Today's automated modern laundry equipment, now a major time and energy saver, has revolutionized home laundry routines. But in considering the degree of automation to buy, the added cost of more automatic features should be balanced against the time and convenience gained.

Changing lifestyles and new fabrics have increased the popularity of dryers, because they are now considered more of a necessity instead of merely convenience appliances. Dryer design is simple, consisting of a container, or drum, in which clothes are rotated and dried by heated air. How this air is heated depends on the fuel source used.

**Types of Dryers**

When shopping for a dryer, the buyer should decide first whether a gas or an electric fuel source is preferred. Generally, this choice is determined by the type of fuel used for cooking. The initial cost of a gas dryer is slightly higher than an electric dryer.

Efficiency and drying capabilities in gas or electric dryers will vary depending on the amount of heat produced. This is determined by the wattage for electric dryers and by the BTU input rating for gas dryers. An electric dryer with less than 5,000 watts and a gas dryer with less than 20,000 BTU's will take longer to dry a load of clothes, and in the long run will cost more to operate and maintain.

Other considerations to make in choosing a dryer are the type of clothing and other articles to be dried, space available, special features desired and budget limitations. Since a dryer has an average life expectancy of 12 to 14 years, future needs also should be considered.

A dryer has two kinds of controls: (1) temperature and (2) time.

**Temperature Control**

Dryer controls adjust the temperature to the type of load. Control settings now available include:

- **Regular or high heat**—Used for cottons and linens.
- **Permanent-press**—Used for manmade fabrics. Clothes are heated and then tumbled without heat to prevent wrinkling.
- **Delicate or knit**—Low heat used to prevent overdrying, shrinking and static electricity.
- **Air fluff**—Operation at room temperature. Used for freshening items like bedspreads, shag rugs.
- **Damp dry**—Used for clothes that will be ironed immediately.

Dryer temperatures actually differ very little, and controls are there primarily to provide the proper turn-off. Essential or major temperature settings are high, low and air fluff. A permanent-press cycle is useful only if you take the time to separate permanent press garments from the rest of the laundry and then, once the drying cycle is over, remove the garments immediately to prevent wrinkling.

**Time Control**

The time control schedules the drying time cycle and turns off the dryer when the cycle is complete. The three different kinds of timing and turn-off controls are (1) timer, (2) thermostat and timer and (3) moisture-sensing system.
Timer. Total drying time for a load is estimated by the user and the timer control set for the number of minutes dryer is to run. To help in making a more accurate estimation, the time dial is usually divided into settings for regular, delicate and permanent-press fabrics. Care of setting is important. Overdrying is a common problem with this type, often causing discoloring, shrinking and wrinkles in the clothes.

Thermostat and timer. If the dryer has both thermostat and timer, the user can select both time and temperature that is best suited for the type of load being dried. When the dryer thermostat reaches the temperature selected, the heat turns off and the timer advances. When the temperature falls, the heat turns on again and the timer stops.

As the clothes dry, the heat comes on less and less. When the heat has been off long enough, the timer advances and completes the drying cycle. Though estimation is still not completely eliminated, there is less chance of having either an overdry or a damp load.

Moisture sensing. This moisture-sensing mechanism is an automatic control giving the most accurate drying results. As moist clothes tumble in the dryer and contact built-in electronic sensors, the moisture completes an electric circuit that keeps the heat turned on. As the moisture decreases during drying, the current in the circuit decreases. When the moisture in the clothes cannot complete the circuit, the heater turns off, with tumbling continuing for a short time to cool down the clothes before the cycle is completed.

Construction

Both quality and safety are important dryer construction considerations. Buyers should look for smooth durable finishes on both the interior drum and exterior cabinet. Rough surfaces on the drum can cause snags or pulls in clothes. An enamel exterior or cabinet is resistant to scratches and common laundry chemicals. Stainless steel, zinc coating or porcelain enamel give good corrosion protection for the drum.

The drum capacity affects the dryer's performance. The larger the drum, the more freely the clothes can tumble and the more effectively air will circulate through them.

Dryers should carry the label of a testing laboratory such as Underwriters' Laboratories, Inc., or the
American Gas Association. These dryers have automatic cut-offs to keep the temperature from getting too hot if the controls fail. AGA-approved gas dryers also stop the gas flow if the flame goes out.

Features

- **Lint filter**—Needs to be easily accessible for lint removal and have a sufficient surface area for greater air flow. The filter mesh needs to be small enough to trap most of the lint yet large enough not to restrict the free passage of air.

- **Window in dryer door**—Permits load inspection without interfering with drying.

- **Lights**—In drum and on top panel illuminate dryer's working surface—an aid if dryer is in a dark corner or basement.

- **Bell signals**—Let you know when drying cycle has ended. In drying permanent-press articles, be sure to remove them immediately to keep from setting wrinkles.

- **Dropdown door**—Is convenient when loading or unloading the dryer; serves as additional work surface.

- **Other features**—Some dryers also offer automatic sprinkling of clothes in dryer, an ozone lamp which gives a “fresh odor” to the laundry and a no-tumble cycle which offers a stationary rack to dry such things as canvas shoes and woolens that might pill.

When considering these features, compare added usability or convenience with the additional cost involved. Will they really help enough?

Installation

**Electric.** Most electric dryers require 200 to 240 volts to operate. Those operating on 110 to 130 volts require a much longer drying time. Dryers should be plugged into a separate 15-ampere, grounded circuit. Exhaussts vented to the outside are required to channel heat, moisture and lint. Use short ductwork that has few elbow bends.

**Gas.** A convenient gas line is needed. An ordinary household electrical outlet is also needed to operate the motor, lights and controls. Gas dryers also must be vented.

Care

Care for the exterior or cabinet of dryers by washing the outside with warm soapy water, avoiding the use of abrasive cleaners on porcelain. Always rinse and dry surfaces. Clean lint filters after each use. Check periodically for lint buildup in the exhaust vent. Metal vent pipes can be taken apart and cleaned with a brush or a vacuum cleaner. If you have inexpensive plastic vent tubing, it may need to be replaced every few years.

Before Calling the Repairman

If your dryer does malfunction or stop working, try these points.

- **If the dryer won't work:**
  - Press “start” button.
  - Close the door securely.
  - Set the controls properly.
  - See if a fuse has blown or a breaker switch tripped.
  - Light the pilot light or unplug outlet (gas models)

- **If the clothes dry slowly:**
  - See if dryer is overloaded.
  - Clean the lint filter.
  - Clean the exhaust vents.
  - Change temperature selection if set improperly.
  - Remember the type circuit being used (the 120-volt requires more drying time than the 240-volt).

Combination and Compact Models

Washer-dryer combinations and compact models can be considered when floor space is limited. The “combo” assembly can be purchased as a single model, as a paired stacked model with the dryer on top on a front-loading washer or as a dual model with the dryer mounted above a top-loading washer.

The single model combines the washing and drying operations with less handling of clothes, but only one load can be washed and dried at one time. Service problems with one function put all functions of the whole machine out of operation until repaired.

The stacked and dual models have separate washing and drying operations. Most of these models can be purchased either in regular or compact sizes. The compact models naturally have smaller drum capacities, with only 4 to 6 pounds per load for both washer and dryer. As a compensation, the washer has a shorter cycle time, 10 to 12 minutes, permitting several loads to be done in the time it takes an ordinary automatic washer to complete one cycle. The compact dryer plugs into...
a regular 110-volt house current and vents directly into the room, requiring a much longer drying time and a well-ventilated room. Before a compact-model purchase is made, try to arrange for a home trial to help you decide whether the benefits outweigh the drawbacks.

The following Extension fact sheets discuss selection, use and care of home appliances.

- L-1139 Selection, Use and Care of Major Home Appliances
- L-1168 Refrigerators and Freezers
- L-1179 Decisions about Dishwashers
- L-1180 Washers
- L-1181 Dryers
- L-1182 Disposers and Compacters
- L-1240 Ranges
- L-1241 Microwave Appliances

These are available from your county Extension office.

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