

Alternatives to Smooth Top Ranges

We have previously mentioned issues with canning on smooth top ranges. Clemson Extension makes no recommendations about pressure canning on smooth top ranges. We do recommend that consumers with smooth-top ranges contact their range manufacturer before pressure canning. Some manufacturers (e.g., American) recommend that their pressure canners not be used on smooth top ranges. Boiling water canning on smooth top ranges requires either canners specifically designed for that purpose or large, deep, flat-bottomed stockpots no larger than the cooking eye surface with capacity for (1) a rack, (2) upright, filled, closed jars and (3) water at a level of 1-2 inches above the top of the jars.

Weck makes an electric boiling water canner (115 V, 1380 watts) that accommodates 7 mason-style quart jars. It is available with or without spigot.

Personnel at the National Center for Home Food Preservation (NCHFP) have examined several alternatives to using smooth top ranges.

- Induction Burners: The recommended pressure canners (American, Mirro, Presto) are aluminum, so induction burners do not work.
- Portable electric burners: Portable burners need to approximate household range burners that are typically 1750W or higher. It is important to have the canner stable and not top-heavy so overhang and height must be considered.
 - The Tablecraft 119A (1500W/120V) burner easily supported a Presto 16-qt weighted gauge canner containing pints of tomato juice. The burner was a good height and a good diameter. Process timing worked well, and pressure was maintained.
 - A similarly configured burner, the APW Wyott CHP-1A Hot Plate (1650W/120V) also is available.
- Portable gas burners –Clemson Extension does not make recommendations regarding outdoor burners. Canner manufacturers specify maximum BTUs for outdoor burners or gas ranges to prevent canner damage. If a bottled gas source is used, it must be adequate for the entire time of the process.
 - Presto recommends against using its pressure canners on an outdoor LP gas burner or a gas range over 12,000 BTU's; doing so may result in damage to the pressure canner and/or property damage and personal injury. Manuals for Presto's pressure canners are available online (<http://www.gopresto.com/products/manuals.php>).

Sources:

- Andress, E.L. 2012. Home Food Preservation Update 2012. PowerPoint presentation. The University of Georgia, Department of Foods and Nutrition, College of Family and Consumer Sciences
- National Center for Home Food Preservation. June 2011. Burning issue: Canning on smooth cooktops. <http://nchfp.uga.edu/publications/nchfp/factsheets/smoothtops.html>
- National Presto Industries. 2012. Presto pressure canner and cooker instructions and recipes. <http://www.gopresto.com/downloads/instructions/01755.pdf>