

## **UNIBELT PATCHER - SPECIFICATIONS**

### **Model BC-5**

These specifications describe a self-contained patch unit, which is permanently mounted to a truck chassis to be used for patching with hot asphalt.

#### **Container:**

Unit shall be 5 cubic yards

Double wall constructed

2" - 6 lb. density insulation throughout

3/16 GA HR steel interior sides, 10 GA HR steel exterior

Top loading lids have expansion corrugations

Top loading doors are 2" double wall constructed

Single hinged top lids open into a V with inside surface acting as a funnel

Flame cut upper pivot arms for top lids

All doors hydraulically operate by 2" x 11" stroke cylinders

Material funneled to center of container

Hydraulic system shall operate at 1500 PSI

Hydraulic controls located at right rear corner of container

Sloping floor shall not be less than 45° from horizontal

Material shall be discharged by a belt over chain, 24" wide conveyor system

Conveyor system shall include high temperature, heavy duty, multiply, 18" wide Kevlar® belt riveted onto every other crossbar by four rivets

Belting shall have WearGuard® coating and sealed ends for lacing

Belt ends are spliced together with screw attached splicer bar

Belt shall be reinforced and designed to withstand 800°F and harsh cleaning solvents

Chain shall have crossbars on every other chain link of conveyor and shall have sprockets with a 1¾" shaft

Conveyor is driven through a gearbox by a hydraulic motor

Forward and reverse controls

3/8" Pintle chain shall be driven by a 25:1 right angle gearbox, and hydraulic high torque motor

#### **Radiant Heater:**

Heat tubes located under container

Interior heat chamber has passageways to direct heat

Passageways separate from heat chamber

Chamber totally enclosed inside container

Two propane fueled casted manifold burners with flume adjustment

Rating of 67,000 BTU each @ pressure of 10 PSI

Controlled by thermostat range of 100°F - 300°F

12 volt electronic igniters

100% fuel shut off if burner is extinguished

Burner area fully enclosed and located at front of unit safely away from rear operation

#### **Hand Torch:**

Pilot with valve control

Capacity of 200,000 BTU

25 foot hose supplied

#### **Shoveling Apron: Model 5**

Constructed of 10 GA HR steel

Folding bottom for material to bypass freely

Mounted on rear of container

#### **Emulsion Spray Unit: Model BH-153-21**

Emulsified Asphalt spray and storage system mounted on truck chassis for applying tack coat

**Tank:**

Two compartment tank  
Storage capacity 130 gallon emulsion and 20 gallon solvent  
10 GA steel with bottom reinforced  
6" curbside filler cap  
Tank dimension 72"W x 16"L x 30"H  
4" clean out on curb side near tank bottom  
Tank shall be vented  
Removable fill basket strainer  
Y strainer at discharge of tank before material enters pump  
Capable of switching from emulsion to solvent with one valve lever

**Heater:**

Internal serpentines of 1" steel tubing to circulate water from truck engine  
Truck engine cooling system as a heat source  
Two 5/8" coolants hose  
System will have a temperature control valve at tank with thermometer  
0°F - 300°F

**Auxiliary Electric Heat:**

Equipped with 110 VAC heat system  
Overnight heating, controlled by temperature sensor  
Heating elements shall be low-density stainless steel

**Mounting:**

Space required for mounting of tank is 22"  
Spraying system shall be mounted in front of dump body  
Mounting shall be accomplished with 2 full length mounts  
Spring bolsters on one side of tank  
Bolting to frame shall consist of 3 each side, 1/2"  
No welding on truck frames will be accepted

**Pump:**

Rotary gear pump  
Output of 10 gallons per minute of 600 R.P.M.  
Pumps shall be hydraulic driven  
All valves shall be high pressured  
It shall be remote mounted for ease of maintenance  
Mechanically actuated from right rear of body  
Pump shall be reversible to draw material back to tank  
Pump shall be driven by a torque motor, which has 5.9 CID

**Spray Wand and Hose:**

System should be plumbed to curbside rear of truck  
3/8" diameter 5 feet long steel application wand shall be supplied  
25 feet of 1/2" diameter oil resistant hose  
A brass changeable nozzle at spray tip  
Wand storage brackets

**Drip Pan:**

10 gallon drip pan/waste oil combination  
Mounted under patcher body  
Necessary valves for draining and cleaning

**OPTIONAL EQUIPMENT****Auxiliary Electric Heat Patcher:**

Low density electric heat  
Minimum 6KW, 240 VAC thermostatically controlled  
100°F - 300°F  
Weatherproof Panel  
Overnight heating of asphalt  
25 foot power cord

**Compactor Lift Platform:**

PB model 640  
Constructed of 3/16" one piece formed plate with 2" lip on back and sides  
1" pipe front pipe stop and two 2" channel rear stops, Reinforced with 3/16 HR angle on side corners  
Cylinder 1½" x 18" stroke, two 6" x 4" tube outside supports and 4" x 4" tube inside with internal rollers, located at rear unit  
Optional Bomag® roller locking bracket

**Roller Transport Device:**

Rear mount lifting rack with two hydraulic 36" stokes cylinders. Designed to lift and carry single drum walk behind rollers

**Hydraulic Tool Circuit:**

25 foot dual hose  
Quick couplers  
Flow meter  
Engine throttle control to be provided by chassis manufacturer  
Relief valve  
Pressure gauge

**Hydraulic Tools:**

Stanley BR67 Breaker  
Asphalt cutter  
Detachable shank with pad  
35 lb., 45 lb., 72 lb., 87 lb. breaker sizes available

**Tool Box:**

Lockable, 18"W x 36"L x 18"H  
Additional sizes and configuration available

**Tool Basket:**

Expanded metal with Angle iron framed mounted on left side of unit  
15"W x 96"L x 8"H

**Lockable Tool Basket:**

Enclosed expanded metal with Angle iron framed mounted on left side of unit  
Two drop down doors with lockable SS T-handle latches  
Optional solid 10 GA skin available

**Spoils Bin:**

18" cross frame spoils bin or 24", 30", 36" wide bins  
Constructed of 10 GA HR steel doors on each side to discharge material

**Hydraulic Spoils Bin:**

Hydraulic dumping spoils bin, ½ cubic yard 36" wide frame mounted  
For easy low profile loading

**Side and Rear Spoils Bin:**

Two ½ cubic yard spoils bin one mounted on curb side of hopper and one mount at rear on street side.  
With sloped floors to discharge material  
Optional hydraulic raise and lower available for rear bin for easy loading

**Solvent Pump:**

12 VDC pump  
Connected to solvent side of tank  
25 foot hose with wand  
Used for cleaning tools

**Cab Controls:**

Inside cab controls, air actuated  
Operates top lids, and/or rear door, conveyor  
(Subject to air availability on chassis)

**Dual Controls:**

Additional set of air actuated controls on left side at rear  
(Subject to air availability on chassis)

**Air Blow Gun:**

25 feet, 3/8" hose and wand  
(Subject to air availability on chassis)

**Arrow Board:**

(10) light board LED  
Arrow - left, right, or both  
Mounted at rear of unit

**Thermometer:**

0°F - 300°F

**Air Compressor:**

Vanair Hydraulic, 40 CFM  
Vanair PTO under deck 160 CFM

**Air Tools:**

60 lb. and 90 lb. Breakers  
Asphalt cutter  
Detachable shank with pad

**Hose Reels:**

Emulsion spray hose reel  
Hand torch hose reel  
Solvent hose reel  
Air blow gun hose reel  
Dual hose reel for hydraulic jackhammer  
All reels are designed to accommodate 25 foot hoses  
Air hammer hose reel, 50 foot

**LPG Tank:**

25 gallon upright (portable) tank or 35, and 50 gallon horizontal frame mounted tank  
Horizontal tanks comes equipped with fill gauge and quick fill port

**Sanding Attachment:**

Equipped with broadcasting spinner  
(6) formed polyurethane vanes  
Spread width (4) feet to (40) feet  
In cab controls

**Pivotal Asphalt Chute:**

Chute to be mounted at rear with 180° - 110° pivot, depending on rear mount accessories

Optional tilt adjustment available

**Side Discharge Conveyor:**

12" conveyor, hydraulic driven  
5 foot in length  
Forward and reverse controls  
Pivotal at rear

**Tool Holders:**

Cone holders  
Asphalt lute and shovel holders  
Lockable hammer holder  
8 gallon water tank with hose and spigot, or 15 gallon tank with pump and hose

**Safety Equipment:**

Fire extinguisher 5 lbs., 10 lbs., 20 lbs.  
Triangle kit  
5 gallon igloo with mounting bracket  
LED taillights  
Backup alarm

**Cross Frame Work Deck:**

12" x 96" safety grip decking with ladder and hand rails  
20" x 96" safety grip decking with ladder and hand rails  
Custom sizes available

**Compactor Plates:**

Wacker WP1550AW HONDA  
Mikasa MVC90L  
MBW - AP2000H

**Walk-Behind Rollers:**

Wacker RSS800A Honda Engine  
BOMAG BW55E  
VIBCO GR-1600H

**Arrow Boards, Beacon and Flashers LED:**

Whelen  
PSE Code 3  
Other brands available

**Work Lights**

**Air Pressure Type Emulsion Spray System:**

Model CS-45, 30 gallons; Model CS-65, 50 gallons; Model CS-144, 119 gallons;  
Model CS-220, 205 gallons

**Pump Type Emulsion Spray System Options:**

Model BH-205-28, 177 gallons (Custom sizes available)  
2" insulated tank  
Clean out panel 10" x 14"

**Steel Chain Only Conveyor**

**GENERAL TRUCK SPECIFICATIONS - BC-5 ASPHALT PATCHER**

**Chassis:**

Conventional or tilt cab  
GVW - 35,000 lbs.  
Cab to axle – 102" minimum – 120" minimum with spoils bin  
Reinforced frame

**Transmission:**

Allison 3000 series

**Switches:**

Electric over electric PTO switch and light switches as required for provided safety lighting