



CITY OF DAPHNE
1705 MAIN STREET
P.O. BOX 400
DAPHNE, AL 36526

2017-C-FD/BREATHABLE AIR COMPRESSOR

SUBMIT TWO (2) COPIES OF BID SUBMITTAL (One Original & One Copy is Acceptable)

I. GENERAL INFORMATION

The City of Daphne is soliciting sealed bids from interested bidders for the procurement of a Breathable Air Compressor. Cost must remain constant for the period of one year from award of contract for additional purchases.

OPTION:

Prior to the annual contract expiration and upon mutual agreement by the City and the Contractor, the term of the contract may be extended for a second and a third year.

Upon renewal of the contract for years 2 and 3, the vendor may request a contract price adjustment only if accompanied by documentary evidence of the necessity for price increase. If the request is approved by the City cost bid will be adjusted for the next year contract term – the new bid cost will not exceed the agreed upon cost throughout the next year's contract period. The requested increase must not exceed the current market cost for such items or exceed the U. S. Department of Labor Bureau of Labor Statistics Consumer Price Index for the applicable period. In any event, when prices to the trade are decreased, the prices of applicable items shall be decreased accordingly. It shall be incumbent on the vendor to notify the City immediately should a decrease become effective.

Oral, telegraphic, or telephonic proposals or modifications will not be considered. All bids must be completed in ink. Bids submitted in pencil will not be accepted. The City reserves the right to reject any and all bids and to waive any formalities. Bids may be withdrawn if a written request is received prior to the time set for the bid opening. Negligence on the part of the bidder in preparing the bid confers no right for the withdrawal of the bid after it has been opened.

II. QUALITY OF MATERIAL

The City of Daphne reserves the right to determine if equivalent products offered meet the standards and specifications desired. Where a specific brand is noted, all bidders should be aware that the brand name is used to indicate the desired quality and performance of the product that is desired.

III. DELIVERY OF PRODUCTS

The bidder agrees to deliver materials requested by the City in the desired quantities at the unit price provided for in the bid within 90 days. All delivery costs will be included in the bid price. The unit prices will remain firm for the term of the agreement as specified in the bid and accepted by the City on which the awarded of this contract is made.

IV. BASIS FOR AWARD OF BID

The City will award the bid to the most responsible bidder responding with the most responsive and lowest bid meeting bid specifications. Bids must be submitted on the enclosed tabulation sheets. Bids will be evaluated on unit prices and awarded to the bidder with the lowest total bid meeting specifications. Bidders are expected to examine the specifications carefully. Failure to do so will be at the bidder's risk and he cannot secure relief with a plea of error in the bid. The bidder awarded the bid must obtain a City of Daphne business license within ten (10) days after award notification.

V. METHOD OF PAYMENT

All purchases must follow the policies and procedures of the City of Daphne Purchasing Department, which require a purchase order prior to delivery. The purchase order number must be on the invoice.

VI. CONFLICT OF INTEREST

No employee, officer or agent of the City shall have any interest in the award of this contract or the bidder. The award of the contract shall be based solely on the lowest and most responsive bidder.

VII. COLLUSION

If there is any reason for believing that collusion exists among the bidders, any and/or all proposals may be rejected. Those participating in such collusion may be barred from submitting bids on the same or other work with the City of Daphne. If there is any reason for believing that collusion exist among the bidders, any or all proposals may be rejected, and those participating in such collusion may be barred from submitting bids on the same or other work with the City of Daphne.

VIII. HOLD HARMLESS PROVISION

The vendor shall at all times indemnify and save harmless the City of Daphne, its officers and employees, against all liability, loss cost or damage, including death, and loss of services, on account of any injury to persons or property, occurring from any causes whatsoever in connection with the chemicals involved in the contract, and will at their expense defense on behalf of the City of Daphne, its officers and employees, either or all, any suit brought against them or any of them, arising from any such case.

IX. PURPOSE

To establish minimum standards for a breathable air compressor with cascade and containment fill station.

X. ALABAMA IMMIGRATION LAW COMPLIANCE

In compliance with Act 2012-491: Upon entering this contract, the contracting parties affirm, for the duration of the agreement, that they will not violate federal immigration law or knowingly employ, hire for employment or continue to employ an unauthorized alien within the state of Alabama. Furthermore, a contracting party found to be in violation of this provision shall be deemed in breach of the agreement and shall be responsible for all damages resulting therefrom. Proof of enrollment in E-Verify for Immigration Law Compliance is required **FROM THE AWARDED BIDDER** - An acceptable proof of enrollment with E-Verify would be an E-VERIFY MEMORANDUM of UNDERSTANDING (MOU).

XI. APPROVALS

1. The breathing air system manufacturer shall be a NRTL (Nationally Recognized Testing Laboratory) Licensed Panel Shop as per UL® 508A standard.
2. The electrical control system shall include motor control components with UL, NEMA or IEC approval and 12vdc control circuit housed within a UL® listed, NEMA enclosure.

Comply _____

Exception _____

XII. SPECIFICATIONS

A. General Arrangement

The air compressor system shall be a turnkey, packaged appliance designed to deliver high pressure breathing air in compliance with the most current NFPA and CGA air quality standards for the refilling of SCBA and SCUBA cylinders. The system shall include the high pressure air compressor, electric motor, air purifier, fill station and all operating and cylinder fill controls as specified below. The system must also be designed to incorporate an integral air storage systems specified below. All components shall be completely assembled and tested by the manufacturer as a system and incorporated within a single appliance requiring only electrical power supply to operate. The system shall be designed with all cylinder refilling and operating controls and performance indicators located on panels at the front of the appliance allowing "at sight" operator monitoring. The appliance shall comply with the currently applicable OSHA specifications as well as state and local electrical codes.

The external construction of the high pressure breathing air compressor system shall be appliance-like. All structural fasteners shall be concealed and all access panels shall include concealed hinges and push button latches. One full height door shall be provided for maintenance access to the compressor. The door shall include a shutdown switch to prevent exposure to running gear in the event it is opened while the compressor is in operation. A full length access door for fill station panel maintenance shall also be provided. Additionally, the outer fill station shall include a unique "Swing Away" feature designed to provide complete access to air flow control components and piping behind the panels. This is all done without having to move the appliance away from the wall and is accomplished using heavy-duty hinges and wheels that easily allows ONE operator to perform the task.

The cabinet shall be designed to minimize noise emission and include sound abatement insulation. The noise level shall not exceed 76 dB at one meter.

The compressor and fill control panels shall be ergonomically designed and feature graphic design technology to group all control components and indicators logically and by function. For maximum clarity and visibility, colored lines shall isolate each control component group. Each group shall then be located within a graphic flow control schematic background and identified with permanent text integral to the panel surfaces. High visibility colored text shall identify and provide operator instructions for all critical functions.

The cabinet configuration shall permit installation with the rear "against the wall". Maximum dimensions of the system shall not to exceed 84"(W) X 41"(D) x 71"(H), including up to four appliance-mounted storage cylinders. A removable blister panel in the rear will allow for a doorway clearance of 34" (with the air storage cylinders removed from the appliance), if required. The appliance like structure shall include an ambient air flow control design that directs the necessary volume of cooling air to the compressor. The cooling system shall also include an integral, top discharge extractor to completely vent the resulting hot air from the compression process out of the cabinet.

All high pressure air plumbing shall be rated for 6000 psig working pressure and utilize seamless stainless steel tubing. All high pressure air tube connections shall use compression fit design

Comply _____

Exception _____

B. Compressor

The ambient air intake and compression shall be through an air-cooled, reciprocating, pressure oil lubricated, four-stage compressor designed for continuous duty at 6000 psig working pressure with a charging rate of 14.0 CFM. The air compressor design shall include a heavy-duty cast iron crankcase supporting the crankshaft with oversized ball bearings on each end. The cylinder arrangement shall be a balanced "V" configuration featuring ringed pistons assuring maximum balance and air volume delivery efficiency while operating at a maximum

compressor speed of 1500 RPM. Lubrication shall be accomplished by controlled splash and shall include a crankshaft driven oil pump to supply metered quantities of oil directly to the fourth stage piston through a replaceable (spin-off) full flow filter. Crankcase level is verified via an oil level sight glass with minimum and maximum indicators.

Each stage of compression shall be protected with a safety relief valve. Valve inspection covers are provided for the first and second stage cylinders to allow for easy access. All valve assemblies shall be designed so they can be repaired without replacing the entire assembly. The cylinders shall include cooling fins to dissipate heat into the cooling air flow from the compressor's integral flywheel fan. Individually mounted coolers shall be located after each compression stage to cool the discharged air to 18°F. above ambient temperature. Accumulated condensation from cooling the compressed air shall be collected in moisture separators mounted on each stage of the compressor and discharged to an automatic, internal, timed drain system for proper collection and disposal.

Prior to shutdowns, the compressor shall be allowed to run unloaded (with opened drains) for a timed period (Purge Cycle) in order to purge all cylinders, separators and crankcase of damaging condensation that develops as compressors cool down. The compressor control panel shall also include a condensate purge test switch in order to verify proper operation of the automatic condensate drain system on demand.

Comply _____

Exception _____

C. Electrical Motor

The compressor shall be v-belt driven by a NEMA design 10-hp, open drip proof electric motor wired for the electrical conditions as shown below:

60 Hertz Current, 3 Phase, 208/230 volts

The motor shall be located under the compressor and driven via v-belt drive arrangement utilizing a hinged motor base to facilitate belt tension adjustment. The compressor and motor base shall include zinc plated, steel encased neoprene mounts to isolate vibration from the appliance.

Comply _____

Exception _____

D. Electrical Control System

The breathing air compressor shall include all the necessary controls to assure safe, efficient operation and monitor performance. The control system shall be of an anti-flutter circuit design and include a latched fault protection circuit to prevent automatic restarting after an abnormal fault has occurred. As a minimum, the control system must include the following:

- Air pressure switch to automatically start and stop the compressor based on demand.
- High compressed air temperature shutdown switch.
- Compressor low oil pressure shutdown switch.
- Magnetic, across-the-line starter with electric motor overload protection.

- Compressed air monitor system including CO and H2O detectors with pre-set warning, shutdown limits and audible alarm. A shutdown audible alarm shall be supplied for all abnormal conditions.

- Auto-drain condensate reservoir capacity shutdown switch and indicator.

Comply _____

Exception _____

E. Instrumentation

The control system must include all monitoring devices as indicated below. These shall be mounted on a control panel located at the front of the compressor with all indicators and gauges grouped logically and each group positioned within a graphic flow control schematic and identified with integral text. The panel background color shall be matte black shade with a textured finish to eliminate glare. Panel component and indicator groups shall be offset by colored lines to enhance operational visibility and safety. All control panel areas shall be illuminated utilizing LED lighting.

The compressor's instrumentation panel shall be engineered for quick and convenient access to all key panel components, eliminating the need to use the appliance maintenance access door. Pressure gauges, indicator lights, the start/stop control pressure switch and all optional instruments shall be accessible for routine maintenance and adjustments from hinged, "knockdown" sub-panels located on the front panel of the compressor.

As a minimum, the instrumentation required is as follows:

- Compressor inter-stage and final pressure gauges.
- Compressor oil pressure gauge.
- Hour-meter.
- Independent illuminated power ON and OFF buttons.
- Normal high air pressure shutdown indicator light.
- Purge cycle indicator light and test switch
- Enhanced shutdown indicator light package including low oil pressure, high compressed air temperature, motor overload, auto-drain reservoir limit and door ajar shutdown conditions.
- General fault shutdown indicator light.
- Emergency stop button.
- Control panel lights (on/off) power switch.
- Digital air monitor (CO and H2O) panel with actual content display in PPM and prompter software keypad for CO monitor calibration. A flow panel with factory plumbed calibration gases shall be included

Comply _____

Exception _____

F. Air Purification System

The high pressure air purification system shall be a multi-chamber arrangement that utilizes disposable cartridges manufactured to provide breathing air that meets or exceeds NFPA and CGA Grade "E" specifications and all other equivalent and recognized standards in use worldwide.

All system components shall be rated for 6000 psig working pressure with a four-to-one safety factor. All chambers in the system shall be constructed of 304 stainless steel to enhance safety and corrosion resistance.

The purification system shall be sized to process 35,000 cubic feet of air at 70°F and compressed to 6000 psig between cartridge changes.

The system shall include the following:

- Final separator chamber connected to the automatic condensate drain system.
- Check valve to prevent back pressure to the compressor.
- One (1) 33" purifier cartridge chamber.
- Pressure maintaining valve to assure that the system is maintained pressurized in order to attain the rated processing capacity of the air purification cartridge(s).
- Safety relief valve.
- Drain valve to relieve the system pressure for maintenance.
- Stem-mounted gauge for system pressure verification.

The system shall be designed so that filling cannot occur in the event that the purification cartridge is not installed. Additionally, the purification system shall have "keyed" chambers so that the filter cartridges can only be installed in their proper sequence.

Comply _____

Exception _____

G. High Pressure Air Storage

The breathing air storage system shall be integral to the appliance and include all cylinders, plumbing and hardware installed in accordance with all current UN/ISO codes, as specified below:

Four (4) UN/ISO, 6000 PSI cylinders each with a capacity of 509 cubic feet or air at 6000 psig. The piping of air storage shall be arranged for cascade filling.

Comply _____

Exception _____

H. SCBA/SCUBA Cylinder Fill Enclosure

The fill station shall be designed for filling four (4) SCBA cylinders simultaneously or separately. The fill station shall be designed for filling two (2) SCUBA cylinders with a maximum height of 30-1/2" and a maximum diameter of 7-3/4", including service valve, boot and fill attachment. The enclosure shall be designed to contain the impact of suddenly expanded high pressure air and all displaced fragments in the unlikely event of a cylinder or fill component rupture.

The fill station containment design must be UL® (Underwriters Laboratories) classified and for maximum operator safety certified to meet NFPA 1901-2016 standards. The UL® testing certificate must be included with the bid or request for quotation and included with the operator's manual when the system is shipped.

The fill station loading door must be designed to be trapped behind the fill enclosure cabinet frame when closed and include an automatic, safety interlock to prevent filling unless the loading door is completely closed. A safety relief valve, to prevent over pressurizing SCBA/SCUBA cylinders above 4750 psig for 4500 psig SCBA filling (or 5800 psig for 5500 psig SCBA filling), shall also be included.

The fill station must allow the fill process to be accomplished from the front. The fill station shall be of a design that does not require the operator to have to hold up or otherwise support the weight of the cylinders being filled while connecting them to the fill whips. The front loading door shall be designed so that, when opened, sleeves that hold the SCBA/SCUBA cylinders tilt forward to ease loading and minimize operator fatigue. Four (4) fill whips, each fitted with a cylinder fill adapter and shut-off valve, shall be located within the enclosure.

Access Door Control: For maximum operator comfort and ease of use, the fill station access doors shall include air actuator handles designed to provide power assisted, effortless operation when opening and closing. When fully closed, the doors shall trip a safety interlock allowing air flow to the fill station. The access doors shall be supported on the enclosure frame with adjustable bearing bushings on each side assuring a balanced and smooth rotation when opening and closing. A damper strut shall secure the assembly to the enclosure so that it does not require operator support and to cushion the access door landing when opened.

The access door design must be fail-safe, permitting manual operation in the event of air pressure loss in the power assist circuit.

Integrated Dual Fill Station Design: This unique and versatile design allows the operator to fill two (2) SCBA cylinders, while unloading/loading two (2) additional cylinders in the adjacent integrated fill station. This maximizes efficiency by eliminating any downtime between SCBA fill sequences. All four SCBA cylinders can be filled simultaneously.

Comply _____

Exception _____

I. Air Flow Controls

All air flow components and indicators shall be mounted on a control panel located at the front of the unit grouped logically with each group positioned within a graphic flow control schematic and identified with integral text. The panel background color shall be matte black shade with a textured finish to eliminate glare. Panel component and indicator groups shall be offset by colored lines to enhance operational visibility and safety. For maximum clarity and safety, the flow control panel shall be divided by function, assuring that the regulated SCBA/SCUBA fill controls are located in a dedicated area apart from air storage management, cascade and air reel control components. The SCBA regulator and controls shall be mounted on a recessed, forward tilt panel, which enhances visibility and operator ergonomics. In order to minimize operator handling of pressurized components, a fill hose(s) pressure vent valve shall be located on the air flow control panel to relieve all fill hoses of pressure after opening the front loading door and before disconnection from the SCBA/SCUBA cylinder(s). The SCBA/SCUBA cylinder fill control system shall include a regulated panel with all the components, devices and piping arrangement necessary to direct supplied compressed high pressure breathing air to the air storage system and the SCBA/SCUBA cylinders being filled.

Additionally, a regulated auxiliary outlet to fill remote air storage systems shall be provided.

All high pressure regulators must be designed so that they cannot be accidentally reset in accordance with NFPA 1901 standards. The regulator knob shall be of the "push-to-reset" design that spins freely if accidentally moved.

A cascade control system shall be included for the number of banks specified below to permit filling or drawing down each air storage cylinder independently of each other and while filling SCBA/SCUBA cylinders. The system shall include a by-pass valve to permit filling SCBA/SCUBA cylinders directly from the compressor.

The fill control system shall include an integral, retractable air reel with 50' of hose and CGA fitting for filling remote air storage systems.

As a minimum, the air control panel must include the following:

- Inlet pressure gauge.
- Adjustable, 0-6000 psig self-relieving regulator, located on the central control panel.
- Regulated outlet pressure gauge, located on the central control panel.
- By-pass valve.
- Two (2) SCBA/SCUBA cylinder(s) fill control valves (one at each fill station).
- Two (2) SCBA/SCUBA cylinder(s) fill pressure gauge (one at each fill station).
- Two (2) SCBA/SCUBA cylinder(s) panel mounted fill hose(s) vent valve (one at each fill station).
- Auxiliary outlet with flow control valve and CGA fitting, located on the central control panel.
- Four (4) bank cascade control with "To" and "FROM" valves and gauge per bank located on the central control panel.
- Air reel fill valve and gauge mounted on a panel above the air reel hose outlet.

Comply_____

Exception_____

J. Instructions

One manual shall be delivered with the system containing information on operation, maintenance, trouble shooting and replacement parts for the entire system.

Comply_____

Exception_____

K. Warranty

All equipment shall be factory assembled, thoroughly tested and backed by a one-year limited warranty covering parts and labor. A second year warranty on compressor parts only is also included.

Comply_____

Exception_____

BID COST SHEET

QUANTITIES PURCHASED MAY VARY BUT AN ESTIMATED ONE (1) UNIT IS ANTICIPATED IN THE INITIAL PURCHASE. ADDITIONAL PURCHASES MAY BE MADE THROUGHOUT THE YEAR.

DESCRIPTION	UNIT PRICE EACH
Breathable Air Compressor	\$

THE BIDDER ACKNOWLEDGES WITH THE SUBMISSION OF A BID THAT HE/SHE HAS REVIEWED THE TERMS AND CONDITIONS OF THIS BID AND ACCEPTS THEM. BID SHEETS MUST BE SIGNED BY COMPANY OWNER OR AUTHORIZED PERSONNEL AND NOTARIZED.

COMPANY NAME
ADDRESS

FEDERAL ID#
PHONE NUMBER
FAX NUMBER
E-MAIL ADDRESS

AUTHORIZED SIGNATURE

PRINT NAME

Sworn to and subscribed before me this _____ day of _____, 2016.

Notary Public

ALL BIDS MUST BE RECEIVED BY DELIVERY OR BY MAIL

IN PERSON/BY DELIVERY:

**CITY OF DAPHNE
FINANCE DEPARTMENT
ATTENTION: SUZANNE HENSON
1705 MAIN STREET
DAPHNE, ALABAMA 36526**

BY MAIL:

**CITY OF DAPHNE
FINANCE DEPARTMENT
ATTENTION: SUZANNE HENSON
P.O. BOX 400
DAPHNE, ALABAMA 36526**



TO: Vendors, Contractors and Grantees
FROM: City of Daphne, AL Finance Department
DATE: March, 2012/ Updated for Legislative Session June, 2012
RE: Alabama Immigration Law Compliance

The City of Daphne, AL is required to comply with the provisions of the new Alabama Immigration Law. Compliance requirements for all cities in the State of Alabama became effective January 1, 2012 and updated in July 2012. The requirements flow down to all contractors, vendors under Bid Contract and grantees doing business with the City of Daphne and are employing one or more employee(s) in the State of Alabama. If you are awarded a contract with the City of Daphne, AL, awarded incentives or grants, or if you wish to continue to do business with the City of Daphne, AL under a current contract and wish to receive funds from the City of Daphne, AL you must complete and submit the following within 10 business days:

If your organization/entity does NOT employ one or more employees in the State of Alabama, please complete Part I of the attached form stating such along with a W-9:

1. Submit an updated W-9 Form (attached)
2. Status of Immigration Law Compliance (PART I only, attached)

If your organization/entity DOES employ one or more employee(s) in the State of Alabama, you must submit the following:

1. Submit an updated W-9 Form (attached)
2. Proof of enrollment in E-Verify for Immigration Law Compliance:

An acceptable proof of enrollment with E-Verify would be an E-VERIFY MEMORANDUM of UNDERSTANDING (MOU). To enroll in E-Verify, you must go to the following web site to enroll in E-Verify which is a federal program that verifies the employment eligibility of all newly hired employees. <http://www.uscis.gov/portalsite/uscis>. Go to the E-Verify Home Page to initiate enrollment. Once ALL of the steps to enroll are completed, a signed copy of your MOU that includes your E-Verify assigned Company ID Number will be available for you to export.

If you have SUBCONTRACTORS, provide your subcontractors notice of their compliance obligations and OBTAIN from each a notarized Proof of Immigration Law Compliance Form. You may provide copies of this memo to your subcontractors as an explanation of this mandatory requirement. *You are not required to submit the subcontractor proof to the City of Daphne, AL. However, the City reserves the right to request evidence of your subcontractors' compliance at any time.*

1705 MAIN STREET • P.O. BOX 400 • DAPHNE, ALABAMA 36526
PHONE: (251) 621-9000 • FAX: (251) 626-3008 • www.DaphneAL.com

These requirements are a condition for doing business with the City of Daphne, AL and for receiving any funds from the City of Daphne, AL. *MAINTAIN COPIES OF ALL DOCUMENTS FOR AUDIT PURPOSES.*

If you DO NOT employ one or more employee(s) in the State of Alabama, submit an updated W-9 and complete PART ■ of the attached Proof of Immigration Compliance Form. **If** you DO employ one or more employee(s) in the State of Alabama, please submit the required proof of enrollment and W-9 Form as identified on the previous page. Please submit the requested documentation to the City of Daphne, AL's address below:

City of Daphne, AL
1705 Main Street
P.O. Box 400
Daphne, AL 36526

We regret any inconvenience that these new requirements place on you and your business/organization. **If you wish to do business with the City of Daphne, AL, you must comply and submit the requested documents.**

If we can assist in any way, please contact us at (251) 621-9000.

Thank you for your cooperation regarding this manner.

Sincerely,
The City of Daphne, AL

PROOF OF ALABAMA IMMIGRATION ACT COMPLIANCE

In compliance with recent amendments to the Beason-Hammon Alabama Taxpayer and Citizen Protection Act (Sections 31-13-1 et. seq of the Alabama Code), the City must obtain proof of enrollment with E-Verify for various contracts and agreements as determined by law. If your company has received this memorandum and it employs one or more employees in the State of Alabama, you must present proof of enrollment with E-Verify. Please complete Part I (if you do NOT employ one or more employees in the State of Alabama) or submit proof of enrollment with E-Verify II (if you DO employ one or more employees in the State of Alabama).

NOTE: MOU signature page is considered proof of enrollment.

PART I – (Complete if you do NOT employ one or more employees in Alabama) State of _____
County of _____

I certify in my capacity as _____ (your position) for

(name of contractor or grantee) that Contractor or Grantee does not employ one or more employees in the State of Alabama. I further certify that should my status change- and I am required to comply that I will submit all required documents to the City of Daphne, AL. I have read the E-Verify Requirements and swear and affirm that it is true and correct.

Authorized Signature