AEROWING
MACHINERY

Road Crack Maintenance Equipment

RELIABLE PERFORMANCE | ADVANCED ENGINEERING | BUILT FOR THE WORLD



HIGH DURABILITY | EASY OPERATION | LOW MAINTENANCE | GLOBAL SUPPORT

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PRODUCT OVERVIEW

Complete Road Crack Maintenance Solution

Aerowing Machinery offers a complete road crack maintenance lineup, including trailer-mounted crack sealing machines, vehicle-mounted crack sealing machines, and dust-collecting road crack routers. Designed for efficiency, reliability, and easy operation.



01

Trailer-mounted Crack Sealing Machine

Flexible and efficient crack sealing equipment for road maintenance operations.



02

Vehicle-mounted Crack Sealing Machine

High-capacity sealing equipment designed for larger road maintenance projects.



03

Dust-collecting Road Crack Router

Efficient crack routing with integrated dust collection for cleaner operation.

HIGH EFFICIENCY | RELIABLE QUALITY | EASY OPERATION | WIDE APPLICATION

AEROWING
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TRAILER-MOUNTED CRACK SEALING MACHINE

FGS-500

Mobile and Efficient Solution for Road Crack Sealing

The FGS-500 trailer-mounted crack sealing machine is designed for efficient sealing of asphalt and concrete pavement cracks. It combines stable heating, uniform material mixing, reliable temperature control and flexible towing performance for continuous road maintenance work.



Fast Heating

Indirect thermal-oil heating for rapid material melting.

Uniform Mixing

Hydraulic vertical mixing keeps sealant evenly heated.

Stable Temperature Control

Automatic control maintains consistent material temperature.

Flexible Towing & Operation

Trailer-mounted design for easy transport and jobsite mobility.

On-site Application

Suitable for highway, municipal road and pavement maintenance projects.



HIGH EFFICIENCY | RELIABLE QUALITY | EASY OPERATION | WIDE APPLICATION

AEROWING MACHINERY

FGS-500
TECHNICAL SPECIFICATIONS

Trailer-mounted Road Crack Sealing Machine



PRODUCT FUNCTION

This equipment heats solid sealant or asphalt through a precise heating process, liquefies it and maintains a constant temperature, then injects the material into routed cracks through the hose and wand to repair cracks and prevent water infiltration. Ferguson's patented full-path electric-heated delivery system and instant pumping technology improve sealing quality, speed and ease of operation.

1. Working Conditions

- Altitude: ≤ 3200 m
- Ambient Temperature: -40°C to 55°C
- Relative Humidity: ≤ 100%

2. General Data

- Model: FGS-500
- Net Weight: 1,589 kg
- Dimensions (L × W × H): 3.5 m × 1.7 m × 2.1 m
- Travel Type: Trailer-mounted
- Travel Safety: dual safety chains; electric brake; emergency brake

3. Engine

- Engine Model: YANMAR 3TNV80F, 3-cylinder water-cooled diesel
- Rated Power: 17.3 kW @ 3000 rpm
- Auto Protection: automatic shutdown in case of high temperature or low oil pressure

4. Melting Kettle

- Volume: 506 L
- Tank Structure: double-layer tank, ceramic insulation in interlayer, steel outer shell
- Opening Size: 356 mm × 457 mm
- Feeding Method: top opening with inward lid to reduce splash risk

5. Heating System

- Burner: diesel burner located under material tank
- Ignition: 100% safety-controlled electric ignition
- Max Heat Output: 250,000 BTU / 63,000 Kcal
- Fuel Consumption: 6.6 L/h
- Heating Method: indirect thermal-oil heating, 30–45 min to working temperature
- Material Heating Temperature: ≤ 200°C
- Thermal Oil Temperature: 10°C – 260°C
- Temperature Display: digital LCD display with centralized controls
- Thermal Oil Capacity: 129 L
- Diesel Tank Capacity: 98 L

6. Mixing System

- Structure: vertical shaft with two W-shaped blades, bi-directional rotation
- Drive Method: hydraulic drive
- Safety Device: splash-protection switch stops mixing when lid is opened

7. Sealant Delivery System

- Total Line Length: 7.5 m (6.1 m hose + 1.4 m wand)
- Effective Working Radius: 5.5 m
- Working Pressure: 15 bar
- Hose Type: single-line hose, no return loop, serviceable, anti-twist protection
- Hose Heating: 24 VAC electric heating
- Wand Type: removable, serviceable, 24 VAC electric heating
- Full-path Heating: hose and wand are fully electric heated for smooth material flow
- Safety Voltage: below 36 V for operator safety
- Auto Heating: hose and wand heat automatically after material reaches temperature
- Temperature Control: automatic control; low-temperature lock below 162°C
- Material Pump: immersed gear pump, bi-directional variable pump, maintenance-free, with protective screen
- Max Flow: 15 L/min, infinitely adjustable
- Pumping Method: on-demand pumping controlled by wand trigger
- Drive Method: full hydraulic, infinitely variable
- Hydraulic Oil Capacity: 98 L

8. Chassis & Other

- Chassis: trailer-mounted
- Axle: single axle, torsion suspension, rated load 2,560 kg
- Max Towing Speed: 80 km/h
- Applicable Materials: sealant or asphalt
- Hoist Capacity: ≥ 300 kg

HIGH EFFICIENCY | RELIABLE QUALITY | EASY OPERATION | WIDE APPLICATION

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VEHICLE-MOUNTED CRACK SEALING MACHINE

FGS-500C

High-capacity Sealing Solution for Larger Road Maintenance Projects

The FGS-500C vehicle-mounted crack sealing machine is designed for efficient sealing of asphalt and concrete pavement cracks. With high-capacity melting, full-path electric heating, instant pumping and stable temperature control, it delivers fast, reliable and easy road maintenance performance.



High-capacity Design

Frame-mounted structure for larger road maintenance jobs.

Full-path Electric Heating

Heated hose and wand keeps material flowing smoothly.

Instant Pumping

On-demand pumping improves sealing efficiency and reduces wear.

Stable Temperature Control

Automatic control helps maintain consistent material temperature.

Jobsite Application

Suitable for municipal roads, highways and other pavement maintenance applications.



HIGH EFFICIENCY | RELIABLE QUALITY | EASY OPERATION | WIDE APPLICATION

AEROWING MACHINERY

FGS-500C
TECHNICAL SPECIFICATIONS

Vehicle-mounted Road Crack Sealing Machine



PRODUCT FUNCTION

This equipment heats solid sealant or asphalt through a precise heating process, liquefies it and maintains a constant temperature, then injects the material into routed cracks through the hose and wand to repair cracks and prevent water infiltration. Ferguson's full-path electric heating and instant pumping technology improve sealing quality, speed and ease of operation.

1. Working Conditions

- Altitude: ≤ 3200 m
- Ambient Temperature: -40°C to 55°C
- Relative Humidity: ≤ 100%

2. General Data

- Model: FGS-500C
- Weight: 1287 kg
- Dimensions (L × W × H): 1.8 m × 1.6 m × 1.38 m
- Travel Type: Vehicle-mounted

3. Engine

- Engine Model: YANMAR 3TNV80F, 3-cylinder water-cooled diesel
- Rated Power: 18.7 kW (24.2 HP) @ 3200 rpm
- Auto Protection: automatic shutdown in case of high temperature or low oil pressure

4. Melting Kettle

- Volume: 506 L
- Tank Structure: double-layer tank, ceramic insulation in interlayer, steel outer shell
- Opening Size: 356 mm × 540 mm
- Feeding Method: top opening with inward lid to reduce splash risk

5. Heating System

- Burner: diesel burner located under material tank
- Ignition: 100% safety-controlled electric ignition
- Max Heat Output: 250,000 BTU / 63,000 Kcal
- Heating Method: indirect heating, 30-45 min to working temperature, max 200°C
- Temperature Control: adjustable thermostat, automatic control
- Sealant Temperature: 10°C – 260°C
- Temperature Display: digital LCD display with centralized controls
- Thermal Oil Capacity: 126 L
- Diesel Tank Capacity: 98 L

6. Mixing System

- Structure: vertical shaft with two W-shaped blades, bi-directional rotation
- Drive Method: hydraulic drive
- Safety Device: splash-protection switch stops mixing when lid is open

7. Sealant Delivery System

- Total Line Length: 6.8 m (5.58 m hose + 1.22 m wand)
- Effective Working Radius: 5.5 m
- Hose Type: single-line hose, no return loop, serviceable, anti-twist protection
- Hose Heating: 24 VAC electric heating
- Wand Type: removable, serviceable, 24 VAC electric heating
- Full-path Heating: hose and wand fully electric heated for smooth material flow
- Safety Voltage: below 36 V for operator safety
- Auto Heating: hose and wand heat automatically after material reaches temperature
- Temperature Control: automatic control with low-temperature lock below 325°F
- Material Pump: immersed gear pump, bi-directional variable pump, maintenance-free, with protective screen
- Max Flow: 15 L/min, infinitely adjustable
- Pumping Method: on-demand pumping controlled by wand trigger
- Drive Method: full hydraulic, infinitely variable
- Hydraulic Oil Capacity: 98 L

8. Chassis & Other

- Chassis: frame-mounted load-bearing structure
- Applicable Materials: sealant or asphalt

HIGH EFFICIENCY | RELIABLE QUALITY | EASY OPERATION | WIDE APPLICATION

AEROWING MACHINERY

DUST-COLLECTING ROAD CRACK ROUTER

FGS-30X

Clean and Efficient Routing Solution for Road Crack Maintenance

The FGS-30X dust-collecting road crack router is designed for precise routing of road cracks prior to sealing. Equipped with an integrated dust collection system, it effectively controls dust and keeps the work environment clean. Compact and easy to handle, it delivers stable performance and improves overall job efficiency.



Integrated Dust Collection

Dust suppression rate up to 96% for cleaner work.

Accurate Crack Tracking

Guides the blade accurately along irregular cracks.

Electric Depth Control

Depth is adjusted by electric screw lift and read from the scale.

Kohler Engine Power

Gasoline V-twin air-cooled engine with electric start.

Jobsite Application

Ideal for highway, municipal road, and airport pavement maintenance projects.

Prepares cracks quickly and cleanly before sealing operations.



HIGH EFFICIENCY | RELIABLE QUALITY | EASY OPERATION | WIDE APPLICATION

AEROWING MACHINERY

FGS-30X

TECHNICAL SPECIFICATIONS

Dust-collecting Road Crack Router



PRODUCT FUNCTION

The FGS-30X dust-collecting road crack router is designed to rout pavement cracks before sealing. It effectively suppresses dust, improves routing accuracy, and supports safer, cleaner, and more efficient road crack maintenance.

1. General Data

- Weight ..... 195 kg
- Dimensions (L × W × H) ..... 1.8 × 0.8 × 1.0 m
- Frame Structure ..... single axle, dual wheel, hand-pushed

2. Engine

- Kohler gasoline engine
- V-type twin cylinder, air-cooled, electric start
- Rated Power ..... ≥27 HP
- Rated Speed ..... 3600 rpm
- Multi-stage air cleaner

3. Cutting Tools

- Tool Type ..... one set of 6 carbide blades
- Average Cutting Life ..... 30,000 linear meters

4. Working Device

- Routing Width ..... 8–50 mm
- Routing Depth ..... 42 mm
- Crack Treatment Speed ..... 458 m/h
- Electric depth control system with screw lift and depth scale
- Electric clutch for instant power cut-off and safe operation
- Crack tracking indicator for irregular cracks
- Travel brake: release T-handle or press handle down to brake movement

5. Drive & Structure

- Fuel Tank Capacity ..... 22. L with full-flow fuel cleaner
- Blade Drum ..... rotary impact type, fits 6 blades of 120 mm diameter
- Power Transmission ..... engine to blade drum via electromagnetic clutch and 2 V-belts
- Adjustable Handle Height
- Protective Plate ..... rubber front plate and side chain curtains for splash and dust protection
- Tires & Bearings ..... 4.8 × 8 tubeless wheels; sealed tapered roller bearings

6. Dust Collection Performance

- Dust Suppression Rate 96%

HIGH EFFICIENCY | RELIABLE QUALITY | EASY OPERATION | WIDE APPLICATION

AEROWING MACHINERY

FACTORY & EXHIBITION

Jinan Ferguson Road Maintenance Technology Co., Ltd.

Manufacturing Base for Overseas Brand Aerowing Machinery

Ferguson 弗格森 | Domestic Brand: Ferguson | Overseas Brand: Aerowing Machinery

Located in Jinan, Shandong, Jinan Ferguson Road Maintenance Technology Co., Ltd. is a professional road maintenance equipment manufacturer and a national high-tech enterprise.

Focusing on machinery manufacturing, technical development, engineering application and product supply, the company offers road crack sealing machines, dust-collecting crack routers, crack cleaning equipment, semi-flexible pavement grouting equipment and other road maintenance solutions.

With more than 35 invention and utility-model patents, Ferguson continuously pursues innovation, dependable quality and practical performance.

Serving domestic road maintenance companies for many years, it has built a strong reputation for durable equipment and proven results.

Professional Manufacturing

Advanced workshop and strict production management.

35+ Patents

Strong R&D capability and continuous innovation.

Exhibition Experience

Active in domestic and international industry exhibitions.

Reliable Quality

Reliable performance and trusted by customers.

Factory Workshop



Modern Production Line | Standardized Manufacturing



Strict Quality Control | Stable & Reliable Equipment

Exhibition Highlights



Industry Expo Booth | Professional Display



Global Presence | Building Long-term Partnerships

PROFESSIONAL MANUFACTURING | 35+ PATENTS | EXHIBITION EXPERIENCE | RELIABLE QUALITY

AEROWING MACHINERY

CERTIFICATTES & TESTING

Core qualifications and product verification



TEST REPORT



SCIENCE & TECHNOLOGY EVALUATION REPORT



HIGH-TECH ENTERPRISE CERTIFICATE



ISO 14001 ENVIRONMENTAL MANAGEMENT SYSTEM



ISO 9001 QUALITY MANAGEMENT SYSTEM



ISO 45001 OCCUPATIONAL HEALTH & SAFETY MANAGEMENT SYSTEM

CREDIT HONORS & SUPPLIER RECOGNITION

Selected awards, credibility certificates and supplier recognition.



INTEGRITY MANAGEMENT DEMONSTRATION UNIT



ENTERPRISE CREDIT RATING CERTIFICATE



CORPORATE CREDIT RATING CERTIFICATE



QUALITY SERVICE; HONEST UNIT



CHINA CREDIT SUPPLIER



AUDITED SUPPLIER