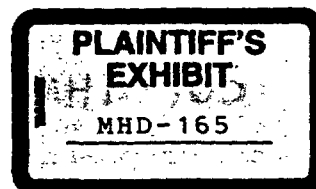


LABORATORY COMMITTEE MEETING

MARCH 7th, 1957



Messrs: E. R. Marden  
R. W. Higgins  
H. B. Speelman  
H. E. Lewis - Absent  
E. W. Rix  
R. B. Abell  
C. W. Haupt - Absent  
K. McDonald - Absent

Gentlemen:

Meeting was called to order at 10:30 A.M. on 3/7/57 in the Aurora Conference Room. The next meeting will be held on March 28 in the same place.

ACTION TAKEN.

1. E3-A - Hot Strength Testing.

Progress report issued 2/22/57. Details of main part of hydraulic test system finished and out for bids in four places. We have requested these bids be returned no later than March 18 so we can proceed with this project as rapidly as possible. Our tentative schedule now is to finish detailing etc. by the end of March and get our bids in as soon as possible. We are setting May 15 as a tentative erection date for this furnace. Furnace structure bids (Electric design) received two of three bids. One of 221.00 and one of 229.00. On the test structure we also received two of three bids, one of 389.00 and one of 217.00.

We had some discussion on the comments put forth by A. P. Green on this type of testing and also discussion on making a more versatile furnace structure so that at a later date part of the furnace can be used for the insertion of a test panel of one of our constructions.

It was decided to disregard outside construction of this unit as we were unable to obtain bids on it. We are proceeding on the basis of doing the work ourselves.

Other than the actual test apparatus we need to formulate a test procedure, to be done by J. W. Hosbain, R. W. Higgins, and R. B. Abell. Priority of this project is herewith changed to A.

2. E4-B - Cold Impact Test Program.

We are proceeding with the last portion of this Test procedure using Thor tile and the Bethlehem Steel clips comparing the results with those obtained using I3H castings. Priority changed to B.

3. E6-C - Hot Impact Test.

No Action. See Minutes 10/4/56.

4. E7-B - Tile Abrasion Test Program.

All samples submitted to date are finished. Work on correlating the results is in progress.

5. E8-B - Comparative Competitive Testing.

Work in progress on J. M. 678, Blazecrete and other insulating and fireproofing materials.

6. E9-C - New Design Refractory Hanger Tile.

No Action. See minutes of 12/20/56.

7. E10-C - Hydrogen Atmosphere Investigation.

No Action. See minutes 2/7/57.

8. E12-A - New Model Thermolayer Wall Construction.

Construction of the model started 2/28/57 and finished to original print on 3/4/57. Seventeen step by step photos submitted to R.W. H. Considerable discussion of block sizes, as related to this construction, by H. B. Speelman. He stated that they would be unable to furnish the size now being used ( $6 \times 15 \times 1\frac{1}{2}$ " ) as a standard size. 15" block would necessitate extra handling and excessive waste. E. R. Marden stated that the pouring recess in the shelf tile must be either centered or lengthened to facilitate the Decrete pour on this unit.

While the model is complete as called for in the original drawing, further requests from the engineering department necessitate extra tile which are on order from Mexico Refractories. When these are received we will proceed with the completion of the model.

9. E13-B - Low Cost E Factor Test Equipment.

Discussion of ideas on this project by E.R.Marden. He will furnish sketches of his ideas in this discussion by next meeting. Priority Change to B.

10. F1-A - Block Insulation Research.

A. In addition to a slower dump rate we are investigating equipment to speed delivery of  $1\frac{1}{2}$ " block to same rate as other sizes.

B. Awaiting details on ASTM handleability test from chairman of ASTM committee C16.

10. P1-A - Block Insulation Research. - Continued.

C. Block Machine Improvement.

1. Slitter & Cross Cut Saws now promised by machine shop for week of March 13 delivery. Slitter saws completed and E. W. Pix is to inspect them on 3/8/57.
2. Link Belt engineer has details of positive drive transmission for study. Vacuum pump discussion in progress at Aurora Pump.
3. Installation of this equipment is dependent upon production picture at time of delivery.

11. P2-A - Slug Free Wool and Shot Reduction.

Slug cleaner on upright conveyor in operation now but not doing too complete a job due to certain poor components in the system and also limitations imposed by design of present building structure.

12. P3-C - Rust Inhibited Insulating Cement.

Priority Changed from A to C - See footnote marked \*.

13. D1-A - Decrete.

Heat transfer information on Decrete "30" was not available to Mr. Marden on his last visit to Sunbeam. Mr. Higgins is to ask Mr. K. T. Kimmelinger to get this information for us. The result of tests run at Sunbeam was that Decrete "30" dusted in the fire and the customer is now going to use our regular Decrete 40 in this application. This completes this portion of this project and it will therefore be placed on the inactive list until further problems arise. Change priority to C.

14. D2-A - Pyroscat.

Change Priority to C.\*

15. D3-C - Castables 60, 80, 100, 125# Classes.

No Action.

16. D4-A - Utility Finish.

Change priority to C.\*

Mr. Lewis wants a similar product to Utility applicable on "Thermobestos" or any other absorbent material. Mr. Marden has been unable to alter our present Utility to meet demand. Suggest placing this under new project entitled "Finish for Highly Absorbent Materials" #DL4-3.

17. D5-A - Thinsuliner Cement.

Change to C priority.\*

18. D9-C - Coating Materials - Waterproofing.

Inactive.

19. D11-C - Curtain Wall Coatings.

Inactive.

20. D12-C - New Type Block Insulation.

Change to B priority.

21. D13-A - Bonding Cement.

Still trying to improve formulation to compete with Sodium Silicate, Asbestos mixtures of competitors and to lower our production costs. Have these formulas now under test.

NEW PROJECT.

D14-B - Build Model of Insulating Refractory Wall Design From Carl Davis of American Arch.

R. W. H. is to obtain material and design for further work.

\* On these projects all laboratory work requested to date has been finished and reports submitted. Until further problems arise they will be placed on an inactive status.

Note: We revised our priority and marking system at this meeting to the following extent. Active projects will have either an A or B priority. When they are placed in C priority they become inactive until further work is required and they will then be reassigned a priority at that time.

Respectfully submitted,

*R. B. Abell*  
R. B. Abell

RBA:lp

cc: Milman  
Hossein  
Pollen  
Earlich  
Folts