



---

**Application**  
Windshield Glass Kiln

---

**Products Used**  
1771

---

## Problem

A manufacturer of glass products for automotive customers was using an A-B PLC 5 with 1771 I/O rack to control a complex glass kiln process to bend the shape of the windshields. The kiln process was control intensive and required a resolution higher than the 12 bit offered by the current solution. With the AMCI card, the outputs are only accessible from the front of the card requiring an A-B input card to see the PLS output status in the I/O image table. Also, the kiln process uses several of the PLS outputs to establish position based windows in which process events had to occur. With the AMCI card, this requires an extra A-B input card as well as additional PLC logic to perform these functions.

## Solution

The 1771 Ultra High-Speed PLS is not only fast; it's smart too. It offers 14 bit resolution, the 16 PLS outputs go directly to the I/O table which eliminates the A-B input card, and the Input Capture and Input Warning Map Register are built in and fed directly to the I/O image table.

## Benefits

- Frees a slot in the rack
- Reduces logic overhead in the system
- Eliminates the A-B input card
- Eliminates the cost of writing additional code

## Conclusion

The 14-Bit accuracy of the 1771 allowed the customer to better control the shape of the glass which resulted in less scrap material.



AppNote.AOR  
3/07.Z315