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Cement Asbestos Products Company

Ragland, Alabama

FROM: W. H. Beasley October 4, 1971

TO: Stanley Mooney

SUBJECT: August 18, 1971 Safety Inspection

Copy to: W. R. Bond, H. C. Davis, L. C. McNeill, S. D. Weaver, file.

Accomplishments on the following items are:

1. Fire hose house entrance cleared.
2. "No Smoking" signs put on oil tanks.
3. Oxygen cylinders secured.
4. Insulating mats have been placed where needed.
6. V-belt drive guard installed.
7. Dust collector pipe connected.
9. Lights are being replaced.
10. Ladder made and installed.
12. Wood saw table repaired.
13. Glass shields on grinders installed.
14. Housekeeping in shop area is being worked on.
15. Junction boxes have been covered.
16. All electric wiring to machines have been checked.
17. Protruding wiring corrected.

18. Instructed to replace any guards removed.

19. Switch boxes covered and closed.

21. Door area closed near the wood saw.

23. Horns on all fork trucks put in order.

24. Added new type dust bag to cement silo. Also, repaired dust collectors on cement and silica silos.

A follow up report will be made when items 5, 8, 11, 20 and 22 are completed.

W. T. B. ...

Dust Collection General Specifications

1. GENERAL

1.1 Scope of Work

This work includes the furnishing and erection of the dust filter, fan, motor, screw conveyors, airlock, relocate existing blower and motor and the fabrication and installation of the mezzanine and all sheet metal ductwork, fittings, and transition pieces necessary for the dust collection system described on the drawings and in the specifications, unless such items are specifically excluded. Installation of the ductwork includes supporting such ductwork from structural steel, the building structure, in a manner acceptable to CAPCO.

1.2 Items Not Included

CAPCO to furnish and install at no expense to contractor, the following:

All Concrete Work

All Electrical Work, including controls

Compressed air supply piping to dust filter.

Pick up hoods on machines (If hoods are not existing CAPCO will negotitate additional cost if furnished by contractor).

~~Bagging station and equipment below the reversible screw conveyor.~~

1.3 Shop and Working Drawings

The drawings furnished by CAPCO are general layout drawings. Contractor is responsible for preparation of detailed Shop and Working Drawings as necessary. Such detail drawings should be submitted to CAPCO in duplicate prior to beginning of fabrication and installation. It is the Contractor's responsibility to field check dimensions shown on his working drawings prior to fabrication and installation.

2. MATERIALS

2.1 Ducts shall be constructed of Carbon Steel in the following U.S. Standard gage thicknesses:

Diameter	Straight Duct	Flat Back Elbows & Bends
3" thru 8"	16	14 & 3/16" *
9" thru 18"	14	12 & 3/16" *
19" thru 24"	12	10 & 3/16" *
25" and above	10	10 & 3/16" *

*3/16" thickness A.R. steel on replaceable backs. Pipe shall be primed with rust preventive primer on the outside with a finish coat of green enamel.

2.2 Contractor may furnish longitudinally welded ductwork in the above gages. Longitudinal welds shall be straight butt welded.

2.3 Blast gates to adjust air flow shall be furnished where called for on the drawings.

2.4 Unless otherwise stipulated on the drawings, dust pick-up ducts shall be connected to the pick-up point on equipment or hoods with a material handling, black abrasion resistant, wire reinforced hose. This sleeve shall be fastened to the ducts with two worm-screw stainless steel clamp bands (one at each end).

3. CONSTRUCTION

3.1 Duct sections and fittings may be connected by butt-welding or by bolted flanges. If Contractor chooses to use flanged connections, suitable caulking must be installed at all such connections.

3.2 Elbows will have a 2-diameter centerline radius where space permits.

3.3 All welds shall be of good workmanship, free from spatter and pits, and uniform.

3.4 All branch ducts are to enter mains at an angle not greater than 30^{0}.

4. INSTALLATION

4.1 Ductwork up to 8" diameter shall be supported at 12'0" maximum centers;

ductwork over 8" diameter will be supported at 20'0" maximum centers.

4.1.1 Ductwork support may be carbon steel rods and angles, coated with primer and a finish coat of green enamel. Supports must be designed to avoid pockets or ledges which could gather dust and pose a sanitation problem. Supports must be capable of supporting the duct assuming the duct is half full of dust with a density of ___ pounds per cubic foot.

4.2 Ducts shall be connected to the inlet of fan with a draw band sleeve and to the discharge with a flanged connection.

4.5 Where necessary, the Contractor shall install holes in roof and floor grating only with the approval of the Owner. Ducts passing through roof are to be flashed weather tight.

5. SPECIAL PRECAUTIONS

5.1 Since the installation of much of the ductwork will involve working in areas where other personnel will be working, precautions must be taken to prevent damage to the building and equipment or injury to personnel. All work in the areas where dust collection ductwork is to be installed will be coordinated by CAPCO.

5.2 Extreme care must be taken during all welding operations to prevent damage to equipment or injury to personnel. Combustibles must be removed prior to welding.

EQUIPMENT SPECIFICATION

Filter Equipment to handle 26000 (28800 future) CFM of air containing Cement Asbestos dust. Air to cloth ratio of 5.56 to 1.

Item 1 - One (1) MAC Dust Filter, Model 96 AVW 352, Style III 4673 sq. ft. of cloth. OR EQUAL

NOTE: A 110 volt electrical source and a 52.6 SCFM supply of 100 PSI clean, dry air are required.

Style III includes clean air plenum with mounting flange at the tube sheet, flanged air outlet, internal air piping, compressed air header, aluminum venturi nozzles, aluminum bag cups, mild steel bag cages, stainless steel bag clamps, air valves, adjustable timer and air pressure gauge, 16 oz. std. polyester dacron filter bags. Timer and solenoid valves are mounted and pre-wired in NEMA 12 enclosure mounted on compressed air header. Welded bag housing flanged to plenum and mounting flange at base of bag housing, 3 special entry plenum's with flanged high entry air inlet, and bolted access doors. 10" wide walkway grating through center of filter. 60° hopper with 9" diameter discharge auger, auger driven from airlock by roller chain drive, and pressure differential gauge are included. Structural steel legs for Style III to support filter and airlock 12'5" above floor inside building.

Item 2 - One (1) MAC Rotary Airlock W20 x 15, 4 vane drop thru with sealed bearings, 3 HP, TEFC, 3-60-230/460 volt motor, shaft mounted reducer V-belt drive, guard and motor base. OR EQUAL

Item 3 - One (1) MAC Screw Conveyor 12 dia. x 20 long, U-Trough construction std. CEMA specification. Flanged inlets and flanged outlets, and including cover, shaft mounted reducer V-belt drive, guard and motor base, complete with 5 HP, TEFC, 1800 RPM, 3-60-230/460 volt motor. (Note: CAPCO to furnish reversing starter to permit the conveyor to be reversed electrically.)

Item 4 - One (1) Twin City 933 RBR OR EQUAL Heavy Duty exhaust fan with V-belt drive, OSHA guard and unitary base complete with Exhaust fan motor 150 HP, TEFC, 1800 RPM, 3-60-460 volt.

Rapid Mixing Area – Duct Design

