

THERMOSAFE



DRUM & PROCESS INDUCTION HEATER



MELTS SOLIDS • HEATS LIQUIDS • TOTALLY SAFE

DESIGNED TO HEAT 205 LITRE DRUMS OR SMALLER STEEL VESSELS.

THERMOSAFE IS A PROVEN ALTERNATIVE TO MULTI-DRUM OVENS AND THE SOLUTION TO A HOST OF PROCESS HEATING PROBLEMS, EVEN IN HAZARDOUS AREAS.

SAFE

EFFICIENT

FAST

CLEAN

SIMPLE

FLEXIBLE

CLOSE CONTROL

MAINTENANCE FREE



IN USE SINCE 1985 IN MORE THAN 40 COUNTRIES

SIMPLE PRINCIPLE

THERMOSAFE is a single induction coil, wholly encapsulated in a cylinder made from a glass reinforced resin specifically developed for chemical plant. The cylinder is simply placed over the drum. Contact is not required.

The coil is connected to a single phase AC mains supply and generates heat directly and uniformly in the drum wall. Energy transfer is by alternating magnetic field and thus there is no heat transfer by the conventional and inefficient means of radiation or convection. As there are no hot elements, the heater remains substantially cooler than the drum being heated.



SAFETY

The complete absence of hot elements and the encapsulation of all electrical components enables unattended use, overnight if required. THERMOSAFE can even be used in hazardous areas Zones 1 and 2, as the heater is unique in possessing full BASEEFA certification. Uniform heating without hot spots reduces the risk of product degradation. Accidental spillage does not present a fire hazard and personnel can work comfortably in close proximity. Together, these features allow material to be heated at point-of-use, thus eliminating the transport of hot drums.



EFFICIENCY

The low system temperature and lack of heat transfer contribute to the high efficiency of the induction heater. Power usage is extremely low at only 2.25kW. Although originally designed with safety in mind, the heaters have won several awards for efficiency and productivity. Independent figures indicate energy savings of over 50% when compared with conventional radiant drum heaters, and more than 90% in comparison with drum ovens.

SPEED

By using the entire drum wall to input energy, the fastest practical heating rate can be achieved without product degradation. Heating times will depend on the contents of the drum but, to give a rough idea, the rate of temperature rise of a typical viscous organic liquid will be about 15°C per hour. The speed is further improved by the instant initial response of induction heating. Typically, THERMOSAFE has proved to be 2-4 times faster than ovens.



CLEANLINESS

With ingress protection to IP66, simple smooth surfaces and no moving parts, the induction heaters are ideal for use in clean environments. They can even be hosed down during use.

OPENS UP APPLICATIONS BEY

