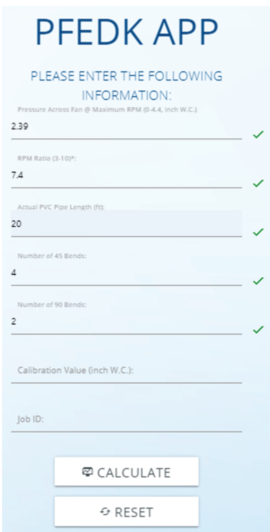
Item #: 498058
Rev Date: 2020-11-30

Quick User Guide – Fan Selection

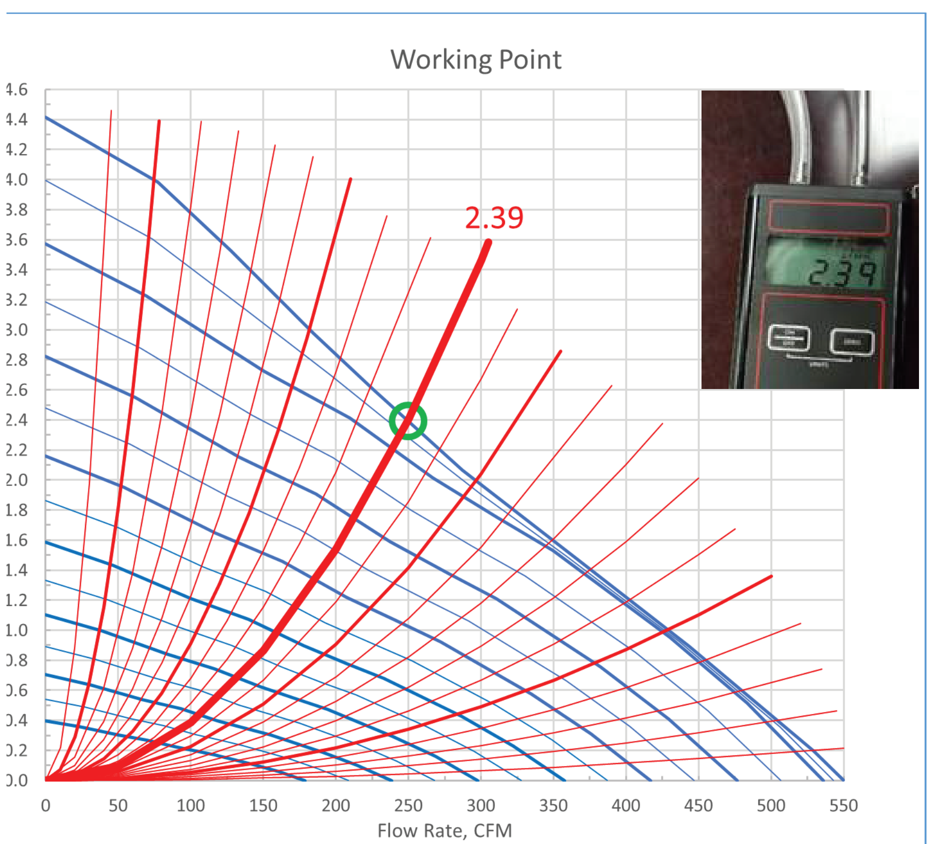
1. Connect and seal fan to suction pit
2. Connect pressure tubes to digital manometer and both couplers
3. If using flexible duct and exhausting to outside; read CALIBRATION also
4. Run fan at maximum RPM; digital display should show “10.0”
5. Record pressure drop on digital manometer; a number less than 4.4”
6. Check pressure field extension holes for good communication; adjust fan RPM as needed and record fan RPM ratio; a number between 3.0 to 10.0
7. Turn fan off



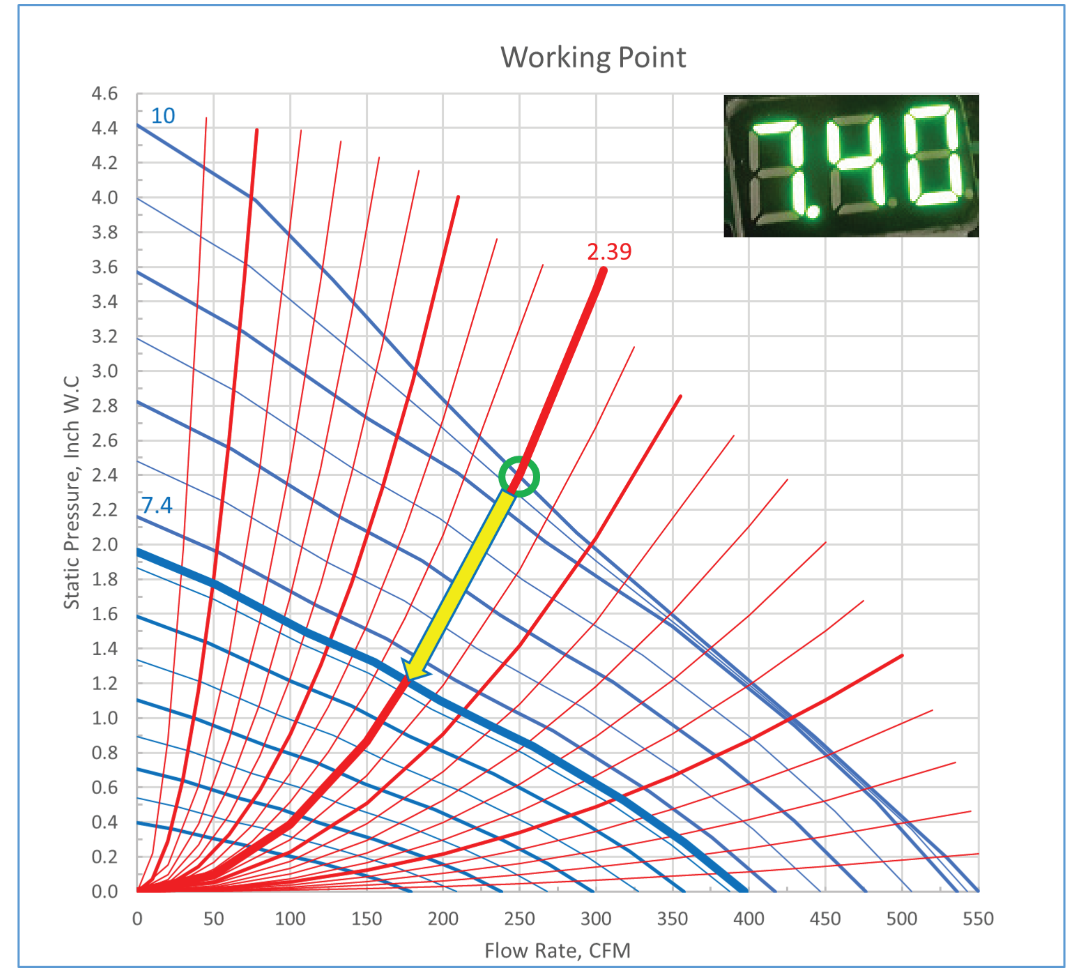
8. If using PFE Diagnostic Kit App
    a. Enter pressure drop across fan; 2.39 for this example
    b. Enter fan RPM Ratio; 7.4 for this example
    c. Enter PVC Pipe Length, 20 for this example
    d. Enter Number of 45 Bends, 4
    e. Enter Number of 90 Bends, 2
    f. Then press the Calculate button to see results.

You can access PFE Diagnostic Kit on-line App by typing the following link in your favorite phone or desktop browser; **pfedk.fantech.app**

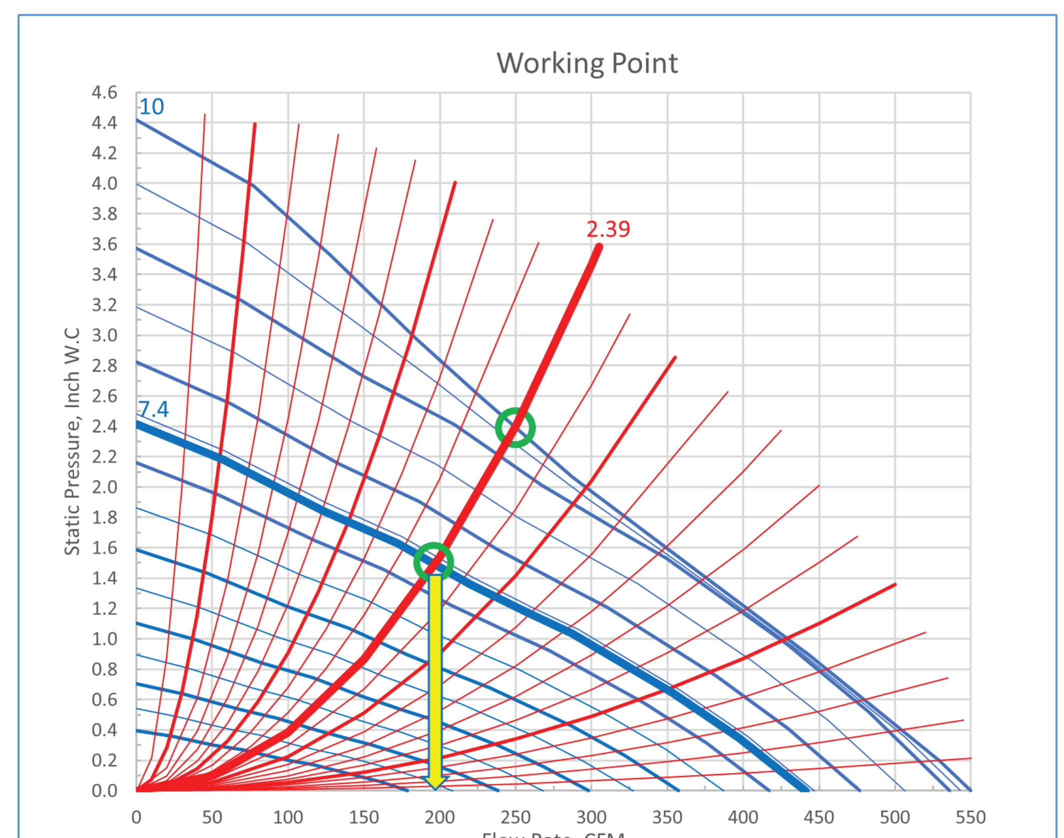
9. If not using PFE Diagnostic Kit App plot the following information:
    a. Plot digital manometer reading; green dot and thick red curve



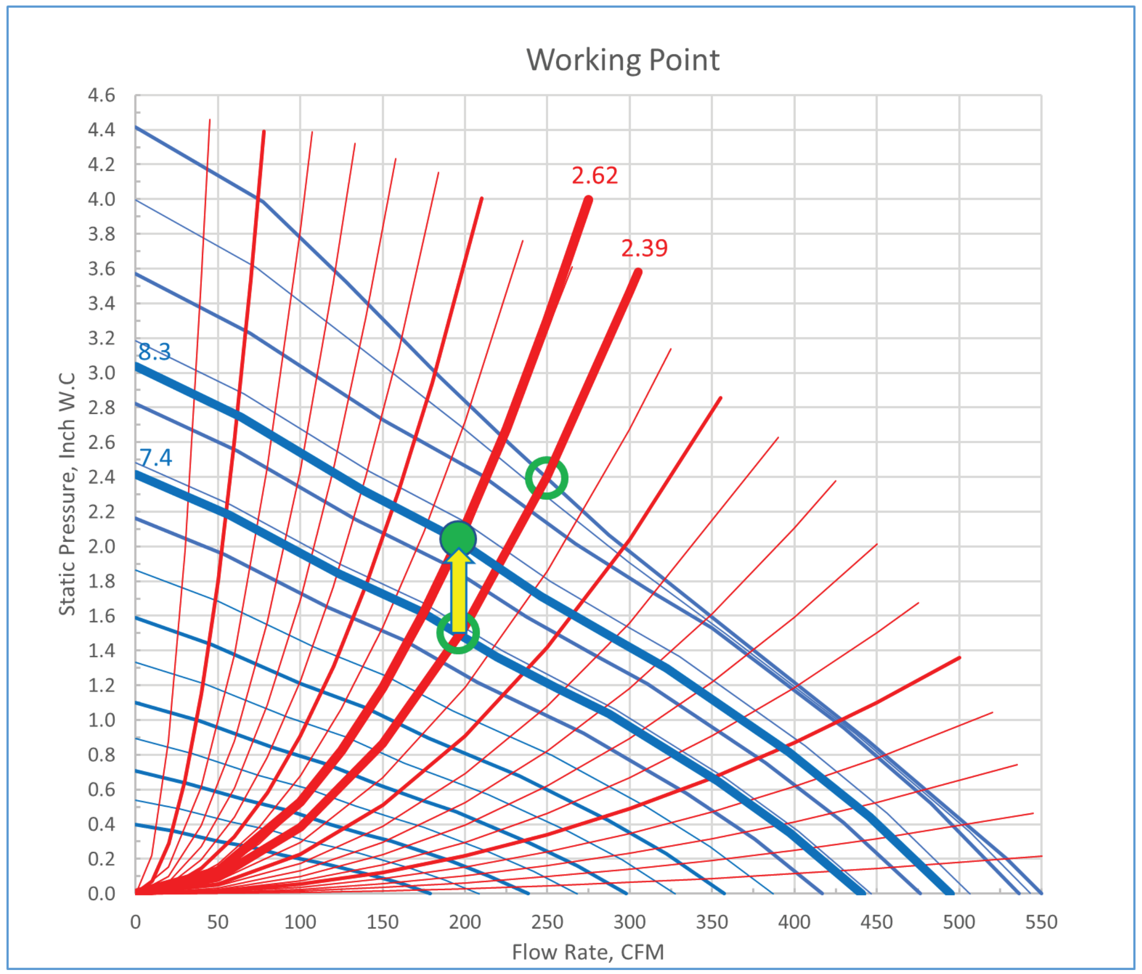
    b. Plot fan performance curve for RPM ratio; thick blue curve



    c. Obtain CFM, intersection of these two curves; yellow arrow

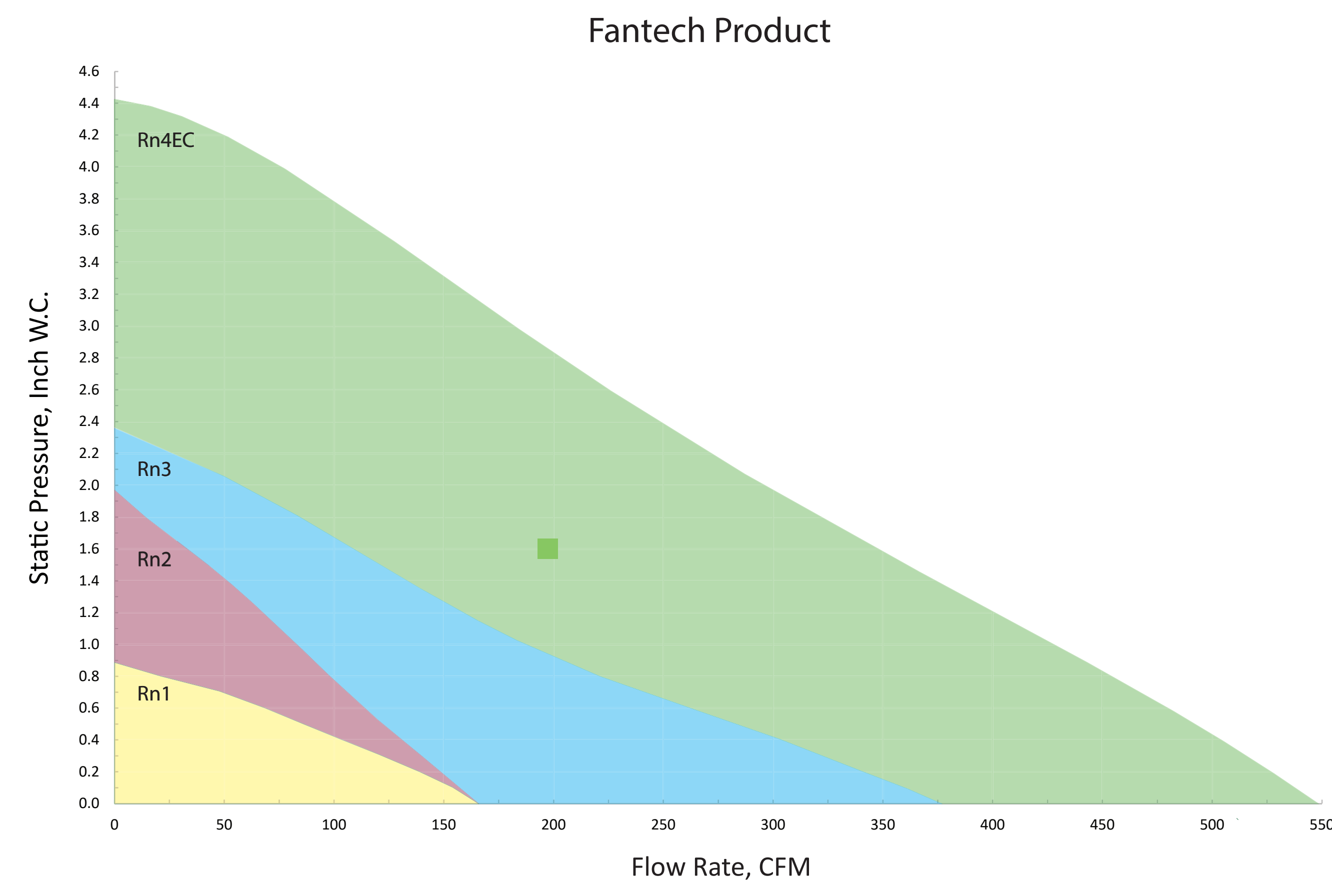


10. Use CFM value to calculate PVC pipe pressure drop as described in PVC PIPE PRESSURE DROP CALCULATION



11. Add PVC pipe pressure drop to Working Point value; green solid point

12. Overlay fan manufacturer performance curves over Working Point Graph and select a fan that performs equal or better than your system Working Point; Rn4 in this example



Notes:

- If an EC fan is selected, fan RPM can be set to RPM ratio; 8.3 in this example

Technical / Customer Support:
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