FILE NAME: Westinghouse (WH)

DATE: 1962

DOC#: WH017

DOCUMENT DESCRIPTION: Memo RE Field Application for Turbine Insulation

Only inoculations approved by WHO will be used

1962

(former 7309-2 appears to be non-arb-composition)

Westinghouse

Date 12/27/62

From Lester Worden - 9 Bldg.

Subject STEAM SERVICE DATA LETTER #62-23

INDEX: Field Application of Turbine Insulation

SOURCE: M.L. #5-15

There still seems to be some misunderstanding concerning the application of turbine insulation in the field. This letter supersedes Steam Supervisors' Letter #58-10.

Process specification 600783 covers the application of [illegible] plastic insulation of unit cylinders above the 326 [illegible] is our standard insulation spec for turbines to be [illegible] the field. Blanket insulation is [illegible] only when required by the contract, since a price addition is involved. [illegible] that the inner layer of insulation, next to the hot [illegible] be insulated, must be of water resistant thermal [illegible] material 46601AB (Previous 7309-2) mesh or bonded [illegible] The outer layer is to be of material 46110BA (Previous [illegible] which is a loose, fibrous plastic insulating cement.

Process specification 600433 covers the application of block insulation to piping or all sizes, and to single cylinder turbine units shipped assembled, and therefore, insulated in the shop.

In general, 600433 Part I specifies block insulation for [illegible] piping (over 10") to be a single layer of 46102BB (Previous 7306) calcium silicate blocks for temperatures up to 600°F. A double layer of 46102BB material is used for temperatures over 601° to 1050°F. Over 1050°F a double layer consisting of material 46601AA (inner) and 46102BB (outer) shall be used.

Part II specifies molded insulation for 10" piping and smaller, consisting of material 54251AH (Previous 5779) up to 1050°F. For 1051°F to 1200°F a double layer of material 46601BA (Previous 7310) shall be used.

Insulation cement material 46110BA is to be used for all pipe insulation patching, filling and finishing.

Blumberg No. 6113

PLAINTIFF'S EXHIBIT WH-752

28045509

All District Offices have on file a standards book containing Lester Works Standard 920.1 through 920.5 on Insulation. They also have a Material Yard File and a Process Specification Book.

Quite often insulating contractors, who wish to make bids for supplying and/or installing the necessary insulation material, visit the job sites for estimating purposes. The attached information listing the current approved materials should aid our Field Service Engineers. Only insulation materials approved by Westinghouse will be permitted on Westinghouse turbines and piping.

F. E. Bachman

Headquarters Steam Service - F. E. Bachman

Attachment

SSD 62-23-2

28045510

Produced 3/93

SSDL #62-23

Process Specification 600783

Turbine Cylinder Insulation

46601AB (Previous 7309-2) (inner). Heat insulating block and pipe bonded mineral wood for steam turbine and steam piping for temperatures up to 1700°F where resistance to moisture is required. Characterized by the dirty brown color.

Suppliers:

Baldwin-Ehret-Hill - Baldwin Hill Mono Block.

Eagle-Picher - EP Supertemp Block.

Johns-Manville - Banroo HT Block.

46110BY (Previous 6407-1) (outer). Loose fibrous heat insulating cement, composed of black mineral wool derived from slag, asbestos fiber and clay binder.

Suppliers:

Baldwin-Ehret-Hill - Baldwin-Hill #1 Insulating Cement

Philip Carey - MM 50 Insulating Cement

Eagle-Picher - Super 66 Plastic Insulation

Johns-Manville - J-M 450 Insulating Cement

Owens-Corning Fiberglas - O-C 660 Insulating Cement

Process Specification 600433

46601AA (Previous 7309-1). On pipe over 10".

Suppliers:

Johns-Manville - Superex M Block

Keasbey & Mattison - K&M Hy-Temp Block

Owens-Corning Fiberglas - Kaylo 20 Block

Philip Carey - Carey Hi-Temp 19 Block

SSD62-23-3

28045511

Produced 3/93

Baldwin-Ehret-Hill - Enduro Hi-Temp Block

Fibreboard Paper Products Corp. - Frasco 150 Hi-Temp Block or Pabco Precision Molded Caltemp Block.

46102BB (Previous 7308). On piping over 10". - High temperature calcium silicate heat insulating block for steam turbines and steam piping for temperatures up to 1200°F.

Suppliers:

Baldwin-Ehrte-Hill - Thermasil Block

Johns-Manville - Thermobestos Block

Owens-Corning Fiberglas - Kaylo Block

Ruberoid - Calcilite Block

Fibreboard Paper Products Corp. - Pabco Precision Molded Caltemp Block.

Part II

46601AW (Previous 5779). Pipe size 1" through 10" using calcium silicate heat insulation.

Suppliers:

Baldwin-Ehret-Hill - Thermasil Pipe

Johns-Manville - Thermobestos Pipe

Owens-Corning Fiberglas - Kaylo Pipe

Ruberoid - Calcilite

46601BA (Previous 7310). High temperature calcium silicate heat insulation (over 1050°F) for pipe under 10".

Suppliers:

Baldwin-Ehret-Hill - Enduro Hi-Temp & Thermasil Pipe Insulation

Johns-Manville - Superex - M & Thermobestos Pipe Insulation

Owens-Corning Fiberglas - Kaylo 20 & Kaylo Pipe Insulation

Fibreboard Paper Products Corp. - Frasco 15C Hi-Temp. Pipe Insulation or Pabco Precision Molded Caltemp Pipe Insulation

SSDL-462-23-4

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Produced 3/93

46110BA (Previous 7311) Insulating Cement.

Suppliers:

Baldwin-Ehret-Hill - Long Fiber Cement 150

Johns-Manville - Asbestos Cement 302

Philip Carey Mfg. Co. - Plastic Cement 707

SSD 62-23-5

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