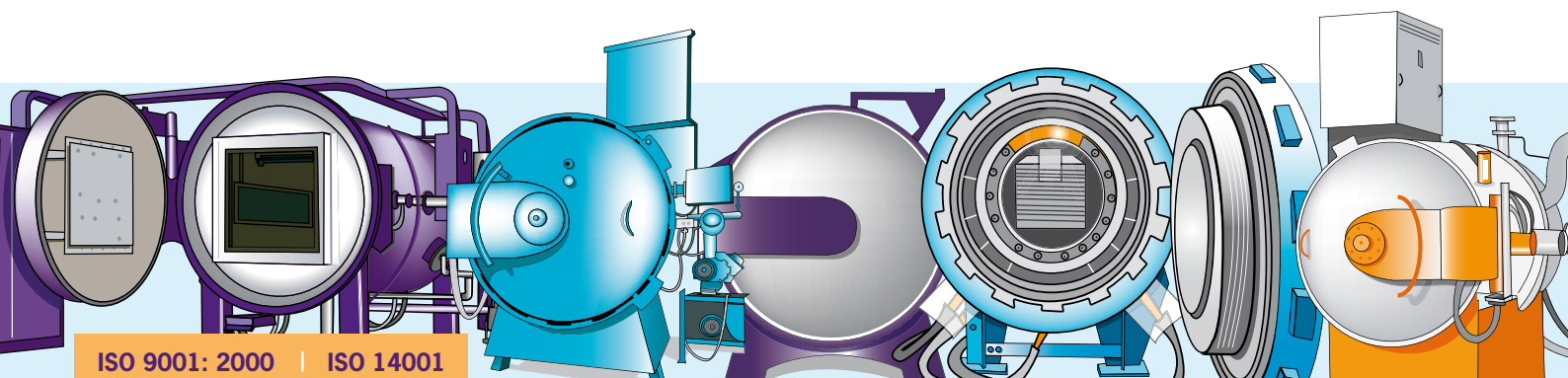
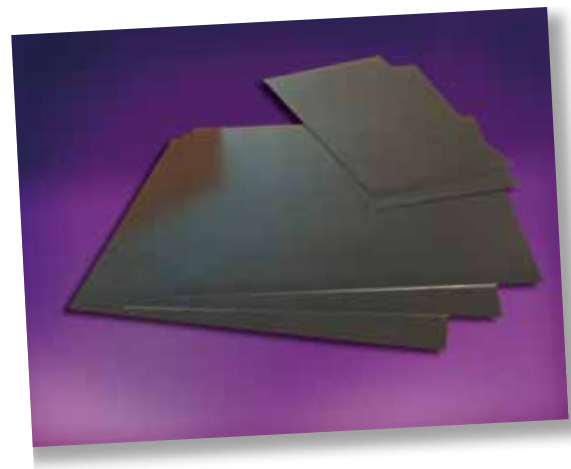
PAPYEX® FHT is a material manufactured from natural graphite specially designed for **applications in high temperature such as furnaces.**

It was treated in high temperature conditions, to **resist thermal shock** without any blistering.

Carbone Lorraine process can produce thicknesses above **1.5 mm up to 10 mm, without any glue.**

## ■ Technical Benefits

- **Resists high temperatures** (550°C in air, and 3,000°C in vacuum), and thermal shock.
- Enable **homogeneous temperature distribution** in the furnace. **Good heat reflection.**
- **Protects the furnace walls** as a barrier against gas and corrosive liquids.
- **Easy to shape** by cutting or punching.

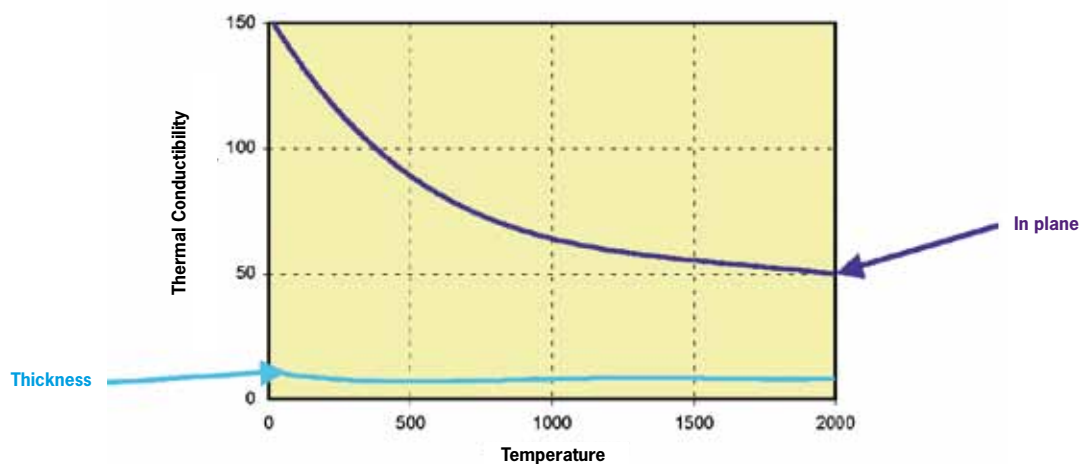


ISO 9001: 2000 | ISO 14001

# WORLDWIDE SPECIALIST IN INDUSTRIAL COMPONENTS

## DESIGNATION FHT

Available dimensions: Thickness up to 2 mm Thickness above 2 mm and up to 10 mm		1,500 x 1,500 mm 700 x 1 000 mm
Specific heat capacity (20°C)	KJ/K.kg	0,7
Emission coefficient - 400°C - 1,000°C		0,4 0,6
Thermal conductivity at 20°C - In-plane - Thickness	W/K.m W/K.m	140-160 4-6
Tensile strength	N/mm <sup>2</sup>	> 4
Resistance to temperature - in air - in vacuum	°C	around 550 around 3,000
Electrical resistivity (T° 20°C) - In-plane - Thickness	Ωμm Ωμm	8-10 600-650
Thermal expansion coefficient (20° to 1,000°C) - In-plane - thickness	10 <sup>-6</sup> /K 10 <sup>-6</sup> /K	around 1 around 30
Permeability coefficient in air, perpendicularly	cm <sup>2</sup> /s	1.10 <sup>-5</sup>
Apparent density (standard products)	g/cm <sup>3</sup>	1
Ash content I Quality N Quality PT Quality		around 0,7 % around 0,1 % 20 ppm



### CARBONE LORRAINE Group:

6,200 employees and an extensive industrial and commercial network covering around 40 countries, working hand in hand with our clients to pursue permanent innovation through a broad range of top-class products and services.

For any information, please get in touch with Sales Department.

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