PTR has more than 40 years of continuous success in supplying over 1000 electron beam welding systems under the names:

- PTR-Precision Technologies
- Leybold-Heraeus
- Hamilton Standard

We have the broadest background available in this specialized technology and have delivered electron beam (EB) welders worldwide to all major users in the automotive, aerospace, defense, sensor, medical, energy, contract welding and many other industries.

offers a complete range of electron beam technology and is able to provide the most suitable system for any application:

- High or low voltages
- High or low powers
- Moving or fixed guns
- Internal or external guns
- High vacuum, partial vacuum or nonvacuum units
- Small chamber, large chamber or air-to-air welders
- Manual, semi-automatic or fully automatic operating modes
- Stand alone welders or fully integrated processing lines

A Variety of EB Welders for a Multitude of Applications



High-speed, state-of-the-art, production welders each built on a single platform and having cycle times as low as 12 seconds. These are the most compact EB welders of their kind being used by transmission producers worldwide. Very-high speed nonvacuum welder for the shortest possible cycle times. This type of welder is used to join a variety of parts, like transmission components, structural beams, tubing made out of steel and aluminum.



Small chamber welder suitable for use in aircraft, sensor, medical, semiconductor and other industries for joining a variety of parts and materials.



Large chamber welder simultaneously utilizing up to 9 CNC axes of beam parameter and part motion control for the most demanding welding tasks.

