



$Q = 350 \text{ cfm/ft of hood length}$
 Hood length = required working space
 $W = 24"$ maximum, if W greater than 24" see chapter 3
 Minimum duct velocity = 2000 fpm
 $h_e = 1.78 VP_s + 0.25 VP_d$

General ventilation, where local exhaust can not be used:

Rod, diam.	Cfm/welder
5/32	1000
3/16	1500
1/4	3500
3/8	4500

or

- A. For open areas, where welding fume can rise away from the breathing zone:
cfm required = 800 x lb/hour rod used
- B. For enclosed areas or positions where fume does not readily escape breathing zone:
cfm required = 1600 x lb/hour rod used

For toxic materials higher airflows are necessary and operator may require respiratory protection equipment.

Other types of hoods

Local exhaust: See VS-90-02

Booth: For design see VS-90-30

$Q = 100 \text{ cfm/ft}^2$ of face opening

MIG welding may require precise air flow control



TITLE

WELDING VENTILATION
BENCH HOOD

FIGURE

VS-90-01

DATE

1-91