



PRECISION RUNWAY RUBBER REMOVAL



LA2200

LATERAL RUBBER REMOVAL SYSTEM

THE WORLD'S MOST ACCURATE SURFACE COATING
REMOVAL SYSTEM FOR RUNWAYS AND HIGHWAYS

The LA2200 advantage

The LA2200 provides airport and highways operators with the most effective surface coating removal system available today.

Using a computer-controlled cleaning head to provide pinpoint accuracy, the LA2200 can be automatically adjusted from the cab to remove rubber deposits or paint from 300mm to 2,200mm widths, ensuring that cleaning is focused only on the areas that need it, reducing the quantity of water and fuel used for each sortie whilst also reducing the risk of surface damage.

Effective rubber and paint removal

- Maximum rubber removal, for deep and long-lasting results
- Consistent and accurate performance, with minimal overlap
- Operates in all conditions, from -6°C to 55°C
- Road legal, allowing one unit to travel on the public highway between locations
- Environmentally friendly - no chemicals or abrasives, low water consumption
- Comfortable cab, reducing driver fatigue and improving safety and reducing operation times

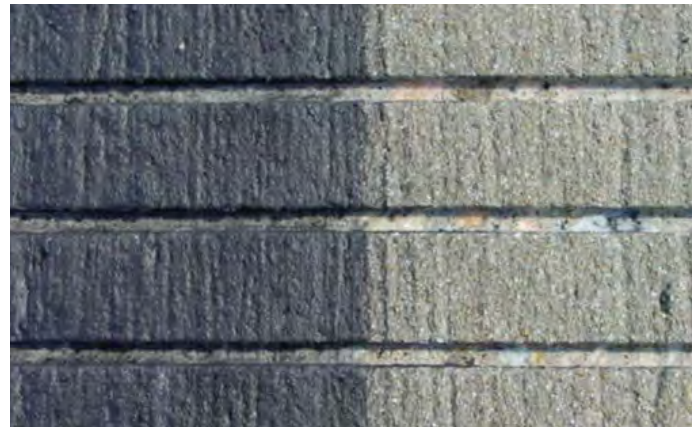
With a roatation speed adjustable up to 3000rpm, the precision head thoroughly removes debris without damaging the underlying surface. It is mounted in a computer controlled frame that allows the operator in the cab to precisely treat affected areas.

Quick to deploy and evacuate

- Deploy and recover in under a minute, with a top road speed of over 60mph
- Powerful vacuum recovery system leaves surfaces dry and ready for operation or further maintenance activities
- Large water and debris tanks extends available operating times, with the debris tank large enough to accomodate process water, rubber deposits and also standing surface water.

Low whole life cost

- Fast operation with single operator capability
- Low consumables costs (no chemicals or abrasives)
- No damage to runway and highway surfaces
- Minimal maintenance, built on widely-supported and internationally available chassis
- Built to last, with chemically-treated stainless steel tanks to minimise corrosion and increase life.



RUBBER
REMOVAL

PAINT
REMOVAL

AIRFIELD
GROUND
LIGHTING
CLEANING

SURFACE
RETEXTURING

Key features

- 1** Insulated cabinet
Sound reduction, security and weather protection.
- 2** 10 micron and 1 micron water filtration
Longer pump, nozzle and valve life.
- 3** Roller shutter doors
Lockable for security.
- 4** High visibility beacons
Compliant with airport regulations.
- 5** Width adjustment on touch screen in driver's cabin
Width adjustment of the rubber removal system without the need for tools.
- 6** Additional front work lights
Excellent night time visibility.
- 7** Multiple nozzles
Result in lower impact per nozzle and more gentle rubber / paint removal.
Small diameter removal head
Low surface impact.
Computer controlled rubber and paint removal
Accurate control of movement and overlap.
Minimal human input.
- 8** Highly efficient vacuum system
1300m³/ hr, 200 mb vacuum. Maximum recovery of water and debris. No need for additional suction equipment.
- 9** Front mounted head
Better visibility.
- 10** No need to remove rubber removal device for road transport
Fast and convenient, with no need for additional vehicles.
- 11** Adjustment from 300mm – 2200mm from within drivers cab
No tools required.
- 12** Lights and direction indicators visible with robot raised
No need to remove robot for road transport.
- 13** Standard road going chassis
Mass produced, available spare parts, easy maintenance.
- 14** Mechanical reduction gearbox
Simple operation. Minimal hydraulics. No possibility for oil leaks.
- 15** Side mounted work lights
Better night time visibility.
- 16** Motion control system
Ensures vehicle is moving before high pressure water is applied to the pavement Surface. Zero possibility for damage.
- 17** Optional Multi-Surface Cleaning unit
Allows linear and lateral rubber / paint removal with one vehicle.
- 18** Vehicle drive is through chassis wheels
Zero slippage and better speed control.
- 19** Modular stainless steel water and tipping debris tanks
Reduced surge for added safety and comfort when driving. Tipping debris tank for rapid turnaround times.
- 20** Stainless steel tanks with pickle and passivation process.
Increases corrosion resistance and life-span for equipment.



TECHNICAL SPECIFICATIONS

Deep clean lateral rubber removal system

Number of cleaning heads	1
Removal width	300 mm - 2200 mm
Performance	800 - 1200 m ² /hr
Rotation method	Hydraulic
Control	CNC servo motors
Deployment method	Hydraulic lift
Set-up time	1 min
Evacuation time	1 min

The single head CNC controlled design allows precise cleaning, with the width and speed adjusted from directly from the cab.

Chassis

Manufacturer	MAN
Model	TGS 33.360 6x4 BB ¹
Performance	800 - 1200 m ² /hr
Axle configuration	6 x 4

The MAN TGS chassis offers a widely available support network. However, other chassis options available to meet your requirements.

Weights and dimensions

Gross weight	33,000 kg
Front axle	9,000 kg
Rear axles	26,000 kg
Length	11 m
Width	2.548 m
Height	3.8 m

Auxiliary Engine

Manufacturer	Perkins
Maximum power	160 kW
Operating speed	1,800 rpm
Emission rating	Tier III (or as required)

The Perkins 160kW unit combines high reliability with low running costs.

Speed reduction system

Type	Hydrostatic or Mechanical
Ratio	Maximum 17:1
Actuation	Pneumatic
Speed range	0.2 - 6 km/h

Unlike other systems, Osprey offers a choice of mechanical and hydrostatic speed reduction, dependant on your specific application.

Ultra-high pressure pump

Manufacturer	URACA
Model	KD 724 Triplex Design
Power input	Flexible direct drive
Maximum water flow	28 l/min
Typical operating pressure	2,500-2,800 bar
Maximum water pressure	3,000 bar

The KD724 reciprocating pump is a highly efficient unit, with low energy consumption and minimal wear.

Over-pressure protection

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

The URACA over-pressure protection relieves at 10% over set working pressure, ensuring that, in the event of a blockage, no damage to the pump occurs.

Inlet water supply system

Maximum flow capability	200 l/min
Maximum delivery pressure	5 bar
Material	Stainless Steel
Filter Type	Twin bag element
Filtration	1 st stage: 10 micron 2 nd stage: 1 micron

The twin stage and long-life filter minimises the risk of damage and wear to the jetting head.

Drive systems

	Truck engine	From auxiliary engine	Power Pack
Forward drive	■ ^{LD}		
Ultra-high pressure pump		■ ^D	
Debris recovery system		■ ^D	
Rotary cleaning head		■ ^H	
Cleaning assembly raise			■ ^H
Debris tank tip			■ ^H
Debris door locks			■ ^H
Debris door open			■ ^H

By minimising the number of continuously active hydraulic systems, Osprey reduces the possibility of oil leakage. We also offer the option of main engine Power Take-Off depending on your requirements.

Key
LD Via low ratio gearbox
D Direct drive
H Hydraulic

Tanks

Clean water supply tank		Fabricated around the debris tank, the clean water supply tank is fitted with internal baffles to reduce water movement and hence improve vehicle handling.
Nominal capacity	8,000 l	
Design	3 compartment modular	
Material	304 stainless steel	
Wall thickness	4 mm	
Anti-corrosion protection	Additional chemical treatment to all areas	
Inlet connection	Country specific	
Drain connection	4 x 50 mm	
High level control	Overflow	Two optional bolster tanks can be fitted to provide additional capacity.
Low level control	Automatic shut-down	
Debris Tank		Debris is collected in a cylindrical tank equipped with hydraulically operated locking clamps and rear door. Once drained, the tank can be tipped to remove the remaining rubber/paint deposits.
Nominal capacity	10,000 l	
Material	304 stainless steel	
Wall thickness	5 mm	
Inlet fitting	114 mm	
Water decant	100 mm pneumatically operated valve	
Overflow protection	Automatic shut-down	
Fuel Tank capacity	300 l	

Debris recovery vacuum system

Manufacturer	Kaeser	The Kaeser blower's heavy duty roller bearings ensures an exceptionally long-service life of up to 100,000 hours.
Type	Positive displacement roots type blower	
Drive	High performance belt system	
Model	Omega 43 plus	
Air flow	22.5 m3/min	

Controls

Cabin controls	All removal and cleaning operations are controlled from the cabin, allowing one operator to control the entire process.
Jetting heads deployment and recovery	
High pressure water on/off	
Water pressure control	
Auxiliary engine speed and monitoring	
Forward speed control ¹	
Speed reduction system engage / disengage	
Rubber / paint removal selection	
Rubber / paint removal width	
9" colour monitor connected to front and rear-mounted cameras	
<small>1 - Standard vehicle accelerator via low-ratio gearbox</small>	

External controls

- Debris tank tip
- Debris door locks
- Debris door open / close

Safety systems

Engine over temperature	In order to prevent damage to the vehicle or its components, there are a number of safety features that will automatically stop the operation.
Engine low oil pressure	
Ultra-high pressure pump low oil pressure	In addition to protecting the vehicle, Osprey features a runway protection system which monitors forward speed, stopping the high pressure pump if the speed drops and thus preventing damage to the pavement.
Low inlet water level	
Low inlet water pressure	
High debris tank level	
Hydraulic system pressure drop	
Hydraulic tank oil level drop	
Debris tank overflow protection	
Debris tank door hydraulics failure protection	
Safety prop to enable safe access when tank inclined	
Lighting:	
Cab mounted amber beacons	
Night-working lights on front, rear and in pump-house	
High output LED lighting on rubber removal frame	
Runway protection system	

Options

Multi-Surface Cleaner



For extra fast cleaning and line removal, the LA2200 can also be fitted with an additional linear cleaning head. Situated under the main chassis, the fixed head provides rapid cleaning and paint removal up to 300mm wide.



Cleaning width	1500 mm
Performance	1,000 - 4,000 m ² /hr
Rotation method	Hydraulic
Set-up time	1 min
Evacuation time	1 min

Other options

Osprey is built to meet your specific requirements. As such, we offer a wide choice of options for both the chassis and equipment we incorporate into your Osprey.

Chassis; MAN, Volvo, Mercedes or Scania

The modular design of the Osprey makes it possible to fit to a wide range of chassis types, depending on your preferences and required water and debris tank capacities.

Auxiliary engine

As an alternative to the Perkins auxiliary engine, we can supply an OMSI Split Shaft Power Take-Off drive. This allows a maximum power of 480kW and an operating speed of 1,350 rpm

Ultra-high pressure pump

We also offer the URACA KD P3-70 pump, that delivers 42 l/min at a maximum water pressure of 2,800 bar.

Clean water and debris tanks

Clean water and debris tank options are available up to 12,600 l and 15,200 l respectively.

Support



With Jetting Systems, you will get the best possible support. Our rapid response service and commissioning team are always available to advise and assist by telephone, email or Skype or carry out site visits as required. And should something go wrong, we offer a rapid spares service to get your vehicle repaired as fast as possible.

All equipment is provided with a comprehensive document pack, including operators and maintainers manuals, test certification and technical drawings. We maintain a duplicate set of documents, along with manufacturing records for every machine we supply, allowing us to quickly resolve issues should they arise.





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