Inter Company Correspondence

File Code

Date: July 27, 1972

To— Name	Department	Division	Plant/Office	CIMS Number
S. C. Enders	Mgr. - Friction Products'	Chemical	Trenton Chemical	
From— Name	**Department**	**Division**	**Plant/Office**	**CIMS Number**
G. A. Sattelmeier	Industrial Hygiene	Personnel	Chrysler Center	

Subject: Asbestos

On July 11, 1972, a study was made at the Friction Materials Building to evaluate employee exposure to asbestos in the Finance Department, Lunch Room and Laboratories. Results of all these samples were below the allowable 5 fibers per milliliter threshold limit value for asbestos. Results appear on the attached data sheet.

Several of the tools used in the Product Development Laboratory need improved ventilation. The ventilation for the equipment in this laboratory and also for the Aampco brake shoe grinder in the garage discharge filtered air into the plant. This type of ventilation does not meet the requirements of the State Health Department. The exhaust air from this equipment must be filtered and discharged to the outside in such a manner as to prevent recirculation.

We recommend that the ventilation system for the belt sander, disc grinder, band saw, table saw, radial arm saw, and the Aampco brake shoe grinder be improved in accordance with the ventilation designs shown on the attachments. In addition, we recommend that an air-line respirator type NPSP-226 be provided whenever bond endurance tests are run in the dynamometer test room.

G. A. Sattelmeier
Industrial Hygienist

hm
Attachments

cc: W. F. Bavinger
R. F. Bowers
W. T. Diehl
D. L. Eschelbach
R. T. Gaskill
T. J. Lang
E. R. Lombard
R. D. McIntosh, M. D.
F. E. Repucci
E. F. Ruiz, M. D.
J. G. Shepherd
N. A. Trombley

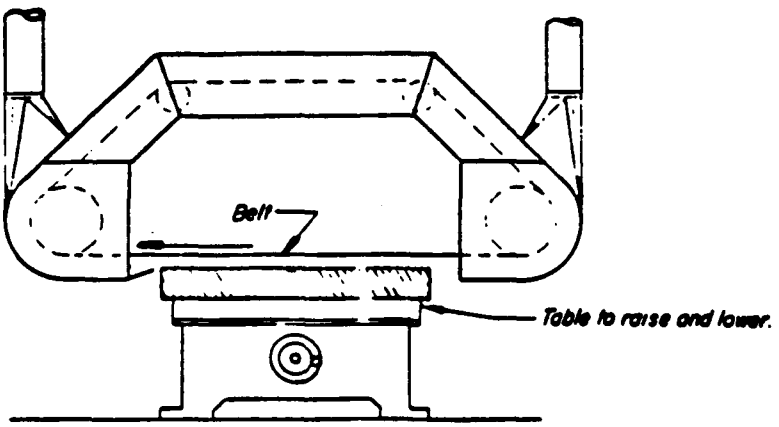
EXHIBIT

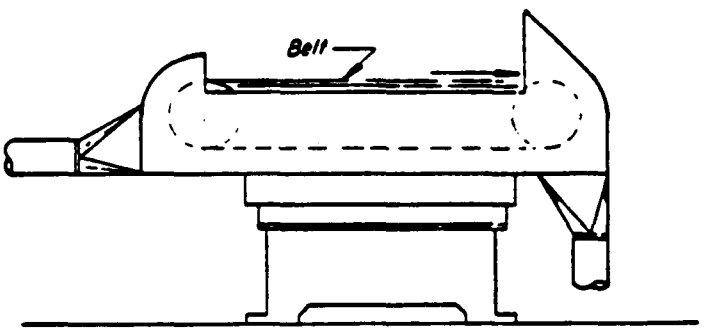
Data Sheet
Trenton Chemical
7/11/77

Asbestos

Location	Concentration in fibers/ml
Threshold Limit Value	5
Finance Department	
Office area - five feet from doorway to plant	0.7
Production employee's lunch room	0.8
Dynamometer test room, operating B side, running general endurance test on brakes	0.5

The above samples were collected on 0.80 micrometer cellulose ester filters using an MSA Personal Sampler.





HORIZONTAL BELT SANDERS

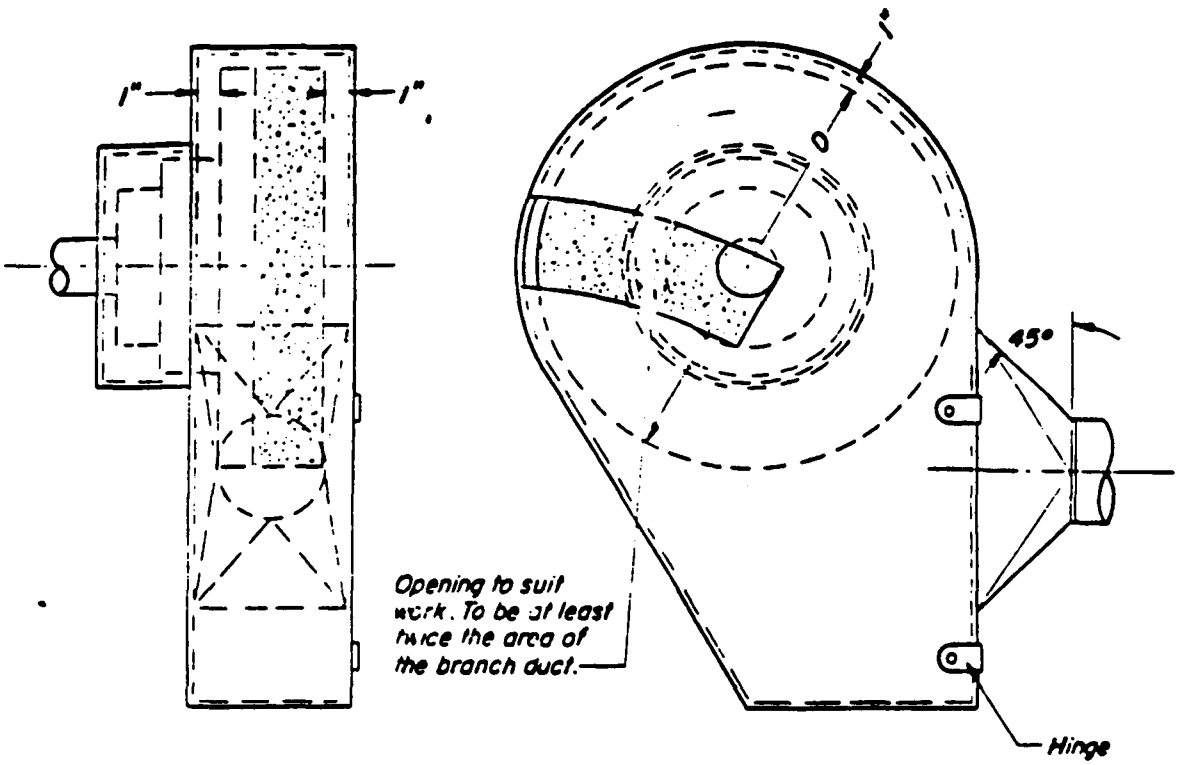
Belt width, inches	Exhaust volume, cfm		
	Head end	Tail end	Total
Up to 6 incl	440	350	790
over 6 to 9 incl	550	350	900
over 9 to 14 incl	800	440	1240
over 14	1100	550	1650

Duct velocity = 3500 fpm
Entry losses = 0.40 VP for tapered take-off

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HORIZONTAL BELT SANDERS

DATE 1-64 | VS-702



Disc diam., inches	Exhaust volume, cfm
Up to 12	220
over 12 to 19	390
over 19 to 30	610
over 30 to 36	880

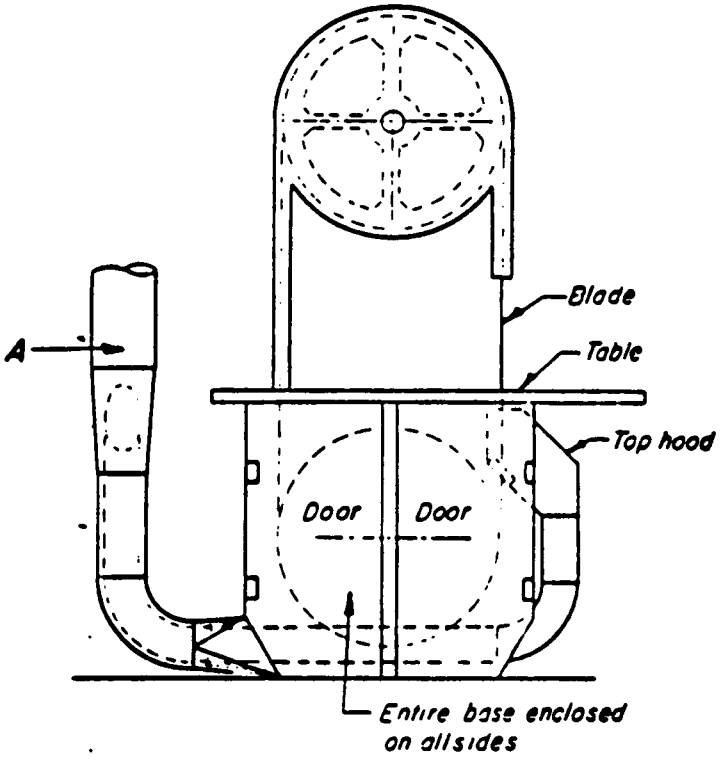
Minimum duct velocity = 4500 fpm branch, 3500 fpm main.
Entry loss = 0.65 VP for straight take-off.
= 0.45 VP for tapered take-off.

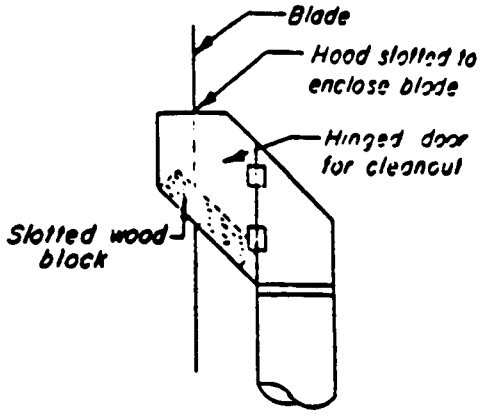
Note: If best practical hood is a poor enclosure, increase exhaust volume accordingly.

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HORIZONTAL SINGLE-SPINDLE DISC GRINDER

DATE	1-61	VS-409





TOP HOOD DETAIL

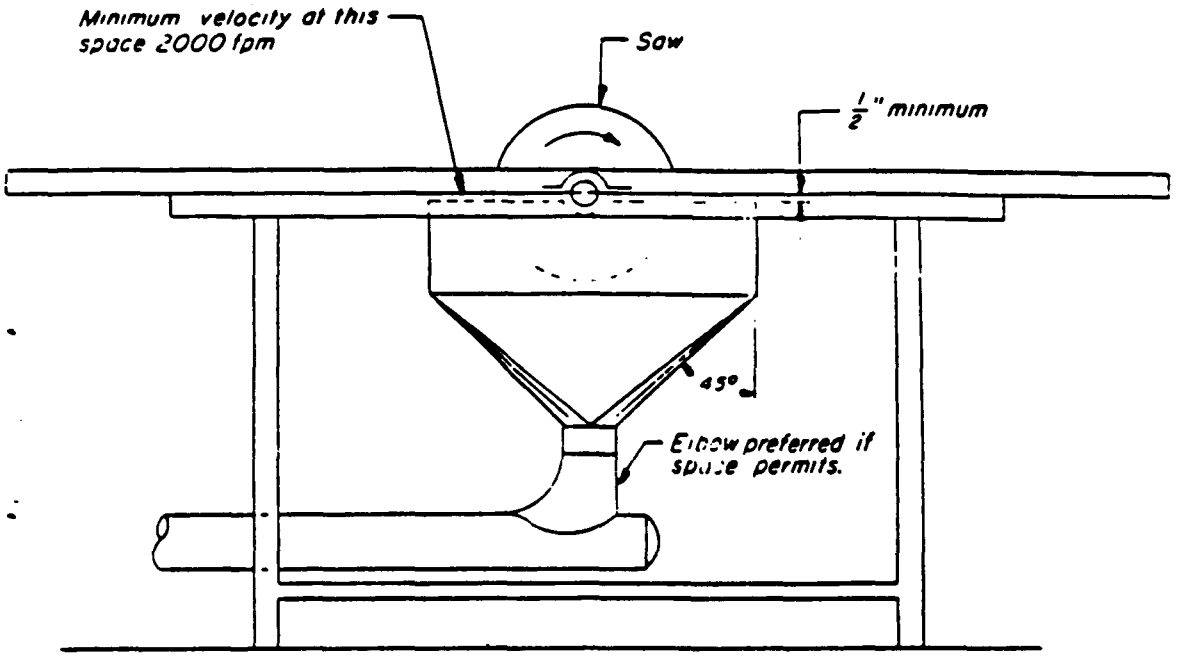
Blade width, inches	Exhaust volume, cfm		
	Bottom	Top	Total
Up to 2	350	350	700
over 2 to 3	350	550	900
over 3 to 4	550	800	1350
over 4 to 6	550	1100	1650
over 6 to 9	550	1400	1950

Duct velocity = 3500 fpm
Entry loss = 1.75 VP in duct riser (Point A)

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BAND SAW

DATE 1-66 | VS-706



Table, rip, mitre and variety saws.

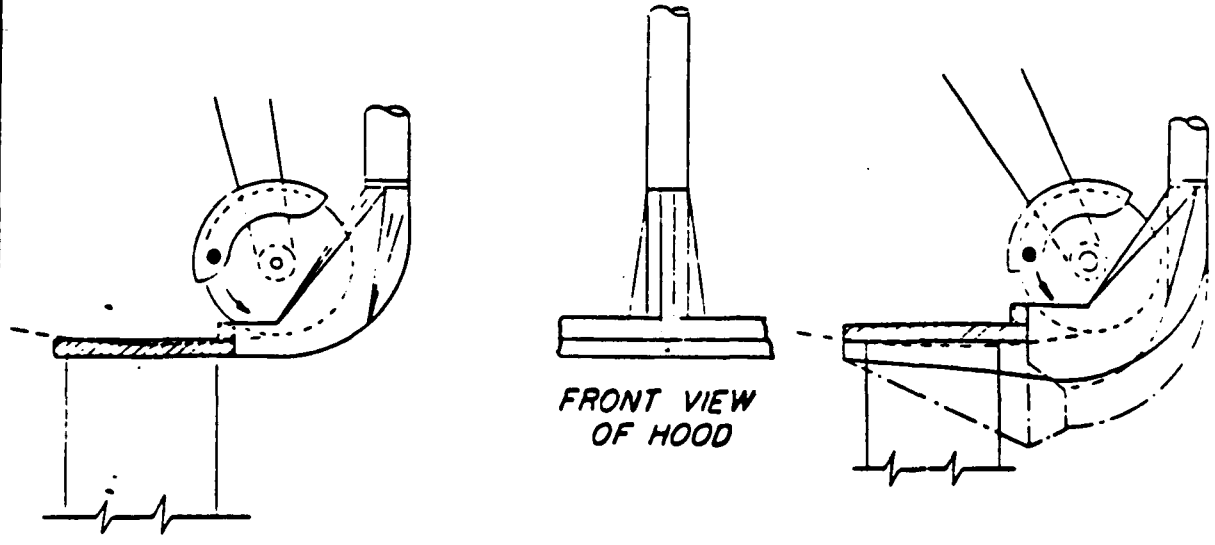
Saw diameter, inches	Exhaust volume, cfm
Up to 16 incl.	350
over 16 to 24 incl.	440
over 24	550
variety with dado	550

Duct velocity = 3500 fpm
Entry loss = 1.0 slot VP + 0.25 duct VP

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TABLE SAW

DATE 1-64 | VS-708



TYPE HOOD WHERE TABLE IS NOT CUT THRU

FRONT VIEW OF HOOD

TYPE HOOD WHERE TABLE IS CUT THRU

Saw diameter, inches	Exhaust volume, cfm
Up to 20 incl	350
over 20	440

Duct velocity = 3500 fpm
Entry loss = 1.78 slot VP + 0.25 duct VP

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SWING SAWS

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