General CFM Requirements for Woodworking Machines

Machine	Oneida Recommended CFM	ACGIH Recommended CFM	Duct Branch Diameter & Appropriate Hood Port Size
Band Saws		350 + 350 = 700	
10-14"	300-500		4"-5"
14-20"	400-700		5-6" Diameter Preferred
Large – up to 2" blade	700+		6" branch, 2x 4" ports
Belt Sanders			
6" wide	450-800	440 + 350 = 790	5-6" May require 2x ports, (top & bottom)
Disc Sanders			
12-18"	350-600	350 – 440	4"-5"
Drum Sanders			
Single Drum 12-24"	500-600	550	5"
Single Drum 36"	800-1000	790	6"
Dual Drum 24-36"	800-1400	1100 – 1500	6"-7"
Jointers			
6-8"	350-500		4"-5"
8-12"	450-700	350 – 440	5"
12+"	700-1000+	550	6"
Lathes			
Small	450-550		5"
Large	650-800		6"
Planers			
10-15"	500-600		5"
18-20"	700-800	785	6"
Radial Arm Saw		430 + 70 = 500	
10-12"	400-600		5", possibly split to hood behind saw and blade guard
12-16"	600-800		6", possibly split to hood behind saw and blade guard
Shapers			
Small ~3/4Hp	300-500		4"
1-1/2 – 3Hp	450-550		5"
Large, High HP, Feeders	550-800+		5-6"+
Table Saws			
10" cabinet or contractor	450-600	350(base) + 100 (top)	5"
10" + with top guard	450-800	350(base) + 100 (top) 440(base) + 350 (top) for large, self-fed	5"-6" branch, split to top and bottom of saw. Varies on top guard port size

The Oneida recommended values listed above are a synthesis of information from several sources: ACGIH (American Conference of Industrial Hygienists) recommendations from the 25th edition, Oneida's years of successful system design and customer feedback. Tools with very well designed hoods may require less CFM to clean properly. Conversely, tools with poorly designed hoods may require more CFM and still may not collect properly. Oneida's recommended values usually err to the conservative side to help ensure good collection even with marginally well designed hoods. Note that in a single operator shop it is desirable to provide the most possible CFM to whichever tool is in operation.