



## **Jackson County Board of Commissioners**

67 Athens Street  
Jefferson, Georgia 30549  
Phone: (706) 367-6309  
Fax: (706) 708-2505  
Email: [lbernati@jacksoncountygov.com](mailto:lbernati@jacksoncountygov.com)

### **INVITATION TO BID**

*March 28, 2017*

Bid Number: 170014

Bid Name: Crackseal melter applicator/trailer mounted

The Jackson County Board of Commissioners is soliciting bids for crackseal melter applicator/trailer mounted. Specifications, terms and conditions are contained herein.

BID DUE DATE/TIME: May 1, 2017 at 10:00AM EDT

RETURN BID VIA: mail, online or deliver to:

[myarbrough@jacksoncountygov.com](mailto:myarbrough@jacksoncountygov.com)

Jackson County Board of Commissioners

Attn: Purchasing Department – Bid # 170014

67 Athens Street

Jefferson, GA 30549

PUBLIC BID OPENING DATE/TIME: May 1, 2017 at 10:15AM Eastern Daylight Time

LOCATION: 67 Athens Street, Jefferson, GA 30549

Direct all questions concerning this bid to:

Myrna Yarbrough

Purchasing Manager

(706) 367-6309

[myarbrough@jacksoncountygov.com](mailto:myarbrough@jacksoncountygov.com)

## **1. GENERAL INFORMATION FOR BIDDERS:**

A. From the issue date of this Invitation to Bid (ITB) until an award has been announced, vendors shall not communicate with any Jackson County elected official or employee, with the exception of the name stated above or the Director of Purchasing, concerning this ITB or any information herein.

B. Whenever the terms "shall", "must", "will", or "is required" are used in the ITB, the item being referred to is a mandatory requirement of this ITB and failure to meet any mandatory requirement may be cause for rejection of the bid.

C. All amendments and or addendums will be posted on the Jackson County Purchasing Information website at [www.vendorregistry.com](http://www.vendorregistry.com) . It is the bidder's responsibility to check this site on a regular basis. The Board will not be responsible for any information not viewed by bidders. All bidders must register at [www.vendorregistry.com](http://www.vendorregistry.com) so that the County has all the necessary vendor information to establish the vendor in the Financial Software System so that payments can be made promptly to the vendor awarded the contract.

## **2. QUOTATIONS**

A. The Board of Commissioners reserves the right to:

- (1) waive formalities and technicalities in any quotation;
- (2) reject any and/or all quotations when in the Board's judgment, it will be in the best interest of the County;
- (3) accept the quotation that in its judgment will be in its best interest of the County;
- (4) purchase from any source, in part or in whole any supplies, equipment or services;
- (5) at its option, award on individual items or on a lump sum basis;
- (6) award this bid to the vendor who in the Board's opinion is most responsive and responsible and will perform in the best interest of the County;
- (7) negotiate final product and final price.

B. Price alone will not be the determining factor in award of this bid.

**3. PRICE:** Prices quoted shall include all costs and charges to include, but not limited to purchasing, packing, transporting the equipment and/or services described herein. The Jackson County Government is exempt from state sales tax. All fees shall be included in the bid price. Bidders must quote based on the bid unit listed.

**4. SAMPLES:** If samples are requested by the Board of Commissioners, they shall be at no charge to the BOC and will become property of the BOC, unless return is requested by the bidder in writing in their bid. Return of samples will be at bidder's expense.

**5. AWARD:** This bid will be awarded to one vendor.

**6. TRADE NAME:** Bidders are required to indicate the brands and models of merchandise and/or services quoted. Unless listed as "brand/model only", brand names and models listed in specifications are used as a standard of quality and/or clarification of desired product.

**7. MARKING:** Merchandise in full cases shall have an identification marking on the outside of the case. Each case, shipping container, etc. shall be marked with the Purchase Order Number supplied by the Board.

**8. SAFETY:** Material Safety Data Sheets shall be provided for all applicable items.

**9. DELIVERY:** Delivery of all materials from this quotation must be FOB destination to the Jackson County Board of Commissioners, 67 Athens Street, Jefferson, Georgia 30549. Delivery shall be made within the vendor's quoted days after receipt of order. Any item(s) not delivered within the time limit may be cancelled by BOC at no expense to same. No deliveries are accepted on Saturdays, Sundays or holidays. DELIVERY SHALL BE ACCOMPLISHED ON WEEKDAYS BETWEEN 8:00AM AND 4:00PM EASTERN TIME.

**10. INSPECTION:** All merchandise and services shall be subject to inspection after arrival at destination or completion of work. In case any items are found to be defective or otherwise not in conformity with specifications or statement of work, the Board has the right to reject such items and/or services and return them at bidder's expense.

**11. PAYMENT:** The Jackson County Board of Commissioners shall make payment for goods and services within thirty (30) days upon receipt, inspection and acceptance by BOC personnel and receipt of invoice. Payment may be made by check or by ACH.

**12. FACILITIES AND EQUIPMENT:** The bidder shall be responsible for the protection of the Jackson County Government's premises and property, and will be held liable for any damages caused by the bidder, bidder's employee(s) or bidder's agent(s) during the execution of this bid, resultant purchase orders or contracts.

**13. INTERPRETATION:** If a bidder contemplating submitting a price quotation is in doubt as to the true meaning of any part of these documents, submit a request for interpretation to the Purchasing Manager at (706) 367-6309. All such interpretations will be posted on the Jackson County Purchasing Information web page.

**14. INDEMNIFICATION:**

A. The bidder does hereby indemnify and shall hold harmless the Jackson County Government, its Board members, employees, agents, and servants (each of the foregoing being hereafter referred to individually as "Indemnified Party") against all claims, demands, causes of actions, actions, judgments or other liability including attorney's fees (other than liability solely the fault of the Indemnified Party) arising out of, resulting from or in connection with the Bidder's performance or failure to perform this agreement, including but not limited to:

(1). All injuries or death to persons or damage to property, including theft.

(2). Bidder's failure to perform all obligations owed to the bidder's employees including any claim the bidder's employees might have or make for privilege, compensation or benefits under any BOC benefit plan.

(3). any and all sums that are due and owing to the Internal Revenue Service for withholding FICA, and unemployment or other State and Federal taxes.

B. The bidder's obligation to indemnify any Indemnified Party will survive the expiration or termination of this agreement by either party for any reason.

**15. FAILURE TO BID:** If you do not wish to bid, please return this bid and state reason(s).

**16. TERM OF CONTRACT:** By submitting a bid in response to this ITB, the bidder is agreeing to guarantee bid prices for the period beginning with bid award and ending 6 months later. The term may be extended for a period of six months upon agreement of both parties. During the term of this agreement, the vendor agrees to allow all other government agencies within the State of Georgia to piggyback off of this bid and obtain all parts and services at the same pricing.

**17. BID RECAP:**

A. A bid summary shall be sent to all responding bidders.

B. A bid summary is available to all other requesters at no charge if requested within thirty days of bid award.

C. After thirty days of bid award, bid documents are available under the Georgia Open Records Act. A written request must be made to the Jackson County Board of Commissioners.

**OTHER:** The undersigned offers and agrees to furnish any or all of the items upon which prices are quoted at the price set opposite each item, in the quantities described, delivered to the point(s) specified, in accordance with the terms and conditions set forth herein. The laws of the State of Georgia shall prevail concerning all purchases and services under this contract. The Jackson County Purchasing Ordinance governs the bid and award of this contract and may be found at <http://www.jacksoncountygov.com/334/Jackson-County-Bid-Information>

I certify that I have read and understand the terms and conditions herein except as stated below. I further state that I am and/or my company is capable, able to, and will provide the requested products and/or service described herein. I am the owner or agent of the company stated below and am authorized and empowered to contract. By my signature on this ITB, I/we guarantee and certify that all items included in my bid meet or exceed specifications.

I certify that this quotation is made without prior understanding, agreement, or connection with any corporation, firm or person submitting a quotation for the same materials, supplies, equipment, or services and is in all respects fair and without collusion or fraud. I understand collusive bidding is a violation of State and Federal Law and can result in fines, prison sentences, and civil damage awards. I agree to abide by all conditions of the quotation and certify that I am authorized to sign this quotation for the Contractor.

SUBMITTED BY \_\_\_\_\_ DATE \_\_\_\_\_

TITLE \_\_\_\_\_ EMAIL: \_\_\_\_\_

COMPANY NAME \_\_\_\_\_

ADDRESS \_\_\_\_\_ CITY \_\_\_\_\_ ST \_\_\_\_\_ ZIP \_\_\_\_\_

TELEPHONE NUMBER \_\_\_\_\_ FAX NUMBER \_\_\_\_\_

COMPANY WEBSITE \_\_\_\_\_

SIGNATURE \_\_\_\_\_

## SPECIFICATIONS – Bid #170014

The purpose of these specifications is to describe a double-boiler type melter applicator that is specifically designed for and shall be capable of heating and applying all grades of asphalt rubber sealant, fiber modified asphalt sealant and specification joint sealant without any further equipment modification. It may be used for the application of resinous, colored sealant and fillers. This unit shall be the manufacturer's current production model manufactured in the United States of America.

### 1. GENERAL SPECIFICATIONS

- A. The machine shall be capable of starting at ambient temperature and bringing the sealant material up to application temperature in one hour at 70° F (21.1° C) ambient temperature.
- B. All qualified bidders must have and maintain a complete inventory of replacement parts and have experienced factory-trained service personnel for this equipment.
- C. A comprehensive safety manual and operational/maintenance CD shall be supplied with each unit.
- D. A factory-trained person shall be made available for initial start-up and training in the operation of the melter.
- E. Temperature indicating devices shall have intervals no greater than 1° F (2.8° C) and shall be calibrated as required to assure accuracy.
- F. The melter shall have continuous sealant agitation and a mixing system to provide uniform viscosity and temperature of material being applied.

### 2. REQUIRED SAFETY FEATURES

- A. The unit shall have a safety shut-off on the lid that automatically stops the agitator when the lid is opened.
- B. The applicator wand shall be equipped with an automatic shut-off feature that will stop the rotation of the sealant pump, sealant flow, and all line pressure when the handle is released or dropped.
- C. The heat transfer oil shall adequately and efficiently bring the sealant material to application temperature without the use of a heat transfer oil circulation pump. This eliminates the potential exposure of personnel to pressurized hot heat transfer oil.

### 3. TOWING FRAME AND JACK

- A. The tongue shall be equipped with an appropriate pintle hitch and shall be adjustable in height above ground level from a minimum of 14 inches (35.6 cm), to a maximum of 32 inches (81.3 cm), permitting practically level towing with a wide range of towing vehicles. The towing hitch shall be bolted to the hitch plate for easy conversion to other type hitches.

B. A screw-post tongue jack shall be furnished. It shall be heavy duty type with a capacity of 5,000 pounds (2,268 kg). It shall be side mounted and swing away for positive road clearance while under tow.

#### 4. TRAILER RUNNING GEAR

A. The unit shall be equipped with a dual independent rubber torsional suspension having a safe load capacity of 5,200 pounds (2,358.7 kg), electric brakes, modular wheels and ST 225/75R15 tubeless tires (Load Range D). Trailers with springs and shackles are unacceptable as they require more maintenance and reduce ground clearance.

B. The unit shall have dual LED taillights, stoplights and turn signals. Lights shall be ICC approved. A license plate holder shall be attached to the driver's side taillight.

C. All melter fluid tanks shall be positioned no lower than the deck level and mounted on top of the channel frame members to assure proper ground clearance. Units that have components that extend below the trailer frame are unacceptable.

D. The unit shall also be equipped with two safety chains not less than 48 inches (121.9 cm) of .38 inch (.97 cm) coil proof chain attached to the tongue with a drilled type clevis pin on the end attached to the frame and screw type clevis pin on the opposite end.

#### 5. HEATING TANK

A. The material heating tank shall be a minimum of 37 inches (93.98 cm) in diameter by 28.75 inches (73.02 cm) deep having a minimum capacity of 133.75 gallons (503.3 l) at ambient temperature. Oval or square sided tanks are unacceptable as they allow for uneven agitation resulting in a non-homogenous sealant and uneven heating of sealant.

B. The tank will have a rear discharge from the pump and a rear plugged outlet. A double boiler type jacket shall create a reservoir that shall hold a minimum of 34.8 gallons (129 l) and require no more than 40 gallons (152 l) of heat transfer oil at 70° F (21.1° C). (Note: At 500° F (260° C) the heating oil will expand approximately 18%).

C. The jacket shall wrap around 100% of the outside area of the circular material tank and bottom and allow for complete circulation of the heated transfer oil.

D. The tank and jacket shall be made of not less than 3/16 inch (.94 cm) rolled sheet steel.

E. There shall be one plug to allow the entire heat transfer oil system to be drained.

F. The heat transfer oil shall be of ISO grade 68.

#### 6. EXPANSION TANK

A. A sealed expansion tank shall be provided to minimize oil oxidation and prevent moisture condensation into the heat transfer oil. Overflow down tubes are unacceptable.

## 7. HYDRAULIC SYSTEM

- A. The hydraulic system shall incorporate a hydraulic pump to power the agitation, pumping, and compressor system. Belt driven hydraulics is unacceptable.
- B. All valves shall be solenoid operated by toggle switch and wand handle switch.
- C. The controls will allow for bi-directional operation of the sealant pump and agitator.
- D. A flow control valve will be mounted on the rear of the unit to allow the operator to adjust the pump operational speed.
- E. The minimum 30 gallon (113.6 l) hydraulic tank will be equipped with an internal 10-micron full flow filter. The filter shall be equipped with a restriction indicator to indicate the need for service. A sight gauge level indicator equipped with a thermometer to measure oil temperature will be mounted on the tank and located where it is easily viewed.
- F. The unit shall have a self-contained air to oil hydraulic cooler with an electric fan to maintain proper hydraulic oil temperatures.

## 8. TANK INSULATION

- A. The heating tank shall be insulated with a minimum of 1 inch (2.54 cm) thick high temperature ceramic insulation and covered by a 22 gauge (.07 cm) steel outer wrapper. Fiberglass and rock wool insulation are unacceptable due to their moisture retention properties resulting in a significant loss of their insulating value over an eighteen-month period.

## 9. LOADING HATCH

- A. A low profile opening for loading shall be required at the top of the material tank and shall be located on the curbside of the machine for operator safety. The loading height shall be a minimum of 50 inches (127 cm) and shall not exceed 59 inches (149 cm) for correct ergonomic lifting and fume exposure.
- B. This will allow the operation of the equipment, including sealant loading, from curbside. Loading systems that require the operator to step onto the melter are unacceptable.
- C. The opening shall have a minimum area of 252 square inches (1,625 square cm), while not exceeding 275 square inches (1,774 square cm) in order to prevent heat loss, and shall be hinged to allow placement of a block of sealant onto lid and closure of lid for easy, anti-splash loading.
- D. The loading hatch shall be easily adaptable for the addition of a retrofit powered loading conveyor with anti-splash tower.

## 10. HEATING SYSTEM

- A. The heat transfer oil is heated by one 12-volt 250,000 BTU high efficiency forced air diesel fired burner directly at the bottom of the heat transfer oil tank.



B. The burner shall fire into a burner combustion box. The box will be insulated by a high temperature flexible insulation that is resistant to damage from the vibration and over road travel. Rigid insulation is unacceptable.

C. Total area exposed to the burner shall be a minimum of 5,244 square inches (33,832 square cm). The material tank shall have a minimum of 4,267 square inches (27,529 square cm) of contact with the heat transfer oil. No other mechanical circulation of the heat transfer oil by pump shall be accepted. This provides for a melt rate of 1,064 pounds (482.6 kg) per hour.

D. The burner shall be lit by a constant duty high voltage transformer powering an electric spark ignitor. This ignitor shall work in conjunction with a sensor that detects a lack of burn or ignition and shuts down the fuel supply.

E. The thermostat control is located on the curbside of the machine for operator safety.

#### 11. INTERGRATED CONTROL SYSTEM

A. The melter applicator shall have a thermostatic control device that will automatically regulate hot oil, material, and hose temperature.

B. The control shall have a digital readout for temperatures of hot oil, material, and hose.

C. The thermostat shall control burner ignition for a temperature range from a low of 200° F (93.3° C) up to a high of 425° F (218.3° C) for a wide variety of sealants.

D. The temperature controls shall be in a single weatherproof control box.

E. The controls shall be activated by a single power switch, which will then turn each function on at the proper time.

F. The control will have fully integrated electric over hydraulic lockout for the agitation system, which prevents the agitator from being powered until the material temperature reaches 275°F (135°C). This prevents hydraulic system damage caused by overheating of hydraulic oil and reduces wear.

G. The control shall have a fully integrated electric over hydraulic lockout for the pumping system, which will prevent the pump from being powered until the hose temperature reaches 325°F (162.8°C). This prevents hydraulic system damage caused by overheating of hydraulic oil and reduces wear.

H. This control box shall also contain the engine ignition controls, hour meter and any engine gauges.

#### 12. DRIVE AND DRIVE CONTROLS

A. The motive force to the agitator and material pump shall be hydraulic motors driven by a hydraulic pump.

B. The drive controls governing the rotational speed of the material pump shall be controlled by adjustable hydraulic valves.

C. The drive controls governing the rotational speed of the material pump shall be controlled by adjustable hydraulic valves.

D. The material pump will have infinite speed control and is electrically actuated by a toggle switch on the control panel or a switch on the hand wand.

### 13. AGITATION

A. The sealant material shall be mixed by a hydraulically driven, full sweep vertical agitator with two opposing horizontal paddles and vertical risers attached to the ends. This feature ensures that material remains in complete suspension and that the hot material stays in the lower area of the tank and does not get splashed or thrown to the upper areas of the tank.

B. The agitation system shall be chain driven from the hydraulic motor to the agitator.

C. The agitator rotates in both directions.

D. For additional safety the agitator will shut off automatically when the loading hatch is opened.

### 14. BI-DIRECTIONAL VARIABLE SPEED PUMPING UNIT

A. A hardened steel gear pump is located in the center of the material tank attached to the bottom of the tank.

B. Pumping of material is controlled by a switch on the hand wand and output is controlled hydraulically.

C. The pump and agitator drive shaft stands vertically attached to two motors on the top surface of the tank.

D. One motor rotates an axial tube having radial mixing blades at the chamber bottom.

E. The second motor drives a coaxial shaft running through the tube to the pump.

F. Sealant pumping shall be on demand.

G. When pumping stops, all line pressure and sealant flow shall stop.

H. No external plumbing or recirculation back into the tank is acceptable.

I. No internal or external valves shall be used in the pumping and sealant delivery system.

J. The pump shall be capable of delivering sealant at a rate that exceeds the melt rate of the unit.

### 15. ACTIVE PUMP PROTECTION

A. The pump shall be completely encircled by a protective screen.

B. The screen shall not allow anything larger than 1/2 inch (1.27 cm) in size to pass from the sealant tank into the pump suction port.

- C. The screen shall continuously rotate 360° around the pump whenever the sealant agitator is engaged.
- D. The active screen will protect the pump from foreign object damage and will self-clean as it rotates around the sealant pump and suction port.

#### 16. SEALANT HOSE AND APPLICATOR WAND

- A. Both the hose and wand are heated by 24 VAC voltage electric current and are temperature regulated.
- B. The combination length between the hose and wand shall not be less than 22 feet (6.70 m).
- C. Due to weight and safety considerations, an oil-jacketed hose is unacceptable.
- D. The hose shall be specifically manufactured for handling liquid asphalt products up to 500° F (260° C) at 500 psi (34.47 bar) working pressure.
- E. Hose shall not be less than 18 feet (5.48 m) in length.
- F. For maximum operator safety it shall be made of stainless steel braid with a 3/4 inch (1.91 cm) inside diameter and shall be Teflon lined. Further, it shall be heavily insulated to prevent hot material from leaking out.
- G. Total diameter of the hose shall be not greater than 2 ¼ inch (5.72 cm). The total weight of the hose shall not exceed 20 pounds (9.07 kg).
- H. The hose is to be wrapped with a minimum of three electrical wires with terminal ends. The wires will be capable of heating the hose to 400°F (204° C) in less than 45 minutes and have variable temperature control capability.
- I. The hand wand shall not be less than 4 feet (1.22 m) in length.
- J. The hand wand shall be constructed of steel with sufficient strength to withstand normal day-to-day operation.
- K. Material flow is controlled by a trigger switch.
- L. For greater operator mobility, the connection between the wand and hose shall be through a 360° swivel.
- M. There shall be no obstruction or valves between the material pump and the wand end.
- N. The hose is supported by a 6 ft. boom (1.83 m), which swivels side to side on dual pillow block bearings.
- O. The boom is centered at the rear of the machine.

#### 17. ENGINE

The unit shall be equipped with a diesel engine with the following specifications:

Electric Start

Four Cylinder 48.3 HP (36kw) @ 2400 RPM, Tier 4 Final Emissions

3.78" (96 mm) Stroke

134.3 Cu. In, (2.2l) Displacement

Full Flow Oil Filter

3.35" (85 mm) Bore

17.6 to 1 Compression Ratio

Water Cooled

High Water Temperature Shut Down

Low Oil Pressure Shutdown

The engine speed electronically adjusts automatically, and is preset in the engine controls for optimal machine performance.

#### 18. FUEL CAPACITY

- A. The melter shall have a 30 gallon (113.6 l) diesel fuel tank for operation of the entire unit.
- B. The unit will be capable of operating for a minimum of 12 hours on one tank of fuel.
- C. The tank shall be equipped with full length sight gauges for fuel level indication protected in a steel cover.

#### 19. AIR COMPRESSOR

- A. The melter shall be equipped with a 100 cfm @ 125 PSI (1982 l/m @ 8.62 Bar), rotary vane air compressor.
- B. The compressor shall be driven hydraulically. Belt drive compressors are non-conforming.
- C. Air pressure shall be controlled by a continual intake valve modulation, which adjusts air flow to increase or decrease depending on user demand.
- D. The compressor has an integral toroidal cooler to maintain proper oil temperature.
- E. There shall be a high temperature shut down.

F. 50 foot of air hose with Chicago quick couplers on each end and a storage rack shall be supplied along with a cold air lance.

## 20. PAINT

A. All painted surfaces shall be coated with two-part epoxy paint.

## 21. TRAINING

A. An authorized, factory representative will be made available for a full day of training at a facility designated by the bidding agency.

B. At this training session a complete operational, mechanical and safety overview will occur.

C. Both safety and operational manuals will be viewed and discussed with all concerned personnel.

D. Additionally, the representative will be available at that time for "on the job" safety and field training.

## 22. SAFETY AND TRAINING MANUALS

A. A written Safety Manual will be provided to the bidding agency.

## 23. PARTS

A. Bidders must provide a list of parts to be maintained at the facility. Order information for additional parts will be provided.

## 24. WARRANTY

A. The manufacturer shall warranty the equipment for a minimum of one year.

## 25. OPTIONS REQUIRED – 3" Pintle hitch, overnight heater

### APPROVED EQUAL

The approved make and model for this specification is a Crafc0 SS125DC 100 CFM or Sealmaster 125 DA or approved equal. Bidders offering to supply equipment other than the approved make and model must supply a detailed description of the equipment being offered, with references and a separate list of all deviations to this specification, attached to your bid document.

Prior to bid award, an on-site demonstration of the equipment offered may be requested. All bidders offering other than the approved model listed will be required to provide an on-site demonstration at the agency's location within 7 days of request to verify that their unit complies with all specification requirements before their bid will be considered. Failure to carry out the provisions noted herein is deemed sufficient reason to reject the bidder's proposal.

## PRICING SHEET

Total price = \$ \_\_\_\_\_

Is this bid for Crafc0 SS125DC 100 CFM or Sealmaster 125 DA or other? \_\_\_\_\_

If other, please provide information as required in approved equal paragraph.