



MINUTES
of the
TECHNICAL & RESEARCH COMMITTEE MEETING
NATIONAL INSULATION MANUFACTURERS ASSOCIATION
Chicago, Ill. March 9, 1962

The
The meeting was called to order at 9:00 A. M. with the following in attendance:

H. P. Hoopes, Chairman
L. L. Collogne
T. S. Clousing
C. E. Ernst
W. Gubar
P. L. Losse
V. L. Miller
E. F. Ott
W. R. Seipt
W. P. Sinclair
U. W. Smith
D. W. Wingerter
R. C. Parlett
J. M. Barnhart

Fibreboard Paper Products Co.
Mundet Cork Corp.
M. H. Detrick Company
Johns-Manville Sales Corp.
Gustin-Bacon Mfg. Company
The Eagle-Picher Company
Pittsburgh Corning Corp.
Keasbey & Mattison Company
Keasbey & Mattison Company
Union Asbestos & Rubber Co.
Baldwin-Ehret-Hill, Inc.
Johns-Manville Sales Corp.
NIMA
NIMA

BASIS OF CALCULATING HEAT TRANSFER

A write up on this subject, dated 2/14/62, circulated to the Committee prior to the meeting was discussed. Several revisions were proposed. The write up with these revisions will be circulated to the Committee for approval and/or comments.

DEFINITIONS

The list of definitions applicable to thermal insulating materials dated 11/28/61 was discussed. Only minor editorial changes were made. This Recommended Practice is attached hereto.

COMMON BASIS OF PRESENTING ECONOMIC THICKNESS

It was explained that when examining the table of "B" factors in the Economic Thickness Manual irregularities in the values of "B" can produce an economic thickness table that would not rise continually, i. e., could drop back at certain pipe sizes.

Mr. Barnhart was asked to talk to Mr. W. C. Turner and try to ascertain as to why this happens. (Mr. Turner said that the primary reason this occurs is due to the sudden increase in costs of insulation for various pipe sizes.)

It was decided that smoothing out the values would be justified on the following basis:

COMMON BASIS OF PRESENTING ECONOMIC THICKNESS (Based on average conditions)

ECONOMIC THICKNESS TABLES (For pipe and flat insulation)

1. Utility or Power - Full year operation (8760 hrs.)
2. Process - Full year operation (8760 hrs.)
3. Commercial - Full year operation (8760 hrs.)
4. Commercial - Heating Season (5400 hrs.)

Conditions

1. Temperatures
100 F to 1200 F in 100 F increments
Note: Average of range
2. Use nominal thicknesses
3. Pipe sizes - as per preference
4. Average design - ambient still air - 80F
5. Surface coefficient - as per curve shown in Fig. 5, in write up on "Basis of Calculating Heat Transfer Through Thermal Insulation on Pipe & Flat Surfaces" (The basis of which has been taken from the ASHRAE "Guide and Data Book")
6. Depreciation period

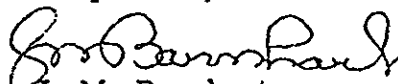
	Plant & Insulation
Utility or power	20 yrs.
Process	15 yrs.
Commercial	20 yrs.

- (b) Discussion on smoke and fire resistance of insulations and finishes was deferred for the present. The Committee does not feel it should duplicate the work that is being done by ASTM on this subject.
 - (c) Mr. W. R. Seipt brought to the attention of the Committee an article entitled "Stainless Failures by Stress Corrosion" featured in Hydrocarbon Processing and Petroleum Refiner, V41, No. 1 (Jan. '62). The article referred to magnesia insulation as a stress corroding material. Mr. Barnhart was asked to write to the Editor of the magazine informing him that his data was wrong and informing him that we would review articles pertaining to insulating materials prior to publication, if he so desires.
 - (d) Mr. Barnhart informed the Committee that BRAB is planning to publish technical data relating to thermal insulations. The Committee agreed that NIMA and the manufacturers could furnish data to BRAB and the government agencies only those values which were obtained by ASTM test methods.
- Mr. Barnhart was requested to ask the NIMA Board of Directors as to the policy desired when other consumers request data not substantiated by ASTM test methods.
- (e) The subject of QPL was discussed, especially the time and money involved by the manufacturers having tests made for qualification. It was requested that NIMA discuss this subject at the next Government T & R Committee Meeting. (i. e. where do manufacturers go to get reliable tests, can some of the tests be eliminated, etc.)

ADJOURNMENT

There being no further business, the meeting was adjourned.

Respectfully submitted


J. M. Barnhart