



Example for:

$$X = 4" = 0.33 \text{ ft}^2$$

$$A = 3" \times 4.5" = 0.094 \text{ ft}^2$$

$V_s$	$Q, \text{cfm}$
1000	52
2000	100
3000	160
4000	210
5000	260
6000	310
7000	360
8000	420
9000	470
10000	520

$$Q = 0.043 V_s (10X^2 + A)$$

Minimum duct velocity = 3500 fpm

$$h_e = 0.25 V_{p_d}$$

$X$  = distance from hood face to center of wheel, ft

$A$  = hood face area,  $\text{ft}^2$

$V_s$  = Wheel Speed, surface feet per min. (SFM or SFPM)

$$= \pi(D/12) R$$

$D$  = diameter in inches

$R$  = rpm of grinding wheel

Reference 10.80.5



TITLE

SURFACE GRINDER

FIGURE

VS-80-12

DATE

02-91