

LYNX 5000 Hydrogen



2.5 m
98"



3.5 m
138"



5 m³
6.5 yd³



700 ℓ +
185 US Gal +



4WS



50 km/h
31 mph



1.6 m / 63"
High Dumping System



Compact cleaning solution for 21st century cities

As cities evolve, so must our maintenance strategies. Introducing the **LYNX 5000**, a new 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 5000** addresses these needs. Offered in **diesel, electric and hydrogen** models, it is equipped to handle future challenges.

Technical Specifications

Dimensions & Weight

- Length (without brushes): 4,940 mm / 194"
- Length (2 brushes): 4,940 mm / 194"
- Length (3 brushes): 5,800 mm / 228"
- Width: 1,800 mm / 71"
- Height (without rotating light): 2,500 mm / 98"
- Height (with rotating light): 2,600 mm / 102"
- Clearance: 230 mm / 9"
- Wheelbase: 2,400 mm / 94"
- Track width: 1,513 mm / 60"
- Empty vehicle weight: 6,500 kg / 14,330 lbs
- Gross vehicle weight (GVW): 11,500 kg / 25,353 lbs

Battery

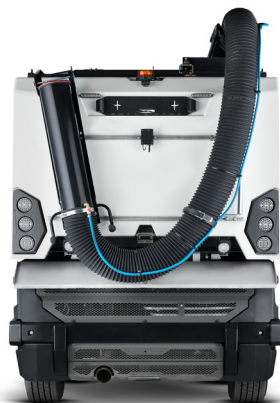
- Operating time: Up to 8 hours
- Battery capacity: 13 kWh (nominal)
- Rated voltage: 644 V
- Maximum voltage: 692 V
- Fast Charging (External charger, DC direct charging) Up to 80 kW

Drive System

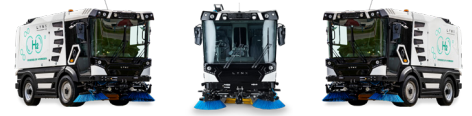
- Maximum transport speed: 50 km/h – 31 mph
- Maximum working speed: 20 km/h – 12 mph
- Maximum gradeability: 24% fully loaded, 30% empty
- Cooling system: fuel cell system separate cooling with coolant circuit, HV components -cooling with coolant and combined cooler, HVAC system condenser separated from the combined cooler
- Drive type: Electric motor mounted on the rear axle
- Safety system when hopper is raised: Speed limitation in dump mode max speed 5km/h; additionally the vehicle emits sound and visual warnings to the driver
- Drive control system: Control of the drive motor via a separate inverter (drive inverter and vehicle drive controller)

H₂ System

- H₂ tanks capacity: 10,5 kg of H₂ at 700 bar
- H₂ refueling system: SAE J2601-2016 Standard for 700 bar
SAE J2799 Communication standard



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Chassis & Suspension

- Drive type (front/rear): Axle/axle
- Chassis type: One-piece rigid chassis, welded frame of fine-grained steel
- Vehicle steering: 4WS
- 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 45% torque
- Dynamic load capacity of the front axle: 5,750 kg / 12,677 lbs
- Dynamic load capacity of the rear axle: 5,750 kg / 12,677 lbs
- 4WS wall-to-wall turning radius (2 brushes): 3,765 mm / 148"
- 4WS curb-to-curb turning radius (2 brushes): 2,950 mm / 116"
- 2WS wall-to-wall turning radius (2 brushes): 5,515 mm / 217"
- 2WS curb-to-curb turning radius (2 brushes): 4,890 mm / 193"
- Dimensions of front tires: 265/70 R 19.5
- Dimensions of rear tires: 265/70 R 19.5
- Front suspension type: Mechanical suspension (hydro-pneumatic suspension with automatic suspension height control as an option)
- Rear suspension type: Mechanical suspension

High Voltage Electrical System

- Drive motor power: Nominal 200 kW, limited to 140 kW
- Drive motor maximum torque: 1000 Nm
- Fan motor power: 58 kW
- Hydraulic system motor power: 58 kW
- On board Charger - Up to 22 kW

Hydraulic System

- Hydraulic oil tank capacity: 70 L / 18.5 US Gal
- Pump type - work hydraulics: variable displacement axial piston pump - LS pump control for all consumers of working hydraulics and hydro-pneumatic suspension (excluding high pressure washer and 3rd brush)
- Pump type - auxiliary hydraulics: Dual gear pump for front and rear axle turning system, brake system and cooling system
- Pump volume - front & rear axle steering system + braking system: 16 cc/rev
- Pump volume - cooling system: 19 cc/rev
- Oil filtration and oil level measurement: Built-in suction return filter, built-in pressure filter, oil level measurement with electronic detection of oil level minimum
- Work hydraulics pump volume: 85 cc/rev



Sweeping System

- Brush diameter (two brushes): 900 mm / 35"
- Brush rotation speed: 0 - 210 rpm
- Maximal sweeping width (two brushes): 2,535 mm / 100"
- Brush suspension: Independent suspension
- Brush ground pressure relief: Independent ground pressure relief
- Brush position control: synchronous left-right, independent up-down position control and independent roll and pitch adjustment (mechanical - standard; hydraulic - option)
- Maximal lateral displacement of front brushes: 350 mm / 14"
- Impact protection: Direct impact protection from the side - mechanical spring on the brush left to right cylinder
- Hopper control unit: Control unit placed in cab, can be operated when standing outside
- Hopper unloading height: 900 mm / 35" standard tipping; 1600 mm / 63" with high dump option (hopper emptied using the push plate)
- Hopper material: stainless steel
- Hopper door opening: hydraulic
- Monitoring and washing hatches: 2 doors, one on each side of the hopper
- Rear bumpers: Protecting sweeper when reversing to the unloading site; additional side bumpers for water tank protection
- Suction mouth width: 700 mm / 28"
- 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: Front flap with the possibility of hydraulic opening and closing
- Suction mouth wheels: 1 heavy duty rear swiveling wheel
- Main suction hose diameter: 225 mm / 9"
- Closing of main suction hose: main suction hose can be closed by electronic control from the cabin (in case of operation with wander hose) or automatic closing of suction hose (in transport - antspill option)
- Suction fan speed: Max. 3,500 rpm
- Suction fan airflow: 14,000 m³/h
- Suction fan drive engine: Axial piston hydraulic motor
- Suction fan exhaust direction: Toward the rear side of the vehicle
- Suction fan cleaning / washing: The suction fan can be cleaned using the sweeper's fresh water system without lifting the hopper
- Bearings self-lubricating bearings (maintenance free) wherever feasible and maintenance-free ball joints on the sweeping unit

Third Brush System (optional)

- Third brush diameter: 900 mm / 35"
- Third weed brush diameter: 700 mm / 28"
- Max. sweeping width with three brushes: 3,525 mm / 139"
- 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: 130 or 200 mm / 5 or 8"
- Wander Hose Length: 5 m / 16 ft



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Water System

- Fresh water tank volume: 705 L / 186 US Gal
- Fresh water tank placement: Lateral
- Fresh water nozzles: 2 pcs. per brush
- Fresh water level measurement: Absolute measurement of fresh water level
- Water recirculation system type (optional): Gravity
- Recirculation water emptying: Controlled from the cabin via recirculation water nozzle on suction mouth; additional emptying possibility via hose connected to the hopper
- Recirculation water nozzles: on suction mouth
- Fresh water pump drive: connected to diesel engine with drive belt and electromagnetic clutch
- Max. fresh water pump pressure: up to 4.42 bar (64 PSI)
- Max. fresh water pump flow: 97 L/min (26 GPM)
- Control of fresh water distribution on front brush nozzles: Possible to spray each brush independently
- Functionality of auxiliary valve and fresh water connection on the right side of the vehicle (optional): 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 connection and supply of fresh water to the wander hose

Manual High-Pressure Washer (optional)

- Washer pump drive: Hydraulic
- Washer pump flow and pressure: 15 L/min (4 GPM) at 150 bar (2,176 PSI); 30 L/min (8 GPM) at 150 bar (2,176 PSI)
- Hose length: 20 m / 66'
- Hose storage method: automatic hose reel integrated into the vehicle (accessible from right side doors)
- Washer nozzles: two types (wide and narrow), selected by rotating the washer gun

Tracking

- ARMS tracking and diagnostic system (optional): Includes 12 months of initial free access to the ARMS portal



Cabin & Comfort

- Cabin construction: Steel welded frame
- Sound insulation: The cabin is soundproofed with sound insulating materials
- Front windshield: Laminated glass, low reflection index, heat reflective (tinted), 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
- Windshield wiper: 2 wiper system with settings for intermittent or continuous wiping, with windshield washing capability
- Driver seat - pneumatic: Pneumatic suspension seat, depth, height and seat tilt adjustable, adjustable seat back angle, adjustable headrest height 4-way adjustment, mechanical lumbar support, seat cushion length adjustable, 3-point safety belt, step-less adjustable shock absorber
- Passenger seat - mechanical: Mechanical suspension seat, depth and height adjustable, adjustable seat back angle, adjustable headrest 4-way adjustment, mechanical lumbar support, 3-point safety belt
- Passenger seat - pneumatic (optional): Pneumatic suspension seat, depth, height and seat tilt adjustable, adjustable seat back angle, adjustable headrest height 4-way adjustment, mechanical lumbar support, seat cushion length adjustable, 3-point safety belt, step-less adjustable shock absorber
- Steering column: Adjustable steering column (1 adjustment angle, steering wheel height adjustment), compact steering column design allows better visibility of work tools, steering wheel lever to control vehicle functions using CAN Bus technology, easy accessible rocker switchers for switching between mods (transport / work / dump), 2WS / 4WS switch, FNR switch
- Reversing camera (optional): Reversing camera, camera feed displays automatically on the main screen / auxiliary screen when the vehicle reverses
- Suction mouth camera (optional): Camera on the suction mouth, screen for camera feed mounted on the central console 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 central console and roof console
- 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, 7 diffusers for the front windshield for quick defogging and defrosting, 2 diffusers in the lower side sections for better defogging of the door windows (improves visibility of working tools and rear view mirrors), 2 central diffusers for better heating effect and better defogging of the floor window (improves view of the suction mouth)
- Rear view mirrors: Combined rear view mirror - R1200 & R300 for better coverage of blind spots, electronically adjustable rear view mirror angle, heating (optional)
- Auxiliary mirrors position: On the driver and passenger doors for better visibility of the brushes
- Main screen: Size 10.1", PCAP capacitive touch screen, built-in USB socket next to the screen, 1000 nit backlight, scratch resistant with anti-glare coating
- Radio (optional) radio with DAB / DAB+ integrated tuner, USB & Bluetooth connectivity, stereo speakers system
- Fire extinguisher (optional): 2 kg of powder, fitted inside the cab
- First aid kit (optional): Inside the cab
- Cabin design regarding sun protection: The forward tilt of the windshield and the extended roof protects the operator from direct sunlight; additional optional windshield sun visors
- Full-sized passenger seat: Yes
- Cabin suspension: Comfortable anti-vibration elements

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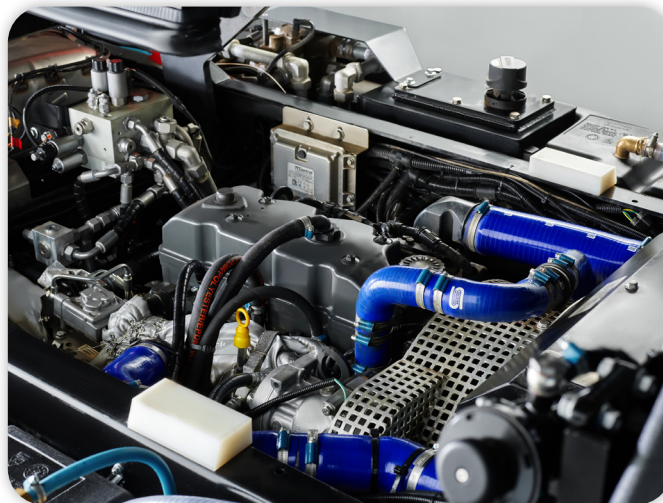


Cabin & Comfort (Continuation)

- Implementation of main and auxiliary sweeping functions control units (I/O): All control units implemented using CAN Bus technology
- Auxiliary storage compartments: Cabin roof storage compartment, bottle holder and small item storage compartment, storage net between driver and passenger seat

Lights

- High beam: LED
- Low beam: LED
- Day light: LED
- Front parking light: LED
- Turn indicators (front, side, rear): LED
- Rear parking light: LED
- Rear fog light: LED
- Rear brake light: LED
- Reversing light: LED
- Front work lights high (optional): LED; roof position
- Front work lights low (optional): LED; sweeping gear / brushes position
- Rear work lights (optional): LED
- Suction mouth work light (optional): LED
- Additional rotating light (optional): LED
- Light wiring: According to ECE R 48



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www.amt-na.com
info@amt-na.com
1-888-874-7820


ADVANCED MUNICIPAL
TECHNOLOGIES INC.

3091 Albion Road North
Ottawa, Ontario
K1V 9V9