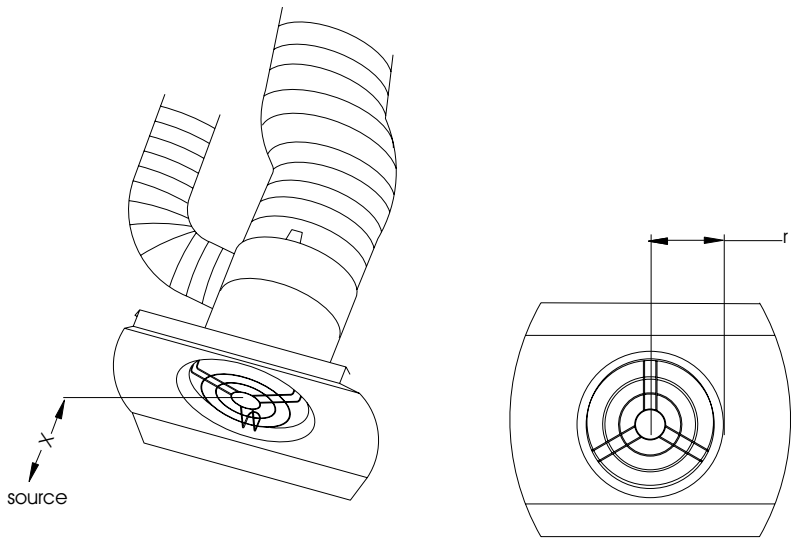


Capture Velocity

NEX Arm



AREA OF NEX ARM INLET

$$A = r \pi^2$$

$$d=6.25in., r=3.125in. = 0.26ft.$$

$$A = \pi (.26)^2 = .2123$$

FORMULA FOR CAPTURE VELOCITY

$$Q = .75V(10X^2 + A)$$

- Q = air flow (cfm)
- A = area of hood opening (square feet)
- V = centerline velocity at X distance from the hood (fpm)
- X = distance from the hood (ft.)

Example - 150 fpm at 9" from the hood

$$Q = .75V(10X^2 + A)$$

$$.75 \times 150 (10 \times .75 \times .75 + .2123)$$

$$112.5 \times 5.837$$

$$Q = 657 \text{ cfm}$$

| Capture Velocity | Distance From Hood (X) | CFM |
|------------------|------------------------|------|
| 100 FPM | 9" | 438 |
| 100 FPM | 12" | 765 |
| 125 FPM | 9" | 547 |
| 150 FPM | 12" | 1149 |

RECOMMENDED CAPTURE VELOCITY FOR DUST IS

100 - 200 fpm

Improving your workspace