

KM T-2 ASPHALT RECYCLER SPECIFICATION

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Technical Product Specifications

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*Specifications are subject to change without notice



COMPLIANCE TO SPECIFICATIONS

The bidder shall indicate 100% compliance by checking “YES” or non-compliance by checking “NO” for each line item of specification. Any space left blank shall be considered non-compliant. Any deviation from the specification, or where submitted literature does not fully support the meeting of specifications, must be clearly cited in detail, in writing, by the bidder and submitted with the bid. NO verbal interpretations will be accepted! In addition NO deviations below “minimum” specifications as written will be accepted.

Bidding Requirements Section

Section		Specification Detail
Section 1 <i>General Description</i>	1.1	The following specification is to describe the Asphalt Recycler unit designed to recycle up to 4 tons an hour.
	1.2	The asphalt recycler is designed to recycle either saw cut material or asphalt millings.
	1.3	The unit is designed to produce “plant quality” Hot Mix Asphalt from recycled asphalt product (RAP).

Section		Specification Detail
Section 2 <i>Trailer</i>	2.1	The GVWR is to be a minimum of 14,000lbs.
	2.2	The unit is to be equipped with a minimum dual 7,000lbs. axles.
	2.3	Trailer frame is to be constructed of 8” channel steel with 2-1/2” x 1/4” square tube support members.
	2.4	Trailer is to be equipped with electric brakes on all 4 wheels and breakaway kit.
	2.5	Trailer is to be equipped with four (4) ST 235/80R16 trailer service. Each tire is to be rated for 5000lbs.
	2.6	Trailer fenders are to be constructed of 11 gage diamond plate steel and welded to frame.
	2.7	Trailer is to include a 3” ID pintle hitch. The hitch is to be adjustable from 18” to 30”.
	2.8	Trailer is to be equipped with a 7,000lb round tube swivel mount manual jack stand.
	2.9	Trailer is to be equipped with 3/8” zinc coated grade 70 safety chains.

Section		Specification Detail
Section 3 <i>Dimensions and Weight</i>	3.1	The length of the unit is not to exceed 23’10” (Loading hopper in down position).
	3.2	The width of the unit is not to exceed 8’6”.
	3.3	The height of the unit is not to exceed 9’ with the hopper in the down travel position, and will not exceed 10’2” with the loading hopper in the up position.
	3.4	The weight of the unit is not to exceed 8,600lbs.



Section		Specification Detail
Section 4 <i>Loading Hopper</i>	4.1	The top opening of the loading hopper must be a minimum 26" x 94".
	4.2	The loading hopper will be constructed of 3/16" steel. 235 Brinell Hardened.
	4.3	The loading hopper will be raised a lowered by 2 hydraulic cylinders with a minimum psi rating of 3,250.
	4.4	The loading hopper will be equipped with two Cougar DC 200 vibrators to assist material load feed into the asphalt drum. Vibrators will be operated by a manual push button.
	4.5	Loading hopper must be positioned at the rear of the unit. Due to safety concerns units that require side or front loading will not be accepted.

Section		Specification Detail
Section 5 <i>Asphalt Heating Drum</i>	5.1	The asphalt heating drum is to be constructed of 3/16" steel. ASTM A36 steel alloy with outside diameter insulated.
	5.2	The asphalt heating drum with be equipped with eight (8) 3/16" 235 Brinell Hardened steel agitators inside of the heating drum. The agitators will be sawtooth design at staggered heights in order to break down material. Any deviation from this critical component will not be accepted.
	5.3	The heating drum with be hydraulically controlled to rotate clockwise and counter clockwise. Drum will rotate at approximately 10RPM.
	5.4	The asphalt heating drum will sit and rotate on four (4) 3"x8" steel forged casters. Each caster will be rated for 14,000 lbs. and equipped with 1 ¼ "precision tapered roller bearings.
	5.5	The asphalt heating drum will sit on a single 3"x6" thrust caster rated at 12,000lbs. 1 ¼ " precision tapered rolling bearing

Section		Specification Detail
Section 6 <i>Engine</i>	6.1	The machines engine will be a Kubota D902-11774. No substitute for this engine will be accepted.
	6.2	The engine specifications will be as follows: Kubota Diesel, 898CC, 3 Cylinder, Water Cooled, Inline, EPA Tier 4
	6.3	The fuel tank capacity will be a minimum 80 gallons with filter and manual shut Off (common tank with burner).
	6.4	The engine power will be 21 BHP @ 3200RPM, liquid cooled.
	6.5	The engine will feature a 12V starter, 60 amp alternator, mechanical fuel pump, fuel filter, and hinged cover.

Section		Specification Detail
Section 7 <i>Hydraulics</i>	7.1	The hydraulic fluid reservoir will hold a capacity of 30 gallons.
	7.2	The hydraulic cooler will be equipped with a hydraulic fan and adjustable to accommodate hot or cold weather conditions.
	7.3	The hydraulic pump output will be 12 gallons/minute with splined shaft.
	7.4	The hydraulic motor will be 38 cubic inch with 3 piece. Self-centering, keyless shaft-hub locking assembly.
	7.5	Hydraulic Cylinders; Lift: (1)- 5"x15" Load: (2)- 2" x16"
	7.6	The hydraulic will be manually adjustable and equipped with variable speed hydraulic heat exchanger, control valves, pressure gauges, filters, piping and hoses.

Section		Specification Detail
Section 8 <i>Heating System</i>	8.1	The heating source will be a Beckett Model SDC burner. No substitute for this specific burner will be accepted.
	8.2	The burner will be ran on No. 1 or No. 2 Diesel, or B-5 bio-diesel.
	8.3	The burner will have a maximum capacity of 700,000 BTU.
	8.4	The heating system will run of a minimum 80 gallon fuel tank with filter and manual shut off. Fuel consumption is approximately 4.7GPH.
	8.5	Other components to be included are piping, hoses, pressure gage, hour meter, and swivel arm.
	8.6	Burner is to be mounted on an adjustable swivel arm that rotates horizontally. Burners that raise and lower vertically will not be accepted.

Section		Specification Detail
Section 9 <i>Electrical System</i>	9.1	The electrical system will run off a 12V marine type deep gel battery.
	9.2	Charging system will be a 60 amp alternator of the Kubota engine. Back up charging system will vehicle chagrining system.
	9.3	Other components: Engine control panel with safety shutdown and first out fault indication, Hour meter, key switch, speed selector switch (idle/run)



Section		Specification Detail
Section 10 <i>Hydraulic Controls</i>	10.1	The asphalt drum rotation will be hydraulically controlled and have three settings: Load, Neutral, and Unload.
	10.2	The asphalt loading chute will be hydraulically controlled and have the ability to move down to load and up to unload.
	10.3	The asphalt recyclers dump feature will be hydraulically controlled and move up and down for easy loading and unloading of the machine.
	10.4	The dump feature will be a single hydraulically controlled scissor hoist rated for 150% of the load. A dual push cylinder hoist system will not be accepted.

Section		Specification Detail
Section 11 <i>Burner Controls</i>	11.1	The burner is controlled by a manual on/off switch.
	11.2	The burner is equipped with a 12 Volt meter.
	11.3	The burner is equipped with an hour meter for total run time.
	11.4	The burner is equipped with pressure gauge.
	11.5	A red mushroom push button for engine and burner shut down is located on the burner platform.

Section		Specification Detail
Section 12 <i>Performance</i>	12.1	The asphalt recycler has the ability to produce 4 tons per hour.*
	12.2	The recycling asphalt temperature is controlled by the operator.
	12.3	The operating temperature ranges from 280°F to 360°F
		*Recycling times will vary depending on outside ambient temperature, and the quality and moisture content of recycled material.