

DRUM HEATING JACKET & BASE PLATE

DATA & SPECIFICATION SHEET

Inditherm Drum Heater Jackets

Revolutionary system for heating the contents of standard drums. Using Inditherm's patented low voltage carbon polymer technology (CPT). This gives a very even heated surface with no hot spots.

Many products become viscous at room temperature, notably sugars, surfactants and a variety of chemicals.

These materials can present users with a number of challenges:

Without heating, the product cannot be discharged quickly enough from the drum into the manufacturing process, "Even at room temperature".

Keeping production flowing, often means replacing the drum before it is completely empty, meaning product is wasted.

Alternative drum heating systems can create hot spots that can burn the product. Un-insulated drums can cause a health and safety hazard when hot.

Accurate temperature control using band heaters is difficult due to the small surface area being heated and lack of insulation.

An Inditherm drum heater jacket solves these problems:

Heating the drum significantly reduces the product viscosity; thereby improving flow and reducing decant time.

The yield is significantly improved, with virtually no product being left behind inside the drum, thereby reducing costs.

Inditherm's low voltage system uses only a small amount of energy and it is possible to heat a full drum from 20°C to 75°C for less than £2.00 (€2.50).

Even temperature distribution eliminates hot spots and the temperature can be controlled to suit the users' needs.



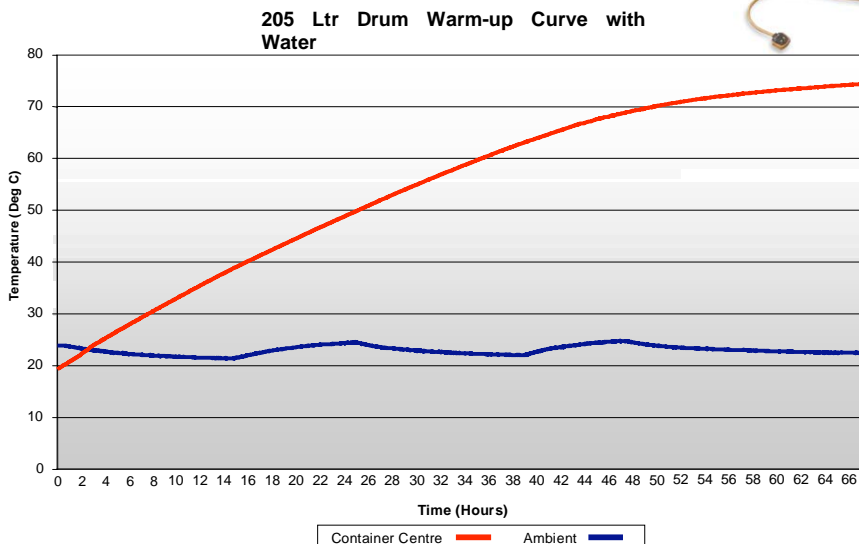
Inditherm Drum Base Heater Plate

The drum heater plate is constructed from two metal plates with U shaped support brackets giving structural strength. The top plate of the unit has the Inditherm's low voltage carbon polymer pad attached to its underside directing even heat through the full area of the plate surface. Insulation is contained between the back of the heating pad and the bottom plate to ensure thermal efficiency. Temperature is controlled by a PT100 temperature sensor on the heating pad. This is powered from a 24Vac transformer control unit with a digital, adjustable temperature display panel. Temperature is adjustable between ambient and 90°C. The drum heating plate can be powered jointly with a drum jacket using one control unit (with twin controllers fitted) or using a separate control unit.

Typical Heating Profile for a 205 Litre Drum Containing Water using a heated jacket

A typical heating profile using water is shown below.

As can be seen, it took only 15 hours to heat the contents from 20°C to 40°C.



Specification for Drum Heater Jacket

Drum Type:	205 Litres (Nominal); other sizes can be custom made to suit
Drum Dimensions:	Diameter: 585mm; Height: 900mm
Inditherm Output:	300W
Mains Voltage:	115 / 230Vac 50Hz
Transformer Type:	1kVA, 1.5kVA, IP55 enclosure
Transformer Output:	12.5A ±1.25A @ 24Vac
Heated Section:	Circumference of drum with 50mm of insulation
Unheated Section:	Integral or removable sewn PVC lid, insulated with 50mm of mineral wool
Temperature Control:	PID thermostat
Temp/Current Protection:	Internal thermal fuse
Temperature Range:	Ambient up to 90°C
Outer Material:	Reinforced chemical & water resistant PVC
Securing Means:	Velcro strips with monster clips on webbing straps

Specification for Drum Base Heater Plate

Plate Dimensions:	585mm Square ; Height 30mm.
Construction	Two metal plates with U section supporting brackets
Inditherm Output:	150W
Mains Voltage:	115 / 230Vac 50Hz
Transformer Type:	1kVA, 1.5kVA, IP55 enclosure
Transformer Output:	12.5A ±1.25A @ 24Vac
Heated Section:	Circumference of drum.
Temperature Control:	PID thermostat
Temp/Current Protection:	Internal thermal fuse
Temperature Range:	Ambient up to 90°C

Inditherm Conductive Polymer Technology

Inditherm's patented heating technology delivers precise, controlled and even temperature with high thermal transfer characteristics. It is adaptable to meet the most challenging situations, such as the awkward shapes of pumps and valves and difficult process conditions such as vertical pipe runs. We can provide tank and pipe insulation and heating for almost any application. The high carbon polymer technology ensures that energy consumption is far below that of conventional heating technologies, delivering very significant cost savings and environmental advantages.

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