



CALCULATING THE COST OF AIR PER THOUSAND CUBIC FEET (MCF)

To get the cost of air per thousand cubic feet (MCF), use the following formula:

$$\frac{\left(\frac{\text{BHP} \times 0.746}{0.90} \right) (\$/\text{KWH})}{\left(\frac{\text{CFM} \times 60}{1000} \right)}$$

0.746 KW/BHP (Kilowatts per Break Horse Power)

Average efficiency = 0.90

4.2 CFM/BHP (an average of CFM per Break Horse Power suggested from Compressor Manufacturers)

The breakdown:

$$\text{KWH (To run the Compressor)} = \frac{\text{BHP of Compressor} \times 0.746}{0.90}$$

$$\text{KWH} \times \$/\text{KWH} = \text{Cost of running Compressor for one hour}$$

$$\frac{\text{CFM of Compressor} \times 60}{1000} = \text{MCF / Hour}$$

$$\frac{\text{Cost of running Compressor for one hour}}{\text{MCF/Hour}} = \$/\text{MCF}$$