4.6 MW 2015 New Solar Centaur 50 SoLoNox Natural Gas Generator Sets



Harnessing Energy for Life



Description & Additional Notes

EXCLUSIVELY FROM USP&E!

USP&E is selling: 4.6 MW 2015 New Solar Centaur 50 SoLoNox Natural Gas Generator

Sets

60 Hz; 4160 Voltage; 1800 RPM;

Units available: 2x

**Note that price is per unit

If you are like us, you read every day about how thousands of fast growth companies struggle to find energy generation that is affordable, reliable and available for immediate shipping and installation on a turnkey basis from a company that really understands the complexities of integration of balance of plant and other site infrastructure.

At USP&E, we have been in business now for over 20 years and have offices in 9 countries. But more importantly, WE ARE OBSESSED WITH EACH CLIENTS JOURNEY TO ENERGY SUSTAINABILITY & RELIABILITY AND ARE DRIVEN TO GUIDE EACH CLIENT TO SUCCESSFUL INTEGRATION OF THE BEST IN CLASS TECHNOLOGIES.

This is important and a huge differentiating factor for our clients because USP&E isn't the hero of our story, you are. We will do everything possible to make sure you are successful, and we have over 20 years of satisfied clients and meaningful, long-term client engagements that prove this out. The potential delays related to permitting, land access, shipping, etc must be dealt with head-on and with urgency. We have helped hundreds of companies like yours for over 20 years.



Description & Additional Notes

The process is really simple:

- 1. Quick, 30 min Engineering/Design Meeting so we Can understand Your project goals, timelines and budgets.
- 2. Scope of work and supply to match our plants to what you need.
- 3. Work together to finalise commercial and technical aspects into a contract and move forward with the project.

Please remember, USP&E is not just an equipment broker. We are a GUIDE to energy project excellence. We offer full Engineering, Procurement, Construction and long-term O&M in over 190 countries around the world in order to make sure our client projects are a RESOUNDING success.

Some of the companies we are currently working with include the City of Neom, Barrick Gold, SPACE-X, Firefinch Gold, Kurdistan MOE, Ivanhoe Mining, Boogertman Partners, and Molo Graphite.

At USP&E, we understand how most companies struggle to find energy generation that is affordable, reliable and available for immediate shipping and installation on a turnkey basis. Your partner must be a company that really understands the complexities of integration of balance of plant and other site infrastructure, and not just be a broker. Ideally, your partner offers complete O&M and warranty support services. This is what we have been doing for over 20 years.



Description & Additional Notes

CENTAUR 50 SCOPE OF SUPPLY

2.1 GENERAL DESCRIPTION

2x Centaur 50 Generator Sets:

2.2 Centaur 50 GAS TURBINE PACKAGE

- Gas turbine
- Reduction-drive gearbox
- Generator
- Start system
- Fuel system
- Lubricating oil system
- Turbotronic 4 Control System
- Air inlet system
- Exhaust system
- · Onskid electrical wiring
- Skid with drip pans
- Piping and manifolds
- Package enclosure with:
- Ventilation system
- Fire detection and suppression system
- Combustible gas detection
- NEC Class I, Group D, Division 2 Electrical System

2.3 Centaur 50 GAS TURBINE ENGINE

- SoLoNOx Combustion System, 25/96 ppmv Nox, Dual Fuel
- Inlet Orientation, Up
- Exhaust Orientation, Axial

2.4 REDUCTION-DRIVE GEARBOX

• 1800 RPM 60 Hz

2.5 GENERATOR AND ASSOCIATED EQUIPMENT

- Kato
- 4160 V



Description & Additional Notes

CENTAUR 50 SCOPE OF SUPPLY

2.1 GENERAL DESCRIPTION

2x Centaur 50 Generator Sets:

2.6 START SYSTEM

Direct-drive AC start

2.7 FUEL SYSTEM

- NACE Compliant
- Dual Fuel System
- Offskid Liquid Fuel Filter System

2.8 LUBRICATION SYSTEM

- Oil tank
- Oil tank heater
- · Gas turbine driven main lube oil pump
- · AC Motor-driven pre/post lube oil pump
- DC Motor-driven backup lube oil pump
- 120 VDC Step starter (ordinary duty)
- Duplex lube oil filter system with replaceable elements
- · Oil level, pressure, and temperature indications
- Pressure and temperature regulators
- Strainers
- · Oil tank vent separator
- · Oil tank vent flame trap
- Carbon steel oil tank and tank covers

2.9 TURBOTRONIC 4 CONTROL SYSTEM ONSKID CONTROL SYSTEM

- ControlLogix controller (Allen-Bradley)
- RSLogix 5000 programming software (Rockwell Automation)
- 1794 Flex I/O input/output modules (Allen-Bradley)
- Combination generator control module (Allen-Bradley/Basler Electric)
- Vibration monitoring system
- ControlNet network (ControlNet International)
- TT4000S onskid local operator interface (Solar Turbines)
- Fire and gas monitoring and control system (Det-tronics)
- Independent backup shutdown system (Solar Turbines)
- Auxiliary Control Console for Offskid Control Interface
- Engine Performance Map Display
- Ethernet Network Supervisory Interface
- Control Screen Engineering Units in English
- Control Screen Language in English



Description & Additional Notes

CENTAUR 50 SCOPE OF SUPPLY

2.1 GENERAL DESCRIPTION

2x Centaur 50 Generator Sets:

2.11 ENCLOSURE

- Complete Package Enclosure
- Dual Fan Ventilation System
- AC Lighting
- Equipment Handling Kit, Quantity 1
- Marinization
- · Fire and Gas Detection System
- CO2 Fire Suppression System
- CO2 Isolation Valves, Pressure Switches, and Software
- Fire Cylinder Cabinets
- Weather / Sound Proofing
- Inlet / Exhaust Ventilation Silencers
- Pressurization System
- Access Doors
- All Steel

2.12 AIR INLET SYSTEM

- Air Inlet System Scope: Standard System
- Air Inlet System Material: Carbon Steel
- Duct, Unlined, 5 ft. x 6 ft., 2 ft. Long, Quantity 1 per unit
- Duct, Unlined, 5 ft. x 6 ft., 5 ft. Long, Quantity 5 per unit
- Duct, Unlined, 5 ft. x 6 ft., 3 ft. Long with Access Hatch, Quantity 2 per unit
- Elbow, 90°, Unlined, 5 ft. x 6 ft., Quantity 1
- Self-Cleaning Barrier Filter, Updraft, Synthetic Spider Web Media, Carbon steel
- · Fixed Height Leg Kit for Updraft Filter
- Air Inlet Silencer

2.13 EXHAUST SYSTEM

- Exhaust System Scope: Standard System
- Exhaust System Material: A387 Alloy Steel
- Rain Stack, 45 in. diameter, 10 ft. long, Quantity 1 each (2 total)
- Expansion Bellows, 45 in. diameter, 3 ft. long, Quantity 1 each (2 total)
- Exhaust Silencer, Floor Standing, Vertical Mount (2 total)

2.14 PARTS

- Startup and Commissioning parts
- 2 years operational consumables
- Insurance parts: Critical, Non-critical, and Repair Kits/Components

Specifications

Balance of Plant Available? (BOP)



Specifications	
Manufacturer	Solar Centaur

Model 50 SoLoNox

2015

Year Condition New

Eastern Asia Location

Price \$2,817,500.00

Category **Natural Gas Generators** Subcategories • 1 - 9 MW

Stock Number USP009521

Wattage 4.6 MW

Zero

Frequency 60 Hz

Natural Gas

Hours

Voltage

Fuel type 4160







• Images may be representative, and actuals can be supplied upon request.





