



CALIFORNIA STATE SCIENCE FAIR 2012 PROJECT SUMMARY

Name(s) Isaac W. Garner	Project Number J2116
Project Title The Dish on Washers	
<p style="text-align: center;">Abstract</p> <p>Objectives/Goals The Objective of my project was to determine what style of dishwasher, European or American, works better overall. Many think all dishwashers work the same but in fact they don't. How they heat the water and how they dry the dishes can be very different. I will compare the two major styles and determine who makes a better Machine overall.</p> <p>Methods/Materials One dishwasher made in Europe (Miele), and one dishwasher made here in America (GE), was used for testing. These machines represent some of the best available models from their region and were of the same price range (\$1200-\$1300). Various kitchen items were soiled with baked on food products to be cleaned by each machine. All Items, ingredients, quantities of food products, cook time/temps, were closely monitored and kept constant per my procedure. Each dishwasher was tested three times using only the normal cycle and the same amount, and brand of dish washing detergent. I Evaluated:, Power usage, water consumption, noise level, cleaning ability, cycle time, and capacity.</p> <p>Results Not all dishwashers of the same price range are created equal. After evaluating all parameters, the European dishwasher outperformed the American made dishwasher. Using a ten star system the Miele received eight stars while the GE only received four stars. Out of all the parameters, cleaning ability was the most notable difference between these machines.</p> <p>Conclusions/Discussion Unfortunately today many products aren't made very well, especially appliances. My results, along with my research of consumer satisfaction surveys, not only suggest I recommend a European made dishwasher but a Miele dishwasher, specifically. Miele dishwashers rank very high in consumer satisfaction ratings and Miele receives top honors for many of their other products. My results, confirm that Miele dishwashers perform very well compared to their domestic counterparts.</p>	
Summary Statement Compare a European and American manufactured dishwasher to see what style works better overall.	
Help Received My Father connected the water and power meters to both dishwashers, handled the hot dishes, and helped with making my graphs.	