

INTER-OFFICE MEMORANDUM

TO Vern L. Frankson
AT W. M. Schuck
C. W. Graff (2)
H. C. Boucher (3)

DATE July 28, 1967

FROM *S. S. Spangenberg*
S. S. Spangenberg

COPIES TO

See Distribution

AT Middletown, Ohio

JOB NO. 7148

SUBJECT Sub-Contract No. 7148-1318 - Change Order No. 2
Gunite Refractories Corporation

Attached is a manually signed copy of subject Change Order.
Conformed copies are being distributed.

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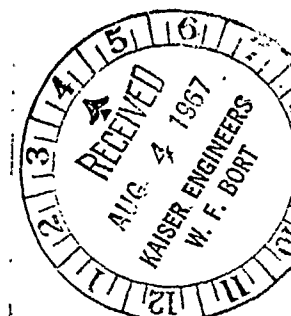
cc - with attachment

ARMCO

F. W. Barnes (2)
P. R. Smith
J. S. Lotz
Reading File

KAISER

D. A. Daly
G. L. Roberts
E. J. Denner
J. Mainier
S. Ustel
B. Scott
A. L. Gordon
C. Billings
F. N. Norton
M. D. Wilson
S. M. Lyon
L. J. Gillett - Oakland
R. J. Minarcini - Oakland
~~W. F. Bort - Oakland~~
R. D. Sahlberg - Butler
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KEN 010803

DEVIATIONS FROM OR ADDITIONS TO SUB-CONTRACT AND SPECIFICATIONS

Sub-Contract No. 7148-1318 dated November 21, 1966. Change Order No. 2

Subject: Abresist Lining-Mill Scale Flume Systems. Date of CO. 6-19-67

Location: Armco Steel Corporation - Middletown, Ohio

Sub-Contractor: Gunitite Refractories Corporation
1301 Woodswether Road
Kansas City, Missouri 64105

DESCRIPTION OF CHANGE: Pursuant to the provisions of Article 8 of the General Terms and Conditions, Sub-Contractor shall perform The Work in accordance with the following changes:

A/ SPECIAL PROVISIONS: That part of this sub-contract identified as Exhibit C and entitled "Special Provisions" is hereby amended by the addition of the following Item 3:

3. The sub-contractor having made claim for payment of costs incurred because of delays in performance of The Work, created by causes above and beyond his control, in the amount of \$ 3,762.30 and the Contractor having taken exception to these charges as being excessive; it is mutually understood and agreed that the Contractor shall make payment of a lump sum of \$1,469.38 in full settlement of sub-contractor's Invoice Nos. GR-221 and GR-237, dated March 31, 1967.

Lump Sum Net Price Increase\$ 1,469.38

CHANGE IN COMPENSATION: Total lump sum amount increased from -
\$35,760.00 to \$37,229.38

CHANGE IN COMPLETION DATE: None

Except as herein expressly modified, said sub-contract as heretofore amended and all the Terms and Conditions thereof shall remain unaltered and in full force and effect and shall apply to all the work performed hereunder.

ACCEPTED:

AUTHORIZED:

Gunitite Refractories Corporation
(Sub-Contractor)

Kaiser Engineers, Inc.,
Agent for Armco Steel Corporation
(Contractor)

By /s/ B. E. Driscoll

By /s/ D. A. Daly

Title General Manager

Title Project Manager

Date July 18, 1967

Date June 28, 1967

SSS:jf

KEN 010804

INTER-OFFICE MEMORANDUM

TO
AT

Vern L. Frankson
W. M. Schuck
C. W. Graff
H. C. Boucher (3)

COPIES TO

See Distribution

DATE

March 20, 1967

FROM

Donald K. Carlson

Don Carlson

AT

Middletown

JOB NO.

7148

SUBJECT

Sub-Contract No. 7148-1318 - Change Order No. 1
Gunitite Refractories Corporation

Attached are conformed copies of subject Change Order. Copies are being distributed.

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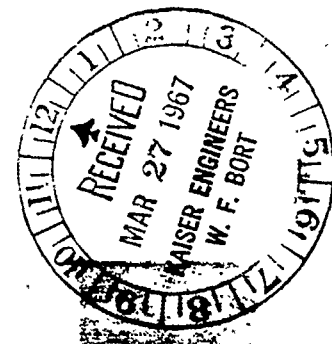
cc - with attachment

ARMCO

F. W. Barnes
P. R. Smith
J. S. Lotz
Reading File

KAISER

D. A. Daly
G. L. Roberts
S. G. Imherr
E. J. Denner
L. H. Kash
S. Ustel
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M. D. Wilson
L. J. Gillett - Oakland
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~~W. F. Bort - Oakland~~
R. D. Sahlberg - Butler
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KEN 010805

DEVIATIONS FROM OR ADDITIONS TO SUB-CONTRACT AND SPECIFICATIONS

SUB-CONTRACT NO. 7148-1318 DATED November 21, 1968 CHANGE ORDER NO. One

SUBJECT: Abresist Tile Installation DATE OF CHANGE ORDER March 9, 1967

LOCATION Mill Scale Flume System - Hot Strip Mill - Middletown Works,
Armco Steel Corporation

SUB-CONTRACTOR: Gunitite Refractories Corporation
1301 Woodswether Road
Kansas City, Missouri 64105

DESCRIPTION OF CHANGE: It is hereby mutually understood and agreed that the Lump Sum Compensation is increased by the amount of \$9,600.00.

Reason: Sub-Contractor's mistake in interpreting bid documents. Sub-Contractor did not understand that maximum mortar thickness of 3/4" referred to in Special Provision No. 1 (F) referred only to mortar used for setting tiles. He assumed that this statement made irrelevant the reference to an approximate 4" difference between elevation of concrete and tile.

It is also mutually understood and agreed that Sub-Contractor will apply this approximate 4" contour "build-up" with a cement gun.

CHANGE IN COMPENSATION: Total Lump Sum Amount Increased from \$26,160.00
To \$35,760.00

CHANGE IN COMPLETION DATE: None

EXCEPT AS HEREIN EXPRESSLY MODIFIED, SAID SUB-CONTRACT AS HERETOFORE AMENDED, AND ALL THE TERMS AND CONDITIONS THEREOF SHALL REMAIN IN FULL FORCE AND EFFECT AND SHALL APPLY TO ALL THE WORK PERFORMED HEREUNDER.

ACCEPTED:

GUNITITE REFRACTORIES CORPORATION
(Sub-Contractor)

By /s/ B. E. Driscoll

Title General Manager

AUTHORIZED:

KAISER ENGINEERS, INC., AGENT
FOR ARMCO STEEL CORPORATION
(Contractor)

By /s/ Vern L. Frankson

Title Manager - Procurement

CONFIRMED

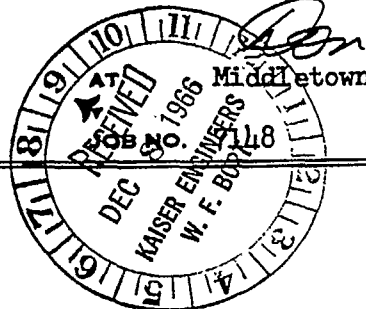
INTER-OFFICE MEMORANDUM

TO Vern L. Frankson
AT W. M. Schuck
C. W. Graff
H. C. Boucher

DATE December 5, 1966

FROM Donald K. Carlson

COPIES TO
See Below



SUBJECT Sub-Contract No. 7148-1318
Gunite Refractories Corporation
Installation - Abresist Liner Tile

Attached is a fully executed copy of subject Sub-Contract for your file.
Conformed copies are being distributed as indicated below.

DKC/cf

cc - with attachment

ARMCO

F. W. Barnes
P. R. Smith
J. S. Lotz
Reading File

KAISER

D. A. Daly
G. L. Roberts
E. J. Denner
S. Ustel
L. H. Kash
A. L. Gordon
F. P. Kennedy
F. N. Norton
M. D. Wilson
S. M. Lyon
L. J. Gillett - Oakland
M. J. Janner - Oakland
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R. D. Sahlberg - Butler
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KEN 010807

KAISER ENGINEERS, INC.
Agent for
Armco Steel Corporation

SUB-CONTRACT

Sub-Contract No. 7148-1318
November 21, 1966

This Sub-Contract is made pursuant to a Contract between Armco Steel Corporation (hereinafter called "Owner") and Kaiser Engineers, Inc., (hereinafter called "Contractor") Agent for Armco Steel Corporation, whereby Contractor agreed with Owner to furnish engineering, construction, and other services relating to the expansion and modernization program at Owner's Middletown Works, Middletown, Ohio.

Contractor and Gunitite Refractories Corporation (hereinafter called "Sub-Contractor") hereby agree that the following work shall be performed by Sub-Contractor for the compensation and upon the terms and conditions hereinafter set forth on Face Sheets "A" and "B" of the Sub-Contract, and including Articles 1 through 37 of the General Terms and Conditions attached to and made a part of this Sub-Contract.

WORK TO BE PERFORMED: Furnish all labor, tools, supervision, materials, supplies, transportation and equipment (except as provided for in Exhibit "B" hereof) and do all things necessary to handle and install complete, Flume Liners in three (3) Mill Scale Flume Systems of the Owner's Hot Strip Mill and Scale Pit Nos. 1, 2, and 3, all in strict accordance with Exhibit "A", all such work being hereinafter sometimes called "The Work".

PLANS, DRAWINGS AND/OR SPECIFICATIONS: Attached hereto as Exhibit "A", and by this reference made a part hereof.

ITEMS TO BE SUPPLIED BY CONTRACTOR: As per list attached hereto marked Exhibit "B", and by this reference made a part hereof.

LOCATION OF WORK: At Owner's Middletown Works, Middletown, Ohio.

WORK TO COMMENCE: As of the date of this Sub-Contract, with field work to commence on date specified in Contractor's Notice to Proceed, to be issued to Sub-Contractor.

WORK TO BE COMPLETED: Time is of the essence of this Sub-Contract, and all work shall be completed by Sub-Contractor as soon as due diligence and good practice will permit, but in no event later than April 25, 1967, or such extended completion date as may be applicable in accordance with and pursuant to the provisions of Article 15 hereof.

FACE SHEET "A"

KEN 010808

BOND: Not required.

COMPENSATION: Sub-Contractor agrees to perform The Work for the following Lump Sum price, which includes all present and future state, federal and local excise and transportation taxes, and all other taxes pertaining to the transaction except the Ohio sales and use tax applicable under the following circumstances:

Any Ohio sales and use tax liability on personal property transferred under the Sub-Contract by the Sub-Contractor to Owner, will be accounted for by Owner under its Direct-Payment Permit No. 161-M. Any Ohio sales and use tax liability for materials transferred to Owner as improvements to Owner's real property will be determined by Sub-Contractor in cooperation with Owner; such tax is Sub-Contractor's direct responsibility, but Owner will reimburse Sub-Contractor over and above the price stated below for the amount of such tax.

LUMP SUM \$ 26,160.00

ADDRESSES:

Sub-Contractor:

Gunite Refractories Corporation
1301 Woodswether Road
Kansas City, Missouri 64105

Contractor:

Kaiser Engineers, Inc., Agent
for Armco Steel Corporation
P. O. Box F
Middletown, Ohio 45042

LIQUIDATED DAMAGES: None. Article 31 of the General Terms and Conditions hereof is inapplicable and is hereby deleted.

ADDITIONAL EXHIBITS: The Special Provisions attached hereto as Exhibit "C", and the Standard Conditions attached hereto as Exhibit "D", are by this reference made a part hereof.

In Witness whereof, the parties have made and executed this Sub-Contract as of the day and year first hereinabove written.

GUNITE REFRACTORIES CORPORATION
(Sub-Contractor)

KAISER ENGINEERS, INC., AGENT
FOR ARMCO STEEL CORPORATION
(Contractor)

By /s/ Raymond E. Winick

By /s/ H. H. L. L. L.

Title President

Title Manager - Procurement

FACE SHEET "B"

EXHIBIT "A"PLANS, DRAWINGS AND/OR SPECIFICATIONS

The following drawings and specifications are by this reference incorporated herein:

<u>DRAWING NO. - REV. NO. - DATE</u>	<u>TITLE</u>
600029 0 3-4-66	General Arrangement of Hot Strip Mill
600030 0 3-4-66	General Arrangement of Hot Strip Mill
600458 4 4-20-66	Inlet Flume, Scale Pit #3, Plan & Sections
600459 2 4-20-66	Scale Pit #3, Sections and Details
600466 1 5-24-66	Scale Pits #1 and #2
600473 1 11-18-65	Inlet Flume @ Column Line 29
600475 1 11-18-65	Inlet Flume
600546 2 3-31-66	Roughing Mill
600606 1 12-30-65	Mill Table Sections
600607 2 8-31-66	Mill Table Sections
600756 2 6-21-66	Roughers #1 and #4
601355 2 9-30-65	Scale Pit #3, Flume Arrangement
601378 1 8-24-65	Scale Pit #1, Flume Arrangement
601379 1 8-24-65	Scale Pit #2, Flume Arrangement
601380 0 8-24-65	Scale Removal System
601638 2 11-3-65	Scale Removal System
601639 1 11-3-65	Scale Removal System
10355 12-14-65	M. H. Detrick Co., Mill Scale Flume System
10356 12-14-65	M. H. Detrick Co., Mill Scale Flume System
10357 12-14-65	M. H. Detrick Co., Mill Scale Flume System
10358 12-14-65	M. H. Detrick Co., Mill Scale Flume System

EXHIBIT "A"
PLANS, DRAWINGS AND/OR SPECIFICATIONS
PAGE 2

<u>DRAWING NO.</u>	<u>- REV. NO.</u>	<u>- DATE</u>	<u>TITLE</u>
10359		5-1-66	M. H. Detrick Co., Mill Scale Flume System
10360		12-14-65	M. H. Detrick Co., Mill Scale Flume System
10361		12-14-65	M. H. Detrick Co., Mill Scale Flume System
10362		12-14-65	M. H. Detrick Co., Mill Scale Flume System

SPECIFICATIONS:

1. ASTM Designation C-144, Aggregate for Masonry Mortar.
2. ASTM Designation C-270, Masonry Mortar Type "N".

EXHIBIT "B"

ITEMS TO BE SUPPLIED BY CONTRACTOR

1. Abresist tile already located at Kaiser Engineers Warehouse in wooden cases (approximately 1,500 lbs. per case).
2. Source of potable water in Hot Strip Mill at various outlets.
3. Sanitary facilities as located at various points throughout the jobsite.
4. Electrical power, 440 volt, three phase, and 120 volt, single phase, at Contractor's distribution panels.
5. Storage space near the site of The Work for storage of materials.
6. Crane service, with operator, to off-load crates of abresist material from Sub-Contractor's truck in area adjacent to flume, as designated by Sub-Contractor.
7. Concrete flume, in accordance with structural concrete drawings.
8. Grade line in flume.

EXHIBIT "C"

SPECIAL PROVISIONS

1. It is mutually understood and agreed that the following descriptions and construction conditions apply to The Work and are, by this reference, incorporated into Exhibit "A" Specifications:
 - (a) Abresist tile will be loaded by Contractor on Sub-Contractor's trucks in Contractor's warehouse compound.
 - (b) Sub-Contractor shall take due care in handling abresist tile, which is a somewhat brittle material and the edges chip if not handled carefully.
 - (c) Manufacturer's drawings, which are listed, indicate the tile placing for the three (3) systems. These drawings indicate the number of pieces required, piece numbers, and number of pieces shipped. Each cast liner is individually marked and its position indicated on the installation drawings.
 - (d) Back of tile shall be cleaned of any loose particles prior to installation.
 - (e) Grout forming flume contour shall have rough finish.
 - (f) Mortar bed for tile shall be 1/2" to 3/4" thick. Tile shall be pressed so that mortar will squeeze out and form a 1/16" to 1/8" joint.
 - (g) No more than two (2) rows of liners shall be installed vertically at one time. Allow twenty-four (24) hours to set.
 - (h) Cross section of concrete flume has been indicated on manufacturer's drawings. Invert elevation of abresist lining is approximately 4" higher than concrete cross section of flume. Mortar thickness can vary to insure invert elevation is as shown on manufacturers drawings.
 - (i) The general description of the Abresist Liner Tile is as follows:

Material Shipping Weight: Approximately 237,200 lbs.

Material Net Weight: Approximately 216,350 lbs.

Fused cast, annealed blocks, 1-1/4" average thickness (weight: 17.5 lbs./Sq. Ft.) made in West Germany from basaltic rock material and cast to fit contour of concrete trench for laying/setting in a sand and cement mortar.

EXHIBIT "A"
SPECIAL PROVISIONS
PAGE 2

Included in the above quantity is an allowance of approximately three percent (3%) of the total tile requirement for normal breakage and damage in shipment and handling (Contractor's inspection indicates material received in good condition).

- (j) Contractor will arrange to have the manufacturer's American Licensee, the M. H. Detrick Company, Chicago, Illinois, provide the Sub-Contractor one or two days of installation instruction at the commencement of work.
2. Sub-Contractor shall perform The Work in such a manner as to cause no interference with the normal operation of Owner's Middletown Works.

88

1204-1389

KEN 010801

Subcontracts - Middletown

Job #6471

RETURN TO
KAISER ENGINEERS
RECORDS CENTER
BOX 3033
REQUEST 19625

KEN 010802