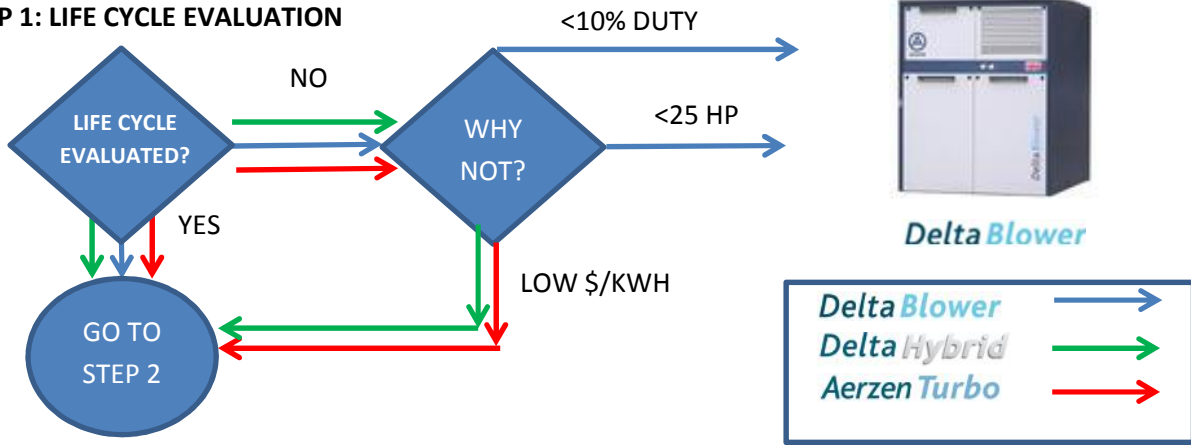




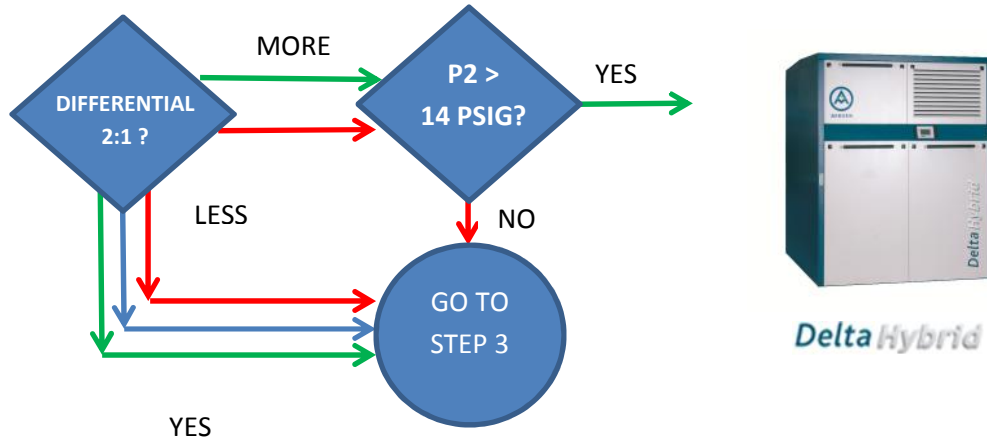
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AN ENGINEER'S MINI-GUIDE TO BLOWER TECHNOLOGY SELECTION

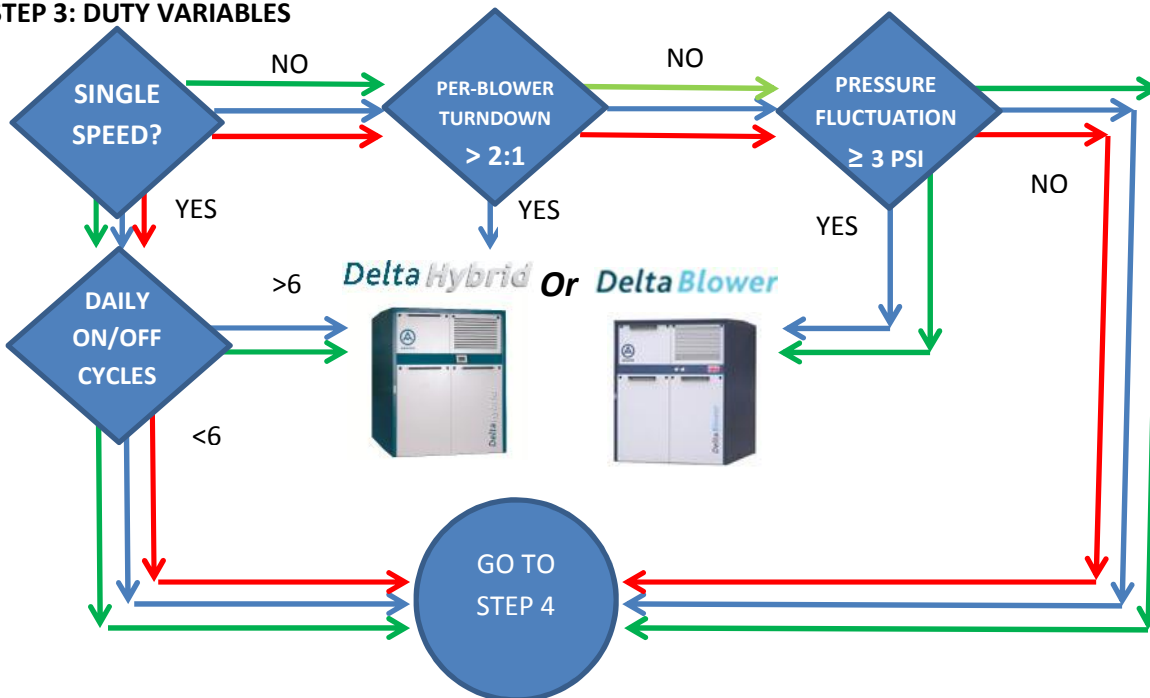
STEP 1: LIFE CYCLE EVALUATION



STEP 2: PRESSURE DIFFERENTIAL



STEP 3: DUTY VARIABLES

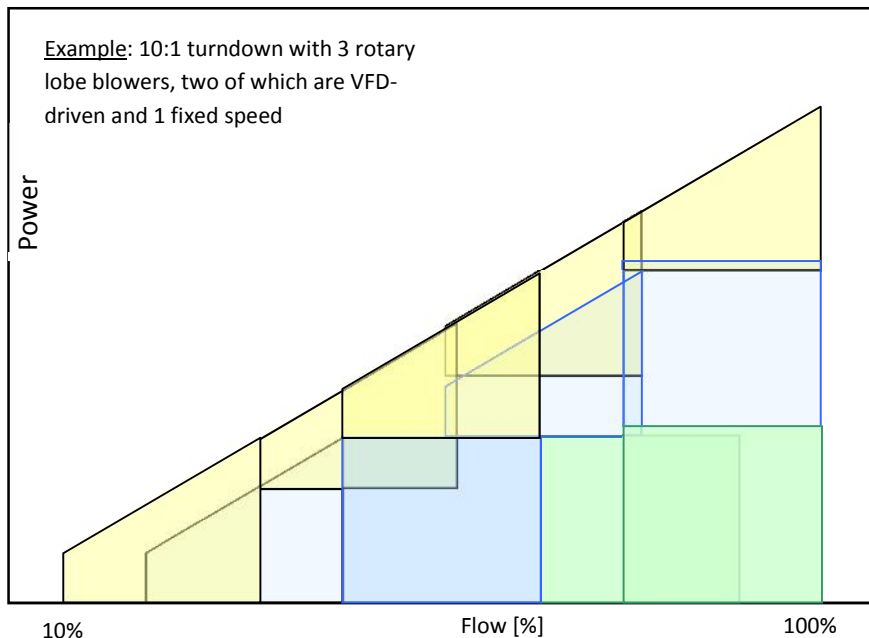


STEP 4: RIGHT SIZING OF INDIVIDUAL BLOWERS

The number of identical size blowers can easily be determined with the following formula:

$$n = \frac{S_{MAX}}{S_{min}} \times \frac{Q_{min}}{Q_{MAX}}$$

- Where:
- S_{MAX} = total maximum system flow
 - S_{min} = total minimum system flow
 - Q_{MAX} = Maximum flow of one blower
 - Q_{min} = Minimum flow of one blower, as long as Q_{min} is never < 45% of Q_{MAX} under hot day conditions


STEP 5: REPRESENTATIVE ENERGY USE CALCULATION

Use the table below as a guide to indicate the total annual power usage, based on the machine sizing in Step 4. Actual numbers are determined by actual system needs.

	% of Design Flow	T1 (°F)	% RH	P2	Annual Usage Factor (%)	Wire to Air kW
Hot Day Maximum						
Cold Day Minimum						
Summer Average						
Fall/Spring Average						

Contact an Application Specialist: (610) 380-0244 Website: www.aerzenusa.com