Stepp OJK-Horizontal Crack Sealers With SMART TECHNOLOGY (STEPP ASPHALT



ASPHALT MAINTENANCE EQUIPMENT 651-674-4491 / STEPPMFG.COM

# Industry Leading Crack Sealing Technology

#### Solving Problems, Addressing Needs

At Stepp Manufacturing, our engineers produce equipment that is known in the industry for it's durability, reliability and functionality. Since our beginning in 1942, our family owned operation has always produced equipment specific to your needs. We use high quality material, innovative engineering, and quality personnel to match your needs as they grow.

#### Welcome to the Future of Crack Sealing

Stepp Manufacturing has always been an industry leader in technology with crack sealing equipment, and with our new OJK-H line of crack sealers, we continue to be the number one choice for crack sealing equipment. With over 35 new design innovations on our OJK-H series, we took a great machine and made it even better!

The Stepp Mfg Oil Jacketed (double boiler) Asphalt Crack Sealing Kettle is used to melt rubberized crack sealing and water proofing compounds and apply them to roads, parking lots, and bridge decks to repair and seal cracks . The Stepp OJK-H Oil Jacketed Asphalt Crack Sealing Kettles are offered with a full flow diesel heat exchanger. Having the lowest loading height on the market makes it one of the safest crack sealing kettles in the USA. Our OJK-H tar kettle is trailer mounted and completely self-contained, meaning it is capable of heating, melting, and applying all grades of rubberized asphalt crack sealer, joint sealants, and waterproofing compounds without the need for additional equipment. Our Horizontal Crack Sealing Kettles are designed for high output jobs. Stepp Mfg OJK-H kettles have a patented heat exchanger system with fast heat up (full heat in under 60 minutes) and a replaceable combustion chamber for longer life. Our submerged pump eliminates freeze-ups by allowing the pump to heat with the material. A splash-free safety loading chute ensures safe operation; couple that with the heated overhead boom and auto-loading system, and you have the ultimate crack sealing machine.







- AKC Smart Technology / Advanced Kettle Controls / CAN Bus Control System
- Digital Engine Management System
- **S** Kubota Power / Anti-vibration Engine Mounts / Noise Insulated Enclosure
- Ultra-Light Hose Smooth Bore Teflon with Inner Floppy Guard & Outer Braid
- **6** Heated Overhead Boom
- **6** Dual Insulated Safety Loading Chutes
- Removable Bolt-on Submerged Pumping System
- O Auger Agitation with Heated Coil Guard Guaranteed Not To Jam
- **One-piece Bolt-on Shackles 250% Stronger than the Competition**
- 2"x6" Trailer Frame with 100% Bolt-on Components

# Industry Leading Crack Sealing Equipment



# Industry Leading Crack Sealing Equipment



## Knowledge-Technology-Innovation and Safety Driven Designs

### With over 100 of years of combined industry experiences in our sales, engineering, and production team, we offer what few companies can -"Wisdom" in our product designs

#### **Stepp AKC Advanced Kettle Controls**

The OJK-H series of crack sealing kettles now boasts an all-inone PLC CAN bus control system. The AKC controller monitors and controls all burner functions, the heated hose, pumping and agitation controls, kettle interlock safety systems, autoloader controls and operations, auger safety shutdown, pump hours, and diagnostics for the burner control system. The AKC integrates all burner and hydraulic controls into a simple, easy-touse control package.

#### **Smart Control Burner Interlock**

The AKC controller includes a burner interlock system. This will not let the operator activate the pumping system or agitator until the material has reached it's interlock temperature. This prevents premature wear on the pumping system and unnecessary hydraulic load. The AKC controller also displays a warning message on the screen and a boom mounted warning light. The warning messages include burner interlock, RTD failure (temp sensor), door open/close, and agitator shutdown. You can also choose between US and Metric settings.



#### Horizontal Kettle Design with Coil Guard Auger

The newly redesigned horizontal tank features the lowest loading height on the market, insulated top covers for heat retention, and a horizontal auger agitation system with coil guard. The heated coil guard surrounding the auger allows for increased heat transfer area and prevents blocks of sealant from jamming.

#### Full Flow Heat Exchanger/Combustion Chamber

The full flow heat exchanger is a unique design that allows for maximum efficiency from our diesel burner. The heat transfer oil is heated in a full flow heat exchanger equipped with a replaceable type 309 stainless steel diffuser/liner then circulated through a coil that surrounds the agitator in the tank, putting the hottest oil into the center of the tank and thawing out the auger first. For operator safety, the burner and combustion chamber are located in front of the product tank to keep noise and exhaust fumes as far away from the operator as possible.

## Knowledge-Technology-Innovation and Safety Driven Designs

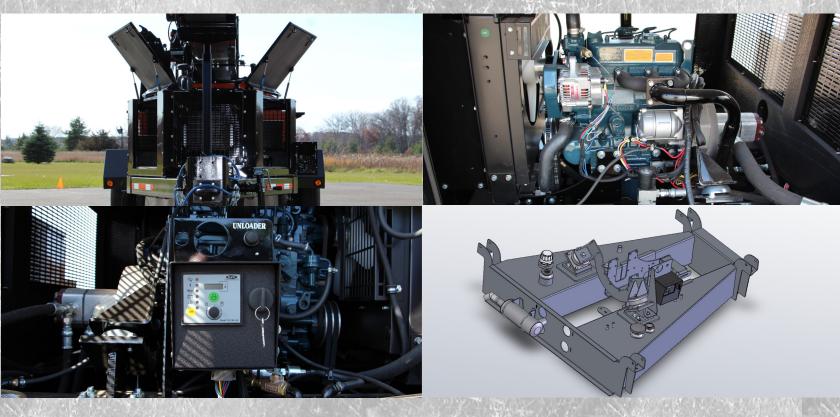
### Standard Equipment Available on the Stepp OJK-H Crack Sealers

#### **Engine Enclosure**

The batwing engine enclosure ensures weather protection, noise abatement and includes vandal proof locks. Equipped with gas operated shocks to keep the large doors open for easy-toaccess service points. The engine enclosure also has quick access points located on top of the enclosure for easy filling of oil and antifreeze.

#### **Kubota® Powered**

Having a quality machine means having quality components, and our engine is no exception. The liquid cooled, three cylinder, 25HP, Kubota D1105 is what powers our workhorse crack sealers. It uses a direct coupled tandem hydraulic pump and a direct mounted 24 volt alternator to power our heated overhead boom and hydraulic components. The new Deep Sea digital engine management system, batwing engine enclosure, and anti-vibration engine mounts make this a quiet, trouble free power plant. (Tier 4 F Compliant)



#### Deep Sea Digital Engine Management System

The Deep Sea digital engine management incorporates the hour meter, volt meter, low oil shutdown, overheat shutdown, and cold weather glow plug operation into one easy-to-operate controller. We also include an unloader button to relieve the hydraulic system pressure during cold weather starting.

#### **Anti-Vibration Engine Mount**

The OJK-H boasts an all-in-one hydraulic tank, fuel tank, and motor mount system. This incorporates the anti-vibration engine mounts, engine enclosure, radiator mount, and 24 volt alternator mount. The fuel tank and hydraulic tank each have a 28 gallon capacity reservoir and include a return filter.

### Engineered Excellence

### "Industry leaders with industry leading technologies" We have pioneered many of the industry's leading designs such as the Electric Heated Hose, PLC CAN Bus Controls, Overhead Boom, Exact-Flow Wand Control, and the On-demand Pumping System

#### Variable Speed, On-demand, Removable, Submerged Pumping System

The OJK-H boasts a submerged 60GPM Viking gear pump for years of durable service. By submerging the pump, we can ensure that it is hot and ready to go as soon as the sealant is up to temperature. The variable speed control is located in the control box or, with the optional exact-flow wand control, on the wand. We have also designed the pump to be easily replaced with the top mounted flange and allows replacement without having to drain the kettle.

#### **Heated Overhead Boom**

The redesigned electric heated overhead boom and ultra-lite hose are just two of the many new features of the OJK-H kettles. The relocated overhead boom allows for optimum operator reach with a shorter, lighter hose to carry. The unique design sends heated product through the boom to the attached hose. With the standard 12' hose attached to the 6' overhead boom, the operator will get over 21' of work area. The boom also puts the operator in a better position for increased visibility.



#### **Ultra-Lite Hose and Wand**

The new ultra-lite Teflon hose with a stainless steel liner gives the operator flexibility without the ability to kink and damage the hose. The 24 volt DC internal heating elements make for fast heat up times and operator safety, and are replaceable without having to replace the hose, making this an affordable, serviceable item. Standard with the ultra-lite hose is the ultra-lite wand.

#### Ultra-Lite Wand with On-Demand Pump Saver

The all aluminum ultra-lite wand system incorporates an ondemand pumping system, or a "Pump Saver", which only pressurizes the hose and wand when applying sealant. This allows safe and efficient pumping procedures with a trigger controlled switch. Couple that with the optional exact-flow wand control option, and you have the ability to adjust the product flow on the fly from the wand handle so you can tackle any and all types and sizes of cracks.

## Knowledge-Technology-Innovation and Safety Driven Designs

### Standard Equipment available on the Stepp OJK-H Crack Sealers

#### **MTF Frame System with Shackle Simplicity**

The Modular Tubular Frame (MTF) system is truly the foundation of our units. Our MTF frame offers flexibility, maintainability, and extreme reliability. Our bolt-on module system allows for components and options to be bolted on, allowing flexibility in your configuration. The MTF frame also allows us to use our one-piece, bolt-on shackle system, "Shackle Simplicity". This true tracking shackle system is 250% more heavy duty than anything else on the market. Our MTF frame with "Shackle Simplicity" is just another example of our industry leading technologies and designs.

#### **Dual Loading Chutes with Agitator Shutdown**

The Stepp OJK-H includes a standard dual safety loading chute with standard agitator shutdown sensors to stop the auger when the doors are open to prevent material splashing. Use the loading chutes for safe and easy splash-free loading from either side of the machine.



#### **Dual Pumping System**

Dual submerged Viking pumping systems with dual heated overhead booms makes the Stepp OJK even more productive. Available on all three size kettles.

#### 185 Gallon 275 Gallon & 400 Gallon Size Options

The Stepp OJK-H comes in 3 different sizes to meet your needs. The 185 will meet most of the average demands of mid -size cities or contractors. Our 275 gallon kettle is our most popular size, covering most county highway departments, DOT's and large contractors. The 400 gallon is designed for the largest jobs where extreme production is required.

### **Options That Bring Value, Productivity and Safety**

### **Optional Equipment available on the Stepp OJK-H Crack Sealers**

#### **Exact-Flow Wand Control**

The optional exact-flow wand control allows the operator to adjust the material flow from the wand handle without going back to the machine. The conveniently located rheostat controls the hydraulic flow to the product pump. Another option to get your job done faster and more efficiently.

#### 100CFM@100PSI Rotary Screw Compressor

A Rotorcomp EVO3-NK 100CFM@100PSI air compressor may also be installed onto the unit to aid in the cleaning of debris from the crack. Our compressor is the REAL DEAL. It is directly coupled to a Kubota V3300 diesel engine rated at 44.1HP@2600RPM and includes an intake valve, oil cooler, hi -temp shutdown, oil filter, minimum pressure valve, separator head, pressure gauge, and shuttle valve to maintain constant engine speeds. No belts, no chains, just more air to get the job done!



#### **Electric Overnight Heat**

110 volt electric overnight heaters help speed up the heating time when you arrive on the jobsite first thing in the morning. It is an option that pays for itself in decreased man hours in just the first week of operation. This is a must have option for crews of all sizes, and just another way Stepp has helped you be more productive and save money.

#### Autoloader with True Loading Technology

Stepp has designed this system for automatic operation once loaded. It eliminates the need for personnel to be in a dangerous position in the bed of the towing vehicle while in motion. Once the conveyor is loaded, it will automatically advance to place additional material into the kettle at a rate equal to that of the material being dispensed, making it the only autoloader on the market that is "truly automatic".

## OJK 185

OJK 275

## **OJK 400**

Shipping Weight	5600#	6000#	6500#
GVWR	10,320#	10,320#	14,000#
Length x Width x Height	210"x90"x85"	210"x90"x90"	210"x90"x95"
Material Capacity	185 Gallons	275 Gallons	400 Gallons
Fuel Tank Capacity	28 Gallons	28 Gallons	28 Gallons
Hydraulic Tank Capacity	28 Gallons	28 Gallons	28 Gallons
Tank Construction	10ga Tank 12ga Oil Jacket 16ga Insulation Jacket	10ga Tank 12ga Oil Jacket 16ga Insula- tion Jacket	10ga Tank 12ga Oil Jacket 16ga Insula- tion Jacket
Tank Configuration	Horizontal	Horizontal	Horizontal
Loading Height	46"	52"	58"
Heat Transfer Oil	ISO VG 68 with 498°F C.O.C. Flash Point	ISO VG 68 with 498°F C.O.C. Flash Point	ISO VG 68 with 498°F C.O.C. Flash Poin
HTO Capacity	110 Gallons	118 Gallons	130 Gallons
Controls	AKC Advanced Kettle Control all-in-one PLC CAN Bus Controller	AKC Advanced Kettle Control all-in-one PLC CAN Bus Controller	AKC Advanced Kettle Control all-in-one PLC CAN Bus Controller
Burner Type and Output	Diesel 350,000 BTU with Full-Flow Heat Exchanger	Diesel 350,000 BTU with Full-Flow Heat Exchanger	Diesel 350,000 BTU with Full-Flow Heat Exchanger
Hose Style	Heated Ultra-Lite 3/4" Smooth Bore Teflon with Stainless Steel Flexible Liner	Heated Ultra-Lite 3/4" Smooth Bore Tef- lon with Stainless Steel Flexible Liner	Heated Ultra-Lite 3/4" Smooth Bore Tef- lon with Stainless Steel Flexible Liner
Boom	24V Electric Heated	24V Electric Heated	24V Electric Heated
Pump	Viking K124A Submerged Gear with Easy Access Design	Viking K124A Submerged Gear with Easy Access Design	Viking K124A Submerged Gear with Easy Access Design
Product Pump GPM	60 GPM with variable range 0-10 GPM	60 GPM with variable range 0-10 GPM	60 GPM with variable range 0-10 GPM
Wand	Ultra-Lite Electrically Heated with Trigger Control	Ultra-Lite Electrically Heated with Trigger Control	Ultra-Lite Electrically Heated with Trigger Control
Engine	Kubota D1105-E4B 24.8 HP Tier 4 w/ Digital Engine Mgmt System	Kubota D1105-E4B 24.8 HP Tier 4 w/ Digital Engine Mgmt System	Kubota D1105-E4B 24.8 HP Tier 4 w/ Digital Engine Mgmt System
Hydraulic Pump	Tandem 1.37 cu. in. and .5 cu. in. @2000PSI	Tandem 1.37 cu. in. and .5 cu. in. @2000PSI	Tandem 1.37 cu. in. and .5 cu. in. @2000PSI
Hitch Height	Adjustable 24"-32"	Adjustable 24"-32"	Adjustable 24"-32"
Frame Construction	2"x6"x3/16" Rectangular	2"x6"x3/16" Rectangular	2"x6"x3/16" Rectangular
Axles	Tandem 6,000#	Tandem 6,000#	Tandem 7,000#
Tires	(4) 225/75R15	(4) 225/75R15	(4) ST235/80R16
Brakes	Electric (Hyd Optional)	Electric (Hyd Optional)	Electric (Hyd Optional)
Hitch	3" Pintle or 2-5/16" Ball	3" Pintle or 2-5/16" Ball	3" Pintle or 2-5/16" Ball



# Stepp Mfg has the Largest Line of Asphalt Maintenance Equipment in the Industry



Asphalt Hot Boxes & Reclaimers



**Asphalt Patch Trucks** 



**Asphait Meiters** 



**Asphalt Kettles** 



Asphalt Recyclers



**Asphalt Distributor Trailers** 



**Asphalt Emulsion Storage Tanks** 



## Water Trucks

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