

D. E. Millier

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W. T. Donahue

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DUST CONTROL - SMALL TOOLS
YOUR LETTER, 11/5/73

An extensive survey has been conducted on small tools with regard to dust control as used in the fabrication of the following Asbestos' containing products:

TRANSITE Pipe Products
FIBREBOARD Type Products
MARINITE Products
Asbestos Panels TRANSITOP Type
Ace Panels - Asbestos Cement Extrusions
Dry Wall Joint Cements

Contacts were made with the following companies either through the marketing manager or the sales manager with regard to dust control on their small tools, and in all cases, except one, the only dust control equipment was on their small belt sanders:

Millers Falls Tools
Greenfield, Massachusetts
Mr. Shaw, Tool Gen. Mgr.

Rockwell Manufacturing Company
Pittsburgh, Pennsylvania
Mr. H. Williams, Prod. Mgr.
Mr. Callahan, Sales Manager

Milwaukee Tools
Brookfield, Wisconsin
Mr. Dick Randet, V. P.
for Marketing
Mr. Robert Youngquist
Mr. James Bassener

Robert Bosch Corporation
Broadview, Illinois
Mr. E. Cheshire, V. P.
Mr. Don Smith, Nat'l Sales Mgr.

Skil Corporation
Chicago, Illinois
Mr. William Foote, Marketing Mgr.

Black & Decker
Baltimore, Maryland
Mr. Bennett, Sales
Mr. Dick Campbell,
Marketing
Mr. Don Ellison,
Engineering

Pilot Manufacturing Company
Torrance, California
Mr. J. Rawlins, President

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In addition to the above, the following companies in exhaust systems for welding and sand blasting were contacted. These companies make suction systems but none are attached to tools:

Pullman Ind. Vac. Cleaner	Hobart Manufacturing Company
Malden, Massachusetts	Troy, Ohio
Mr. Ross	Mr. Jack Force

Empire Abrasive Equip. Corp.
Philadelphia, Pennsylvania

I, also, have contacted Symons Corporation in Des Plaines, Illinois, who make a vacuum grinder for joints in concrete walls, and Kett Manufacturing Company of Cincinnati who have a fiber glass sheet saw with a dust collector but is only usable for material up to about one-half inch thick. The Symons' joint grinder uses a Carbide tool and mills the rough joints in concrete.

Dr. Paul Larle has been working on this project for some time and has some imported equipment from England for dust control on a B & D saw and for a portable drill. In addition, he has put a vacuum pick-up on a large portable "Skil" type saw for test purposes.

Based on his tests to date and the tests conducted by the Asbestos Research Council in England, we find the following:

CUTTING OPERATIONS

Without Exhaust

Using hand, portable power and radial type saws without dust extraction gives dust counts from 20 to 200 fibers per cc, depending on equipment type used and product being cut.

With Exhaust

Using hand, portable power and radial bench saws with efficient dust extraction gives dust contents as low as below 5 fibers per cc, depending on equipment type used and product being cut. This requires a good high-vacuum type exhausting equipment.

With Exhaust and Wet Cutting

Using a good exhaust system and wet cutting, it appears less than 2 fibers per cc fiber count is obtainable. However, wet cutting is banned in California and has possible shock hazards.

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DRILLING OPERATIONSWithout Exhaust

Drilling operations generate much less dust without exhausts and probably run mainly less than 5 cc for most operations.

With Exhaust

Drilling with efficient exhaust systems should readily meet the less than 2 fiber per cc count under dry conditions without any water sprays.

SANDING OPERATIONS

Many portable power sanders are available with dust collectors, however, very little sanding is done in the field.

The only operations requiring dry sanding in any volume is in gypsum dry wall applications, mainly in the Eastern U. S., as in the Western U. S. a textured spray finish is popular which requires minimum sanding.

In sanding dry wall joints, the usual sanding is manual, using sand paper and a block, however, the new joint cements which are ready-mixed require much less sanding. In many cases, just a touching off of high spots is required. There is a great labor turnover in this industry so total exposure is probably minimized.

We are continuing to work on this problem and have additional equipment to investigate.

It is highly possible that we might have to recommend parts from various manufacturers and then interest some manufacturer in assembling a complete unit to our specification.

Our survey work is almost complete and we are putting together some of our recommendations on equipment to solve these dust problems generated by use of small tools.

William T. Donahue

