FILE NAME: AMMCO (AMC)

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National Loss Control Service Corporation

Long Grove, Illinois 60049
Telephone: 312-540-2400

February 7, 1973

Mr. Leonard Morrison
Ammco Tool Company
2100 Commonwealth
North Chicago, Illinois

Dear Mr. Morrison:

Enclosed is the report on the asbestos study conducted in your plant on January 30, 1973.

I believe the report is in the general format that we discussed. If you have any questions concerning this report, please feel free to contact us.

Let me thank you again for all of your help on the day of my visit.

Sincerely yours,

David M. Gioiello, Jr.

David M. Gioiello, Jr.
Environmental Consultant

DMG/bls
Enc.

(E)

ASBESTOS STUDY

FOR

AMMCO TOOLS, INC.

NORTH CHICAGO, ILLINOIS

NATIONAL LOSS CONTROL SERVICE CORPORATION

Long Grove, Illinois 60049
Telephone (312) 540-2400

ASBESTOS STUDY

FOR

AMMCO TOOLS, INC.

NORTH CHICAGO, ILLINOIS

INTRODUCTION

This report covers the results of an asbestos study conducted on January 30, 1973 to evaluate worker exposure to asbestos while operating the Ammco Model 8000 "Safe-Arc" Brake Shoe Grinder.

SUMMARY OF RESULTS

The results of this study indicate a worker operating the Model 8000 "Safe-Arc" Brake Shoe Grinder had an asbestos exposure within the excursion value specified by OSHA. Due to the normal intermittent operation of the grinder, the daily average asbestos exposure should be well within OSHA specifications. This should hold true for all similar Ammco grinders if they are operated following the manufacturer's recommendations, and are equipped with either the large or small bag dust collection system with the standard neck provided by the manufacturer. This study applies only to brake shoe grinders manufactured by Ammco.

RECOMMENDATIONS

None.

EQUIPMENT AND STUDY PROCEDURES

This study was conducted at the Ammco plant in North Chicago, Illinois. Mr. Leonard Morrison operated the grinder during all tests. Also present were Mr. Leo C. Bogaerts and Mr. Bruno Canale.

The grinder was operated at 3450 rpm, the standard operating rate. The grinder was operated in accordance with the manufacturer's recommended procedures. Asbestos samples were taken during use of both the large and small bag dust collection systems. The brake shoes were manufactured by Maremont and were Model #28-1994, bonded brake shoes.

The asbestos fibers were collected on membrane filters. Air was drawn through the filters at a rate of 2.0 liters per minute. The top of the filter cassette was removed and the open face pointed downward.

The air samples were taken in the breathing zone of Leonard Morrison while he operated the grinder. Sampling times were selected to correspond with the time required for normal use of the grinder in completing a brake job.

Asbestos counting of samples was done in the NATLSCO laboratory by viewing the samples under a phase contrast microscope and counting the fibers. A minimum of forty fields were counted for each sample.

DISCUSSION

OSHA has set a 8-hour time weighted average limit for asbestos not to exceed 5 fibers longer than 5 micrometers per cubic centimeter of air. No employee shall be exposed at any time to airborne concentrations of asbestos in excess of 10 fibers longer than 5 micrometers per cubic centimeter of air.

The results of this study indicate that a worker operating the Ammco Model 8000 "Safe-Arc" Brake Shoe Grinder following the manufacturer's recommendations, and with either the large or small bag dust collection system with the standard neck, will not be exposed to asbestos concentrations exceeding the OSHA limits.

Respectfully submitted,

David M Gioiello Jr

David M. Gioiello, Jr.
Environmental Consultant

ASBESTOS STUDY

AMMCO TOOL COMPANY

JANUARY 30, 1973

Description of Operation	Sample Time Start/Stop	Concentration fibers/ml
Large bag, standard neck 4 shoes ground during study Breathing zone sample	9:20/9:23	2.2
Large bag, ½ full, standard neck, 4 shoes ground Breathing zone sample	10:40/10:43	5.1
Large bag, standard neck 16 shoes ground Breathing zone sample	11:43/11:49	3.26

ASBESTOS STUDY

AMMCO TOOL COMPANY

JANUARY 30, 1973

Description of Operation	Sample Time Start/Stop	Concentration fibers/ml
Small bag, standard neck 4 shoes ground Breathing zone sample	9:10/9:13	3.6
Small bag, standard neck, motor stall, 1 set of shoes ground to bare metal Breathing zone sample	10:55/10:58	5.1

ASBESTOS STUDY

AMMCO TOOL COMPANY

JANUARY 30, 1973

Description of Operation	Sample Time Start/Stop	Concentration fibers/ml
Prototype large dust collector, with disposable bag, 4 shoes ground, breathing zone sample	9:00/9:03	9.4
Prototype collector, 8 shoes destroyed, breathing zone sample	11:13/11:28	2.2

ASBESTOS STUDY

AMMCO TOOL COMPANY

JANUARY 30, 1973

Description of Operator	Sample Time Start/Stop	Concentration fibers/ml
Small bag, standard neck 4 shoes ground Sample collected at the fill line of the bag, 1 inch from the bag itself, shoes ground for 1½ minutes	10:27/10:30	15.2
Large bag, standard neck, 4 shoes ground Sample collected at the fill line of the bag, 1 inch from the bag itself, shoes ground for 1½ minutes	10:33/10:36	50.2
Prototype large dust collector 4 shoes ground Sample collected one-half way up to top of bag, 2 inches from bag itself, shoes ground for 1½ minutes	11:08/11:11	2.2

ASBESTOS STUDY

AMMCO TOOL COMPANY

JANUARY 30, 1973

Description of Operation	Sample Time Start/Stop	Concentration fibers/ml
Large bag, experimental neck with hose clamp, 4 shoes ground Breathing zone sample	9:27/9:30	35.4
Small bag, experimental neck with hose clamp, 4 shoes ground Breathing zone sample	9:38/9:41	5.1

ASBESTOS STUDY

AMMCO TOOL COMPANY

JANUARY 30, 1973

Description of Operation	Sample Time Start/Stop	Concentration fibers/ml
Large bag, experimental dust seal (external), 4 shoes ground Breathing zone sample	9:56/9:58:45	7.1
Standard bag, experimental dust seal (external) 4 shoes ground Breathing zone sample	10:14/10:17	6.5

ASBESTOS STUDY

AMMCO TOOL COMPANY

JANUARY 30, 1973

Description of Operation	Sample Time Start/Stop	Concentration fibers/ml
Background sample taken on the table approximately in the middle of the room after several tests had been run	9:32/9:35	0.7

Two filters subjected to the same handling were turned in as blanks.

12/3/77

January –

2 days –

Approx 20-30 tests

Bob Hanrahan will call back when ready to do more testing