Recycler Cost of Operation Calculations

Formulas:

Volts (V) x Amps (A) = Watts (W)
Watts (W) x Hours (H)/1000 = Killowatt Hours (KwH)
KwH x Cost/KwH = Cost per cycle
Compressed Air Usage Formula – 4cfm = 1 Hp = .75 KwH
Calculations are based on US National Average 16 cents/KwH

Example:

1. **55 Gallon Recycler**
   Volts – 220V Amps – 50A Cycle Time – 6-8 hours

   220 x 50 = 11000 W
   11000W x 6H/1000 = 66 KwH
   66KwH x 16 cents/KwH = 1056 cents or **$10.56 per 6 Hour cycle**
   11000W x 8H/1000 = 88 KwH
   88KwH x 16 cents/KwH = 1408 cents or **$14.08 per 8 Hour cycle**

2. **17.5 Gallon Recycler**
   Volts – 220V Amps – 13.5A Cycle Time – 3-7 hours

   220 x 13.5 = 2970 W
   2970W x 3H/1000 = 8.91 KwH
   8.91KwH x 16 cents/KwH = 143 cents or **$1.43 per 3 Hour cycle**
   2970W x 7H/1000 = 20.79 KwH
   20.79KwH x 16 cents/KwH = 333 cents or **$3.33 per 7 Hour cycle**

3. **6 Gallon Recycler**
   Volts – 220V Amps – 10 A Cycle Time – 3- 5 hours

   220 x 10 = 2200 W
   2200W x 3H/1000 = 6.6 KwH
   6.6KwH x 16 cents/KwH = 106 cents or **$1.06 per 3 Hour cycle**
   2200W x 5H/1000 = 11 KwH
   11KwH x 16 cents/KwH = 176 cents or **$1.76 per 5 Hour cycle**

4. **Accel-Cool**
   Cycle Time – 30m - 1 hr
   Air consumption of Venturi – 21.4cfm

   21.4cfm x .75KwH/4cfm x .5Hr = 2 KwH
   2 KwH x 16 cents/KwH = 32 cents or **$.32 per 30 minute cycle**
   21.4cfm x .75KwH/4cfm x .1Hr = 4 KwH
   4 KwH x 16 cents/KwH = 64 cents or **$.64 per 1 hour cycle**