

Issued 09-06-2017

## **INSTRUCTIONS TO BIDDERS BROOM CORE REFILLS**

The Capital Region Airport Authority (CRAA) hereby invites from persons, firms, or corporations, who meet the qualifications hereinafter set forth, sealed bids to provide Broom Core Refills for use at Capital Region International Airport, Lansing, Michigan.

For the information of prospective bidders and their convenience in the submission of a bid, the following documents, which constitute the bid Package, are being furnished to each bidder and are attached hereto:

1. Instructions to Bidders;
2. Broom Core Specifications;
3. Bid Form

This bid package shall constitute contract documents. Please read all terms and conditions thoroughly before submitting bids. It is the intention of the CRAA to select one (1) qualified broom core refill supplier.

Each bidder must complete and return the attached Bid Form, filling in the forms completely and in full accordance with these instructions; so that the bid is received in the office of the Capital Region Airport Authority, Capital Region International Airport, Lansing, Michigan, by 3:30 p.m. Monday, November 6, 2017. Bids received after this specified time will not be given consideration. **Bid forms returned without authorized signature will be rejected in whole.**

The CRAA reserves the right to consider the relative experience and qualifications of each of the respective bidders and to select the bidder to whom it will award the bid.

The CRAA reserves the right to reject any and all bids and to waive any informality or irregularity in the submittals. The CRAA shall be the sole judge of the adequacy of bidder's qualifications. The CRAA will award to the bidder best meeting the airport's needs, as determined by the CRAA in its discretion. The CRAA is not bound to award the Concession to the lowest bidder. The CRAA reserves the right to negotiate with one or more bidders after opening bids. The CRAA may, in its discretion, conduct one or more interviews with bidders prior to selection.

Should a bidder find any discrepancy in or omissions from these "Instructions" or other bid documents, he/she should at once notify the CRAA in writing, which will send clarifying written instructions to all prospective bidders. The CRAA will not accept responsibility for any other explanations or interpretations of the instructions. Bids shall be submitted ATTN: Ron O'Neil, Director of Maintenance Capital Region International Airport 4100 Capital City Blvd. Lansing MI. 48906. Questions will be addressed by Kevin Miller Airfield Manager 517-881-0664.

No bid will be considered from any person, firm or corporation who has failed to perform acceptably any existing or prior contract or agreement with the CRAA.

***Ron O'Neil***  
***Director of Maintenance***

# **BROOM CORE REFILLS SPECIFICATIONS**

## **GENERAL**

Refill sets shall consist of 150 wafers, 46" diameter. Wafers shall have a 19-1/2" diameter core. Sets shall include sufficient quantities of spacers. Brush sets should be a 50-50 mix of poly and wire. Brushes are to be of the continuous fill (non-tufted), sectional wafer type which requires spacers for the assembly of the brush core.

## **1. BRUSH RING**

The brush ring shall be formed from 18-gauge quality coil stock (Rockwell B Hardness 50-55) steel rolled into a continuous channel. The inside diameter shall be sized for a slip fit over the sweeper (M-B 20') core. The channel side shall be 1.0' high to firmly embrace and contain the brush bristle.

## **2. DRIVE PINS**

Each brush section shall have four reinforced drive lugs protruding into the inside of the brush ring which propel the brush on the sweeper core. These drive lugs shall be spaced at 90 degrees to go against the sweeper core drive bar.

## **3. HOLDING WIRE**

Brush bristles shall be held inside the brush ring channel by eight rounds of wire under high tension to ensure efficient operation at high brush RPM. The holding wire shall be hard drawn, bright basic wire, having a tensile strength of 130,000 – 160,000 PSI.

## **4. HOLDING WIRE CLAMPING**

Bristle holding wire tension will be maintained by deforming an elongated C-shaped clip, retaining the wire under high tension to insure against bristle loss.

## **5. SPACERS**

New spacers of sufficient quantity are to be supplied with each set of refills ordered.

## **6. SYNTHETIC WAFERS**

Bristles are to be of high quality stretch-oriented isostatic polypropylene plastic with a carbon additive to stabilize the polymer against the elements. The bristles shall have a high amplitude crimp, measure .060/.065 x .090/.095 inches in their cross section, having a specific gravity of 0.90 and a water absorption of less than .03%. Bristles to be completely mildew resistant and have a tensile strength of 25,000 – 35,000 PSI.

## **7. STEEL WAFERS**

Bristles are to be .018" in diameter galvanized, high carbon steel brush wire, scientifically crimped in two separate planes, 3-1/2 crimps per inch, 1/8" depth, spirally crimped. Carbon content to be .65 to .75%. Brush wire is to be zinc coated 15 ounce/square feet minimum to protect against the elements and have a tensile strength of 315,000 – 375,000 PSI. Wafers shall have a ten pound minimum weight.

## **8. STATIC BALANCING**

All wafers shall be within 50 oz-in static balance and marked at the heavy location for no broom bounce.

### **9. FRICTION LINER**

The bristle retaining ring shall be lined with a high quality neoprene liner to absorb the friction and dissipate the heat of friction at the ring edge to insure against bristle loss.

### **10. PACKAGING**

Wire and poly bristle sections are to be packaged and shipped in cardboard boxes on skids for handling with forklift. The spacers are to be shipped in the same fashion.

### **11. DELIVERY**

Supplier must be able to guarantee delivery within 14 days ARO.

Successful bidder must agree to replace defective refill sets at no cost to the CRAA. Pricing is to be submitted FBO Capital Region International Airport, Field Maintenance Facility, 3168 West State Road, Lansing MI 48906.

Successful bidder will be awarded contract from Monday, November 13, 2017 through Saturday, November 10, 2018.

The Capital Region International Airport's use is @ 12 refill sets annually based on past years. That number may increase or decrease depending upon weather conditions.

**CRAA BID FORM**

Instructions: Mail form to arrive or deliver by the time and place shown in the bid invitation in sealed envelope clearly marked with item being bid on. No late, faxed, or emailed bids will be accepted.

The undersigned has read and understands the bid specification and agrees to provide products and/or services in accordance with the bid specifications as follows:

**BROOM CORE REFILLS**

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**Price per set FOB:**      \$ \_\_\_\_\_

**Bid prices remain firm for 30 days.**

**COMPANY  
TELEPHONE**

**ADDRESS (Include Zip Code)**

**AUTHORIZED SIGNATURE**

**PRINT NAME**

**TITLE**

**DATE**