Why the Industrial Furnace Manufacturing **Industry Selected ITS as Their Partners**

Partnership Philosophy: ITS approaches each project like a partnership.

Technical Engineering: Drawing from decades of experience in various thermal applications, ITS engineering expertise and technical knowledge is unparalleled. Utilizing the best tools for the job, from the latest in engineering software packages to the most advanced control systems to actual field operations results, ITS engineering staff can design and manufacture the best solution for the thermal processing application.









Research & Development Department and Testing Laboratory

International Thermal Systems is unmatched with a full time R&D laboratory directed by a US Patent holder with a Ph.D. in Thermal Science. Complete heat process tests are conducted in our R&D Laboratory to prove and confirm the process parameters prior to engineering/ manufacturing. Proprietary heat transfer computer software and commercial CFD software are used to simulate the heating process with proven accuracy. The benefit to the customer is the confirmation of the exact process parameters prior to the engineering and manu-

ITS Aftermarket Parts and Services Department

- Spare parts
- Repair parts
- Retrofit parts
- Emergency repair parts

Factory Trained Technicians available for:

- Field installations
- Equipment relocation
- Equipment retrofit and repairs
- Commissioning/Debug/Startup
- Equipment trouble shooting









International

Thermal

Systems





Furnace

Division





rnational Thermal Systems LLC Milwaukee, WI 53214

Königstraße 28 D-70173 Stuttgart



Car Bottom Furnace

- Manual or automated load cars for processing large and heavy products
- A rail mounted product car to transfer parts into and out of the furnace
- Heat-treat large and heavy welded fabrications such as gear blanks, oil drill pipe, drive shafts and similar type products
- Product car also serves as the floor in the furnace
- Hearth of the car constructed with cast or fiber insulation
- Product support provided by piers, hearth plates or grating
- Furnace door is integral to the car or can be fixed to the furnace body and vertically actuated to seal the chamber.
- Multiple zone heating technology available

Box Furnace

- A box furnace features a vertical lift or swing out door allowing for various sized products to be placed in the furnace
- Multiple zone heating technology available
- Box furnaces are used for:
 - Heat-treating
 - Calcining
 - Curing
 - Annealing
 - Stress relieving
 - Preheating
 - Tempering
 - Other high temperature processes





Drop Bottom Furnace

- Used to solution heat treat aluminum alloys
- The furnaces with quench designed to meet all requirements of AMS and BAC
- Systems designed for rapid quench
- Quenching solutions can include water, glycol, oil, or air
- Quench solution temperatures are tightly monitored and controlled
- Typical quench systems are located at furnace level or in a pit and can be stationary or mobile.
- Rinse stations available

Tip Up or Clam Shell Furnace

- Tip Up or Clam Shell Furnaces are an excellent choice for extremely heavy loads
- Features a pivoting furnace body to allow overhead crane loading and unloading of parts
- Tip Up or Clam Shell Furnaces are used for:
 - Heat-treating
 - Calcining
 - Curing
 - Annealing
 - Stress relieving
 - Preheating
 - Tempering
 - Other high temperature thermal processes
- Multiple zone heating technology available





