

Kiln Corner

A Checklist for Evaluating Used Kilns

by Arnold Howard

Photography Courtesy of Paragon Industries, LP.

Though Arnold Howard works for Paragon Industries, L.P., the information here applies to all brands of glass kilns. Feel free to send questions for this column no matter what brand of kiln you own.

Take this checklist along when you visit someone who is selling a used kiln. Visually inspect the kiln and if possible, turn it on. If the kiln is away from a power source and cannot be turned on, then check the elements with an ohmmeter.

Visual Inspection

Making a careful visual inspection is one of the most important tools you have at your disposal whenever you are considering buying a used kiln. As you examine the kiln, be sure to carefully check all of the following areas for any damage or signs of excessive wear.

- Rust on the kiln case and screws. Severe rust indicates high humidity or firing moist glass molds. This is hard on a kiln.
- Tight screws on the switch box.
- The condition of the stainless steel. Splashed kiln wash or glass paint indicates a lack of maintenance.
- The condition of the paint.
- Whether the kiln has the correct stand. If you are not sure, check the kiln manufacturer's website for a picture of the kiln, which is always shown with the stand.
- Missing rubber feet on the stand or kiln base.
- The condition of the cord and plug. Is there any heat damage? Cracked insulation or a corroded plug indicate heavy usage. You will need a new cord set.
- The condition of the firing chamber floor. Minor cracking is normal. Look for embedded glass, which indicates poor maintenance. As long as the glass is not too deep, it is easy to remove. You would not necessarily need to replace the floor. Patching with a firebrick section is usually sufficient.
- The condition of the kiln walls. Check for dripping glass and excessive cracking. Vertical, regularly spaced straight cracks in firebricks indicate that the kiln has been overfired.
- The condition of the kiln lid.
- Whether the elements are bulging out of grooves. Have the element coils collapsed and bunched up? That results in elements falling out of lid grooves.
- Whether the digital keypad has any melted plastic or stains.

Operation

Turn on the kiln and heat to 200°F. Check to make sure that all of the elements turn on and that the controller (or switches) work. Next check the digital display, looking for any burned out digits or any error messages that the controller is giving you.

Now listen to the kiln. Do you hear any abnormal chattering or popping noises from the relays/switches? Also be sure to test the elements with an ohmmeter if the kiln is not close to a wall outlet and cannot be turned on. Disconnect the power, open the switch box, and place the ohmmeter leads on the two element connectors of each element. You can obtain the correct ohm readings from the kiln manufacturer.



The glass that has embedded into the firebrick floor can usually be repaired without replacing the floor. Note the missing sections of sidewall element groove and the element staple. This is minor damage that will not affect the firing results.

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Arnold Howard writes instruction manuals and advertisements for Paragon Industries, L.P. His hobbies are glass fusing and karate. He also enjoys studying history and watching classic movies. You can reach Arnold at ahoward@paragonweb.com with questions for future columns. Sign up for his kiln newsletter at www.paragonweb.com.

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