



With nearly 6,000 horizontal furnace tubes delivered worldwide, Bruce Technologies Inc. is the established industry leader for digitally controlled horizontal furnaces. Bruce BDF-Series of horizontal furnaces offer customers proven reliability, state-of-the-art thermal technology, precision loading, superior throughput performance, reduced cost-of-ownership (COO) and the support of a world-wide organization.

Referred to as the most reliable furnaces in the industry, Bruce Technologies Inc. offers two models of horizontal furnaces, the BDF-41 and BDF-200, for handling 100-200mm wafers. To further enhance the capabilities of the furnaces, Bruce Technologies Inc. and Amtech Systems Inc. offers an array of system options including semi-automated and fully automated Loading systems for total system flexibility.

- Number of Tubes:** 4 (BDF-41), 3 (BDF-200)
- Wafer Size:** 100-200mm (BDF-41), 150-200mm (BDF-200)
- Load Station Filtration:** HLF (Class 10)
- Loading Systems:** **DURADRIVE™** Boatloaders
- Scavenger System:** Individual Exhausted & Monitored
- Heating Element Zones:** 5 - (Standard), 3 - (Optional)
- Temperature Control:** **INTEMPOS™** Module
- Furnace Exhaust:** Water-Cooled Heat Exchanger
- Source Cabinet Layout:** Vertically-Mounted Gas Panels
- Furnace Controllers:** Independent Tube Level **7355X** DDC's
- Process Management Software System:** **APEX** (Optional)

Retrofit & Conversions

Bruce offers a variety of horizontal furnace upgrades that are specifically designed to maximize performance and minimize cost-of-ownership. With over 30 years of OEM experience, Bruce remains your first choice for all types of furnace equipment upgrades. The list below represents a sample of available retrofits. For additional details, please contact your Bruce Technologies Inc. representative.

- Complete Furnace Rebuilds
- Wafer Size Upgrades
- Process Conversions
- Thermal Control Enhancements
- Boatloader & Wafer Loading Upgrades
- Control System Conversions
- Gas Distribution Modifications
- Furnace Automation Solutions



OEM Manuals, Drawings & Documentation



Boatloaders, Autodoors & Amtech S300 Automation



7355 DDC System Controller

Bruce Technologies Inc.

Technical Support Services

Technical Support's objective is to consistently provide support that exceeds our customers expectations. Our support team provides all aspects of technical information such as wiring schematics, drawings, preventative maintenance schedules, upgrade procedures, and system specifications for all Bruce equipment.

Spare Parts

To ensure maximum uptime, Bruce can suggest a spare parts package specific to your equipment. Bruce also stocks a large number of spare parts at depots located throughout the world. Bruce also offers 24/7 service option for immediate shipping of critical spare parts to customer sites.

Heating Elements

High-Temperature, Fast Cooling Options



Contract Support Services

Bruce offers a number of service options to meet individual customer requirements. Fully trained and qualified Field Service Engineers are dispatched to provide responsive regional support.

Shift Coverage Contract: A service plan that augments a customer's maintenance function with individual shift coverage. Services include preventative and unscheduled maintenance, operator training, maintenance scheduling and troubleshooting.

Conversion, Upgrade or Retrofit Service: Services are available to meet specific customer requirements when upgrading equipment with enhancements or modifications. Services are quoted for specific tasks, as required.

Installation Services: Available for New Furnace, Retrofits, or conversions.

Process Application Support: Services are available to assist in troubleshooting specific process application problems.

APEX Software Support Services: Support options can be customized to meet each customer's individual needs. Typical services include telephone support, scheduled preventative maintenance visits and emergency on-site service. Bruce APEX telephone support can be purchased on a per call basis, or through an annual contract.

