

PULSEO
GENERATION



**ENERGIZE
YOUR
PERFORMANCE**

WARRANTY

HAULOTTE

5 YEAR*








*See conditions in the Haulotte distribution network

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Haulotte 
EQUIPMENT



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INTRODUCTION

TOMORROW'S CHALLENGES FOR CLEANER CITIES

Cities across the globe must rise to the same challenge: tackle air pollution, fight global warming and offer their citizens the best possible living conditions.

Many cities and countries have adopted measures limiting or even prohibiting the use of pollution-intensive vehicles and equipment. Engine regulations such as STAGE in Europe and TIER in North America are becoming increasingly strict, calling for ever more sophisticated and expensive technologies.

These constraints lead to the development of environmentally-friendly alternative energies.



TODAY ELECTRICITY MEETS ALL
THE REQUIREMENTS TO POWER
CONSTRUCTION MACHINERY.
WELCOME TO THE PULSEO GENERATION.



PULSEO
GENERATION

**A NEW
GENERATION
OF MOBILE
ELEVATING
PLATFORM:
PULSEO**

**TAKE THE LEAP
TO ELECTRIC
POWER**

PULSEO is Haulotte's range of all-terrain electric mobile elevating work platforms.

Lower energy costs and less air and noise pollution, all with optimal performance: that is the promise of the electrical architecture featured in **PULSEO** machinery.

Enjoy a multitude of new opportunities: indoor and outdoor applications, rough terrain capabilities, operation suited to low-emission and low-noise zones.

HA20 LE and HA20 LE PRO are the first models in the PULSEO product line.



ECO-RESPONSIBILITY

- > Electric architecture
- > Silencious
- > Environmentally friendly



VERSATILITY

- > Zero emission, suited for indoor work
- > Excellent driveability in rough terrain conditions
- > Extended working hours with no inconvenience for local residents



HIGH PRODUCTIVITY

- > 360° continuous turret rotation
- > Load capacity up to 350 kg
- > Rapid, simultaneous movements



OPTIMAL SAFETY

- > Haulotte Activ'Shield™ Bar 2.0 to prevent crushing risks
- > Haulotte Activ'Lighting System to ensure safety during nighttime loading and unloading operations



EASY MAINTENANCE

- > Haulotte Activ'Screen: on-board diagnostic tool
- > Easy access to components
- > Maintenance-free electric motors
- > Centralized battery filling



OPTIMAL ENERGY MANAGEMENT

- > A full day's work in electric mode
- > Auxiliary range extender to increase battery working cycle if necessary
- > Haulotte Activ'Energy Management to preserve battery charge / working cycle and lifespan



AN ECONOMIC CHOICE

- > Reduced energy costs
- > 2 machines in 1 for easier fleet management



GOOD FOR THE ENVIRONMENT

WORK EMISSION-FREE WITH PULSEO

PULSEO's electric design lets you work with no harmful emissions.

More and more cities and countries are taking steps to reduce their environmental footprint.

PULSEO offers a clean alternative suited to any situation.

LOW EMISSION ZONES (LEZ)

Limitation of vehicles with internal combustion engines in downtown areas.



"GREEN" LABELS FOR CONSTRUCTION SITES

Increasing number of "green" construction sites where low-pollution vehicles have become standard.



COMPANIES FOLLOWING INTERNAL ENVIRONMENTAL POLICIES

Corporate strategies aimed at reducing companies' carbon footprint.





ECO-RESPONSIBILITY



ZERO EMISSION... ALSO MEANS **SILENT OPERATION**

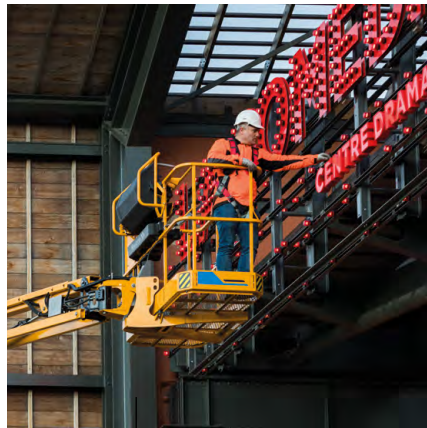
The PULSE0 generations offers a wonderfully quiet experience for both operators and people nearby.

It keeps a low acoustic profile in any situation, offering new opportunities for use.



LOW-NOISE AREAS

Hospitals, schools, bookstores, etc.



PUBLIC PLACES

Shopping centers, airports, concert halls, pedestrian streets, etc.



FLEXIBLE WORKING HOURS

Nighttime or early morning work with no inconvenience for local residents.





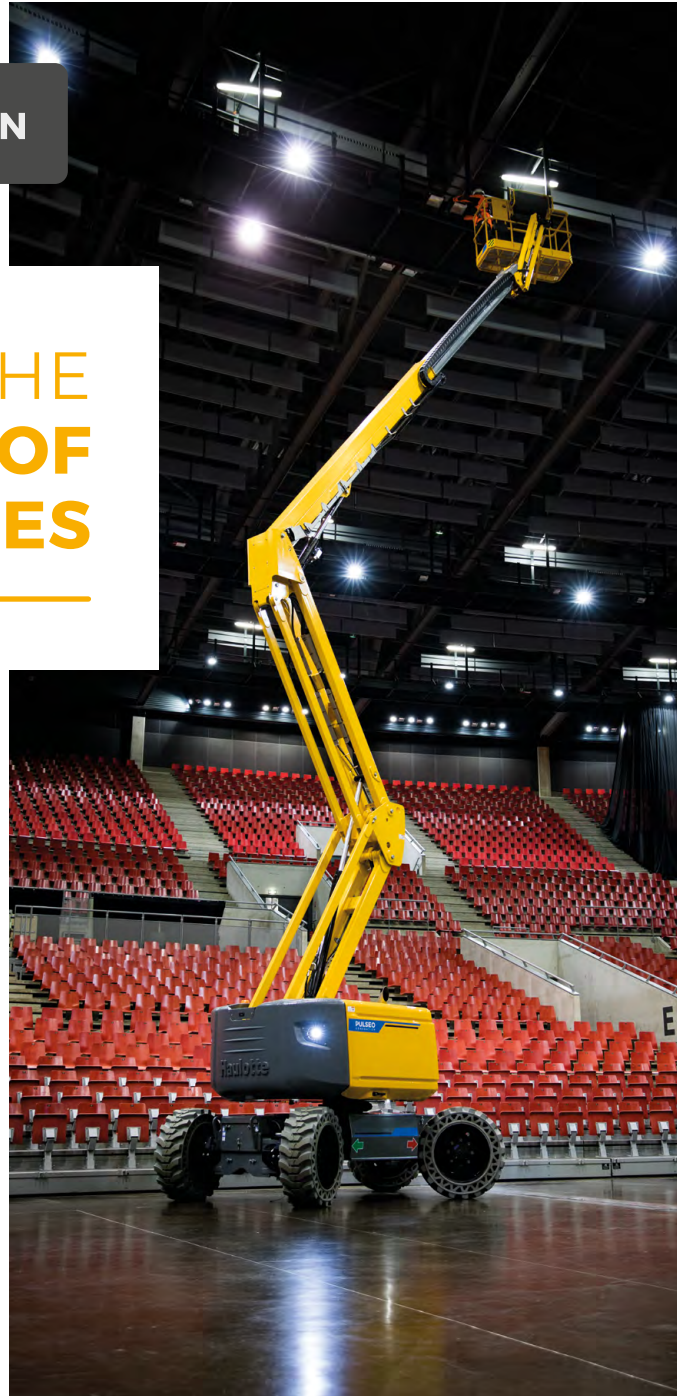
VERSATILITY

IN

BROADEN THE RANGE OF POSSIBILITIES

A MACHINE FOR ANY APPLICATION

Thanks to its electric architecture and unparalleled rough terrain capacities, **PULSE0** generation models are perfectly suited to indoor or outdoor projects, guaranteeing clean, quiet operation in any setting.



OUT





VERSATILITY



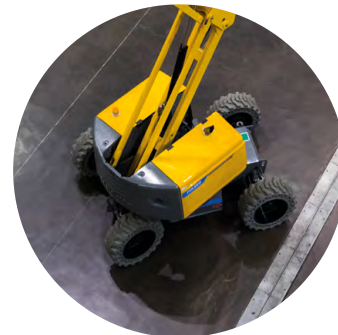
INDOOR WORK AT HIGH HEIGHTS

Clean technology and equipment suited to indoor applications:



LEAVE NO TRACE

Available with non-marking tires, **PULSE0** machines can be used indoors without leaving a trace.



PERFECT FOR SENSITIVE FLOORS

PULSE0 machines can be used on almost any floor with low ground pressure. Working at heights in shopping centers, airports, concert halls and other public places is no longer a challenge.

SMALLER FOOTPRINT

The machine's low tail swing and easy handling allow for operation in confined spaces.

IN



VERSATILITY

UNMATCHED POWER TO OVERCOME ANY OBSTACLE

OUT

4-wheel drive for powerful torque

The oscillating axle
guarantees optimal adherence

You will be amazed by the driveability of PULSEO generation machinery:

- > **Independent 4-wheel drive**, with each wheel producing powerful torque and ensuring excellent traction distribution,
- > **An oscillating axle** to keep the wheels in contact with the ground for optimal adherence,
- > **Solid cured-on tires** provide the wheels with the flexibility needed to properly hold the ground, even on the roughest terrain.





VERSATILITY

AMAZING AGILITY IN ALL-TERRAIN CONDITIONS



- > **4-wheel steering** considerably reduces the turning radius and allows for crab steering.
- > **High ground clearance** to get over obstacles and protect machine components.

- > **Up to 45° gradeability** to operate on heavily inclined terrains and climb truck ramps.
- > Ability to handle a **4° Tilt**.

EVERYTHING IT
TAKES
**FOR EXCELLENT
MANEUVERABILITY**





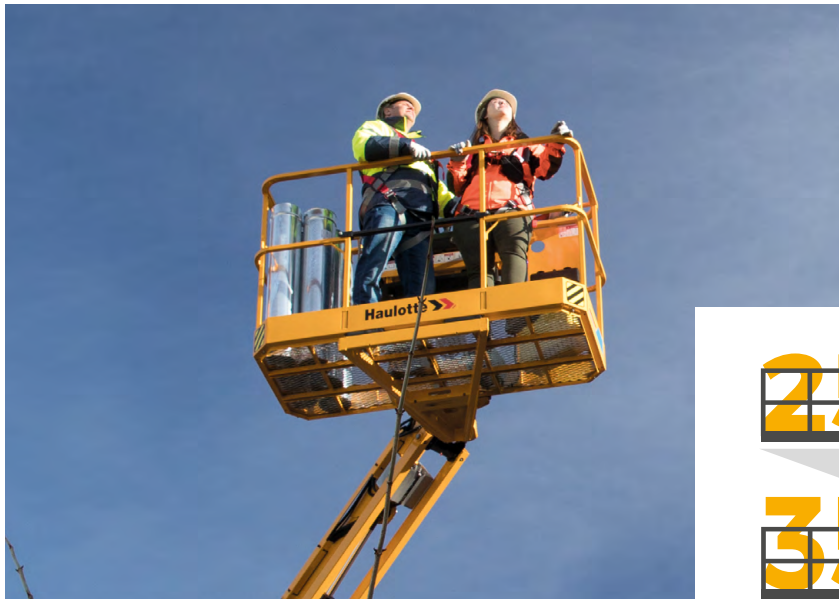
**HIGH
PRODUCTIVITY**

OPTIMAL PERFORMANCE FOR PRODUCTIVE WORK

Haulotte 
DUAL LOAD

EXTENDED LOAD CAPACITY

To limit the number of trips between the ground and the work area, **PULSE0** generation articulating models are available in dual load versions to increase the platform capacity to 350 kg.



250 kg
to
350 kg



QUICK AND EASY ACCESS TO WORK AREAS

Featuring the best performance in their category, **PULSE0** machines are your allies in the quest for productivity:

- > Ultra-fast elevation speed,
- > Simultaneous movements (up to 4 simultaneous movements),
- > 360° continuous turret rotation.



**OPTIMAL
SAFETY**



SAFETY IS OUR PRIORITY

The **PULSEO** generation incorporates the latest safety innovations.

PRECISE MOVEMENTS

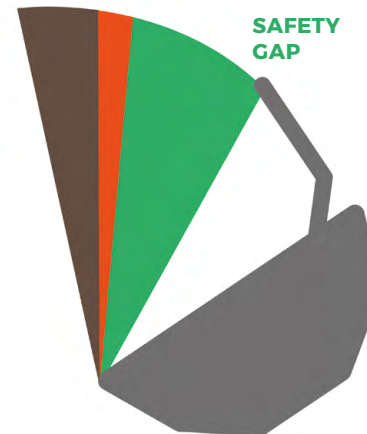
Proportional controls ensure precise movements, guaranteeing smooth operation on the way up to the work area. No jolts, just fluid motion.

Haulotte 
ACTIV' SHIELD
B A R

SECONDARY GUARDING DEVICE

Haulotte Activ'Shield™ Bar 2.0 is by far the safest and most effective system of its kind. Faced with a risk of entrapment, the operator is propelled against the bar. The machine automatically stops. Protected by the Safety Gap, the operator maintains easy access to controls and unobstructed visibility.

**BUFFER
SPACE** **STOP
POSITION**





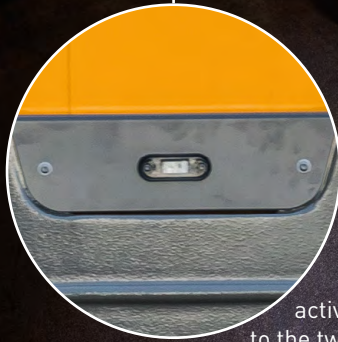
**OPTIMAL
SAFETY**



Illuminated controls
on the upper and lower
control box



Illumination of the
elevation area around
the machine



Automatic
activation thanks
to the twilight sensor

AN EXCLUSIVE **ULTRA-HIGH- PERFORMANCE LIGHTING SYSTEM**

Haulotte 
ACTIV' LIGHTING
SYSTEM

ULTRA-HIGH-PERFORMANCE LIGHTING SYSTEM

Platforms are generally loaded and unloaded early in the morning or in the evening. To ensure safe performance of these delicate procedures, **PULSEO** models feature the innovative high-performance Haulotte Activ' Lighting System. Comprising 11 LED spotlights, it provides ideal illumination of the basket, controls and the maneuvering area around the machine.



OPTIMAL ENERGY MANAGEMENT

A FULL DAY'S WORK, 100% ELECTRIC

OPTIMIZED POWER CONSUMPTION

To maximize battery life and ensure the machine can handle daily work requirements, **PULSEO** Generation models feature:

- > high-capacity batteries,
- > ability to lower the basket by the force of gravity with no power consumption,
- > an electronic protection system to limit power surges, responsible for overconsumption.

**ELECTRIC
AUTONOMY**
FOR A FULL
DAY'S WORK





OPTIMAL ENERGY MANAGEMENT

WITH **PULSEO**, BATTERY LIFE KNOWS NO LIMITS

EXTEND BATTERY WORKING CYCLE WITH THE RANGE EXTENDER ENGINE

PULSEO models are equipped with an on-board range extender to rapidly recharge your batteries. Low fuel consumption ensures minimal energy costs. The machine retains its full operating capacity during the ultra-fast charge cycle.

BUILT-IN AC CHARGER

The machine features an electric charger to recharge the batteries from a wall socket at the end of the day.



AUTO CHARGE BY RANGE EXTENDER ENGINE

- > The machine remains fully operational
- > Same productivity as in electric mode
- > Ultra-fast charge cycle: up to 80%



AC CHARGE

- > Charge the batteries when not in operation
- > Charge up to 100%



OPTIMAL ENERGY MANAGEMENT



WITH PULSEO, TAKE CARE OF YOUR BATTERIES



Developed in partnership with LITEN, a major European research institute and a driving force behind the development of the sustainable energy technologies of the future, the Haulotte Activ'Energy Management system was designed to extend the lifespan of your batteries.

ABSOLUTE CONTROL OVER BATTERY WORKING PARAMETERS

PULSEO Generation models are equipped with a Battery Monitoring System to analyze working parameters:

- > temperature,
- > voltage,
- > current,
- > performance.

With these parameters, the various machine components become smarter, adjusting their behavior in real time.

CHARGE CYCLE OPTIMIZATION

The smart charger monitors the parameters of the charge cycle in real time, reducing charging time. Battery capacity remains optimal over time.



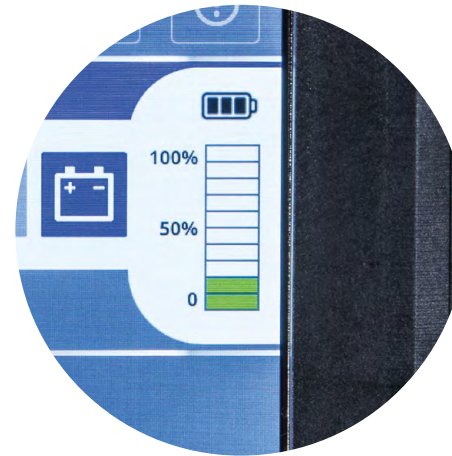
OPTIMAL ENERGY MANAGEMENT

MORE ACCURATE CHARGE INDICATOR

Battery charge indicators located on the upper and lower control boxes, as well as on the charger screen, provide reliable information on battery status.



Upper control box



Lower control box



Charger screen

BATTERIES WITH A LONGER LIFESPAN

BUILT-IN BATTERY MAINTENANCE CYCLE

A de-sulphation cycle performed by a technician allows for an ultra-slow charge to regenerate the battery. This cycle renews the battery, optimizing its lifespan.

REMINDERS OF BEST MAINTENANCE PRACTICES

Directions displayed on the Haulotte Activ'Screen remind users of best practices for battery use and maintenance:
> need for periodic AC charging,
> centralized battery filling.

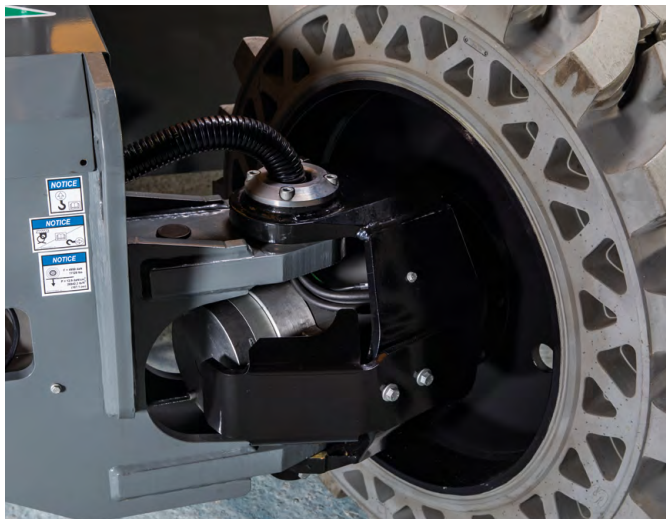


EASY MAINTENANCE

SIMPLIFIED MAINTENANCE TO GUARANTEE YOUR MACHINES ARE ALWAYS AVAILABLE

MAINTENANCE-FREE ASYNCHRONOUS MOTORS (AC)

Known for their performance, sturdiness and reliability, AC motors require no routine maintenance.



CENTRALIZED BATTERY FILLING SYSTEM

The batteries feature a centralized filling system for easy maintenance. A few seconds is all it takes.



DIRECT ACCESS TO COMPONENTS

Machine components are easily accessible:
> swing out engine tray,
> removable hoods to access batteries,
> access to cables and hydraulic hoses,
> etc.





**EASY
MAINTENANCE**

EFFECTIVE DIAGNOSTIC SOLUTIONS

Haulotte **ACTIV'** SCREEN

Haulotte Activ'Screen makes life easier for users and technicians on a daily basis.

It can be used to:

- > configure the machine,
- > provide users with information to help them identify alarms, tilt, overloading, etc.
- > access the list of preventative maintenance procedures,
- > diagnose and resolve malfunctions, if necessary.



MOBILE DIAGNOSTIC TOOL

All Haulotte Activ'Screen functions are available on mobile devices via the Haulotte Diag app. Technicians thus enjoy the mobility necessary for even more effective configuration and diagnostics.



Direct access to configuration and diagnostics menus



EASY MAINTENANCE

RUGGED MACHINES DESIGNED TO WORK IN THE MOST DEMANDING ENVIRONMENTS

PULSEO models feature the highest standards of quality. They undergo more than 2,000 hours of testing before being marketed and feature a **5-year warranty***.



Guide bushings for cables and hoses



Anticorrosion treatment on axles, fasteners and painted components



Steering cylinders protected inside the frame



Control box protected by high-strength composite housing



Excellent protection for exposed cables



Reinforced hoods



Thick protection shields around traction motors



*See conditions in the Haulotte distribution network





**AN ECONOMIC
CHOICE**

CHOOSING A **PULSEO** PLATFORM MEANS INVESTING IN **GREATER FLEXIBILITY**



PULSEO MODELS COMBINE
THE ADVANTAGES OF
ELECTRIC POWER AND AN
ROUGH TERRAIN MACHINE

READY FOR FUTURE REGULATIONS

PULSEO machines are ready for stricter access limitations in downtown areas (low-emission zones) and future engine regulations.

FIRST IN / LAST OUT

A **PULSEO** platform is 2 machines in 1. Its versatility makes it indispensable throughout the duration of projects, from the start-up phase to the final finishings. Using a single machine throughout the life of a project guarantees availability while reducing transportation costs.

SIMPLIFIED FLEET MANAGEMENT

With **PULSEO** models, power source no longer determines what equipment can be used for any given application. Perfectly versatile, they are suitable for jobs that used to require different machines, thus maximizing utilization rates.



**AN ECONOMIC
CHOICE**

REDUCE ENERGY COSTS WITH **PULSEO**



**TAKING THE LEAP TO
ELECTRIC POWER
MEANS A LASTING
REDUCTION IN
OPERATING COSTS**

IMMEDIATE REDUCTION IN ENERGY COSTS

Whatever energy source you use, you will see a reduction in energy costs associated with using the machine. The low cost of electricity with the built-in charger and a reduction of more than 55% in fuel consumption for use of the range extender, compared to a diesel-powered device, all contribute to offsetting the initial cost of the machine in record time.

LOWER PREVENTATIVE MAINTENANCE COSTS

Electric motors feature considerably fewer hydraulic hoses, thereby reducing maintenance costs for these components. Low demands on the power generator during the battery charge phase allow for longer maintenance intervals. **PULSEO** electric mobile elevating work platforms thus offer an overall reduction in maintenance costs.

MODELS

	HA20 LE	HA20 LE PRO
Wheel drive	4	4
Wheel steer	2	4
Tires	Standard	Large diameter
Electric drive	●	●
Oscillating axle	●	●
Turret rotation	355°	360° continuous
250 kg load capacity	●	●
Dual load capacity 250 - 350 kg	○	○
Auxiliary range extender	●	●
Haulotte Activ'Shield Bar	○	●
Haulotte Activ'Lighting System	●	●
Haulotte Activ'Energy Management	●	●
Haulotte Activ'Screen	●	●

● standard / ○ option



THE FIRST
TWO **PULSEO**
GENERATION
MODELS



Haulotte
ACTIV' LIGHTING
SYSTEM



Haulotte
ACTIV' SCREEN



Haulotte
ACTIV' SHIELD
BAR

OPTIONS



CHOOSE
THE RIGHT
EQUIPMENT
**FOR YOUR
PROJECTS**



1 Pipe cradle



2 Dual load capacity
250/350 kg



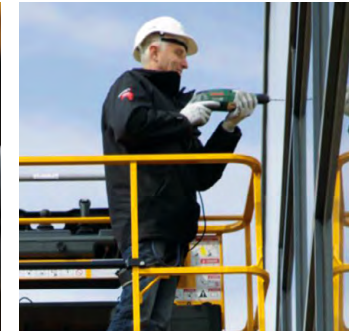
3 Lateral swing door



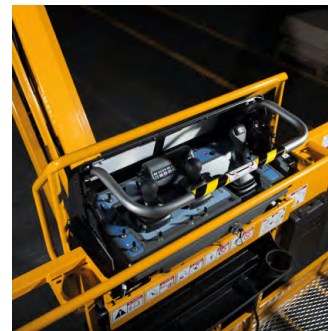
4 Glazier pack



5 Compressed air line



6 Power to platform



7 Haulotte Activ' Shield Bar
(Standard on PRO models)



8 Cold weather package



9 Non-marking tires

PULSEO GENERATION



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