ROLLER HEARTH FURNACES

Abbott Furnace Company custom designs and manufactures roller hearth furnaces for a variety of applications, particularly those requiring heavy loads and high volume capacity, long part length, and reversible or oscillating conveyance drives. Abbott's emphasis on superior control of temperature and atmosphere management provides uniform and consistent results for these high production furnace systems.

Roller hearth furnaces are applied for a variety of common heat treatments, such as annealing, normalizing, stress relief, hardening and tempering, as well as reheat and brazing, but are particularly suitable for multi-step processes with multiple in-line process chambers with isolation doors and purge chambers.

- Available with gas-fired or resistance heating element heating systems, or insulating fire-brick and/or ceramic fiber linings, for use with a variety of protective/process gas atmospheres.

- Cooling systems: controlled ramp slow-cooling, fast recirculated gas-cool, Varicool jet cooler, water-spray cooling/quench, or elevator/dunk quench, as well as combination systems to suit the process.

- Auxillary equipment, like loading and unloading mechanisms for charge and discharge tables, and transfer conveyors for load tray positioning, are integrated and synchronized for automated operation.

- Atmosphere control systems for elemental, mixed, or natural gases, and generated gas atmospheres, as well as humidifiers or dryers.

- User-friendly control software, including Abbott’s S.M.A.R.T. data collection system.