

E-2 VENDORS LIST, PROCESS PLANT

FABRICATED EQUIPMENT

DRUMS & PRESSURE VESSELS

Modern Welding Co.
Metal Arts (Stainless)
Nooter Corp.

TOWERS

Chicago Bridge & Iron Co. (Field erected especially)
Nooter Corp.
Struthers Wells - Gulfport

TRAYS

Glitsch Inc.
Koch Engineering Co., Inc.
Nutter Engineering Co., Inc.

PACKING (TOWER, RASCHIG RINGS, CERAMIC BALLS, ETC.)

Norton
Glitsch
Koch Engr.

METHANOL CONVERTER

Chicago Bridge & Iron Co.
Babcock & Wilcox Co.
Nooter

STEAM DRUMS (HIGH PRESSURE)

Babcock & Wilcox
Combustion Engineering
Dyna-therm Corp.

WASTE HEAT BOILERS

Foster Wheeler Corp.
Struthers Wells
Technotherm Corp.
Babcock & Wilcox Co.

WASTE HEAT BOILERS (VERTICAL HIGH PRESSURE TYPE)

American Schack

FIELD ERECTED TANKS/VESSELS

CBI
RECO
PDM

STACKS (CS)

Continental Boiler Works Inc.
Grand Junction
Hogan Mfg.

STACKS (FRP)

Heil Process
Ershig's
Justin Enterprises

STACKS & BREACHING

Global Steel of Arkansas (Div. of Hogan Mfg.)
Modern Welding Co.
Mosher Steel Co.

FLARE STACK

John Zink Co.
Flare Gas Corp.
National Airoil Burner Co.

STEEL DUCTING

Hogan Mfg. Inc.
Hemminger Co.
Grand Junction Steel Fabricating Co.

STRUCTURAL STEEL WORK

To be determined by plant location.

HEAT EXCHANGERS:

DOUBLE PIPE

Brown Fin Tube Co.
Smithco Engr. Co., Inc.
Armstrong

FIN TUBE

Brown Fin-Tube Co.
Con-Rad Corp.
Graham Mfg. Co.

HEAT EXCHANGERS: (Cont'd.)

SHELL & TUBE (LARGE/HIGH PRESSURE)

Hunt Tool Co.
Struthers Wells - Warren
Hughes Anderson Engr. Co.

SHELL & TUBE (REGULAR)

Hughes Anderson
Engr. Corp.
Nooter Corp.
Warner Corp. - Tulsa

PLATE-FIN/CORE TYPE

Stewart Warner
Trane

PLATE TYPE

APV Co.
DeLaval Separator Co.
Tranter

REFRACTORY MATERIALS

Babcock & Wilcox Co.
General Refractories
A. P. Green Firebrick Co.

SIDING & ROOFING

Young Sales
Kiernan-Gregory
Corbesco

BURNERS

John Zink
Cohen
National Airoil

PIPING & BULKS

ANCHOR BOLTS

Nut & Bolt
Southeastern
House of Threads

BOLTS AND NUTS

Nut & Bolt
Southeastern
House of Threads

CONCRETE

To be determined by plant location

EXPANSION JOINTS (METAL)

Metalflex
ADSCO
Pathway

EXPANSION JOINTS (RUBBER)

Mercer
Uniflex
Holtz

EXPANSION JOINTS (FABRIC)

Pathway
Raybestos
Flowflex

HOSE & FITTINGS

Mineco
Tampa Rubber & Gasket
Rubber & Accessories

PIPE:

CARBON STEEL

A & J Friedman
Tampa Valve & Fitting
McJunkin

FRP

Conley Corp.
Corban Ind.
Fibercast

POLYETHYLENE

Nipak
Driscopipe

STAINLESS

A & J Friedman
Tampa Valve & Fitting
McJunkin

PIPE FABRICATION:

CARBON & STAINLESS STEEL

Cornell & Underhill]

NASCO

Chas. F. Guyon

CAST IRON DUCTILE IRON

Clow

American Cast Iron

U.S. Pipe & Foundry

C.I. POLYPROPELENE LINED

Dow

Resistoflex

FRP

NASCO

RECO

Tampa Steel Erecting

RUBBERLINED

NASCO

RECO

Tampa Steel Erecting

PIPE HANGERS

Grinnell

F & S Central

Bergen Patterson

Corner & Lada

PRECAST CONCRETE PIPE

To be determined by plant location

REBAR

To be determined by plant location

TRAPS & STRAINERS

Sarco

Yarway

Mueller

VALVES:

ALLOY, STAINLESS

Tampa Valve & Fitting
McJunkin
Pacific

BUTTERFLY

Durco
Keystone
Centerline

CARBON, FORGED

A & J Friedman
Tampa Valve & Fitting
McJunkin

DIAPHRAGM

Grinnell
Dow

KNIFE GATE

Fabri-Valve
Centerline Valve
Dezurik

PLUG

Durco
Tuflin
Rockwell International Flow Control Div.

MECHANICAL:

AGITATORS

Mixing Equipment Co.
Philadelphia Gear Corp.
Chemineer Agitators, Chemineer Inc.

COMPRESSORS:

CENTRIFUGAL-PROCESS

Dresser Clark Div., Clark Bros.
DeLaval Turbine Inc.
G.E.

INSTRUMENT AIR

Ingersoll-Rand
Atlas Copco
Joy

PLANT AIR

Ingersoll-Rand
Joy
Atlas Copco

CONDENSERS (STEAM TURBINE)

Graham Mfg. Co.
DeLaval Corp.

COUPLINGS (DRY)

Bendix
Zurn
Thomas

CRANES/HOIST

Shepard Niles Crane & Hoist Corp.
Robbins-Myers
Coffing Hoist

DEAERATORS

Chicago Heater Co., Inc.
Crane Co., Cochran Environmental Systems Div.
LA/Water Treatment Div. of Chromalloy American Corp.

PUMPS:

API

Goulds Pumps, Inc.
Ingersoll-Rand
Byron Jackson Pump Div., Borg-Warner Corp.
Pacific Pumps Div., Dresser Industries Inc.
Bingham

ANSI

Duriron Co. Inc.
Goulds Pumps
Ingersoll-Rand

BOILER FEED WATER

Byron Jackson
Ingersoll-Rand
Pacific Pumps

POSITIVE DISPLACEMENT, CONTROLLED VOLUME

Pulsafeeder Products, Ingersoll Corp.
Milton Roy Company
BIF, A Unit of General Signal Corp.

SILENCERS

American Air Filter Co., Pulsco Div.
Burgess-Manning Div., Burgess Industries Inc.
Fluid Kinetics

TURBINES:

STEAM (LARGE)

General Electric Co.
Turbine Div., DeLaval Turbine Inc.
Turbodyne Corp.

STEAM (SMALL)

Coppus Engineering Corp.
Elliott Company
Turbodyne Corp.

DRYERS (INSTRUMENT AIR/HEATLESS)

The C.M. Kemp Mfg. Co.
Pall Trinity Micro Corp.
Anderson

DRYERS (PROCESS GAS)

Pall Trinity Micro Corp.
Chromalloy American Corp.
C.M. Kemp Mfg. Co.

EJECTORS, (VACUUM)

Croll-Reynolds Engr. Co., Inc.
Graham Mfg. Co. Inc.
Ametek Inc., Schutte & Koerting Div.

FANS/BLOWERS

Robinson Industries, Inc.
Zurn-Clarage
American Davidson
Buffalo Forge Co.

FILTERS

AMF Cuno Div.
Dollinger Corp.
Pall Trinity

FLAME ARRESTORS

Fly, Ash Arrestor
Shand & Jurs Co.
Varec, Inc.

FOAM PROTECTION SYSTEMS

Walter Kidde Corp.
National Foam Corp.
3M Company

GENERATOR SETS, ELECTRIC (ENGINE DRIVEN)

Onan Div., Onan Corp.
Kohler Co.
Stewart & Stevenson

LOADING ARMS

OPW Dover Corp.
Continental EMSCO
FMC Corp.

MISCELLANEOUS/PACKAGE EQUIPMENT

PACKAGE BOILERS

Babcock & Wilcox
Clever Bros.
C.E.

FIRED HEATERS

Foster Wheeler
Born
Lummus

OXYGEN PLANT

Lotebro Corp.
Liquid Air
BOC

CONDENSERS

Graham Mfg. Co.
Process Engr. & Machine Co.
BASCO Div., American Precision

WATER TREATMENT SYSTEMS

LA/Water Treatment Div. of Chromalloy American Corp.
Graver Water Conditioning Company
Betz Laboratories, Inc.

COOLING TOWERS

The Marley Co.
Lillie Hoffman Cooling Towers
Ecodyne

ELECTRICAL

ELECTRICAL MOTORS

Westinghouse Electric Corp.
General Electric Co.
Louis Allis

HEAT TRACING SYSTEMS

Chemelex
Thermon Mfg.

LOAD CENTER TRANSFORMERS

Westinghouse Electric Corp.
General Electric Co.

MOTOR CONTROL CENTER & MEDIUM VOLTAGE CONTROLLERS

Westinghouse Electric Corp.
General Electric
Allen Bradley

RELAY CABINETS

Haines City Electric
Powell Electric
Federal Pacific

SWITCHGEAR

Westinghouse Electric Corp.
General Electric Co.
Square D Co.

UNINTERRUPTED POWER SYSTEM

Static Products
Exide
Deltic

LOAD CENTERS

Westinghouse Electric
General Electric

INSTRUMENTATION

CONTROL PANELS:

LARGE (COMPLEX-HI DENSITY)
Fitzgerald Engrg.
Austin Assocs.

MEDIUM
Mechanical Controls
Haines City Electric
Unit Electric

SMALL (LOCAL)
Curry Controls

MINIATURE PANEL INSTRUMENTS
(Conventional)
Moore Products
Taylor Instruments

ELECTRONIC SYSTEMS
(CRT DISPLAYS, ETC.)
Foxboro Co.
Honeywell

RECORDERS (POTENTIOMETRIC)
Honeywell
Leeds & Northrup
Westronics

INDICATORS POTENTIOMETRIC
(DIGITAL)
- Acromag
Leeds & Northrup
Transmation

ANNUNCIATORS

Beta
Ronan
Scam

ANALOG SIGNAL CONVERTERS & SWITCHES

Moore Industries
Rochester Instr. Sys.
Transmation

ANALOG COMPUTING DEVICES

Fisher Controls
Moore Products
Transmation

ANALYZER SYSTEMS

CONDUCTIVITY & PH

Beckman
Leeds & Northrup
Uniloc

OXYGEN

Beckman
Thermox
Westinghouse

HYDROGEN (THERMAL CONDUCTIVITY)

Beckman
Leeds & Northrup
Mine Safety Appliance

CO/CO2 (INFRA-RED)

Beckman
Thermo-Electron
Mine Safety Appliance

SULFUR TITRATOR

Barton
Houston Atlas

GAS/LIQUID CHROMATOGRAPH

Beckman
Applied Automation
Bendix

H2S/SO2 ANALYZERS

DuPont

GAS SPECTROPHOTOMETER

Perkin-Elmer

COMBUSTIBLE/TOXIC GAS DETECTOR SYSTEMS

Mine Safety Appliance
General Monitors
Scott

FLOW INSTRUMENTS

ORIFICE PLATES & METER RUNS

Daniels
Peco/Robinson
Vickery Sims

GILFLOW-METER Bennet-Gervasse

PILOT TUBES (ANNUEAR)

Ellison
Meriam

FLOW TUBES

Bethlehem
BLF
Daniels
Vickery Sims

SEGMENTAL WEDGE

Taylor

ROTAMETERS

Brooks
Fischer & Porter
Schute & Koerting

MAGNETIC FLOW SYSTEMS

Fischer & Porter
Foxboro Co.
Brooks

TURBINE FLOW SYSTEMS

Daniels
Fischer & Porter
Foxboro

ANALYZER SYSTEMS (Contd.)

COMBUSTIBLE/TOXIC GAS DETECTOR SYSTEMS

Mine Safety Appliance
General Monitors
Scott

CONTROL VALVES

GENERAL SERVICE

Fisher Controls
Masoneilan
Valtek

CORROSION SERVICE PLUG

Durco
Tufline
DeZurick

CORROSION SERVICE DIAPHRAGM/PINCH

Fisher Controls
Clarkson
RKL

BUTTERFLY VALVES

Fisher Controls
Keystone
Hammel Dahl (Conoflow)

LO NOISE

Control Components
Fisher Controls
Valtek

AUTOMATIC RECIRCULATION

Yarway

CONTROL VALVES

GENERAL SERVICE

Fisher Controls
Masoneilan
Valtek

CORROSION SERVICE PLUG

Durco
Tuflin
DeZurick

CORROSION SERVICE DIAPHRAGM/PINCH

Fisher Controls
Clarkson
RKL

BUTTERFLY VALVES

Fisher Controls
Keystone
Hammel Dahl (Conoflow)

LO NOISE

Control Components
Fisher Controls
Valtek

AUTOMATIC RECIRCULATION

Yarway

SAFETY/RELIEF VALVES

SPRING LOADS SAFETY RELIEF VALVES

Crosby
Teledyne Farris
Consolidated (Dresser)

TANK (PRESS., VACUUM, PRESS/VAC-CONSERVATION)

Invalco
Shand & Jurs
Varec

RELIEF (HIGH VOLUME WATER)

Kunkle

RELIEF (TURBINE DISCHARGE)

Atwood Morrill

PILOT (DUAL) OPERATED HIGH PRESSURE & VOLUME

Anderson-Greenwood

RUPTURE DISCS

BS & B
Fike
Continental

FLOW INSTRUMENTS

FLOW SWITCHES

Magnetrol
Universal Monitor
Mercoid

POSITIVE DISPLACEMENT FLOW METERS

American Meter
Brooks
A. O. Smith

LEVEL INSTRUMENTS

FLOAT/DISPLACER TRANSMITTER-CONTROLLER

Fisher Controls
Magnetrol
Masoneilan

FLOAT/DISPLACER SWITCHES

Fisher Controls
Magnetrol
Mercoid

CONDUCTANCE LEVEL SWITCHES & PROBES

B & W
Invalco
Warrick

VIBRATING REED SWITCHES

Dynatrol
Endress & Hauser

ULTRA-SONIC SWITCHES

Endress & Hauser
National Sonics
Delavan

CAPACITANCE SWITCHES

Drexel Brook
Fisher Controls
Robertshaw

PADDLE LEVEL SWITCHES

Bindicator
Monitor
Fuller

STEAM DRUM COLUMNS & GAUGES

Diamond
Penberthy
Reliance

REMOTE STEAM DRUM INDICATORS

Reliance
Yarway

LEVEL INSTRUMENTS (Contd.)

GAUGE GLASSES

Daniels
Jerguson
Penberthy

FLOAT TYPE TANK LEVEL INDICATORS
(USE TAPE TYPE ONLY)

Invalco
Shand & Jurs
Varec

NUCLEAR LEVEL GAUGES

Ohmart
Texas Nuclear
Kay Ray

PRESSURE INSTRUMENTS

PRESSURE GAUGES

Ashcroft
Helecoid
U. S. Gauge

PRESSURE SWITCHES

ASCO
Custom Components
U. E. Controls

PRESSURE REGULATORS (PROCESS)

Fisher Controls
Leslie
Masoneilan

PRESSURE REGULATORS (PNEUMATIC SYSTEMS)

Fisher Controls
Masoneilan
Moore Products

MANOMETERS

Dwyer
Ellison
Meriam

TEMPERATURE INSTRUMENTS

P1-METALLIC THERMOMETERS

Ashcroft

Moeller

Rochester Gauges

TEMPERATURE SWITCHES

ASCO

Control Components

U. E. Controls

RID'S AND THERMOWELLS

Rosemount

Thermo-Electric

Mineco

THERMOCOUPLES & THERMOWELLS

Daily Instrument

Instrumatics

Thermoelectric

TEMPERATURE REGULATORS

Ashcroft

Leslie

Taylor

MISCELLANEOUS INSTRUMENTS & CONTROLS

MACHINERY MONITORING SYSTEMS

Bentley Nevada

Dymac

Dytronics

VIBRATION SWITCHES

Metrix

Robertshaw

Amot

TACHOMETERS

Foxboro

Dynalco

Airpax

TELEVISION SYSTEMS

Diamond

Motorola

SOLENOID VALVES

ASCO

General Controls

Skinner

TELEVISION SYSTEMS (FUEL SAFETY)

General Dynamics

Maxon

North American

TRINIDAD METHANOL PLANTSHIP
US MANUFACTURED MATERIALS

- I. **Drilling**
 - A. **Wellhead**
 - 1. Vetco
 - 2. FMC
 - 3. Cameron
 - B. **Casing**
 - 1. Lone Star Steel
 - 2. Hydril
 - 3. NL Atlas
 - C. **Drill Bits**
 - 1. Hughes
 - 2. Smith
 - 3. Security
 - D. **Liner Equipment**
 - 1. TIW
 - 2. Otis
 - E. **Mud**
 - 1. Milpark
 - 2. NL Baroid
 - 3. Magcobar-IMCO
 - F. **Cement**
 - Halliburton
 - G. **Cement Float Equipment**
 - 1. Davis Lynch
 - 2. Halliburton

II. Process Equipment

- A. Ball Valves**
 - 1. Cameron
 - 2. WKM
- B. Check Valves**
 - 1. Wheatley
 - 2. Judd
 - 3. Prince
- C. Controls and Pilots**
 - Fisher
- D. Relief Valves**
 - 1. Axelson
 - 2. Anderson-Greenwood
- E. Level Gauges**
 - 1. Daniels
 - 2. Jerguson
- F. Meter Tubes**
 - Daniels
- G. Chart Recorders**
 - Barton
- H. Liquid Meters**
 - Floco
- I. Tube Fittings**
 - 1. Parker
 - 2. Swagelok
- J. Heat Exchangers**
 - Brown Fin Tube
- K. Reverse Flow Coalescers**
 - King Tool Company
- L. Safety System Panels**
 - 1. PMCS
 - 2. Autocon

III. Pipelines

A. Line Pipe

1. U. S. Steel
2. CF&I

B. Subsea Gate Valves

1. FMC
2. Cameron

C. Subsea Check Valves

Tom Wheatley

D. Subsea Ball Valves

Cameron

E. Control Umbilicals

1. Hydril
2. Parker