

LABORATORY COMMITTEE MEETING

JULY 11th, 1957

PLAINTIFF'S
EXHIBIT

MHD-167

Messrs: R. W. Higgins
E. R. Marden
H. B. Speelman
H. E. Lewis
E. W. Rix
R. B. Abell

Gentlemen:

Meeting was called to order at 10:30 A.M., July 11, 1957 in the Aurora Conference Room. The next meeting will be held September 5th, 1957 at the same place.

ACTION TAKEN ON REGULAR AGENDA.

1. E3-A - Hot Strength Testing.

Bob Higgins visited Hayes Laboratory of H. W. in Pittsburgh last month and his recommendations are:

1. Build furnace outside with its own flue.
2. Make single purpose, simple unit.

Karl Davis OK'd use of Maxon Premix equipment on finding that we had previous operating experience and were planning to have the burner and premix as close together as possible.

John Hosbein will be here during the week of July 15th and we will try and iron out all details of this project and proceed with it.

2. E4-B - Cold Impact Test Program.

No Action.

3. E7-B - Tile Abrasion Test Program.

Procedure report submitted by R. Bruce Abell. This needs some dressing up to be incorporated in an Engineering Department data book consisting of:

1. Test Furnace Data (1950 - 1951)
2. Cold Tension Tests (EB & HB9)
3. Abrasion Tests
4. Cold Impact Tests
5. Hot Strength Tests

4. E8-B - Comparative Competitive Testing.

Quigley Insulag tests are now completed except question of relative wet adhesion to steel vs. Pyroscat. Work in progress on A. P. Green castable Block Mix vs. our "Easy Seal" and Schindler vermiculite block.

5. EL2-A - New Thermolayer Wall Model.

Completion of model is now scheduled for Week of July 22nd. New Decrete chute has been submitted to Engineering Department.

6. EL3-B - Low Cost K Factor Equipment.

No progress to report.

7. EL4-B - Model of American Arch Light Weight Insulating Refractory Wall.

This model was started on June 26 & 27th but K. T. Davis and R. W. Higgins made design revisions during erection to facilitate construction permit various wall thicknesses using from $4\frac{1}{2}$ " to 9" of insulating firebrick. We are now going to finish the model using $4\frac{1}{2}$ " and 9" depth tile along with the present $6\frac{3}{4}$ " shapes. The overlap on the H315 tile by the insulating firebrick was decreased so that it would not interfere with the castings or hangers which support the H315 tile. Karl Davis is working up the new design drawings on the basis of the model revision.

8. PL-A - Block Insulation Research.

A. Block Smoking.

We received one complaint on this and to keep it from happening again the following steps are to be taken.

1. Furnish hot plate to oven tender and test a larger number of samples for smoking as they come from the oven.
2. Work on inorganic binders.
3. Try to eliminate asbestos from block.
4. Get manufacturing specifications for plant.

B. A.S.T.M. Handicability Testing.

1. Drop tester - No action due to vacation shut down of plant.
2. Tumbler test - We discussed this proposed specification and okayed it from our point of view. We have the equipment for this test.

C. Block Machine Improvements.

1. Slitters & Crosscut - Now in use, still need some adjustment but we are working on this problem.
2. Positive Drive System. - Preliminary design sketches have been completed and a summary of our needs issued by E. W. Rix on 7/9/57. Howard Speelman will take drawings and summary to fabricators in Indiana for bids on this project.
3. Vacuum Removal System. - This is under consideration along with the redesign of the block machine. The half pound of water per board foot mentioned in last month's meeting is over and above what our regular driers take out. Test data on this is included in Dan Rix's report of 7/9/57.
4. P.I.V. Unit. - This unit is being installed now and will be run for the first time during week of 7/15/57.

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

We still require a constant feed of wool to the granulator to enable the slug cleaner to work right. Our plans are now to install it during the vacation shut down. The water cooled heat resisting cast steel divider is working above expectations. We now get a regular six stream melt which wasn't possible with our other dividers.

10. D2-B - 1

Submitted was Ed Marden's trip report dated 7/2/57 on his 6/15/57 trip to Texas City pertaining to Pyroscat gunned on a tank and his report dated 7/2/57 covering his 6/25/57 trip to Tulsa concerning the Refractall Company wet gun tests.

Phillips Petroleum was considering Quigley Insulag and Pyroscat for their Sweeney, Texas job. Ed Marden's reports and letters were helpful in obtaining this order for Pyroscat to be installed by Thorpe Insulation Co. of Houston, Texas.

11. D4-A - Utility Finish.

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| 1. Navy Specifications | Work in Progress |
| 2. Finish for highly absorbent block | Work in Progress |
| 3. Palming qualities vs. One Coat | Work in Progress. |

12. D12-B - New Type Block Insulation Research.

No Action.

New Projects.

E15-A - Findlay Silica Castable.

This information was requested by Mr. Pete Merkle of our Detroit office for use on an all silica construction for glass tanks.

INACTIVE PROJECTS.

1. E6 - Hot Impact.
2. E9 - New Refractory Hanger.
3. P3 - Rust Inhibited Insulating Cement.
4. D1 - Decretes.
5. D3 - Castables 60, 80, 100, 120# Classes.
6. D5 - Thinsuliner & Thinsuliner S. L.
7. D9 - Coating Materials - Waterproofing.
8. D13- Bonding Cement.

Respectfully submitted.

R. B. Abell
R. B. Abell

RBA:11

cc: Ellman
Hosbein
Pollen
Ehrlich