

## Sintering line

Our continuous conveyor belt furnaces operate in a controlled atmosphere of endogas or a nitrogen-hydrogen mixture, designed specifically for sintering pressed powder parts. These include applications such as brake components, electrical sector brushes, and mechanical components. The furnaces feature a metal muffle with a prechamber for stearate removal, ensuring optimal material treatment. With a belt width of up to 500mm, these systems are available with or without carbon restoration, offering flexible solutions to meet your production needs.

# **Application: Sintering**

Our equipment serves a wide range of industries involved in component production, being focused on staying attuned to market demands. We specialize in adapting sintering technology to meet the specific needs of each application, ensuring that our solutions deliver optimal performance and efficiency for diverse manufacturing processes.

### Fields of Application: Range of Installations

Through extensive research, we have developed three types of sintering furnaces, each designed to meet the specific needs of various industries:

- Sintering of Iron or Bronze Pressed Metal Powders: Used in automotive sectors, including applications for dampers, filters, and small gears.
- Sintering of Brakes and Clutches: Our continuous furnaces are equipped with endothermic controlled atmospheres, generated both inside and outside the furnace, or with nitrogen-hydrogen atmospheres.
- Sintering of Graphite Powder: For large components used in various industries, these static furnaces and nitrogen-tight boxes are equipped with incinerators to burn off compounds produced during the sintering process.

With over 100 systems supplied globally, we pride ourselves on customizing and innovating each furnace to seamlessly integrate with existing production lines and meet the specific needs of each sector.

#### **Technical Specifications**

Our sintering furnaces are available with either electric or combustion heating, featuring highly heat-resistant inner muffles. These furnaces can be continuous or static, with operating temperatures reaching up to 1,150°C.

We offer the following models:

- Continuous Conveyor Belt Furnaces: Equipped with a prechamber for stearate removal, these furnaces feature an endothermic controlled atmosphere generated on-site and ceramic or silicon carbide muffles. With a belt width up to 450mm, they offer an hourly production capacity of up to 300kg.
- Continuous Conveyor Belt Furnaces: Similar to the above but with a metallic muffle and a nitrogenhydrogen mix or endothermic atmosphere generated on-site. These furnaces have a belt width up to 500mm and can achieve an hourly production of up to 300kg.
- ► Static Furnaces: These furnaces include boxes for nitrogen containment and an incinerator for combustion fumes. With chamber dimensions of up to 3,000 x 3,000 mm, they can handle loads of up to 14,000kg.

The selection of the furnace depends on the required hourly production and the weight-to-volume ratio of the parts being treated.

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