20,000 Barrel Per Day Crude Oil Refinery (For Sale)

AT THE EXCEPTIONAL PRICE OF \$39,500,000.00

PRICE INCLUDES SHIPPING AND INSTALLATION

Includes 2- TEN T B/D DISTILLATION UNITS
(SELLER NEEDS TO SELL TO MAKE ROOM FOR NEW REFINERY)

The details of the referenced refinery are as follows 20,000 bpd diesel refinery for sale.

Total: $39.5 million C&F Nigerian Port (subject to prior sale)

- The price includes 1. Refurbishment and 2. Dismantlement.

The refinery is designed to produce the majority of product as diesel fuel. Plant mainly produced diesel, depending on API, can also make a % of naphtha and kerosene.

PLANT INCLUDES ‘TWO SEPARATE 10,000 BPD ATMOSPHERIC UNITS, AND ONE 600 BPD VACUUM USED AS A REFLUX UNIT. (INVENTORY ATTACHED)

NOTE. Two (2) 10,000 - 12,500 bbl per day each Crude distillation Units. One tower is moly. Manufactured by Horton and Inclusive of the following:
**Short List: Inventory**

- 5 crude oil process heaters
- 18 crude and transfer pumps
- heat exchangers
- 2 distillation towers - 10,000 bpd each
- 1 vacuum unit - 600 bpd capacity - used as a reflux unit
- 3 stripping towers
- Associated utilities
- lab equipment
- 2 boilers
- complete spare parts and controls

Crude Heaters manufactured by Eclipse with burner systems complete with piping, wiring controls, gas or fuel fired.

Inventory attached on Description and price document.

**HISTORY:**

Started in 1986 with a small 600 bpd vacuum unit. In 1989 the owners needed to expand, and installed the first 10,000 bpd distillation unit to produce diesel, kerosene, and naphtha. At this time the vacuum unit was converted to a reflux unit. A second 10,000 bpd distillation unit was purchased and in the process of being added when the refinery shut down. All parts are included for this second unit.

**OPTION: FOR LESS AMOUNT CAN SELL EVERYTHING BUT THE SECOND 10,000 B/D DISTILLATION UNIT.**

The Refinery was shut down in 1992 due to low prices and gradual reduction in demand for diesel. Periodically the unit is turned on to run fluids through it. This is a fully operational distillation unit and is always pickled in diesel.

Export packaging, turnkey and project management services available on a separate contract agreement.

Turnkey Estimate does not include the purchase price of refinery or shipment. Final Turnkey agreement ‘Subject’ to feasibility study.

**THE PRICE ABOVE INCLUDES**

**‘DISMANTLEMENT-REFURBISHMENT’ AS NEEDED. SEE REFURBISH LIST.**

The services provided on the 20 000 bpd unit

- Dismantling/refurb/export packaging supervision / Technical and engineering consulting
- Site preparation supervision / re erection and start up supervision

The refinery is designed to produce the majority of product as diesel fuel

- Mid 80's vintage
- Heater -
• Atmospheric tower with 27 trays -  
• Re-heater reflux tower with 17 trays -  
• Coolers  
• Controls with spare parts  
• Various pumps and motors to support system  
• Cooling tower - manufactured by Baltimore Mead  
• The equipment is maintained by the owner and is in good condition. All vessels are filled with diesel.  
• Electrical system is 60 Hz. Will be converted to 50 hz cycle if required.  
• All heaters and towers have ASME stamps  
• Spare parts  
• Controls: pneumatic

This is a fully operational distillation unit and is always pickled in diesel.

**EQUIPMENT INVENTORY LIST**

This is a list of the major items but not to be limited to the equipment sold: LOTS OF SPARE PARTS

1. **Crude Atmospheric Distillation**

   Two (2) 10,000- 12,500 bbl per day each Crude distillation Unit. One tower is moly. Manufactured by Horton and Inclusive of the following:

   **H-101 A & B**
   Crude Heaters manufactured by Eclipse with burner systems complete with piping, wiring controls, gas or fuel fired.

   **T-101**
   Crude Distillation Tower complete with 27 trays.

   **T-102**
   #2 fuel oil stripper column tray

   **T-103**
   Kerosene stripper, Consolidated Fabricators

   **T-104**
   Naptha Stabilizer column

   **V-101**
   Crude Oil Overhead Accumulator,

   **V-102**
   Desalter water drum, Fabricators

   **V-103**
   Desalter

   **V-104**
   Column overhead Accumulator

   **VV-106**
   Compressor Suction Drum

   **V-109 & 114**
   Fuel Gas KO Drum, complete with compressor discharge
V-113
Fuel Day Tank

V-125
Atmosphere Gas Oil Stripper

V-131
Pressure Vessel, wash oil surge drum,

G-101
Vent Gas Compressor,

E-101
Exchanger, 16’ tube length, ¾” tube size

E-102A & B
2 similar exchangers for service to overhead vapor crude

E-103
Same, kerosene crude

E-107ABCD
5 exchangers,

E-108 A & B
2 Crude column overhead condensers,

E-111
#2 Fuel Oil cooler

E-112ABCD
4 Reduced Crude Coolers,

E-113
Desalter Brine Water Exchanger

E-114ABC
3 Stabilizers Feed Exchangers

E-115 A&B
2 same, Stabilizer Feed Pre-Heater

E-116
Stabilizer overhead condenser

E-118
Heat Exchanger LPG Vaporizer

E-119, 121
2 Air-cooled Exchangers

E-136
AGO Cooler,

P-101 A & B
2 Pumps, motors to include wiring, piping and controls

P-101C
Pump, crude charge,
2 Ingersall Rand pumps,

P103 A & B
2 same,

P-105 A & B
2 Same,

P-104 A & B
2 Goulds pumps

P-107 A & B
2 Pumps

P-108 A & B
2 Same,

P-109 A & B
Same

P-110, 111A & B
3 Same Model

P-112 A & B
2 Ingersall Rand pumps,

P-114 A & B
Same

P-112 A & B
2 Ingersall Rand pumps,

P-114 A & B
Same

P-112 A & B

2. **Crude Vacuum Reflux Unit**

One Hundred Thousand (100,000) tonnes per year capacity

Inclusive of:

**H-102**
Vertical cylindrical vacuum heater comprising vacuum heater, air preheat system, burners, platforms, piping and controls.

**V-103**
Desalter, designed to 275 PSIG & 350 F

**V-123**
Vacuum tower

**V-125**
AGO stripper.

**V-126**
90 PSIG steam drum

**E-135 A & B**
2 desalter make up water/desalter brine exchangers,

**E-139**
Condenser

**E-140**
Condenser

**E-142**
Condenser

M-346 A & B
Cooling towers, vacuum tower system cooling water

E-129
HVGO stream generator

E-130
Same, vacuum tower bottom

E-131
AGO crude exchanger

E-133
LVGO product cooler

E-134
HVGO product cooler

E-136
AGO cooler

V-127
Barometric sump

V-128
Wash oil surge drum,

E-125 A & B
2 LVGO crude exchangers

E-126 A & B
2 HVGO product crude exchangers

E-128 A & B & C
Vacuum tower bottoms, crude exchangers

P-125 A & B
2 injector coolant pumps, 40 PSIG, 110 F, 88 ft Head, centrifugal

P-127 A & B
2 Pumps, vacuum unit bottoms

P-129 A & B
2 wash oil to vacuum tower pumps

P-130 A & B
2 HVGO product pumps,

P-131 A & B
2 LVGO product pumps

P-133 A & B
2 vacuum ejector coolant pumps

P-134 A & B
2 barometric water pumps
P-135 A & B
2 barometric slop oil pumps, same model

P-143 A & B
Pumps, Milton Roy

P-262 A & B
2 Pumps, Vacuum cooling tower water, Goulds,