



An Innovation  
Partner to the  
Window and Door  
Industry

### **A Window and Door Team Driven by Your Needs**

Praxair is more than just gases. We have a wide range of services that help create value and improve the competitiveness of window and door manufacturers around the world. Praxair has been working with the industry for years, developing advanced technologies that improve energy efficiency and product quality.

Praxair's window and door technology team is composed of engineering and market specialists who are focused on our customers' goals and challenges. The team works with industry consultants, engineering companies, and educators to develop better technologies for the industry. We help you specify, start-up, and optimize each system we offer. The result is an integrated, well-planned, and more efficient system and specialty gas supply meeting your needs.

Praxair offers a wide range of gas production and storage systems options for window and door manufacturers, including cryogenic, pressure swing adsorption, membrane, and bulk liquid. Together we work to achieve one goal; to provide you with the most cost-effective supply method.

### **Comprehensive Product Range**

Supplying each application with the proper gas (grade, compliance, certification, scale).

### **Consistent Reliability**

Ensuring high quality products are there when they are needed.

### **Equipment and Systems Excellence**

Connecting customers with everything needed to handle and store gases efficiently and safely.

### **Productivity and Innovation Partner**

Working with the glass industry to identify and implement productivity and cost improvements.

### **Ease of Doing Business**

Providing convenient e-commerce options and strong customer support.

### **Safety Focus**

Making safety the top priority for every activity.

# Windows and Doors

## Optigas II Gas Fill System



Filling insulated glass units with an Optigas® II Gas Fill System can enable window manufacturers to qualify for Energy Star 2015 and Energy Star Best-in-Class ratings at lower cost.

The Optigas II System can precisely fill insulated glass with the right mixtures of Argon and just enough Krypton needed to meet your target U value with significantly less waste as compared to other fill systems that can lose 50% or more of the Krypton being filled. You can gain an extra U value point or more without having to use alternative higher cost options. With Praxair's consistent, reliable supply of affordable krypton you can count on a low cost solution. And with Optigas ThermalCert built in, you will be able to verify the gas content to your customers.

The OptiGas II System also includes IAS Fast-Gas capabilities that provide a fast Argon fill system. So there is no need to have separate fill machines for Krypton and Argon, the OptiGas II System does it all.

Developed jointly by Praxair and Integrated Automation Systems, the OptiGas II System employs innovative technologies that give you precise control of the filling process – practically eliminating the waste common with existing systems – and enables you to cost effectively (and reliably) use krypton and krypton/argon mixes in more of your product lines. The result is a measurable competitive advantage for your operation because achieving more desirable U value targets means you can produce windows at a much lower gas cost.

### OptiGas II System Key Benefits

**Automated** – Units are filled with the proper gas, in the specified proportion, without manual intervention or having to change design, manufacturing processes or use higher cost alternatives.

**Reliable** – As one of the world's largest manufacturers of Krypton, Praxair can offer reliable supply at reasonable and predictable prices.

**Accurate** – Precise gas-fill control consistently achieves more accurate fill content with less waste than traditional filling.

**High Yielding** – By practically eliminating Krypton waste, the OptiGas II System reduces gas usage by half or more per window.

**Tunable** – You'll be able to target the most effective Krypton-Argon ratio for each unit, to achieve an optimum U value.

**Flexible** – The OptiGas II System can be run as a stand-alone unit or integrated with FeneVision or other ERP or production software. The OptiGas II System can fill Krypton or Argon quickly and consistently.

**Verifiable** – With the built in ThermalCert quality control module you'll be able to verify gas content to your customers and provide verification data in case of audit.

