

# TECHNICAL SPECIFICATIONS

## Linear Runway Rubber Removal Systems Type LI750 (Truck Mounted)



# OSPREY

Runway Rubber Removal Systems

Manufactured by

# JETTING SYSTEMS

**Compact rubber and paint removal system  
designed for mounting on a 18 tonne chassis.**



### General Data

<i>Equipment gross weight</i>	<i>18,000 kg</i>
<i>Mounting</i>	<i>Chassis</i>
<i>Operation time between clean water refill and debris discharge</i>	<i>2 hours</i>
<i>Design temperature range</i>	<i>0 to 55°C</i>

### Applications

<i>Runway rubber removal</i>	<i>1000 – 1700 sq mt/hr</i>
<i>Paint marking removal</i>	<i>Rate depending upon thickness and condition</i>
<i>Apron cleaning</i>	<i>Large surface area cleaning</i>
<i>AGL cleaning</i>	<i>Cleaning of landing lights without damage whilst simultaneously removing rubber deposits</i>



<i>Manufacturer</i>	<i>URACA</i>
<i>Model</i>	<i>KD 724 Triplex Design</i>
<i>Max water flow</i>	<i>28 l/min</i>
<i>Typical operating pressure</i>	<i>2500 – 2800 bar</i>

## High pressure reciprocating plunger pump

*The sturdy URACA is available in various drive and liquid end configurations.*

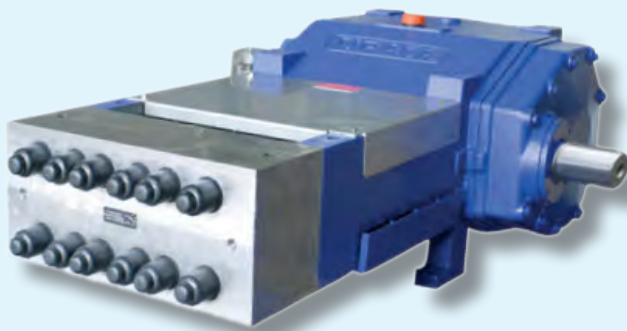
*Designed for low viscous liquids.*

*Main applications in industry and service sector:-*

*Descaling*

*Industrial ultra-high pressure cleaning*

*Special applications*





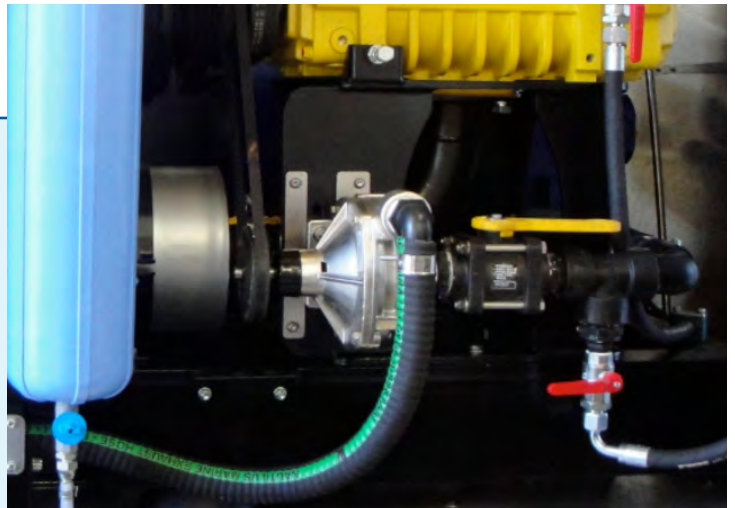
## Over Pressure Protection

<i>Manufacturer</i>	<i>URACA</i>
<i>Type</i>	<i>MSSV Overflow and relief valve</i>
<i>Relief pressure</i>	<i>Set at 10% above final operating pressure</i>



## Inlet Water Supply System

<i>Max flow capability</i>	<i>200 l/min</i>
<i>Max delivery pressure</i>	<i>5 bar</i>
<i>Material</i>	<i>Stainless Steel</i>



<i>Type</i>	<i>Twin bag element type</i>
<i>Filtration level</i>	<i>1 x 10 micron, 1 x 1 micron</i>



## Drive Systems

*Hydraulic systems are at a minimum on this vehicle with the only continuously operating system being to rotate the jet bars. All other systems are 'dormant' until required.*

*Forward drive*

*From truck engine via hydrostatic drive*

*UHP pump drive*

*From truck engine via PTO*

*UHP debris recovery system*

*From truck engine via PTO*

*Rotary cleaning head*

*Hydraulic from power pack*

*Cleaning assembly raise*

*Hydraulic from power pack.*

*Debris tank tip*

*Hydraulic from power pack.*

*Debris door locks*

*Hydraulic from power pack.*

*Debris door open*

*Hydraulic from power pack.*

## Controls

*Operator cabin controls*

*External controls*

*Deployment and recovery of rubber /  
paint removal heads*

*Debris tank tip*

*High Pressure Water On / Off*

*Debris door locks*

*Water Pressure control*

*Debris door*

*Rubber / Paint removal selection*



## System Shut Downs

*In order to protect the system components there are the following automatic shutdown systems in the event of:-*

- *Engine over temperature*
- *Engine low oil pressure*
- *High pressure pump low oil pressure*
- *Low inlet water level*
- *Low inlet water pressure*
- *High Debris level*
- *Hydraulic system pressure drop*
- *Hydraulic tank oil level drop*

## Runway Protection System

*The forward speed of the vehicle is continuously monitored. If the vehicle speed drops below a pre-determined level the high pressure water system deactivates thereby avoiding the possibility of causing damage to the runway surface.*

*Type*

*Motion control monitoring system*

## Clean Water Supply Tank

*The clean water tank is divided into three main compartments. The main water tank is fabricated around the cylindrical debris tank and is fitted with integral baffles to reduce water surge during vehicle movements. Two additional 'bolster' tanks are fitted in accordance with individual customer requirements.*

*Nominal capacity*

*3500 lt*

*Design*

*Modular*

*Material*

*304 Stainless Steel*

*Material thickness*

*5mm*



*Surge protection*

*The clean water tank is fitted with internal baffles to reduce water surge in both forward and sideways directions.*

*Protection*

*Pickled and passivated stainless steel  
In accordance with country requirements*

*Inlet fitting*

*2"*

*Drain*

*Overflow at full level*

*High level control*

*Automatic shutdown of operation when tank level becomes low.*

*Low level monitoring*





## Debris Tank

*Debris is collected in a cylindrical tank mounted at the rear. It is equipped with hydraulically operated locking clamps and a hydraulically opening rear door. Once the dirty water is drained through a decant valve the tank may be tipped to remove the remaining rubber deposits.*

<i>Nominal capacity</i>	<i>5,500 litres</i>
<i>Design</i>	<i>Cylindrical design</i>
<i>Material</i>	<i>Stainless steel</i>
<i>Material thickness</i>	<i>5mm</i>
<i>Inlet fitting</i>	<i>114mm</i>
<i>Water decant system</i>	<i>100mm pneumatically operated valve</i>
<i>Overflow protection</i>	<i>Debris carryover is avoided by means of a shut off valve which is actuated once the high debris level is reached. This valve also closes during transport to avoid debris carryover due to fluid movement.</i>
<i>Technical Safety</i>	<i>Integral safety prop fitted</i>

<i>Debris removal method</i>	<i>150mm pneumatically operated valve and fully opening rear door and tipping tank.</i>
<i>Debris chute</i>	<i>Integral with tank</i>
<i>Debris tank tip method</i>	<i>Twin hydraulic rams</i>
<i>Debris door lock method</i>	<i>Hydraulically operated catches</i>
<i>Hydraulic safety</i>	<i>Safety valves are fitted to prevent the debris door or tank from falling in the unlikely event of a hose failure. Safety prop is provided to enable safe access under the tank for maintenance</i>

## Debris Recovery Vacuum System

<i>Drive</i>	<i>High performance belt drive system</i>
<i>Manufacturer</i>	<i>Kaeser</i>
<i>Type</i>	<i>Positive displacement roots type blower</i>
<i>Air flow (nominal)</i>	<i>1000 cfm</i>





## Monitoring System

*Cameras*

*Front and rear mounted*

*Monitor*

*Colour monitor in drivers cabin*

## Lights and Warnings

*Amber beacons*

*2 x Front*

*Night working lights*

*2 X Rear*

*Additional lights are fitted at the front*

*Lighting inside pump house*

*Rear lighting*

## Pump and Engine Enclosure



*The pump, engine, vacuum and control systems are enclosed in a lockable pump house. This is manufactured from aluminium and provides protection against sun, rain, wind and dust*

## Equipment-Surface Preparation and Corrosion Protection

*Steel fabricated items*

*Where possible these are shot blasted and sprayed with zinc before being hot powder coated.*

*Aluminum bodywork*

*Etch primed followed by two top coats in chosen colour*



# Rapid Rubber Removal MSC System 750mm

<i>Location</i>	<i>Beneath trailer</i>
<i>Applications</i>	<i>This system provides faster rubber removal rates under certain conditions.</i> <i>Apron cleaning</i> <i>Centre line cleaning</i>
<i>Deployment</i>	<i>Hydraulic frame lifting vertically</i> <i>Manual pump override</i>
<i>Number of heads</i>	<i>1</i>

<i>Rotation method</i>	<i>Hydraulic</i>
<i>Rubber removal width</i>	<i>750mm</i>
<i>Performance</i>	<i>1000 - 1700 sq mt/hr</i>
<i>Illumination</i>	<i>The frame is fitted with high output LED lighting to ensure all areas are well lit during darkness.</i>
<i>Set up time</i>	<i>1 minute</i>
<i>Evacuation time</i>	<i>1 minute</i>



## Technical Specifications

Every Osprey is custom built to meet every customer's specific requirements. As such, this table only provides example specifications for models we have previously built.

General	
Number of cleaning heads	1
Removal width	Fixed (200 - 750 mm)
Performance	1000 - 1700 m <sup>2</sup> /hr
Rotation method	Hydraulic
Control	Cab mounted control
Deployment method	Hydraulic lift
Set-up / Evacuation time	1 min
Chassis	
Manufacturer	MAN, Volvo, Mercedes, Scania, DAF, Hino
Axle configuration	4 x 2
Weights and Dimensions	
Gross Weight	18000kg
Length	8.9m
Width	2.54m
Height	3.4m
Variable speed hydrostatic drive	
Actuation	Pneumatic
Speed range	200-6000 m/hr
Ultra High Pressure pump	
Maximum water flow	28 l/min
Typical operating pressure	2500 - 2800 bar
Clean water tank	
Nominal capacity	3500 l
Material	304 Stainless Steel
Anti-corrosion protection	Pickle and Passivation
Debris recovery	
Nominal tank capacity	5500 l
Material	304 Stainless Steel
Vacuum system air flow	28 m <sup>3</sup> /min
Controls	
Cabin controls	Jetting head deployment and recovery, Water pressure control, Auxiliary engine speed and monitoring, Rubber / paint removal selection, 9" colour monitor and optional video recorder, connected to front and rear-mounted cameras.
External controls	Debris door locks, Debris door open / close, Debris tank tip



**For further information  
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These specifications are general and for guidance only. We reserve the right to alter or amend at any time without notice

