

# RENOVA Asphalt Recycler

## PROPOSAL



**RENOVA**<sup>SM</sup>  
**INDUSTRIES**

*Paving Ways to a Better Earth*

**City of Valdez**  
**602 Egan Avenue**  
**Valdez AK 99686**

**RENOVA Industries • Charlotte, North Carolina**  
**844-778-1788**  
**[www.renovaindustries.com](http://www.renovaindustries.com)**



April 15, 2016

C/O Construction Machinery Industrial, LLC  
City of Valdez  
602 Egan Avenue  
Valdez, AK 99686

Attention: Mr. Joe Russell

Reference: RENOVA Asphalt Recycler Proposal

Dear Mr. Russell:

As demonstrated, the RENOVA asphalt recycler processes stockpiled millings and RAP into a high quality hot mix asphalt, eliminating the need to purchase and transport expensive hot mix from a local asphalt plant or to use an even more costly solution for wintertime asphalt repairs such as cold patch. With the RENOVA recycler, you can convert millings to hot mix year round for less than half the cost of mix from the hot plant.

RENOVA Industries proposes to manufacture and furnish, in accordance with the following specifications and general conditions, the equipment and services described below.

One (1) RENOVA Recycler, an asphalt pavement recycling machine, designed to deliver premium-quality hot mix asphalt mix asphalt for repair sites using reclaimed asphalt pavement extracted directly from the repair area itself or by using stockpiled millings, RAP or unused, discarded asphalt mix.

### **Functionality**

The RENOVA machine and process:

- Produces new virgin hot mix asphalt by recycling asphalt millings or RAP, broken asphalt chunks up to 24" in diameter or unused, discarded asphalt mix, year round, in cold temperatures or wet conditions.
- Properly heats, agitates, mixes and renews old material in quantities desired with mix temperature maintained at optimum level throughout the entire process; monitored by a handheld digital laser thermometer.
- Uses a RENOVA proprietary, pelletized or brick-sized AC additive/rejuvenator which enables production of high-quality hot mix asphalt from millings or RAP.

- Produces eight tons of premium-grade quality hot mix asphalt per hour, processing each two tons load in ten to fifteen minutes (assumes ambient temperature >70° F and dry millings).
- Requires only a two-man crew; allowing the paving operator to avoid the lengthy, inefficient conventional process of pavement repairs - saving time, money, and idle crews.
- Eliminates the need for costly hot mix asphalt from the local asphalt plant - patch when asphalt plants are closed or unavailable when serving larger jobs or other customers. Produce hot mix for less than half price of asphalt plants.
- Eliminates repeated pothole re-repair work and expense since the RENOVA repair will be permanent if the RENOVA process, including proper compaction, is followed.
- Eliminates waste; uses 100% recycled materials.

### **Specifications**

1. Mobile RENOVA asphalt recycling machine mounted on a dual-axle (7,000 lbs. each), 4-wheel, diamond-plated steel-floored 18-foot trailer equipped with electric brakes.
2. Trailer and machine with all attachments weighs 11,200 lbs. with trailer Gross Vehicle Weight Rating (GVWR) at 14,000 lbs. in compliance with all DOT requirements. Includes maintenance-free LED tail lights.
3. Specially fabricated 3/8" steel heating/mixing drum to provide maximum heat and mixing while preventing product from burning or scorching.
4. Reversible drum rotation via direct drive variable speed hydraulic driven planetary reducer (0 to 9 RPM).
5. Self-loading hopper, chute, mixing fins and spiral flights fabricated with 1/4" steel.
6. Dual-pivot hopper for easy knee-level loading, lifting of material up and into mixing unit, and providing clearance for discharge of the resultant hot mix asphalt.
7. Dual hydraulic lifts on hopper and burner assembly for proper positioning
8. Enclosed drum assembly contains access panels for inspection of all moving parts.
9. Industrial-grade 1.4-million BTU burner with automatic fuel & flame cutoff switch. Operating temperature between 270-350° F monitored by handheld digital laser thermometer (laser thermometer not included).
10. Equipped with automatic dust and heat flow exhaust fan and stack.

11. Dual hydraulic lifts for tilting of drum assembly (aids in loading and discharging).
12. 26 HP, 3 cylinder, liquid-cooled diesel engine with 28 gallon hydraulic oil capacity and spin-on filter. Both engine and burner run on diesel #1, #2, off-road bio-diesel. Can be adapted to propane where required. Includes hour meter & pressure gauge.
13. 91 gallon fuel tank with fuel pump, dual fuel filters and shut-off valve.
14. 120V, 5500 watt generator with electrical outlet to run accessory equipment for associated tasks (electric saw, jack hammer, light, etc.). All wiring protected by steel tube or conduit.
15. 2"x 6" 1/4" high-strength steel wall box-beam side rails with all-enclosed wiring.
16. 2"x 6" 1/4" high-strength steel wall box-beam tongue extends the full length to the front axle hangers, with 3/8" safety chains and slip hooks.
17. Dual jack stand levelers with safety pins on back of trailer. Adjustable ball coupler – easy connect to vehicles with different ball heights and sizes (2-2 1/2").
18. Trailer with powder coat finish resists fading and promotes scratch resistance.
19. Length: 18 ft., Height: 9 ft., Width: 8 ft.
20. RENOVA Industries provides 1 (one) calendar day of on-site training for machine operation and calibration including equipment operations, maintenance & safety controls and training in the use of proprietary rejuvenate to ensure mix quality.
21. FOB: Seattle WA, USA

**Items not included:**

1. Rejuvenator, digital laser thermometer, compaction equipment
2. Freight and handling charges beyond Seattle WA
3. Taxes, permits and/or other services unless otherwise noted
4. Compliance to local codes neither guaranteed nor implied

**Warranty:**

Two (2) years parts and labor warranty for defects in workmanship. RENOVA Industries LLC hereby authorizes City of Valdez to perform warranty work on their RENOVA Recycler.

**Delivery:**

Four (4) to eight (8) weeks

## Base Recycler

### **RENOVA 4200**

Asphalt recycler per above description sized at 4,200 lbs. hot mix capacity per batch less taxes & shipping

## Optional Materials

### **Tool Box** (not included/optional)

36" x 24" x 24" diamond plate aluminum tool box, installed on trailer

### **Packer** (not included/optional)

2.5 HP gas-fired engine vibratory roller-packer with 8" diameter, 12" long drum

### **Rejuvenator** (strongly recommended)

RENOVA 3" X 3" X 2.5" asphalt cement/rubber/rejuvenator cubes additive enables the production of high quality hot mix asphalt from stockpiled millings or RAP. Rejuvenate cost: \$1.35/pound plus shipping. Method of shipment: Fifty ready-to-use 40-cube boxes on one full pallet, yielding 2,000 lbs or one ton of rejuvenator.

Prices remain in effect through June 30, 2016 and apply to a purchase or Letter of Intent to Purchase on or before that date.

Thank you for your interest in this technology and the advantages it provides you to better manage your community's resources.

Yours Truly,

**RENOVA Industries**



Bruce Whitney