Name(s) **Onnig J. Ashikian**	Project Number **S1903**

Project Title

Air Pressure Efficiency

Abstract

Objectives/Goals
Problem: can using more air pressure in an air resevoir change the level of efficiency?

Methods/Materials
Materials:
1. 1 DC Generator; 2. 1 compressed air tanks (each at a different psi level); 3. 1 voltage meter; 4. 5 LED lights; 5. Conductible wires; 6. Alligator clamps; 7. 1 stopwatches; 8. Pencil and paper; 9. Ruler and calculator; 10. Pressure gauge.
Procedure:
   1. Gather your materials.
   2. Attach the LED lights to the Generator using the conductible wires
   3. Next attach amp meter and voltage meter to generator
   4. Then attach compressed air tank with an initial pressure of 80 psi to the generator.
   5. Next open valve for compressed air tank and keep at a working pressure of 20 psi and record amps and volts every ten seconds for one minute.
   6. Repeat three times then refill tank and test it with 140 psi.
   7. Finally, multiply the amps to volts and find your practical energy.

Results
In our results we discovered that the lower the psi level is the efficiency will be. This happens because when you use a higher psi level, there is going to be a lot of loss of energy. If you use less psi then you will have more efficiency and you will gain more energy because you have less losses. Although our hypothesis was wrong, we still agree because when you look at the results, the answer is clear.

Conclusions/Discussion
Eventually we had discovered that our hypothesis was wrong. In the results shown if you use less psi then you will have a higher efficiency. In our results we found out that when you use less psi, you can gain approximately 30% more energy as when you use a higher psi level. This happens because with lower psi level less energy will be lost.

Summary Statement

I am testing whether using a higher pressure in the air tank will give a higher efficiency

Help Received

Father helped me with lab epuipment and procedure