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Lateral Runway Rubber Removal System



Established 88

Technical Specifications and Equipment

High Precision • Ultra-High Pressure • Environmentally Safe

The Werner Lateral Runway Rubber Removal System is a state-of-the-art, high-performance cleaning unit engineered for runway rubber removal, paint marking removal, and apron cleaning.
It delivers exceptional accuracy, safety, and operational efficiency — utilising ultra-high-pressure water technology to remove surface deposits without damaging the underlying pavement.
Proudly designed and manufactured in South Africa, this system provides world-class performance for airports, military bases, and industrial airfields.
Durable. Precise.
100 % South African Built.

Every detail enhances operational efficiency, safety, and precision — making the Werner system the preferred choice for airport operators worldwide.

Debris Tank



Technical Specifications and Equipment

General Data

Total Tank Volume (L): ± 18,000	
Payload (Kg): ± 18,000	
Dimensions (L x B x H): 9278 x 2600 x 3820 mm	
Gross Vehicle Weight: 33 tons	
Axle Configuration: 6 x 4	
Design Temp. Range: -20 + 55 º	

Applications

- Runway Rubber Removal: 800–1 200 m²/hour
- Paint Marking Removal: Adjustable according to paint thickness and surface condition
- Apron Cleaning: For large-surface cleaning and degreasing
- AGL (Airfield Ground Lighting) Cleaning: Removes deposits around lights without causing damage

Over Pressure Protection

Manufacturer	WERNER
Type	MSSV Overflow and relief valve
Relief Pressure	Set at 10% above final operating pressure

Inlet Water Supply System

- Max Flow Rate: 200 L/min
- Delivery Pressure: 5 bar
- Material: Stainless steel
- Filter Type: Dual-bag element filter
- Filtration Levels: 10 micron & 1 micron
- Tank Capacity:
  - Clean Water: ±8 000 L
  - Debris Tank: ±10 000 L

Ultra High Pressure Pump

Manufacturer	WERNER
Model	KD 724 Triplex Design
Max. Water Flow	28 l/min
Typical Operating Pressure	2500-2800 bar
Max. Water Pressure	3000 bar

- Applications:
  - Descaling
  - Industrial high-pressure cleaning
  - Precision runway and pavement maintenance
- Built for extreme-duty industrial performance, the Werner KD724 delivers high power, low maintenance, and maximum reliability.

Drive System

- Vehicle Drive: Truck engine via low-ratio gearbox
- Ultra-High-Pressure Pump Drive: Auxiliary engine
- Rotary Cleaning Head: Hydraulic (auxiliary engine-driven)
- Debris Recovery System: Auxiliary engine
- Tank Tip, Door Locks, Door Open: Hydraulic (power pack driven)
- All non-essential systems remain dormant until required, minimising wear and fuel consumption.

Diesel Drive Engine

Manufacturer	Deutz / Kirloskar / Perkins
Max. Power	160 kW
Operating Speed	1800 rpm
Emission Rating	Tier III (or as required)
Fuel Tank Capacity	300 L
Drive Type	Flexible direct drive element

Technical Specifications and Equipment

Controls (Operator Cabin Controls)

- High-pressure water on/off
- Water pressure control
- Head deployment & recovery (rubber/paint removal)
- Rubber/Paint operation mode selection
- Auxiliary engine speed & monitoring

Controls (External Controls)

- Debris door operation & locks
- Debris tank tipping
- System shutdown controls

Monitoring System

- Cameras: Front and rear
- Driver Cabin Monitor: Full-colour digital display
- Lighting:
  - 2× front amber beacons
  - 2× rear night-working LED lights
  - Additional interior and pump-house lighting

Automatic System Shut Downs

- The system automatically deactivates in case of:
  - Engine over-temperature
  - Low engine oil pressure
  - Low inlet water level or pressure
  - Low hydraulic oil or system pressure
  - High debris level
  - High-pressure pump oil failure

Runway Protection System

- Integrated motion control monitoring automatically disengages high-pressure systems if forward vehicle speed falls below a safe threshold — preventing pavement damage.

Clean Water Supply Tank

- Nominal Capacity: 8 000 L
- Design: Modular (3-compartment with baffles)
- Material: 304 stainless steel (4.5 mm thick)
- Bolster Tanks: Optional, based on customer configuration
- Automatic low-level shutdown protection
- Overflow safeguard at full level

Debris Recovery Vacuum System

- Drive: High-performance belt drive
- Manufacturer: Werner
- Model: Omega 43 Plus
- Type: Positive displacement Roots-type blower
- Air Flow: 777 cfm (nominal)

Equipment-Surface Preperation and Corrosion Protection

- Steel Components: Shot-blasted, zinc-sprayed, and powder-coated
- Aluminium Components: Etch-primed and finished in dual-coat paint
- Pump & Engine Enclosure:
  - Lockable aluminium housing
  - Protects from heat, weather, dust, and vandalism

Speed Reduction System

Manufacturer	Knowles UK / Omsi
Type	Max. 17:1 speed reduction gearbox
Operation	Mechanical reduction
Actuation	Pneumatic
Speed Range Nominal	200-6000 mt/hr

Technical Specifications and Equipment

Debris Tank

- Nominal Capacity: 10 000 L
- Material: Stainless steel, 5 mm thick
- Design: Cylindrical
- Inlet Fitting: 114 mm
- Water Decant System: 100 mm pneumatically operated valve
- Tipping Angle: 49° (twin hydraulic rams)
- Door Mechanism: Hydraulic clamps with mechanical locks
- Overflow Protection: Pneumatic shut-off valve
- Safety: Hydraulic safety valves and integral support props

Deep Clean Lateral Rubber Removal System

- Location: Front bulkhead-mounted
- Applications:
  - Rubber deposit removal
  - Paint line removal
  - Airfield light (AGL) cleaning
- Deployment: Hydraulic vertical-lift frame
- Heads: Dual rotary heads
- Rotation Drive: Hydraulic
- Control: CNC servo motor for precise, overlap-free removal
- Performance: 800–1 200 m²/hour
- Illumination: LED high-output floodlights
- Setup/Evacuation Time: ±1 minute each
- Operator Adjustment: 100–2 200 mm width via touchscreen in cabin
- Ensuring pinpoint accuracy, the CNC-controlled heads eliminate surface damage while maximising removal efficiency.

The Werner Lateral Range

Surge Protection	The clean water tank is of modular design, consisting of a main tank and two additional “bolster” tanks. The main tank is divided into 3 compartments with internal baffles
Additional Corrosion Protection	Additional chemical treatment to all areas to increase
Inlet Fitting	Long term resistance to corrosion
Drain	1 x 2 ½”
High Level Control	4 x 2”
Low Level Monitoring	Overflow at full level Automatic shutdown of operations when tank level becomes low





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Equipment & accessories

Nozzles & Hoses

Werner Pumps supplies a full range of high-performance accessories designed to complement the Runway Rubber Removal Unit and enhance overall efficiency.

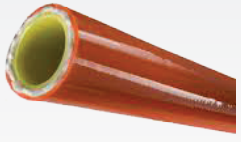
Product Range Includes:

- ENZ Swiss-engineered jetting nozzles for precision cleaning
- Rotary and fixed nozzles for varying pipe diameters
- Specialised cutter and root removal heads
- Vacuum hoses, suction lines, and discharge couplings
- High-pressure hoses with reinforced protection layers
- Quick-release couplings and fittings

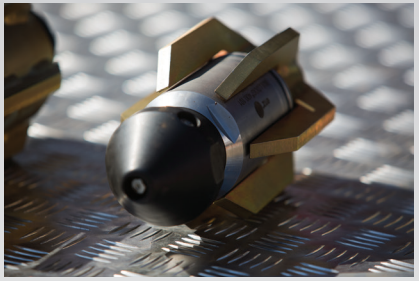
All accessories are rigorously tested for durability, safety, and compatibility with Werner high-pressure systems.





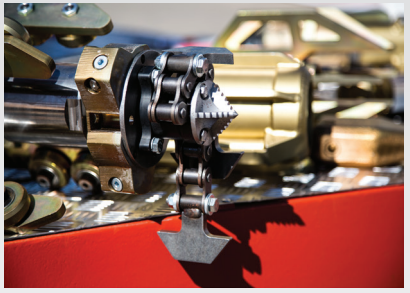


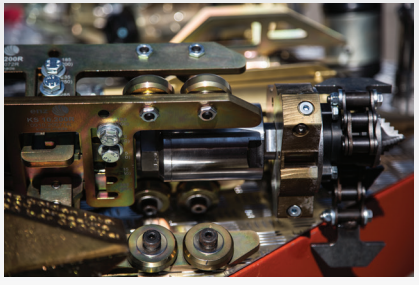




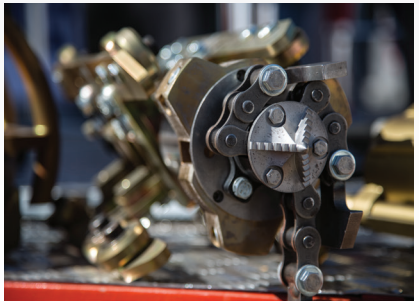














Get in touch

For precision runway rubber removal and ultra-high-pressure cleaning systems, contact Werner South Africa Pumps & Equipment (Pty) Ltd. We deliver innovation, engineering excellence, and full after-sales support — proudly made in South Africa.

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SHEQ NATIONAL CERT
Certified: ISO 9001 · ISO 14001

100% SA BUILT

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