

GAS DRYERS -VS- ELECTRIC DRYERS

In 1962, I helped install a Belco 30 lb. Athletic Washer & Dryer into Sedgefield Middle School in Charlotte, NC. We replaced the washer in 1986. The dryer was not replaced until February 2004. When I mentioned this fact to the principal he did not seem too impressed. He stated "This dryer has already proven its reliability... I'm more impressed that the same fellow who carried it in is the same fellow that carried it out." This dryer was in operation **41 years 280 days!** Why did it last so long? Because it was a gas heated dryer, not electrically heated.

Gas dryers operate on 110 volts/ 1 phase/ 20 amp service and plug into a regular wall socket. Electric dryers require 208 volts/ 3 phase/ 100 amp service or 480 volts/ 3 phase/ 50 amp service. Electric dryers use 2-3 times more energy to operate than gas models. Electric dryers take 5-10 minutes longer to dry than gas models. This makes the motor, fan basket, drive bearings, V-belts turn more RPM, operate more hours and require more repairs than a gas dryer.

Electric dryers have far more parts to wear out and replace, such as six (6) heating elements (\$87 each), a 100 Amp contactor (\$238) and a transformer (\$380)... all of which are replaced periodically. Gas ovens have a gas valve and two burner tubes which normally last the life of the dryer. Because gas dryers have fewer parts and require less service, they have a 5-10 year longer life span than most electric dryers.

Over 80% of commercial type dryers sold in the USA are gas dryers. Schools that do not have natural gas, normally use bottled gas (LP) instead. A propane tank must be installed outside the building. Our 50 lb. gas dryer burns approximately 100,000 BTU per hour for \$1.33 compared to \$3.16/Hr for an electric dryer. This is a whopping **savings of \$1.83 per hour!**

A school dryer operating just 5 hours a day for 200 days equals 1000 hours a year. Multiply this by the 25 year life span of a dryer. It totals 25,000 Hrs @ \$1.83 and equals a **\$45,750 savings for a gas heated dryer!** When the extra expense of parts and service are added to the energy costs, electric dryers cost 3-4 times more to operate than gas models.

Formula: One Kilowatt hour (KWh) of Electricity = 10.8 cents
One Therm (100,000 BTU) converts to 29.3 KWh @ \$0.1080 = \$3.16 per Hr
One Therm (100,000 BTU) of Natural Gas. = -\$1.33 per Hr
(One Therm of Liquid Propane Gas = \$2.63 per Hr)

"Bottom Line" Total Energy Savings for a Natural Gas Dryer \$1.83 per Hour

After 40 years in the laundry industry, it is my opinion that no one should ever purchase an electric dryer, unless they cannot get gas. I feel gas dryers are no more dangerous than electric models. They will both burn you, if you stick your hand in the oven! More dryer fires are caused by "poor housekeeping" (clogged lint screens) than by leaky gas lines or faulty wiring. Electric dryers sell for \$300-\$400 more than gas models. Why pay more for an inferior product?

The prices for gas & electricity are based on average residential rates (3/21/07 thru 3/3/08) published by the US Department of Energy. Total 25 year savings was estimate with no adjustments for future price increases. This savings does not include additional service & repairs maintaining an electric dryer.