

COMPANY CORRESPONDENCE

PLAINTIFF'S
EXHIBIT

BX-107a

TO DIV: Specialty Chemicals

FROM DIV: Specialty Chemicals

LOCATION: Morristown

LOCATION: Buffalo Dye Plant

ATTN OF: Mr. R. Sobel

DATE: May 31, 1972

Director of Environmental & Process Technology

SUBJECT:

INDUSTRIAL HYGIENE - ASBESTOS

1. Please note attached copies of newly issued Corporate Engineering standards for application of asbestos fiber insulation to high-temperature equipment.
2. In my opinion, some reference to OSHA standards and the need for monitoring and personnel protection should be included in the standard. The attendant costs should be part of engineering estimate.
3. Reference to the hazard and its control in our Corporate standard would constitute evidence that our engineers are fully cognizant of the asbestos problem.

K. H. Ferber

K. H. Ferber
Manager of Environmental Control

KHF:dmw

Encl.

cc: Mr. G. Hero
Mr. W. Ferguson ✓

JUN 2 1972



CORPORATE ENGINEERING STANDARDS

ISSUED

MAY 1972

REVISED

INSULATION, EQUIPMENT, TO 900°F -
ASBESTOS FIBER, SPRAY ON -
MATERIAL AND APPLICATION

EF

PAGE
1

1. SCOPE

This Standard covers the material for and the application of spray-on type asbestos fiber insulation intended for use on equipment, vessels and large ducts at temperatures to 900°F.

2. REFERENCE

The following Corporate Engineering Dep't. (CED) Standards are a part of this Standard:

- EF 100-1 Insulation, General Conditions
- EF 225-2 Insulation, Finishes, Equipment
- EF 225-3 Insulation Protection
- EF 225-4 Insulation, Weatherproof & Vapor Barrier

3. ADDENDUMS

Exceptions, deviations, deletions or additions to this Standard to define any specific requirements shall be as contained in an addendum(s) to this Standard. When so specified the requirements of the addendum(s) shall take precedence.

4. INSULATION THICKNESS

The thickness of applied insulation shall be as specified in the Application Schedule in an addendum or as contained in any other applicable document.

5. "APPROVED EQUAL"

"Approved Equal" as herein used shall be considered as permission to use an alternate similar material to which the insulation applicator has more ready access and which has the written approval of the specifying agency (CED or a Division of Allied Chemical Corp.).

6. MATERIAL

6.1 Insulation shall be a pure asbestos fiber blended with an inorganic binder suitable for machine spraying; Asbestospray Corp., HTA-L or approved equal.

6.2 Attachment Pins shall be 10 Ga., nail head type, 1/2" longer than the specified thickness. Pin speed clips shall be 26 Ga., 2 1/2" square.

6.3 Hardware Cloth - 1/2" mesh

6.4 Wire Mesh - Galvanized, 20 Ga. steel wire, hexagonal.

7. APPLICATION

The insulating material shall be applied the specified thickness using blowers and spray nozzles that blend the asbestos fiber with water to form a continuous, monolithic insulation. applied insulation shall be consolidated to the specified thickness within 30 minutes after spraying, to a smooth surface free from visible defects, by pressing or light tamping with a trowel or a board. Insulation shall not be applied during inclement weather or when the temperature of surfaces to be insulated or that of the surrounding area is below + 32°F.

When the applied and tamped insulation is over 2" but not over 4" thick or when applied to tanks and vessels over 4 ft. diameter, mechanical support in the form of attachment pins (Para. 6.2) shall be used, spaced as follows:

Vertical Surfaces	- 18"
Tank & Vessel Tops	- 24"
Flat or Conical Bottoms	- 12"

Squares of hardware cloth, 4" x 4" shall be impaled on the pins and into the insulation before it has been pressed and tamped and pin speed clips installed over the cloth. The top of the cloth when cut off above the speed clips, shall be 1" below the pressed and tamped insulation surface. Additional insulation shall then be applied over the clips to match the adjacent surfaces.

When the applied and tamped insulation is over 4" thick, it shall be applied in accordance with the preceding paragraph except that the insulation shall be further reinforced with wire in place wire mesh (Para. 6.4) installed midway between the inner and outer insulation surfaces.

The method to be used in welding the attachment pins to surfaces to be insulated shall be referred to, and shall have the approval of, the specifying agency (CED or a Division of Allied Chemical Corp. or the authorized representative at the site).

Insulation, except when otherwise specified, shall be applied up to manholes and nozzles only to allow access to flange bolts. Removable and replaceable covers shall be fabricated for these in general accordance with CED St'd. EF 100-1. Covers will not be required on vessel manholes and nozzles operating at 150°F. or less.

8. INSULATION FINISH

All applied insulation shall be finished and/or protected in accordance with CED St'd. EF 225-2, EF 225-3 or EF 225-4 as specified and applicable.

1. SCOPE

This Standard covers the material for and the application of spray-on type asbestos fiber insulation intended for use on equipment, vessels and large ducts at temperatures to 1350°F.

2. REFERENCE

The following Corporate Engineering Dep't. (CED) Standards are a part of this Standard:

- EF 100-1 Insulation, General Conditions
- EF 225-2 Insulation, Finishes, Equipment
- EF 225-3 Insulation Protection
- EF 225-4 Insulation, Weatherproof & Vapor Barrier

3. ADDENDUMS

Exceptions, deviations, deletions or additions to this Standard to define any specific requirements shall be as contained in an addendum(s) to this Standard. When so specified, the requirements of the addendum(s) shall take precedence.

4. INSULATION THICKNESS

The thickness of applied insulation shall be as specified in the Application Schedule, in an addendum, or as contained in any other applicable document.

5. "APPROVED EQUAL"

"Approved Equal" as herein used shall be considered as permission to use an alternate similar material to which the insulation applicator has more ready access and which has the written approval of the specifying agency (CED or a Division of Allied Chemical Corp.).

6. MATERIAL

6.1 Insulation shall be pure asbestos fiber blended with an inorganic binder suitable for machine spraying; "Asbestospray Corp." HTB or approved equal.

6.2 Attachment Pins shall be 10 Ga., nail head type, 1/2" longer than the specified applied thickness. Pin speed clips shall be 26 Ga., 2 1/2" square.

6.3 Hardware Cloth - 1/2" mesh.

6.4 Wire Mesh - Galvanized, 20 Ga. steel wire, hexagonal.

7. APPLICATION

The insulating material shall be applied the specified thickness using blowers and spray nozzles that blend the asbestos fiber with air to form a continuous, monolithic insulation. applied insulation shall be consolidated to the specified thickness within 30 minutes after setting, to a smooth surface free from visible ridges by pressing or light tamping with a trowel or board. Insulation shall not be applied during inclement weather or when the temperature of surfaces to be insulated or that of the surrounding area is below + 32°F.

When the applied and tamped insulation is over 2" but not over 4" thick or when applied tanks and vessels over 4 ft. diameter, mechanical support in the form of attachment pins (Para. 6.2) shall be used, spaced as follows:

- Vertical Surfaces - 18"
- Tank & Vessel Tops - 24"
- Flat or Conical Bottoms - 12"

Squares of hardware cloth, 4" x 4" (Para. 6.3) be impaled on the pins and into the insulation. It has been pressed and tamped and pin speed clips installed over the cloth. The top of the cloth when cut off above the speed clips, shall be below the pressed and tamped insulation surface. Additional insulation shall then be applied over clips to match the adjacent surfaces.

When the applied and tamped insulation is 4" thick, it shall be applied in accordance with paragraph except that the insulation shall be reinforced with wired in place wire mesh (Para. 6.4) installed midway between the inner and outer insulation surfaces.

The method to be used in welding the attachment pins to surfaces to be insulated shall be referred to, and shall have the approval of the specifying agency (CED or a Division of Allied Chemical Corp. or the authorized representative at the site).

Insulation, except when otherwise specified shall be applied up to manholes and nozzles and to allow access to flange bolts. Removable and replaceable covers shall be fabricated for these in general accordance with CED Std. EF 225-2. Covers will not be required on vessel manholes and nozzles operating at 150°F. or less.

8. INSULATION FINISH

All applied insulation shall be finished and or protected in accordance with CED Std. EF 225-2. EF 225-3 or EF 225-4 as specified and applicable.