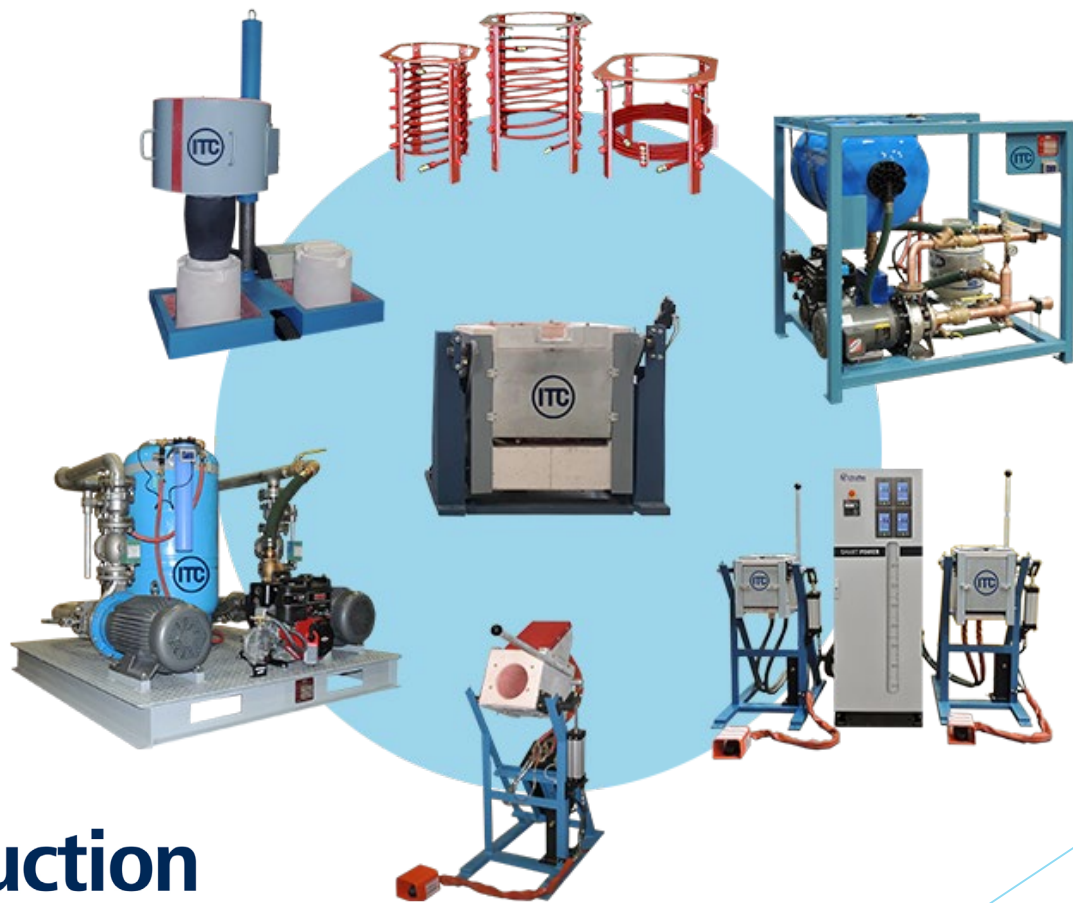


ITC INDUCTION MELTING EQUIPMENT



Low-Frequency Power Supplies

**Power supplies ranging from 50 - 1000 kW
and 0.1- 9.6 kHz**

- ▶ Designed and constructed for easy operation and low- maintenance
- ▶ High electrical efficiency
- ▶ Three Phase SCR controlled Electronic Circuit Interrupter shuts the power off in the event of an inverter or furnace failure. This prevents the loss of expensive fuses, damage to the circuit breaker and protects inverter components
- ▶ Diagnostic lights in the front panel monitor electronic controls and safety interlocks
- ▶ High-quality design is user and maintenance friendly



High-Frequency Power Supplies

By UltraFlex Power Technologies, Inc.

Power Supplies ranging from 1 kW to 200 kW

- ▶ Advanced Cost-Effective Power Supplies utilizing the latest switching power supply technology
- ▶ First in the industry “adaptive digital phase-control” providing very efficient operation in a wide frequency and load ranges
- ▶ Reliable, modular systems that are easy to maintain and service
- ▶ Flexible, wide-range load impedance matching by utilizing multiple transformer ratios and configurable tank capacitance



High-Frequency Power Supplies

by UltraFlex Power Technologies, Inc.

Ultraflex SmartPower™ Compac Systems

- ▶ A breakthrough innovation in the induction heating technology, featuring the **Direct Digital Step™** control algorithm and a unique configurable modular approach.
- ▶ Configurable and field upgradable power supplies with output power from 50kW to 400kW.
- ▶ Wide output frequency range – two ranges available from 6kHz to 60kHz and from 40kHz to 200kHz.
- ▶ Zero down time can be achieved if additional module (N+1) is installed in the system.
- ▶ Latest SiC transistor technology and proprietary digital control algorithms ensure optimal performance and maximum efficiency in a wide frequency range.



Tabletop Melting Furnaces



- ▶ EasyMelt by UltraFlex Power Technologies, Inc. is a compact 2.8 kW tabletop unit ideal for melting of small batches of precious metals. It comes in two different models, a water-cooled and an air-cooled one.

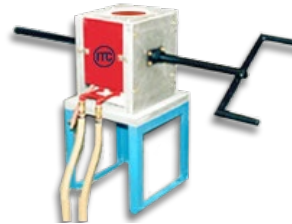
Compact Power Cube Furnace



- ▶ One-Man Manual Tilt. This furnace is mounted on a heavy duty steel frame. It is equipped for one-man pouring with the pivot point near the center of the furnace for easy tilting.

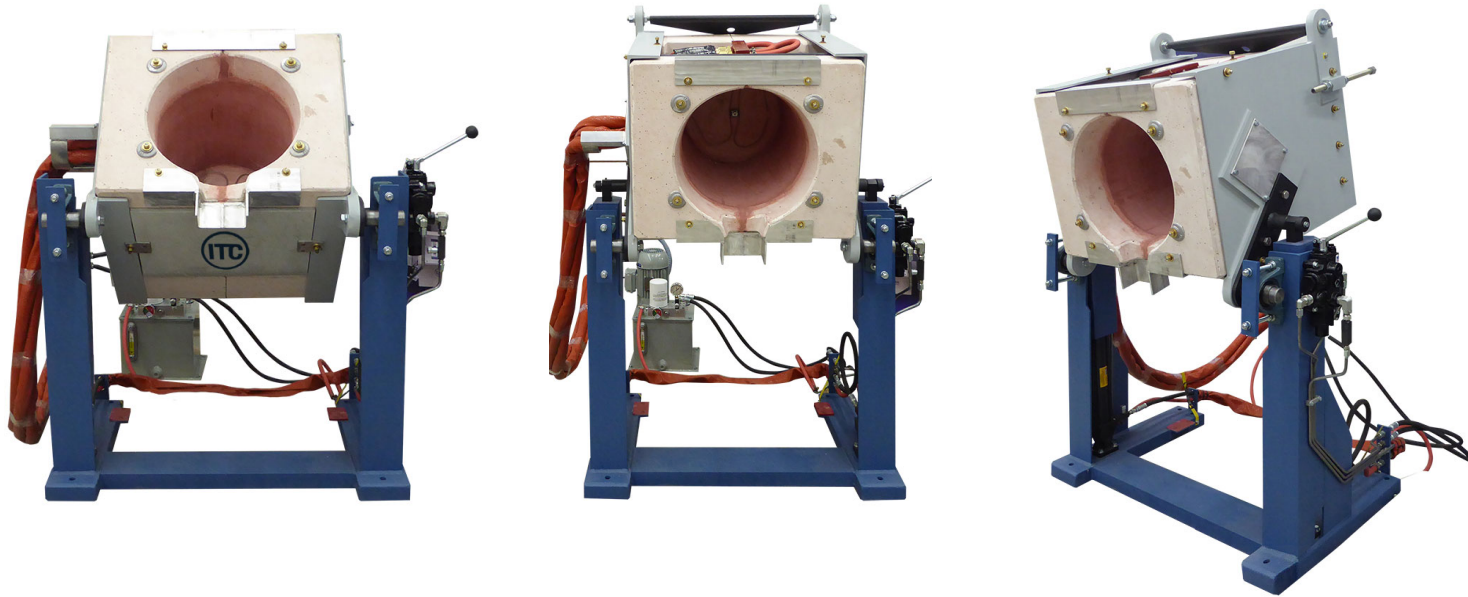


- ▶ One-Man Nose Tilt with Pneumatic Assist. The furnace is mounted on a heavy duty steel frame and is equipped for one-man pouring. The furnace has the pivot point near the nose of the furnace for accurate pouring. This furnace includes an air-over-oil hydraulic cylinder for easy tilt assistance.



- ▶ Two-Man Shank Pour with Table. Furnace is mounted on heavy duty steel frame table and is designed for two-man pouring into stationary molds. Flexible water-cooled power cables allow movement from table to mold with power "on" to eliminate loss of temperature.

Power Cube Melting Furnace



- ▶ Can melt 20 kg to 900 kg. of steel and 40 kg to 1300 kg of brass
- ▶ Extremely durable and high-quality construction with a cast and fired refractory top and bottom blocks

Lift & Swing Furnaces



EZ Lift Melting Furnace

- ▶ This lift induction melting furnace has a capacity of up to 30 lbs/ 13kg for steel melting, using double ceramic 'crucible in crucible', ideal for investment casting. As well as a capacity of up to 50 lbs/ 22kg for brass with single clay graphite crucible. The rugged design is counter-weighted for easy up & down operations, for which no air or hydraulics are required. The furnace has a cast refractory spill containment table, as well as a built in crucible pedestal block. Additionally a replaceable refractory crucible pedestal is included and a custom coil can be designed to match the power supply. The furnace can stand freely and can be easily moved out when not in use.

Small Lift & Swing Melting Furnace

- ▶ This induction melting furnace has a capacity of up to 30lbs/ 13kg for melting steel, using a double ceramic crucible in the crucible, ideal for investment casting. As well as, 50lbs/ 22kg capacity for brass, non-ferrous metals, clay, graphite melting. This can be done using either silicon carbide or machined graphite crucible. It has a built-in splash containment shield and refractory lined spill pan. It is powered by a single airline connection to a 100psi/ 6.89bar source, additionally, both the water and power connections can be placed on either side. It is equipped with a movable foot-operated control valve and allows to be easily moved when not in use.



Large Lift & Swing

- ▶ The key element of the furnace is the lifting mechanism. When in the upwards position, it swings in excess of 90 degrees to the left or right in order to fully access the crucible. The hydraulic operation from the integral or external mounted hydraulic pump provide a smooth lift. It comes supplied with crucible pedestals and refractory lined spill pans. Additionally, it is possible to be manufactured to accommodate from #50 to #225 bilge crucibles. A fume collector ring is built into the furnace, which can be connected to a dust collector. A foot-operated control valve is available and located in the front centre of the furnace.

Custom Melting Systems

ITC can design and manufacture complete high frequency induction systems that are ideal for melting of gold, silver, platinum or ferrous and non-ferrous metals.

All systems are complete with an ITC furnace and/or custom induction coil and an UltraFlex high-frequency power supply.



Nose-Tilt Furnace



Power Cube Furnace



Lift & Swing Furnace



Melting Furnace
Platform System

Water-Cooling & Recirculating Systems



Single & Dual Water Pump

Both types are designed for closed-loop type water cooling and recirculating systems. The Single Pumping Module includes 1 water pump. The Dual Pumping Module includes 1 main water pump and 1 stand-by water pump. These water pumping modules are designed for maintaining proper water flow as the water is recirculated throughout your induction system.

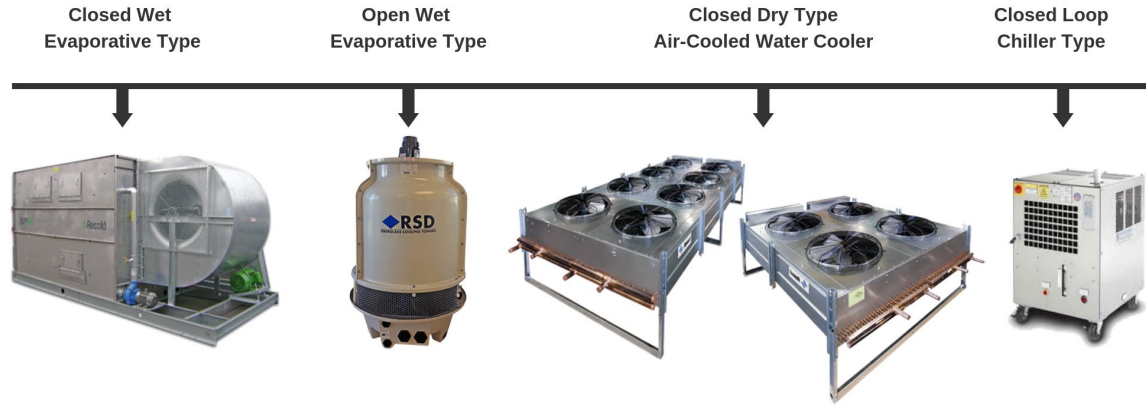


Compact Motor Control Center

- ▶ Controls all auxiliary motors required on an induction melting or heating system for operation of water pumps, cooling tower fans and hydraulic pumps. Manufactured with up to 6 Motor Starters plus a solid state adjustable timer for shut-off of water pump after system cool-down



- ▶ ITC offers a variety of [water cooling towers, chillers & tanks](#). We can help you decide which one will best suit your manufacturing requirements. We will provide you with the best water cooling solution to ensure that the power supplies, coils and furnaces in your induction system are being properly water cooled so that your induction equipment remains at safe temperatures during operation.



Water Saver Tank & Recirculator

- ▶ Ideal for cooling smaller induction systems. It is designed to maintain constant water pressure to your induction equipment so that your equipment is not subject to fluctuations in city water pressure, which can cause problems with equipment performance.



Water Cooling System

- ▶ The water cooling system is a complete dual pump module with emergency back-up pump motor, compact motor control panel and open evaporate type water cooler, fully assembled onto a sturdy platform.



Additional Equipment



ITC Induction Melting Coils

- ▶ ITC manufactures a wide range of coils for induction melting applications. All of our coils are engineered and designed for the customer's specific production needs to maximize the efficiency of the melting or heating process. High conductivity copper tubing with proper wall thickness is selected to maximize electrical efficiency. Our induction melting coils have the mechanical strength to withstand the severe conditions of a foundry environment. High dielectrical and high-temperature insulating materials are used for all coils. Special attention is given to the operating environment such as vacuum or air melting applications.

ITC Water Cooling Flex Leads

- ▶ Water cooling is one of the most important factors in the life of your induction melting equipment. To ensure efficient cooling process there needs to be a proper water flow to and from the induction coil. We manufacture water cooling cables using all top quality materials with a fast turn around time. In addition to that, we also offer an optional fire retardant sleeve that protects your cables against damage from heated material. Water cooling cables are recommended for air or vacuum applications.



About ITC



- ▶ ITC is now part of [UltraFlex Power Group](#).

Induction Technology Corporation was founded in 1979. The company was started with the main objective of providing superior service and innovative products for the induction melting and heating industry. ITC originally operated out of the founder's garage in Huntington Beach, California. Throughout the years, ITC moved into bigger facilities as it grew, finally landing in Apple Valley, California. The facility occupies over 30,000 square feet and was built on 5 acres of industrial property. ITC has experienced steady growth during its 40 years being in business. The steady growth is attributed to its commitment to providing superior customer service and having the main objective of improving products and services continuously.

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