



February 22, 1957

Koppers Company, Inc.
Mr. Jack Hyde
Chamber of Commerce Building
Pittsburgh, Pennsylvania

SUBJECT: Weirton Steel Company
Weirton, West Virginia
12' Sintering Machine

Dear Jack:

Enclosed are two sets of heat transfer calculations for the insulated straight wall portions shown on our drawing P-21223-A. The insulation in these areas will consist of 3 3/4" insulating castable (H-W 85 or equal) and 1 1/2" of our Detrick Block.

I have also enclosed copies of the conductivity curves for the block and castable. I took "K" factors for the brick from Harbison-Walker's "Modern Refractory Practice", Page 339, 1950 Edition, using the same values as for 70% Alumina. According to Al Pierce this is acceptable, as 60% Alumina is close enough to the 70% in conductivity.

As you can see, I end up with an outside skin temperature of 211° F.

Please let us know if there is anything more we can furnish you in the way of information.

Very truly yours,

M. H. DETRICK COMPANY

Walter E. Ellman

WEE:GS

Enc.