Selectable Flow Patterns
Achieve Fast and Uniform Cooling Results with Ipsen’s Directional Cooling!

Directional cooling is a standard feature of the SuperTurbo™ horizontal vacuum furnace. This superior furnace design improves cooling uniformity and rates by controlling the flow of gas through the load by selecting different gas exit paths out of the hot zone. The cooling gas flow is adjustable for various geometric loads and part sizes, providing better control to achieve higher part hardness and a faster quench while minimizing distortion. Example: For a tall, narrow load the selectable gas exits are top-and-bottom, while a wide, flat load requires side exit paths. With an asymmetric part, alternating the gas exit path from top-to-bottom will produce more even cooling, which can be manually set or automatically controlled by thermocouples.

Directional cooling and other listed features are among the many unique attributes of the SuperTurbo™, an excellent furnace for hardening and tempering large loads and parts.

- Digital Trim-sets the heating power for each heating zone in different temperature ranges
- Convection assisted heating system
- Quiet motor
- 12-20 bar quench pressure options
- Meets GM cooling specifications