



Screw plug immersion heaters are ideal for direct immersion heating of liquids, including all types of oils and heat transfer solutions. Screw plug heaters consist of hairpin tubular elements that are brazed or welded into a machined pipe thread fitting, (normally an NPT fitting for North American standards) which are then screwed directly through a threaded coupling in the tank wall or vessel, or installed in pipe. Horizontal or vertical mounting on the vessels for static fluids or inside vessels for fluid circulation heaters. Screw plug heaters comprise a very compact bundle of pin heating elements available in several materials compatible with the fluids to be heated (steel, stainless steel, Incoloy, etc). Screw plug industrial heaters are used for heating gases and liquids in tanks or vessels. These submersible

heating elements have been designed so that heat transfer will occur at a rapid rate, enabling quick liquid heat up times. Typically, they are implemented in the food and beverage industry, laboratory clinics, applications involving hydraulic oils and lubricants as well as more sophisticated uses such as heating up flammable liquids or gases which require explosion proof housing. Screw plug heaters can be equipped with control and safety devices (thermostats, Pt100 sensor, thermocouples, etc.) for the measurement of the temperature in the fluid or of the heating elements. An electrical control and power supply unit with IP44 to IP66 protection rating, in polyamide, aluminium, painted or stainless steel, protects the connections from the heating elements to the power supply and from the control and safety devices to the power cabinet.

Application

Screw plug heaters are an easy way to heat up solutions in smaller containers that also require controls. Mechanical thermostats or Digital control panels can be used with these immersion heaters to help reach target temperatures with great accuracy meeting your project objectives. Additional thermowells can be installed for high limit temperature probes to help protect your liquid and processes.

- Plastic processing machinery
- Water and oil heating appliances
- Packing machineries
- Vending machines
- Dies and Tools
- Heating chemical solutions
- Ovens and Dryers
- Kitchen equipment's
- Clean water
- Process water
- Lube & Fuel Oil Heating
- Mild and severely corrosive solutions
- Hydraulic oil and ethylene glycol
- Boilers & Water Heating
- Clean & Process Water
- Freeze Protection & Winterizing
- Heat Transfer Systems
- Parts Cleaning Solutions
- Plating & Finishing Chemicals
- Storage Tanks
- Temperature Control Units
- Wash Systems
- Wax Heating
- Waste Oil

Material Sheath Selection

Applications	Sheath Material	Screw Plug Material
Clean water, Freeze protection, hot water storage, Boiler and water heaters, cooling towers, Solutions not corrosive to copper	Copper	Stainless Steel
Hot water, steam boilers, mildly corrosive solutions (in rinse tanks, spray washers)	Incoloy	Stainless Steel
Oils, Gases, Mildly corrosive liquids, stagnant or heavy oils, high temperature, low flow gas heating	Stainless Steel	Stainless Steel
Process water, soap and detergent solutions, Soluble cutting oils, demineralized or deionized water	Stainless Steel	Stainless Steel
Mildly corrosive solutions	Stainless Steel	Stainless Steel
Severe corrosive solutions, demineralized water	Incoloy	Stainless Steel
Light Oil, Medium Oil	Stainless Steel	Stainless Steel
Food Equipment, Food Equipment with cut out	Incoloy	Stainless Steel