

## BID SPECIFICATIONS HMT40000DL

## MARATHON 2 TON ASPHALT HOT BOX

| 1    | OVERVIEW  | YES | NO |
|------|---|-----|----|
| 1.1  | Shall be a new and currently produced tandem axle, diesel burner, oil jacketed heated, Asphalt Trailer/Haulers (hot mix transporter) trailer type with dump option, with <b>1,814 kg (4,000lbs.)</b> capacity.                        |     |    |
| 1.2  | Trailer(s) that are classified as prototype, demonstrators and/or discontinued models shall not be accepted.  |     |    |
| 1.3  | Asphalt hopper and frame shall be of welded construction. A bolted designed hopper and frame construction shall not be accepted.  |     |    |
| 1.4  | Welding on the trailer, frame and hopper shall meet or exceed the CSA W59-03 or equivalent standards.   |     |    |
| 1.5  | The gross hopper capacity shall be 1,814 kg. (4,000lbs.) Specify hot asphalt mix cubic yard capacity. <b>Specify:</b> 1.55 cubic yards  |     |    |
| 2    | TRAILER - HOPPER FEATURES AND DIMENSIONS  |     |    |
| 2.1  | Trailer frame shall be fully welded and constructed of heavy duty six (6) inch channel iron. Tubular trailer frame will not be accepted.  |     |    |
| 2.2  | Heavy duty tandem axle trailer with a minimum axle rating of 4,716 kg. GAWR.  |     |    |
| 2.3  | Slipper spring suspension shall have a minimum rating of <b>2,358 kg GVWR</b> on axle. Torsion suspension will not be accepted.   |     |    |
|      | All-season radial tires with heavy duty rims rated for the maximum GVWR of the asphalt trailer shall be provided.   |     |    |
| 2.4  | Specify Make: Carlisle Specify Size: 225/75-R15-D   |     |    |
|      | Specify Model: Radial Trial HD Specify Load Range: Load Index 2,535 lbs   |     |    |
| 2.5  | Tires and rims shall meet load requirement for the unit and its axle specifications.  |     |    |
| 2.6  | Hopper floor material shall be 10 GA reinforced steel.  |     |    |
| 2.7  | Two (2) Hopper doors shall be stainless steel with 2" fibreglass insulation. There shall be two (2) 12VDC electric linear actuators to open and close door with manual override.<br>Hopper door dimension is 27.5" x 70" EACH.        |     |    |
| 2.8  | Shall have one (1) 1/4" steel construction, guillotine style, vertical sliding rear unloading door. Door opening shall be approximately <b>15" high X 21" wide</b> with ratcheting latch to secure guillotine door open while in use. |     |    |
| 2.9  | Fenders shall be fixed to the hopper and will tilt with the hopper. The fenders are manufactured with nonslip checker plate material. Fenders designed to eliminate the use of mud flaps.   |     |    |
| 2.10 | Hitch shall be vertically adjustable from approximately <b>17" to 27"</b> . Hitch shall a have forged steel pintle-eye of 3" I.D.   |     |    |
| 2.11 | The trailer shall have a 7-pin round (RV) trailer plug provided, wired to MTO standard trailer wiring diagrams. Trailer wiring shall extend three (3) feet after pintle-eye.  |     |    |

| 2    | TRAILER - HOPPER FEATURES AND DIMENSIONS (CONTINUED)  | YES | NO |
|------|---|-----|----|
| 2.12 | There shall be a minimum 30 Amp marine type automatic 120VAC battery charger to be secured within a waterproof and compartment in an accessible area on front of hopper. Battery compartment shall be supplied with drain and vent holes. <b>Specify Make</b> : Hoffman 12X10X5 Box – IOTA DLS30A Series M Battery Charger. |     |    |
| 2.13 | Hopper walls shall be a 10° sloped polyhedral shape to carry asphalt material to the shoveling platform. Sloped walls will allow access to asphalt material without constant tilting of the hopper or the need to reach in with long tools to get at asphalt material.  |     |    |
| 2.14 | The shoveling platform shall be fabricated stainless steel with dimensions of 44" (112cm) width x 18.5" (47cm) depth and the shoveling platform shall 26" (66cm) high from the ground.  |     |    |
| 2.15 | Unit will come equipped with a 3GAL. release agent bottle/sprayer   |     |    |
| 2.16 | Unit will come equipped with a tool rack to hold (4) four tools with maximum of 2" diameter handles.  |     |    |
| 2.17 | The material vat shall have a 10° sloped polyhedral shape for optimum flow of asphalt.<br>The material vat heated area is approximately <b>6,200 in<sup>2</sup>.</b>  |     |    |
| 2.18 | The material vat shall be constructed of minimum 10 ga steel construction.  |     |    |
| 2.19 | The oil vat shall hold a capacity of <b>49USG/185L</b> of heat transfer oil rated at <b>500°F /</b><br><b>260°C</b>   |     |    |
| 2.20 | The oil vat heated area is approximately <b>6,943 in<sup>2</sup></b> .  |     |    |
| 2.21 | The oil vat shall be constructed of minimum 10 ga steel construction.   |     |    |
| 2.22 | There shall be a drain located at the rear of the melter to allow for draining out heat transfer oil yearly. <b>Specify:</b> Located underneath hopper  |     |    |
| 2.23 | There shall be 1" ceramic insulation on all sides and bottom.   |     |    |
| 2.24 | There shall be a minimum of <b>12-gauge HRMS</b> steel covering the outside wall of vat when completed.   |     |    |
| 2.25 | There shall be a heat transfer oil expansion located on top of material vat with a capacity of <b>13USG/49L.</b>  |     |    |
| 2.26 | Tongue weight of <b>700 lbs (317 kg)</b> fully loaded hot box with all options as described above. (Includes full tank of fuel and oil jackets at required level)   |     |    |
| 3    | HEATING SYSTEM - DIESEL   |     |    |
| 3.1  | The main burner shall be a 12-volt diesel-burner, maximum <b>165,000 BTU</b> with electronic spark ignition and shall be equipped with flame out protection.  |     |    |
| 3.2  | Fire-chamber shall be equipped with 1" ceramic fibre insulation.  |     |    |
| 3.3  | Burner shall have a safety shut off switch to disable burner when asphalt hopper is raised.   |     |    |
| 3.4  | Burner shall have automatic temperature control thermostat to control heat transfer oil temperature.  |     |    |
| 3.5  | Burner assembly shall have protective guarding or enclosure installed to protect burner assembly from the elements.   |     |    |
| 3.6  | Shall be equipped with a 1500 watt/120-volt heater, fully immersed in the heat transfer oil to carry hot oil through to maintain even heat distribution overnight.  |     |    |
| 3.7  | Diesel tank shall have a capacity of <b>10USG/37L</b>   |     |    |
| 3.8  | The diesel tank shall come with a labeled, vented fill-cap. The tank shall also have an accessible drain plug.  |     |    |
| 3.9  | The fuel tank shall be equipped with a mechanical fuel level indicator.   |     |    |
| 3.10 | Diesel tank shall tilt with the hopper, diesel tank to be mounted at front of the hopper, filler cap and fuel lines shall be protected against accidental impact damage from dumping of hot asphalt.  |     |    |

| 3    | HEATING SYSTEM - DIESEL   | YES | NO |
|------|---|-----|----|
| 3.11 | Exhaust shall exit the heating chamber through a front mounted covered exhaust stack.   |     |    |
| 4    | LIGHTING AND SAFETY   |     |    |
| 4.1  | Shall be equipped with a highway lighting package: four (4) light LED system for road safety located on rear left and right side of the trailer. Lighting shall include park, tail, signal, and brake lights with emergency 4-way capability. |     |    |
| 4.2  | Battery master disconnect switch shall be installed on unit to prevent battery drain  |     |    |
| 4.3  | All lighting must comply with DOT or equivalent requirements.   |     |    |
| 4.4  | All major components around the box (such as heater exhaust, beacons, lighting, and switches) shall be protected by brackets or shields against heated material and/or elements.  |     |    |
| 4.5  | All wiring and hoses shall be protected by ducts or looms from the elements, chafing and heat sources, using moisture and temperature resistance connectors.  |     |    |
| 4.6  | Exposed hot surfaces shall be adequately marked and identified, in English, e.g.<br>"Caution- May Be Hot"   |     |    |
| 4.7  | Shall be equipped with single 15ft pendant control.   |     |    |
| 4.8  | Shall have an audible alarm to advise operators that hopper is being lowered.   |     |    |
| 4.9  | For enhanced visibility and detection in low light conditions, two (2) inch wide red and white conspicuity tape, 983-32 NL (or equivalent) shall be applied to the sides and rear of machine.   |     |    |
| 4.10 | Shall be equipped with a green strobe burner indicator light to alert crew of any burner issues.  |     |    |
| 4.11 | Must be equipped with an LED directional flashing arrow board that is compliant with SAE J595 Class 1. <b>Specify:</b> 50"L x 12.5"H x 2"D  |     |    |
| 5    | PAINT   |     |    |
| 5.1  | The complete machine shall be cleaned of all weld spatter and oil for final painting.   |     |    |
| 5.2  | The machine shall be coated with epoxy primer and painted Urethane Black, standard colour.  |     |    |
| 6    | OPTIONS INCLUDED  |     |    |
| 6.1  | Shall have a separate shovel rinse tank mounted in front curb side fender.  |     |    |
| 6.2  | There shall be a 10 lb. fire extinguisher with mounting bracket installed on machine.   |     |    |
| 6.3  | There shall be 2 traffic cone holders installed on either side of the tool holder at front of machine.  |     |    |
| 7    | OPTIONS AVAILABLE   |     |    |
| 7.1  | Amber Strobe Light Installed on equipment   |     |    |
| 7.2  | Slow Moving Vehicle Sign mounted on unit  |     |    |
| 7.3  | Spare Tire & Rim, mounted to trailer  |     |    |
| 7.4  | Aluminum Rim Upgrade  |     |    |
| 8    | WARRANTY  |     |    |
| 8.1  | Warranty policy to be included with the bid/tender  |     |    |
| 8.2  | 5 year limited trailer warranty   |     |    |

## Specifications may change without notice.