



## **SolaReactor™, Sirius™ and Sirius™ Junior**

**Our furnace systems offer our customers many advantages**

**Automatic Boat Loaders** (Cantilever Loader System) - ProTemp's loader system is an in-house design that uses a precision drive screw for vibration free movement as well as minimal particulate generation and long life. This loading system was designed for high production loads (500 substrates per cycle) and we have systems running 24/7 in customer's facilities for more than 5 years with minimal down-time.

**Heating Elements** - ProTemp has been designing and manufacturing our own elements for 15 years. With our in-house design and manufacturing capability we can respond quickly to both standard and special design elements as well as adapting an element design to specific power requirements. We also have one of the longest element warranties in the industry.

**Gas Systems** - Again with our in-house design and manufacturing capability we can react quickly to specific customer requirements. All our gas systems are orbital welded using micro fittings (in lieu of bending tubing), face-seal fittings, clean-room assembly and helium leak testing prior to shipment.

**Process Sequence Controller** - ProTemp has used the ITS ([www.intyme.com](http://www.intyme.com)) Tymkon™ controller for more than 30 years. This is a state-of-the-art micro-processor controller using a Microsoft XP-PRO operating system that is easily learned by our customers. ITS has shipped more than 11,000 of these controllers and is widely used by many furnace manufacturers as well as other industries.

**ProTemp Mass Flow Controllers** – ProTemp's Model 6200 and 6400 mass flow controllers are designed to be interchangeable with most other manufacturers and is available in ranges from 0 to 50 SLM, a requirement for our SolaReactor™ furnace systems.

**Temperature Controllers** – We have used the Eurotherm ([www.eurotherm.com](http://www.eurotherm.com)) temperature controllers for more than 25 years and found them to be the most reliable controller on the market.

**Versatility** – ProTemp offers a wide range of Atmospheric, LPCVD and PECVD process capabilities for wafer sizes up to 450mm diameter. Our furnace systems may be configured to have any or all of these capabilities in the same frame.