

ARMCO INQUIRY

Works Middletown Works

Date 3-8-72

Inquiry No. M-2253 A.W.

To: Mr. J. E. Flannery, Director Purchasing

From: L. C. Petersen, Electrical Engineer

Subject: ISM 500 HP Pump Motor

RES-9744 ICP/MTB (Power)

Please secure price and delivery information on the following:

**PLAINTIFF'S
EXHIBIT**

ARO-119

Please have the below vendor quote on a 1500 HP, 2300 Volt, 3 Phase, 1800 RPM,

Temp rise 60° C. Cont. Duty Ambient Temp 40° C., Cycles 60 Induction Motor

Westinghouse Frame and Motor is 1904S.

Suggested Vendors: ✓1.

Westinghouse Electric Corp.
7710 READING ROAD.
CINCINNATI, OHIO 45237

3-13-72

2.

3.

REV. 4-26-72 recd. 4-27-72.

NEG. NCNI-617 3-22-72
recd. 3-23-72

Special Instructions:

Proposal required on or before 3-20-72

No. of copies 2

Required Delivery

Address Reply To Mr. Elwood B. Keller, Expediter

By L. C. Petersen

ARMCO INQUIRY

Works Middletown - Hamilton Plant

Date September 23, 1971 Inquiry No. M-2118 MS

To: Mr. J. E. Flannery, Director of Purchases

From: V. R. Helton, Mechanical Engineer

Subject: Special Brick - Top of Bosh - #2 Blast Furnace Reline/BAK/VRH

Please secure price and delivery information on the following:

Four - 3 inch courses of brick from El. 138'-5" to El. 139'-5" per
dwg. #7497-D.

Material to be made and stored until released by Purchasing.

- Suggested Vendors: ✓ 1. Harbison-Walker (HW-69-65)
P.O. Box 36171
CINCINNATI, Ohio 45236
9-28-71 ✓ 2. Charles Taylor Co. (X-11-342F)
P.O. Box 44040
CINCINNATI, Ohio 45244
3.

Quote # 71-1007 10-4-71
recd 10-7-71

Special Instructions:

Proposal required on or before 10-8-71 No. of copies 2
Required Delivery January 1, 1972
Address Reply To E. B. Keller, Expediter, Works Engineering

cc: P. Schroth, Research

By Vernon R. Helton
Vernon R. Helton, Mechanical Engineer

ARMCO INQUIRY

Works Middletown - Hamilton Plant

Date September 22, 1971

Inquiry No. M-21147 MS.

To: Mr. J. E. Flannery, Director of Purchases

From: Vernon Helton, Mechanical Engineer

Subject: Carbon Brick - #2 Blast Furnace Reline/BAK/VRH

RES 9526

Please secure price and delivery information on the following:

Carbon brick for bosh per dwg. #7008-D,

13½" bevelled brick from El. 127'-6½" to 138'-5" (29 courses at 4½").

Carbon brick and tuyere blocks per dwg. #7008-D,

18" brick from El. 124'-2" to El. 127'-6½".

Tuyere block detail per dwg. #2185-B.

(Two piece tuyere & cinder notch blocks-req'd 12 complete tuyere blocks and
(2 complete cinder notch blocks).

NOTE: Material to be made and stored until released by Purchasing.

Supplier to provide a Reproducible Tracing of course count upon
receipt of order.

Suggested Vendors:

9-27-71

1. Union Carbide (National Carbon Div.)

120 SOUTH RIVERSIDE PLAZA
CHICAGO, ILLINOIS 60606

2. ~~Great Lakes Carbon~~

3.

(G/O 10-15-71)

QUOTE # 704-1-4163-N761

10-20-71 recd. 10-25-71

Special Instructions:

Proposal required on or before 10-8-71

No. of copies 2

Required Delivery January 1, 1972

Address Reply To E. B. Keller, Expediter, Works Engineering

cc: P. Schroth, Research

By Vernon R. Helton
Vernon R. Helton, Mechanical Engineer

ARMCO INQUIRY

Works Middletown - Hamilton Plant

Date September 22, 1971

Inquiry No. M-2146 MS

To: Mr. J. E. Flannery, Director of Purchases

From: V. R. Helton, Mechanical Engineer

Subject: Ceramic Brick, #2 Blast Furnace Reline/BAK/VRH

Please secure price and delivery information on the following:

Hi-Fired, Super Duty Brick for #2 Blast Furnace as shown and noted on
dwg. #7497-D.

Hi-Fired, Hi-Duty brick for #2 blast furnace dome as noted on dwg #7497-D and
reference dwg. #5371-D.

NOTE: Supplier to furnish a Reproducible Tracing of course count upon receipt
of order. Prints to accompany quotation.
Material to be made and stored until released by Purchasing.

Suggested Vendors:

✓1. General Refractories
515 C.G. E.E. Bldg.
MIDDLETOWN, OHIO 45042

Ref. Prop. 11-24-71 recd. 11-29-71
Rev. Prop. 11-2-71 recd. 11-3-71
Prop. 10-13-71 recd. 10-18-71

✓2. Harbison-Walker Refractories
PO Box 36171
CINCINNATI, OHIO 45236

Prop. 10-25-71 recd. 10-27-71.

✓3. A. P. Green Refractories
3991 FONDORF DRIVE
COLUMBUS, OHIO 43228

Prop. 10-11-71
recd. 10-14-71

✓4. North American Refractories
NATIONAL CITY - EAST SIXTH BLDG.
CLEVELAND, OHIO 44114

Prop. 11-3-71 recd. 11-5-71

Special Instructions:

Proposal required on or before 10-8-71

No. of copies 2

Required Delivery January 1, 1972

Address Reply To E. B. Keller, Expediter, Works Engineering

cc: P. Schroth, Research

By Vernon R. Helton
Vernon R. Helton, Mechanical Engineer

ARMCO INQUIRY

Works Middletown - Hamilton Plant

Date July 26, 1971 Inquiry No. M-2132 J.H.

To: J. E. Flannery, Director - Purchases

From: A. Lancaster - Senior Engineer

Subject: No. 4 Coke Oven Battery Repair - RES-9226 EAK/Al - Hamilton Plant

Please secure price and delivery information on the following:

To furnish labor and material to Silica Weld tie-in joints between original flue wall brick and the repaired flue wall brick at No. 4 coke oven battery.

Price to be firm.

Suggested Vendors:

- ✓ 1. Koppers Company Inc. → Project # 7372.
Engineering and Construction Division
Pittsburgh, Pa. 15219
- 2.
- 3.

Quote 9-1-71

reqd. 9-3-71

7-29-71

Special Instructions:

Proposal required on or before Sept., 1, 1971 No. of copies 2
Required Delivery _____
Address Reply To E. B. Keller, Expediter, Works Engineering

By A. Lancaster
A. Lancaster, Senior Engineer

ARMCO INQUIRY

Works Middletown

Date April 5, 1971

Inquiry No. M-2066 A.W.

To: Mr. J. E. Flannery, Director Purchasing
Attention: R. Wenzel

From: J. L. Slama, Sr. Engineer

Subject: Large HP, HV Motors

JLS/157B (Power Department)

Please secure price and delivery information on the following:

Budget quotations for:

1 to 4 - 3500 HP, 13.8 KV, 1800 RPM, 1.15 S.F. Induction Motor. Sleeve Bearing with split oil rings, 6 imbedded winding RTD's, 460/3/60 space heaters, neutral leads brought out to terminal box, extra large terminal box.

Alternates: Speed = 900 RPM, 1200 RPM, 3600 RPM

Suggested Vendors: ☒ 1. General Electric Corp. *Quote - No. 346-11123 4-15-71 recd. 4-16-71*
2621 Victory Parkway
Cincinnati, Ohio 45206
4-12-71 ☒ 2. Westinghouse Electric Corporation *Prop. 4-12-71. Recd. 4-13-71*
7710 Reading Road
Cincinnati, Ohio 45237
3.

Special Instructions: Please obtain quotations via telephone.

Proposal required on or before _____ No. of copies 2

Required Delivery _____

Address Reply To Mr. Elwood B. Keller, Expediter

By J. L. Slama

ARMCO INQUIRY

Works Middletown - Hamilton Plant

Date March 3, 1971

Inquiry No. N-2037

To: J. E. Flannery, Director - Purchases

From: A. Lancaster, Senior Engineer

Subject: No. 1 Blast Furnace Reline, RES-8609/BAK/Al, Hamilton Plant

Please secure price and delivery information on the following:

Carbon Brick for a Blast Furnace Lining as follows:

- A. Carbon brick hearth wall from elevation 104'-9" to elevation 115'-6" thickness of wall varies from 31 $\frac{1}{2}$ " to 22 $\frac{1}{2}$ ".
- B. An 18" carbon brick tuyere wall from elevation 115'-6" to elevation 122'-7 $\frac{1}{2}$ ". Tuyere wall to include one, two piece cinder notch block and twelve, two piece tuyere blocks. A deduction in quantity of carbon brick to be made where cinder notch and tuyere blocks are placed.
- C. A 13 $\frac{1}{2}$ " beveled carbon bosh wall from elevation 122'-7 $\frac{1}{2}$ " to elevation 132'-7". The slope of bosh is 1-31/32" to 12".
- D. The required quantity of high thermal conductivity carbonaceous mortar.

Reference drawings: 2126-B, 6537-D, 6933-D and 7263-D.

- Suggested Vendors:
- 1. Union Carbide Corporation
 - 2. Great Lake Carbon Corporation
 - 3.

Special Instructions:

Proposal required on or before March 24, 1971 No. of copies 2
Required Delivery June 1, 1971
Address Reply To E. B. Keller, Expeditor, Works Engineering

By A. Lancaster
A. Lancaster, Senior Engineer

ARMCO INQUIRY

Works Middletown - Hamilton Plant

Date February 27, 1968

Inquiry No. M-1072

To: A. E. Cockman, Manager of M.R.O. Equipment Purchases

From: R. H. Neyer, Civil Engineer

Subject: #1 Blast Furnace Reline - RES-7022 - RHN/HLO - Hamilton Blast Furnace

Please secure price and delivery information on the following:

Cost of a 10'-0" Panel Lining of 69-65 Alumina Chrome Brick starting from 6" below the mantle at El. 133'-3-7/8" to 24'-6" above the mantle at El. 157'-9-7/8", shown as Zone "B" and detailed in Section "A-A" on Armco Dwg. 017022.

*Cancelled
as per RHN
3-1-68*

Suggested Vendors: 1.

2.

3.

Special Instructions: Contact Dick Neyer of Hamilton Engineering Dept., for any questions

Proposal required on or before March 21, 1968

No. of copies 2

Required Delivery August 1, 1968

Address Reply To -N. T. Kurfiss, Works Engineer

By Dick Neyer
Dick Neyer, Civil Engineer

AK

ARMCO INQUIRY

Works Middletown - Hamilton Plant

Date February 27, 1968 Inquiry No. M-1071

To: A. E. Cockman, Manager of M.R.O. Equipment Purchases

From: R. H. Neyer, Civil Engineer

Subject: #1 Blast Furnace Reline - RES-7022 - RHN/HLO - Hamilton Blast Furnace

Please secure price and delivery information on the following:

Cost of a lining of Dense Mullite Brick starting from 6" below the mantle at El. 133'-3-7/8" to 24'-6" above the mantle at El. 157'-9-7/8", shown as Zone "B" on Armco Dwg. 017022. A 10'-0" wide, vertical panel of Alumina Chrome Brick will be installed as shown in Section "A-A" from El. 133'-3-7/8" to El. 157'-9-7/8".

Do not quote on Mullite for this panel area.

*Cancelled
as per RHN
3-1-68*

- Suggested Vendors:
1. Harbison Walker
 2. Charles Taylor
 - 3.

Special Instructions: Contact Dick Neyer of Hamilton Engineering Dept., for any questions.

Proposal required on or before March 21, 1968 No. of copies 2
Required Delivery August 1, 1968
Address Reply To N. T. Kurfiss, Works Engineer

By Dick Neyer
Dick Neyer, Civil Engineer

ARMCO INQUIRY

Works Middletown - Hamilton Plant

Date March 1, 1968

Inquiry No. M-1070 Rev. 1

To: A. E. Cockman, Manager of M. R. O. Equipment Purchases

ATTN: C. M. Kneppshield

From: R. H. Neyer, Civil Engineer

Subject: #1 Blast Furnace Reline - RFS-7022 - RHN/HLO - Hamilton Blast Furnace

Please secure price and delivery information on the following:

CHANGE NOTIFICATION

Change 24'-6" above the mantle at El. 157'-9-7/8" on Inquiry M-1070, to read 6" below the mantle at El. ~~133'-3-7/8"~~.

132'-9 7/8"

Suggested Vendors: 1. Harbison Walker - *PROP. 3-15-68 recd. 3-19-68*

2. A. P. Green

3. North American Refractories - *QUOTE 3-12-68 recd 3-18-68*

4. General Refractories - *QUOTE M683-19. 3-14-68 recd 3-15-68*
QUOTE M683-20. 3-21-68 recd. 3-22-68

Special Instructions:

Contact Dick Neyer of Hamilton Engineering Dept., for any questions.

Proposal required on or before March 21, 1968 No. of copies 2

Required Delivery August 1, 1968

Address Reply To N. T. Kurfiss, Works Engineer

By R. H. Neyer
R. H. Neyer, Civil Engineer

ARMCO INQUIRY

Works Middletown - Hamilton Plant

Date February 27, 1968

Inquiry No. M-1070

To: A. E. Cockman, Manager of M.R.O. Equipment Purchases

From: R. H. Neyer, Civil Engineer

Subject: #1 Blast Furnace Reline - RES-7022 - RHN/HLO - Hamilton Blast Furnace

Please secure price and delivery information on the following:

Cost of an 18" thick lining of High Fired Super Duty Ceramic Brick starting from 24'-6" above the mantle at El. 157'-9-7/8" and ending at the top of the stack at El. 191'-6-7/8", shown as Zone "C" on Armco Dwg. 017022.

Suggested Vendors: 1. Harbison Walker

2. A. P. Green

3. North American Refractories

4. General Refractories

Special Instructions: Contact Dick Neyer of Hamilton Engineering Dept., for any questions.

Proposal required on or before March 21, 1968

No. of copies 2

Required Delivery August 1, 1968

Address Reply To N. T. Kurfiss, Works Engineer

By Dick Neyer, Civil Engineer

ARMCO INQUIRY

Works Middletown - Hamilton Plant

Date February 27, 1968

Inquiry No. *M-1069 *OK*

To: A. E. Cockman, Manager of M.R.O. Equipment Purchases

From: R. H. Neyer, Civil Engineer

Subject: #1 Blast Furnace Reline - RES-7022 - RHN/HIO - Hamilton Blast Furnace

Please secure price and delivery information on the following:

Cost of an 18" thick lining of Carbon Brick starting from center line of Tuyeres at El. 120'-9" to 6" below the mantle at El. 132'-9-7/8", shown as Zone "A" on Armco Dwg. 017022. This brick will be beveled on one side to fit the contour of the Steel Bosh Shell.

Cost of 12 - 36" x 18" x 18" Half Tuyere Blocks. The blocks will be cut or machined to fit the contour at the Tuyere Jacket.

Also quote on an adequate amount of a High Thermal Conductivity Carbonaceous Mortar.

Suggested Vendors: 1. National Carbon

✓ 2. Great Lakes Carbon *PROP. # CE 680320-Q227 3-19-68*
mod. 3-25-68

✓ 3. UNION CARBIDE - *PROP S-2032 4-1-68 mod. 4-5-68*

Special Instructions: Contact Dick Neyer of Hamilton Engineering Dept., for any questions.

Proposal required on or before March 21, 1968

No. of copies 2

Required Delivery August 1, 1968

Address Reply To M. T. Kurfiss, Works Engineer

By *Dick Neyer*
Dick Neyer, Civil Engineer

ARMCO INQUIRY

Works Middletown

Date 10/31/67

Inquiry No. M-929 KC Rev. 1

To: R. M. Fletcher, Mgr. Const. & Equip. Purch.

From: L. H. Rose, Civil Engineer

Subject: Bldg. 201-T Extension
RES-6032-1 PFK/LHR/GEM (Tubing)

~~Please secure price and delivery information on the following:~~

Please secure a lump sum bid and date to begin construction on the following:

Erection of an 80' x 120' STEELOX extension of Bldg. 201-T and associated construction as per drawings and job summary attached.

Work to be done by ARMCO SHOPS.

Suggested Vendors: ☒ 1. McGraw Const. - *PROP. Nov. 17, 1967 recd. Nov. 20, 1967*

11-7-67 ☒ 2. David L. Smith Const. Co. *PROP. Nov. 24, 1967 recd. Nov. 28, 1967*

☒ 3. Ohio Valley Higgers - *PROP. Nov. 22, 1967 recd. Nov. 27, 1967*

Special Instructions:

Proposal required on or before 11/10/67 No. of copies 2

Required Delivery 11/15/67

Address Reply To M. T. Kurfiss, Works Engineer

By L. H. Rose

JOB SUMMARY

Bldg. 201-T Extension
RES #6032-1 PFK/LHR/GLW (Tubing)

Yardwork

Yardwork will consist of the following items:

1. Remove existing concrete as per drawing #559755 & 559756. Ref. dwgs. #570789, 570790, 570791, 570792.
2. Grading and backfill of roadways, yard areas, and general building site as per drawings #559808, 559898, 559755 & 559756. (This does not include excavation and backfill for footings, piers and spandrel walls)
3. Asphaltic concrete paving and base as per drawing #559808.
4. Signs & guards including sidewalk safety lines, parking & door number signs, door guard posts and scrap conveyor guard as per dwg. #559808 and 559755, 559725 and 559989.
5. Installation of electric gate operator.
6. Clean-up including general clean-up of the construction area at the end of the job.

Structure:

Structure will consist of the following items:

1. Excavation and earthwork including excavation and backfill for footings, piers, spandrel walls and floors and including filling the existing truck depress. Dwgs. #559808, 559755, 559756 and 559989.
2. Formwork, reinforcing steel and concrete including forming, placing steel, placing, finishing and curing concrete and removal of forms for footings, piers, spandrel walls, floors and conveyor base as per dwgs. #559755, 559756 and 559989 and as per Armco specifications for concrete, Middletown Works.
3. Erect an Armco Truss Type Steelex bldg. 80' wide x 120' long including the following:
 - (a) Breaking out packaged components.
 - (b) Assembly of trusses
 - (c) Erection of crane girders
 - (d) Relocation of (2) two crane repair platforms
 - (e) Removal and disposal of the existing end wall
 - (f) Field painting of structural steel
 - (g) Field connection to existing building.
 - (h) Furnish and erect crane rails, clips and splice bars (the girders are equipped w/welded studs for the clips)
 - (i) Manddoors and windows as shown on drawings.

Note: (1) All Steelex building parts will be furnished by Armco and are stored on the site or will be delivered to the site.

(2) The existing end wall is not to be removed until the extension is enclosed and heated.

The above as per drawings #559898, 559755, 559756, 559725, 559776, 567059, 567060, 567061, 567062, 567063, 567064, 567066.

4. Furnish and install gutters and downspouts including connection of downspouts to existing sewer as per drawings #559808 and 559725.

5. Truck doors including:

(a) Electrical work on a new motorized steel roll door which will be furnished and erected by Armco.

(b) Relocation of an existing motorized steel roll door including electrical work.

Drawings #559725 and 559911.

6. Electrical Work

Material furnished by Armco is so stated.

Armco will furnish all wire, except the figure 8 - 1/0 bare conductor needed for the crane collectors.

Information for the other material and equipment should be obtained from the Bill of Material on the drawings.

Contractor to provide all necessary labor and material required to do the following electrical work:

Building lighting:

Install lighting per Armco Dwg. #559912. Armco will furnish the mercury vapor fixtures, ballasts and lamps.

Scrap Conveyor

Install control equipment, power and control wiring per Armco Dwg. #570939 Rev. C & D. The conveyor will be furnished by Armco with motor mounted.

Crane Collector

Extend existing crane collector system per Armco Dwg. #559911.

Gate Operator

Install necessary conduit, wire and control per Armco Dwg. #570782, Rev. G, and manufacturers instructions.

Power Feeder to Heaters and Overhead Door

Increase existing feeder size to doors and extend to new locations per Armco Dwg. 559911.

The heaters will be furnished by Armco with controls wired, by the manufacturer. The overhead doors will also be furnished by Armco with motor and limit switches mounted but not wired.

7. Heating including the following:

- (a) Installation of two (2) unit heaters - heaters furnished by Armco.
- (b) Installation of four (4) door air heaters - heaters furnished by Armco.
- (c) Install natural gas supply lines, drops, & connections to heaters.
- (d) Install vents and duct work
- (e) Relocate natural gas line all as per Dwg. #567077

8. Guards, signs, & safety painting inside the building including a guard rail across the building in the end bay. Dwg. #559755 & 559756.

9. Misc. iron & steel including a new crane access stair, a truck access platform, a scrap conveyor support, lighting fixture brackets, crane collector brackets. Dwg. #559806, 559807, 559989.

Equipment

Equipment installation consists of the installation of one 12' long section of scrap conveyor and modification of the existing conveyor as per Dwg. #559939 & 559808.

Note: This conveyor must be installed prior to construction of the building so that scrap flow from operations can be maintained during construction. No other operations will be effected by construction.

ARMCO INQUIRY

Works Middletown
Date 10-4-67 Inquiry No. M-929 K.C.
To: R. M. Fletcher, Manager Const. & Equip. - Purchases
From: L. H. Rose, Civil Engineer
Subject: BLDG. 201-T EXTENSION
RES-5032-1 - PFK/LHR (TUBING)

Please secure price and delivery information on the following:

Erection of a 80' x 120' Steelex extension of Bldg. 201-T and associated construction as per drawings by McGraw Construction and as per Middletown Works Engr. Dept. (L.H. Rose).

Suggested Vendors: ☒ 1. McGraw Construction Co.

10-6-67.

2.

3.

Special Instructions:

Estimate
Proposal required on or before 10-10-67 No. of copies 2
Required Delivery 10-16-67
Address Reply To H. T. Kurfiss, Works Engineer

By L. H. Rose

ARMCO INQUIRY

Works Middletown - Hamilton Plant

Date September 26, 1967 Inquiry No. M-920 L.S.E.

To: R. M. Fletcher, Manager of Construction & Equipment Purchases

From: J. T. Young, Civil Engineer

Subject: 8000# Fork Truck - Maintenance, RES-S1.53, JTY/H1.0, Hamilton Maintenance

Please secure price and delivery information on the following:

1 - 8000# Fork Lift Truck with following specifications:

Minimum Lift - 14'6"
Forks - Standard
Pneumatic Tires
Free Lift - Standard
Engine - Gasoline
Transmission - Standard
Steering - Power
Protectoseal Gas Cap
Alternator

OPTIONS

Dual Drive Tires
Engine Hour Meter
Overhead Guard
Red Warning Light
Head & Tail lights
Filtration Kit
Bearcat Armour Guard Tires
Diesel Engine
3 Stage Mast
Spark Arrestor

Suggested Vendors: 1.

Clark
10RT4001 - QUOTE. # 12-1. 12-1-67 recd. 12-9-67

~~Hyster~~
BODE FINN Co - PREP. 10-26-67 recd. 10-30-67

~~Allie Chalmers~~

✓3. CITICORP - PROP. CJNN-689. 10-21-67 and 11-6-67

Special Instructions:

Proposal required on or before Oct. 23, 1967 No. of copies 2

Required Delivery _____

Address Reply To N. T. Kurfiss, Works Engineer

By J. T. Young, Civil Engineer

ARMCO INQUIRY

Works Middletown

Date 6-13-67

Inquiry No. M-834 K.C.

To: R. M. Fletcher, Manager Const. & Equip. - Purchases

From: J. A. Raiche, Mechanical Engineer

Subject: WICOFF LOCKER ROOM
RES-2595 - PFK/JAR (B & Y)

Please secure price and delivery information on the following:

One locker room building to be constructed at the Wicoff Street entrance, per Armco drawings 554487 thru 554499, 557567 thru 557577, 557587, and 557610; and per specifications No. 7114 (3-1) locker rooms, dated March 14, 1967. NOTE: Where the drawings and the specifications differ, the drawings will take precedence.

Armco will furnish the steel building BCS3-C in the general vicinity of the building site, and the site will be cleared of existing buildings (but not floor slabs).

Please submit bid using the attached chart-of-accounts; taxes, insurance, and other indirect costs should be included with the direct costs, not separated.

Note for McGraw: Submit bid based on use of commercial construction equipment; not Armco-owned.

Suggested Vendors: *6-16-67*
✓ 1. David L. Smith Const. Co., Inc. *PROP. 7-14-67 recd. 7-18-67*
Middletown, Ohio
✓ 2. McGraw Construction Co. - *PROP. 7-13-67 recd 7-18-67*
Middletown, Ohio

3.

Special Instructions:

Proposal required on or before July 15, 1967 No. of copies 2

Required Delivery _____

Address Reply To N. T. Kurfiss, Works Engineer

By J. A. Raiche

ARMCO INQUIRY

Works Middletown

Date 5-18-67

Inquiry No. M-810

To: R. M. Fletcher, Manager Const. & Equip. - Purchases

From: Larry E. Baruth, Mechanical Engineer

Subject: FORK TRACTOR CAR LOAD
RES-8109 - LED/JSM (WEST SHIPPING)

Please secure price and delivery information on the following:

- 1 - New electric fork tractor to be used by Shipping for loading coils into railroad box-cars. Coils weigh 20,000#, but future requirements may ask for 30,000# coil loading capacity. Compromise on maneuverability versus lifting capacity must be reached. Request visit with vendors to determine specifications.

5/24
 5. JOHN MARK DAVIS Sales Co - Prop. 7-11-67 need 7-12-67
 P.O. Box 37294
 CINC. O 45237
5/24
 6. PORTMAN EQUIP. CO.
 4331 ROSE BLVD
 CINCINNATI, OHIO 45236
 7. BASTNER BROS.
 2642 SPRINGFIELD
 CINCINNATI, OHIO 45214

Suggested Vendors:

1. Yale
 11000 EQUIP. CO
 4850 SPRINGFIELD PKWY
 CINCINNATI, OHIO 45215
 Prop. #60487 - 7-6-67 need 7-12-67
2. ~~Elmer~~
3. Clark
4. Automatic - Prop. #38772 - 6-29-67 need 7-12-67
 (Others)

Special Instructions:

Proposal required on or before June 1, 1967 No. of copies 2
 Required Delivery
 Address Reply To N. T. Kurfiss, Works Engineer

By Larry E. Baruth

ARMCO INQUIRY

Works Middletown

Date 3-30-67

Inquiry No. M-753

K.C.

To: Mr. R. M. Fletcher, Manager Const. & Equip. - Purchases

From: R. H. Noyer, Civil Engineer

Subject: GUN DOME OF FURNACE - #3 BLAST FURNACE RELINE
RES-6041 - RHN/HLO

Please secure price and delivery information on the following:

The labor and material to completely studd and gun the dome of #3 Blast Furnace as shown on Armco Dwg. 559609. The quotation shall be submitted in the following format:

1) Gunning Material Only (6" thick - 960 ft.²)

(a)	Cost/Bag	\$
(b)	Cost/Ton	\$
(c)	Total Mat'l Cost	\$
(d)	Total Mat'l Wt.	\$

2) Studding - Nelson "V" Type Steel Stud on 12" C/C Diamond Pattern (Estimated 960 Studs)

(a)	Cost/Stud (material only)	\$
(b)	Total Material Cost	\$
(c)	Installation Cost/Stud	\$
(d)	Total Installation Cost	\$

Suggested Vendors: ☒ 1. A. E. Anderson - *PROP #67082 - 4-12-67 - recd. 4-14-67.*

4-3-67

☒ 2. Kaiser Refractories

☒ 3. Refractories & Insulation Corp.

☒ 4. A. P. Green

Special Instructions: *5. FURNITE REFRACTORIES CORP. PROP. 4-14-67 recd. 4-18-67*

Proposal required on or before April 14, 1967

No. of copies 2

Required Delivery July 1, 1967

Address Reply To N. T. Kurfias, Works Engineer

By R. H. Noyer

3) Labor To Apply Gunning Material Only

- (a) Cost/Sq. ft. \$
- (b) Total Cost \$

4) Adjustment Cost Per Sq. Ft. In case More or Less Gunning Required than Indicated

- (a) Gunning Material. \$
- (b) Studs \$
- (c) Gunning Application \$
- (d) Installation of Studs \$

NOTE: All scaffolding will be furnished by Armco.

ARMCO INQUIRY

Works MiddletownDate 12-19-66Inquiry No. M-587CC.To: W. M. Schuck, Manager Const. & Equip. - PurchasesFrom: J. T. Young, Civil EngineerSubject: GUNNITEING UPTAKES, OFFTAKES & DOWNCOMERRES-6041 JTY/HLO - #3 BLAST FURNACE

Please secure price and delivery information on the following:

The cost of completely gunniteing the insides of the oftakes and uptakes, and partially gunning the inside of the downcomer as shown on Armco dwgs. BC-2394 & BC-2388 with a 3" layer of Gunnite.

Also the cost of re-gunniteing the coke bins and beams as shown per Armco dwg. BC-1059.

7. A.P. GREEN CO - PROP. #677 Rev. 1. 4-24-67 - need 4-26-67
PROP. #709375-11. 4-21-67 need 4-26-67

B. H. HARTMAN

4. STONHARD CO. - PROP. 1-13-67 need 1-16-67
MAPLE SHADE, N. J.

5. GUNNITE REFRACTORIES - PROP. 1-17-67 need 1-19-67
KANSAS CITY, MO. - REV. PROP. 4-14-67 need 4-18-67

6. KAISER REFRACTORIES - PROP. 1-20-67 need 1-23-67

Suggested Vendors:

1. Lawrence Refractories - PROP. 5-8-67 need 5-11-67.
Pedro, Ohio
2. A. E. Anderson - PROP. 1-19-67 need 1-21-67
Buffalo, N.Y.
3. Refractories & Insulation Corp.
Penna,

Special Instructions:

Break estimate down into labor, material and studding for the uptakes, oftakes and downcomer, estimate coke bins. separately.

Proposal required on or before 1-15-67 No. of copies 2

Required Delivery

Address Reply To N. T. Kurfiss, Works EngineerBy J. T. Young

ARMCO INQUIRY

Works Middletown - Hamilton PlantDate October, 18, 1966Inquiry No. M-511

A.W.

To: Wm. Schuck, Manager Construction & Equipment PurchasesFrom: F. D. Rentschler, Mechanical EngineerSubject: Relocate P.C.S. Bin - Piqua - H.O./FDR RES-3184

Please secure price and delivery information on the following:

Erection of a 200 Ton Capacity Pre-Fabricated Storage Bin, at the Piqua Quarry.

The work will include disassembly of the Bin in it's present location, erection in a new location, & installation of an air-slide system (with associated Shut-off gates & air piping). No concrete or electrical work is to be included.

The work will take one to two weeks & is to be performed in early December, 1966.

Contractor should contact R. Hennessey & F. D. Rentschler (Piqua Quarry) for an appointment to review the work involved prior to submitting a quote.

NOTE: F. D. Rentschler can be contacted at Armco Hamilton Plant.

Suggested Vendors:

✓ 1. Champion Bridge Co.
Wilmington, Ohio

PROP. 12-5-66 rec'd 12-6-66

10-21-66

✓ 2. McGraw Const.
Middletown, Ohio

3.

Special Instructions:

Proposal required on or before November 14, 1966No. of copies 2Required Delivery December, 1966Address Reply To N. T. Kurfiss, Works EngineerBy F. D. Rentschler

ARMCO INQUIRY

Works Middletown
 Date 10/17/66 Inquiry No. M-510 DAN WARD
 To: Wm. Schuck, Manager - Equip. & Const. Purchases
 From: E.G. Ophroek, Assoc. Civil Engineer
 Subject: Bubble Desuperheaters (18" Steam Line)
RES #2627 - EGO/MFB (Power)
 Please secure price and delivery information on the following:

A dual system of two (2) Bubble Desuperheaters to be used after pressure reducing valves on 10" Steam Lines for the purpose of desuperheating steam at 165 PSI from 750° F to 480° F.

Each desuperheater should handle 175,000 lb/hr. using boiler feedwater as the cooling media, and a suitable blow-down system should be provided.

6. FORNEY ENGR. CO. - PROP # 0-95-6102 1-5-67 and 1-6-67
 7. FISHER INDUST EQUIPT. QUOTE C-8022 1-22-67 and 1-25-67
 (HAPPY 6)
 1-24-67 8. WILCOX & CORNELIUS (MURRAY JEON WORKS) PROP. 2-17-67 and 2-20-67
 CINCINNATI, OHIO BURLINGTON, IOWA

Suggested Vendors: ☒ 1. Babcox & Wilcox PROP. P-11-551- 11-2-66 and 11-3-66
 10-20-66 ☒ 2. COMBUSTION ENGR. CO.

12-20-66 ☒ 3. ROCKWELL MFG. - NO BID
☒ 4. FOSTER WHEELER CORP.
 Special Instructions: ☒ 5. BAILEY METER - NO BID.

Proposal required on or before October 28, 1966 No. of copies 2
 Required Delivery 4 Months
 Address Reply To N. T. Kurfias, Works Engineer
 By E. G. Ophroek