PLAINTIFF'S EXHIBIT FOS-485

FOSECO, INC.

INTER-COMPANY AND INTER-DEPARTMENTAL CORRESPONDENCE

TO: W. C. Fletcher

FROM: G. H. FitzGerald

DATE: September 14, 1973

SUBJECT: Visit to Copperweld:
Thursday, September 13, 1973

Objectives:

1. Observe the setting and pouring of ingots using #685 hot tops made in the following recipes:
   (a) EP 5465, formerly designated as EP 5273D;
   (b) EP 5452A, a special pallet of boards which, having shown moisture condensation inside the shrink bag, were exposed to the air for several days.

2. Examine with J. Thebo and G. Martin current problems with distorted and malformed boards.

Observations:

1. Accompanied by H. Wright and the above personnel, this writer set 3 ingots using the EP 5465 recipe boards. These boards showed no departure from the existing fit obtained with EP 5452A. When poured the ingots showed no evidence of boiling, as did the EP 5452A recipe. Board surfaces did blacken after 45 seconds of pouring time and a small amount of ashing was observed on the leading edge of boards.

2. One ingot was set with the "air dried" EP 5452A material. This ingot exhibited significant boiling. The boards of this pallet were examined and found to be thoroughly dried and uniformly cured.

3. Five pallets of material packaged on 1st and 3rd shifts, 9/11/73, were examined for distorted and malformed material. There was no evidence of defects attributable to forming at the machine. However, there were 30 side boards which had to be scrapped due to improper alignment of the board on the dryer form-- this amounts to 10% of side board examined! This distortion produces serious problems when set by mill personnel. The boards will not seat flat against the ingot wall, steel will enter this gap and produce a high incidence of "elephant ears" at the rolling mill.

Conclusions and actions needed:

1. EP 5265 shows promise of being an acceptable material. However further testing is needed. A complete heat will be set and poured Friday morning and results will be forwarded by J. Thebo.

2. Boiling in ingots is attributable to the 5.18% X3578 in this recipe rather than retained free moisture. Marketing has agreed to try and use up all the existing inventory of EP 5452A material since Manufacturing has returned to using P-31 until an acceptable replacement is available. - HDW/JT

3. Irrespective of recipe involved, Manufacturing, Q/C and Tooling must determine immediately the cause of the "off contour" boards and take corrective action. JCM,RTC, GHF

4. Manufacturing and Q/C using returned samples of defective material must educate the packers what is unacceptable for packing. JCM, GHF

GHF:mlr
cc: P. A. Partington
W. J. Vandemark
G. Fenton
H. D. Shephard/A. Santighian
F. A. Habeeb
H. D. Wright/J. Thebo
R. B. Orndorff/R. T. Callahan
J. C. Mohr