

LYNX 2000 Diesel















3.1 m

2 m3

400 €

4WS

50 km/h

74 HP Diesel Engine





Compact cleaning solution for 21st century cities

As cities evolve, so must our maintenance strategies. Introducing the LYNX 2000, a compact cleaning solution tailored to tackle the demands of 21st century urban environments. With cities expanding rapidly and infrastructure becoming more complex, the role of city maintenance workers is both increasingly difficult and essential. The LYNX 2000 addresses these needs. Offered in both diesel and electric models, it is equipped to handle future challenges.



Technical Specifications

Dimensions & Weight

• Length (without brushes): 4,120 mm

• **Length (2 brushes):** 4,400 mm

• **Length (3 brushes):** 5,230 mm

• Width: 1,315 mm

• Height (without rotating light): 2,045 mm

• Height (with rotating light): 2,150 mm

• Clearance: 194 mm

• Range of suspension lifting/lowering: ±50 mm from

central position

Wheelbase: 1,790 mmTrack width: 1,075 mm

• Empty vehicle weight: 3,300 kg

• Gross vehicle weight (GVW): 4,500 kg (optional

5,000 kg)

Engine

• Model: HATZ 4H50TICD

• Emissions standard: Euro 6

Emissions Control: Diesel Particle Filter (DPF)
 with Diesel Oxidation Catalyst (DOC)

• Cooling: Water-cooled engine

• **Displacement:** 1,952 ccm

• No. of cylinders: 4

• Gross rated power: 55 kW @ 2,800 rpm

• Maximum torque: 240 Nm @ 2,100 rpm

• Fuel tank capacity: 65 L

• Diesel engine control system: CAN Bus

• **Diesel engine suspension:** Hydraulic anti-vibration

elements

Drive System

- **Drive type:** Hydrostatic drive, 2WD drive on rear axle
- Drive control system: CAN Bus electronic control dependent upon load, drive controller integrated on the drive pump
- Type of drive hydraulic pump: Axial piston
- Type of drive hydraulic motor: Axial piston
- Maximum gradeability: 30%
- Maximum transport speed: 25 km/h, 40 km/h, 50 km/h

- Maximum working speed: 12 km/h
- Exhaust system execution: During standard machine operation, the exhaust is directed to the side on the upper portion of the vehicle
- Safety system when hopper is raised: If driving over 5 km/h with the hopper raised, the vehicle emits sound and visual warnings to the driver
- Cooling system execution: HVAC system condenser separated from the combined cooler







Chassis & Suspension

- Drive type (front/rear): Axle/axle
- **Chassis type:** One-piece rigid chassis, welded frame of fine-grained steel
- Vehicle steering: 2WS (4WS optional)
- Front axle control: Hydraulic
- Rear axle control: Electro-hydraulic, automatic shutdown of 4WS when switching from working mode to transport mode
- **Differential type:** Limited slip differential, up to 40% torque
- Dynamic load capacity of the front axle: 3,500 kg
- Dynamic load capacity of the rear axle: 3,500 kg
- Front axle turn angle: 48°
- Rear axle turn angle: 24°
- 4WS wall-to-wall turning circle radius (2 brushes): 3,450 mm
- 4WS curb-to-curb turning circle radius (2 brushes): 2,425 mm

- 2WS wall-to-wall turning circle radius (2 brushes): 4,325 mm
- 2WS curb-to-curb turning circle radius (2 brushes): 3,235 mm
- Dimensions of front tires: 225/70 R15
- Dimensions of rear tires: 225/70 R15
- Front suspension type: Hydro-pneumatic suspension with transverse stabilization
- **Rear suspension type:** Hydro-pneumatic suspension with transverse stabilization
- Suspension control: Automatic suspension height control, independent front and rear suspension height control, two different ride heights selectable up to maximum driving speed, any ride height selectable up to 5km/h driving speed
- **Suspension Height:** In the highest suspension position, the vehicle can climb a 150 mm curb
- Rear Hook (optional): Orlandi rear hook, installation of electrical socket possible

Electrical system

- Voltage: 12 V
- Battery capacity: 110 Ah
- Control system execution: CAN bus

 Software upgradeability: Software for all subsystems upgradeable from a single point on the vehicle

Hydraulic System

- Hydraulic oil tank capacity: 35 L
- Pump type work hydraulics: Variable displacement axial piston pump, LS pump control for all consumers of working hydraulics, hydro pneumatic suspension and rear axle turning system
- Pump type auxiliary hydraulics: Dual gear pump for front axle turning system, brake system and cooling system
- Pump volume rear axle steering system + braking system: 8 cc/rev
- Pump volume cooling system: 19 cc/rev
- Oil filtration and oil level measurement: Built-in suction return filter and pressure filter; oil level measurement with electronic detection of oil level min.
- Work hydraulics pump volume: 75 cc/rev









Sweeping System

• Brush diameter (two brushes): 850 mm

• Brush rotation speed: 0-125 rpm

• Minimal sweeping width: 1,400 mm

• Optimal sweeping width: 2,520 mm

• Maximal sweeping width (two brushes): 2,860 mm

• Brush suspension: Independent suspension

Brush ground pressure relief: Independent ground pressure relief

 Brush position control: Independent left-right, updown position control, synchronous left-right brush position control (optional)

• Impact protection: Direct impact protection from the front - spring inside the brush arm, lateral impact protection - shock valves integrated into the hydraulic system

• Hopper unloading height: 1,550 mm

• Hopper unloading angle: 44°

 Hopper material: Aluminum, Stainless Steel (optional)

• Hopper door opening: Hydraulic

 Monitoring and washing hatches: 2 hatches - one on each side of the hopper, to inspect and wash inaccessible hopper compartments

• **Rear hopper bumpers:** Covering the entire way up to the hopper unloading height

• **Rear step:** The vehicle is equipped with a rear folding step for easy inspection of the hopper interior

• Suction mouth width: 820 mm

• Suction mouth suspension: Independent suspension of suction mouth, with anti- vibration elements and parallelogram levers that provide parallel lifting and lowering of the suction mouth

 Suction mouth flap: The suction mouth is equipped with a front flap, with the possibility of hydraulic opening and closing

• Suction mouth wheels: 3 wheels, all swiveling

• Main suction hose diameter: 225 mm

• Closing of main suction hose: Main suction hose can be closed by electronic control from the cabin (for operation with wander hose)

• Suction fan speed: 3,500 rpm

• Suction fan airflow: 9,000 m³/h

• Suction fan pressure difference: 4,500 Pa

• Suction fan power: 15 kW / 20 hp

• Suction fan drive engine: Axial piston hydraulic engine

• Suction fan exhaust direction: Toward the rear side of the vehicle

 Suction fan cleaning / washing: The suction fan can be connected to the water supply system for cleaning and washing. The connection can be executed from the outside of the vehicle without the need to lift the hopper. The fan can be connected to the fresh water system of the vehicle

 Bearings: Self-lubricating bearings (maintenance free) wherever feasible

Third Brush System (optional)

• Third brush diameter: 850 mm

• Third weed brush diameter: 700 mm

• Max. sweeping width with three brushes: 3,100 mm

• Installation of third brush: Quick attachment

• **Preparation for installation of third brush:** The vehicle can be prepared in production for subsequent installation of the third brush

Wander hose (optional)

• Wander Hose Position: On the roof of the hopper

Wander Hose Diameter: 150 mmWander Hose Length: 4,000 mm



Water System

- Fresh water tank volume: 230 L
- Fresh water tank placement: Lateral and rear
- Fresh water tank filling: On the driver's side of the sweeper
- Fresh water level measurement: Absolute measurement of fresh water level
- Water recirculation system type: Separate recirculating water tank, with pressurized stream
- Recirculation water tank volume: 170 L
- Recommended volume of recirculation water available in the hopper: 150 L, a level meter is installed on the side of the vehicle with an indication of the recommended volume of recirculating water in the hopper
- Recirculation water level measurement: Discrete measurement of recirculation water level (minimum and maximum)
- Recirculation water pump drive: Hydraulic
- Max. flow of recirculation water pump: 60 L/min
- Recirculation water nozzles: Points of recirculating water injection can be chosen - either only downstream of suction hose, or down and upstream of suction hose

- Fresh water pump drive: Electric
- Max. fresh water pump pressure: 61 PSI
- Max. fresh water pump flow: 1.6 GPM
- Fresh water nozzles: 2 pcs. per brush, nozzle tilt and orientation control, cleanable coarse filter in front of nozzles
- Control of fresh water distribution on front brush nozzles: Possible to spray either on both brushes, only on the right brush, on the third brush and both brushes simultaneously, or to shut down spraying entirely
- Functionality of auxiliary valve and fresh water
 connection at the rear of the vehicle: Possibility of
 pumping water from the fresh water tank to the
 recirculation tank, possibility of connecting a watering
 hose, possibility of connecting a hose for washing the
 suction fan, possibility of connecting a short hose for
 washing hands, possibility of connecting a hose for
 priming the mini wash pump in case of a long period
 without water in the tank (winter period), possibility of
 connection and supply of fresh water to the wander
 hose
- Recirculation water emptying: Controlled from the cabin, large opening at the bottom of the recirculation tank

Manual High-Pressure Washer (optional)

- Washer pump drive: Hydraulic
- Washer pump max. pressure: 140 bar
- Washer pump max. flow: 11 L/min
- Hose length: 10 m

- **Hose storage method:** Automatic hose reel integrated into the vehicle (not placed on the front side)
- Washer nozzles: Two types (wide and narrow), selected by rotating the washer gun

Tracking & Safety

- ARMS tracking and diagnostic system: Subscription for 12, 24, 36 or 48 months (optional)
- Filter service kit: For A (50 hours), B (500 hours) or C (1000 hours) service (optional)





Cabin & Comfort

- Cabin construction: Steel welded frame
- **Sound insulation:** The cabin is soundproofed with a foam profiled insulator
- Front windshield: Laminated glass, low reflection index, heat reflective (tinted), no front cross profile, no classic front dashboard, heated (optional)
- **Doors:** Tempered glass, sliding windows, low reflection index, heat reflective (tinted)
- Side windows: Laminated glass, low reflection index, heat reflective (tinted)
- Floor window: Tempered transparent glass
- Cabin suspension: Comfortable anti-vibration elements
- Windshield wiper: Wiper with settings for intermittent or continuous wiping, with windshield washing capability
- Driver seat mechanical: Mechanical suspension seat, depth and height adjustable, adjustable seat back angle, adjustable headrest height, 3-point safety belt
- Driver seat pneumatic (optional): Pneumatic suspension seat, depth and height adjustable, adjustable seat back angle, adjustable headrest height, 3-point safety belt
- Passenger seat mechanical: Mechanical suspension seat, depth and height adjustable, adjustable seat back angle, adjustable headrest height, 3-point safety belt
- Passenger seat pneumatic (optional): Pneumatic suspension seat, depth and height adjustable, adjustable seat back angle, adjustable headrest height, 3-point safety belt
- Steering column: Adjustable steering column (2 adjustment angles, steering wheel height adjustment), compact steering column design allows better visibility of work tools, steering wheel levers to control vehicle functions using CAN Bus technology
- Reversing camera (optional): Reversing camera, camera feed displays automatically on the main screen when the vehicle reverses
- Suction mouth camera (optional): Camera on the suction mouth, screen for camera feed mounted on the steering column for excellent visibility

- **360° camera (optional):** Provides a 360° bird's- eye view of the immediate vicinity of the vehicle, including all blind spots
- Control of main sweeping functions: On the right or left console, depending on the vehicle version (LHT or RHT), console attached to the right or left cab door, control units resistant to dirt, water and mechanical damage
- Control of auxiliary sweeping and vehicle functions:
 On the roof console, control units resistant to dirt,
 water and mechanical damage
- Execution of main and auxiliary sweeping functions control units (I/O): All control units implemented using CAN Bus technology
- Heating and air conditioning: HVAC system with automatic control, possibility to switch off outside air circulation in the cabin, built-in external dust filter, built-in dust filter inside the cabin for air recirculation, 4 diffusers for the front windshield for quick defogging and defrosting, 2 diffusers on the inner side of the cabin roof for maximum cooling effect and defogging side windows (improves visibility of rear view mirrors), 2 diffusers in the lower side sections for better defogging of the lower side windows (improves visibility of working tools), 2 central diffusers for better heating effect and better defogging of the floor window (improves view of the suction mouth), automatic air conditioning
- Rear view mirrors: Combined rear view mirror -R1200 & R300 for better coverage of blind spots, adjustable rear view mirror angle, heating (optional), heated panoramic mirrors with or without electric adjustment and additional mirror for front brushes (optional)
- Main screen: Size 7 inch, PCAP capacitive touch screen, 16 million colors, built-in USB socket next to the screen for easy connection, 1000 nit backlight, anti glare coating
- Radio: Radio with MP3 and USB connectivity, DAB + Bluetooth connectivity (optional), stereo speaker system on the sides of the roof
- **Fire extinguisher (optional):** 1 kg of powder, inside the cab can be reached from the driver's seat
- First aid kit (optional): Behind the driver's seat
- Full-sized passenger seat: Yes

Cabin & Comfort (Continuation)

- Toolbox (optional): In front of the co-driver's seat
- Cabin design regarding sun protection: The forward tilt of the windshield and the extended roof protects the operator from direct sunlight
- Hopper lifting / lowering: Control is possible with the cabin door open or through the side window of the cabin
- Auxiliary storage compartments: Cabin roof storage compartment, side console compartments, bottle and small item storage compartment, storage net on the rear cabin wall, document tray at the back of the seat-back
- One key system: The same key is used to open the doors of the cabin and the fuel tank plug

Lights

High beam: Halogen (LED optional)Low beam: Halogen (LED optional)

• Day light: LED

• Front parking light: LED

• Turn indicators (front, side, rear): LED

Rear parking light: LEDRear fog light: LED

Rear brake light: LEDReversing light: LED

Front work lights (optional): LED
Rear work lights (optional): LED

• Suction mouth work light (optional): LED

• Light wiring: According to ECE R 48

Surface Protection

• Color of the sweeper according to the customer request: Changing the color of the vehicle's white side surfaces or the sweeper's roof color (optional)

Certificates

• PM emissions: 4 stars PM 2,5 / PM 10 test according to EN ISO 15429-3











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