



HC10

Control of Wood Dust From Table Saws

HAZARD

Table saws have been found to create significant amounts of wood dust. Workers exposed to wood dusts have experienced a variety of adverse health effects such as eye and skin irritation, allergy, reduced lung function, asthma, and nasal cancer. Therefore, the National Institute for Occupational Safety and Health* (NIOSH) recommends limiting wood dust exposures to prevent these health problems.

CONTROLS

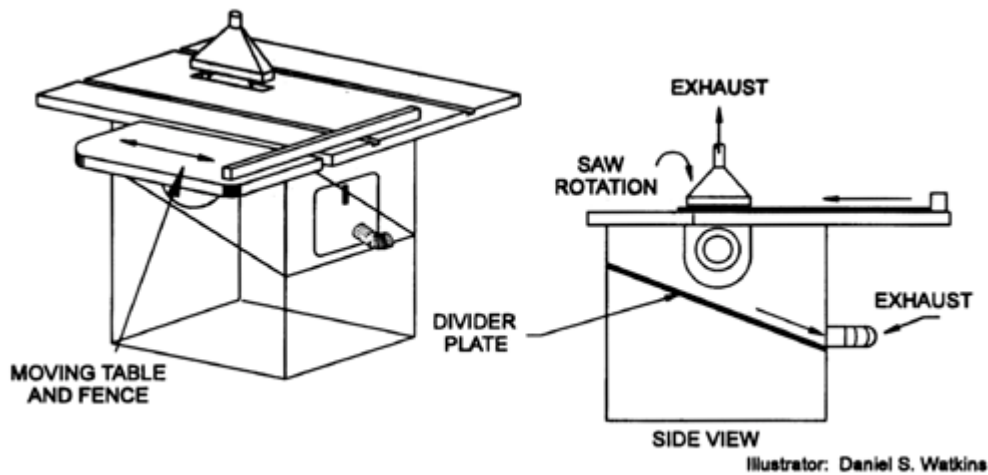
NIOSH researchers found that the wood dust generated by table saws is often poorly controlled. To address this problem, researchers designed and tested a control system for table saws that significantly reduced wood dust emissions.

LOCAL EXHAUST HOOD

Table saws are widely used in many types of woodworking operations. Although they are sometimes used only sporadically, they are found to generate significant amounts of dust. The traditional method of dust control for table saws is exhaust through the bottom of the table. This is often not adequate to control the large amounts of high speed dust that are generated by the saw blade. To better control the dust, NIOSH researchers added a Local Exhaust Hood to the table saw. (See ILLUSTRATION) Another modification involved the addition of a divider plate in the table base to increase the exhaust velocity and aid clean out. The table exhaust location was also relocated. The exhaust hood, when placed over the top of the blade saw, contains the dust as it is thrown from the saw blade. Laboratory testing indicates that the exhaust hood reduces wood dust emissions by greater than 90 percent when it is installed on a typical table saw. The hood is designed so that it will not interfere with the operator's activities, is easy to install and maintain, and is inexpensive to operate. This dust control device is not currently commercially available. Call NIOSH for more information.

*NIOSH is the Federal agency responsible for conducting research and making recommendations for preventing work-related illness and injuries. HAZARD CONTROLS are based on research studies that show reduced worker exposure to hazardous agents or activities.

**ILLUSTRATION:
AUXILIARY EXHAUST HOOD FOR TABLE SAWS**



For More Information

To obtain more information about controlling this hazard, or for information on other occupational health and safety issues, call NIOSH at:

1-800-35-NIOSH (1-800-356-4674)

A technical article *Controlling Wood Dust from Table Saws* has been written on this subject.

This document is one in a series of seven HAZARD CONTROLS concerning wood dust control techniques listed below that are available free upon request from NIOSH:

- HC4 Control of Wood Dust from Horizontal Belt Sanders
- HC5 Control of Wood Dust from Shapers
- HC6 Control of Wood Dust from Automated Routers
- HC7 Control of Wood Dust from Large Diameter Disc Sanders
- HC8 Control of Wood Dust from Random Orbital Hand Sanders
- HC9 Control of Wood Dust from Orbital Hand Sanders
- HC10 Control of Wood Dust from Table Saws

Acknowledgments

The principal contributors to this HAZARD CONTROLS are Jennifer L. Topmiller, Division of Physical Sciences and Engineering, and Jerome P. Flesch, Education and Information Division, NIOSH.

This document is in the public domain and may be freely copied or reprinted. NIOSH encourages all readers of this *HAZARD CONTROLS* to make it available to all interested employers and workers.

DHHS (NIOSH) Publication No. 96-127