

Drum Heater Base



PAULISTA HEATERS
ELECTRIC HEATING SYSTEM

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Drum Heater Base

1- Product Specifications

- ✓ Voltage: 110V, 220V, 380V, 440V or other.
- ✓ Working Temperature: up to 250°C (482°F).
- ✓ Suitable for both metal and plastic drums.
- ✓ Standard sizes: 20L, 50L, 100L, 200L - We also manufacture other sizes.
- ✓ It may come with an insulating cover.
- ✓ Type of controllers: digital thermostat.
- ✓ The thermal blanket is attached to the metal platform.
- ✓ The metal platform is made of painted steel.
- ✓ Supports up to 500KG.
- ✓ It has an electrical insulation layer made of silicone and fiberglass .
- ✓ Easy to install and use.
- ✓ Ideal for use in conjunction with other drum heating solutions: drum heater type heating pad or drum heating blanket.



2- General description of the product structure

| Description | Technical Details |
|--|--|
| <p>The drum heater base is manufactured with a silicone blanket reinforced with fiberglass fabric, resistive wire, with internal and external cabling according to electrical current, temperature control, male power plug, and metallic structure.</p> | <p>Working temperature: From -40°C (104°F) to +250°C (482°F) (withstands peaks of -90°C (-194°F) and +300°C (572°F) for short periods of time)</p> |
| | <p>Weight capacity: 1kg/cm²</p> |
| | <p>Electrical insulation: 20KV</p> |
| | <p>Hardness: Standard 30 + 5 Shore , other hardness levels may apply according to customer requirements.</p> |
| | <p>Metal structure made of steel with a primer and paint coating.</p> |
| | <p>Internal Teflon cable – withstands temperatures up to 260°C (500°F) – Voltage: up to 600V</p> |
| | <p>*Internal electrical connection cables are used to connect the heating element to the controller.</p> |
| | <p>External silicone cable – withstands up to 200°C (392°F) – Voltage: up to 500V</p> |
| <p>External PP cable – withstands up to 90°C (194°F) – Voltage: up to 500V</p> | |
| <p>*Cables for external electrical connection do not have direct contact with the heating element; they are used to connect the temperature controller to the power outlet.</p> | |
| <p>Direct or alternating current power supply</p> | |

Power plug:

We offer a power plug according to the design current and voltage, as well as the model the client needs in their process. The two line options are:



Brazilian standard 3-pin plug 10A or 20A for 110V or 220V.



Industrial plug 16A, 32A, 63A, and 125A for 110V, 220V, 380V, or 440V.

Metal Structure:

The metallic structure is made of resistant steel, containing a layer of primer and painted to prevent oxidation. It has a metallic edge that serves to guide the operator to correctly place the drum on the structure. The digital thermostat is already coupled to the structure itself.



Temperature controller:

Digital Thermostat

Recommended for low and medium power belts (up to $0.7W/CM^2$). Variation of $+5^{\circ}C$. Comes with a temperature sensor (PT100, J, K, NI120, PTC or other) for belt temperature control. More than one controller can be attached to control the product temperature. Controller used: NOVUS 321.



3- Instruction manual:

How to use

- Position the drum centrally on the drum heater base.
- Check the electrical grid voltage where the thermal belt will be connected. If connected to a lower voltage, it will heat little. If connected to a higher voltage, it will burn.
- Configure the temperature on the digital thermostat according to the manufacturer's manual.
- For safety, we recommend adjusting the temperature up to 100°C. If necessary, increase by 10°C, wait for the blanket to reach the new set point, and repeat if necessary.
- Allow heating until the product stored in the drum reaches the appropriate temperature. The heating time varies according to the specific heat of the product to be heated, the power of your belt, and the volume of your container.
- Afterward, unplug the drum heater base and wait 1 minute for it to cool down⁶¹.
- Remove the drum from the top of the structure for dispensing.

Recommendations:

- ✓ Do not use the drum heater base above the design temperature.
- ✓ The drum heater base can work up to 250°C continuous with peaks of 300°C.
- ✓ Metallic drums or tanks support high temperatures, but plastic containers support a maximum of 90°C (if placed above this, they will puncture).
- ✓ To increase heating efficiency, it is recommended to use it together with the drum heating blanket or the thermal belt drum heater.
- ✓ Use the drum heater base exchanging heat with a drum containing product (never empty).
- ✓ Use rubber gloves to avoid static electricity shock⁶⁹. This shock does not pose a danger to humans, only discomfort.
- ✓ Do not puncture, cut, or immerse the blanket in liquid; risk of electrical short circuit.
- ✓ The drum heater base may release gases from its internal components during the first few heating cycles (especially at high temperatures, above 150°C).
- ✓ Cleaning should only be done with the blanket de-energized, using a clean cloth and alcohol.
- ✓ If there is damage to the drum heater base, stop using it and notify Paulista Heaters to verify if it is safe to continue using the product, as there may be a risk of electric shock.
- ✓ Do not make any modifications to the drum heater base without prior notification and authorization from Paulista Heaters. If not informed or approved, the product's legal warranty is violated.

Safety Items:

- ✓ The drum heating base used in the drum heater base is completely electrically insulating, resistant to fungi, and resistant to chemicals.
- ✓ Cleaning of the drum heater base must be done dry, with a cloth and alcohol.
- ✓ The drum heating base does not easily adhere dirt.
- ✓ The drum heater base has grounding in the metallic structure itself.
- ✓ Do not use the drum heater base when its thermal blanket has bubbles, is punctured, cut, has the resistive element exposed, or is burned, as there is a risk of electric shock.
- ✓ The thermal blanket does not come into contact with the product being heated.
- ✓ Provides a safe heating process for operators, with minimal risk of occupational accidents.

4- Application :

The drum warmer base is ideal for heating products stored in:

Metal or Plastic Drums



Ideal for use in areas such as:

- ✓ Pharmaceutical industry,
- ✓ Food industry,
- ✓ Chemical industry,
- ✓ Metallurgical industry,
- ✓ Auto repair shop,
- ✓ Laboratory.

We manufacture custom-made products to best meet your needs. Contact us for a quote!

Registration Data

Company Name

Paulista Heaters co.

Trade Name

Paulista Heaters

CNPJ

44.493.049/0001-07

State Registration

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