HOW TO DETERMINE COMPRESSOR CFM LOST TO LEAKS WITHOUT INFO FROM PLANT

1. Determine full load CFM of compressor
   1. Use US. DOE MEASUR Tool
   2. Compressed Air Example (purple) > Inventory > Select data from existing compressor
      1. This is an air compressor catalogue, listing compressor HP, psi, and CFM
   3. Use info from plant (psi, HP) to determine CFM – SEE FIGURE BELOW
   4. May need to scale by compressor HP (1,391 CFM × 340 HP / 350 HP = 1331 CFM)
2. Multiply full load CFM by % CFM of compressor
   1. Ex. Compressor @ 70% load: 1331 CFM × 70% = 932 CFM going to plant
3. Use info from plant to determine % energy lost to leaks (between 5-10%)
   1. If plant has large square footage, bad at leak checking etc: 10% × 932 CFM = 93.2 CFM
   2. If plant has low square footage, annual leak checking: 5% × 932 CFM = 47 CFM
4. Use python tool or excel tool to vary number of leaks and size of leaks to match CFM calculated
   1. Try and stick to many smaller leaks (1/32” or 1/16”)
   2. SEE FIGURE 3 FOR EXAMPLE

A screenshot of a computer

Description automatically generated

A poster with text and images of power

Description automatically generated with medium confidence



