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Lasso™

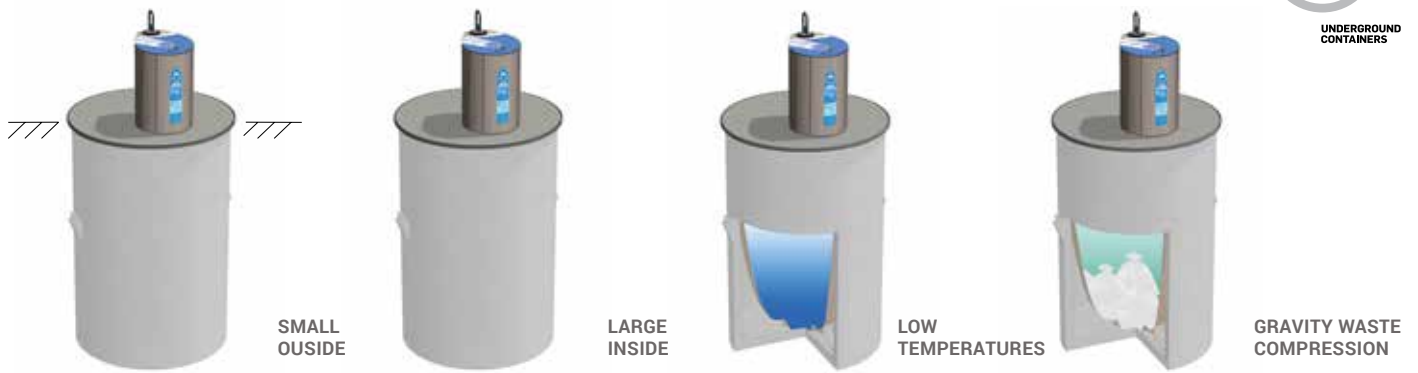
# UNDERGROUND CONTAINERS



ECO INNOVATION

## SMALL URBAN IMPACT FOR A BETTER LIVING





The lasso™ underground container is available in 5m<sup>3</sup> and 3m<sup>3</sup> capacities.

It is characterized by its high mechanical strength and fire resistance (M0 classification) due to its monobloc structure in C40/50 class prefabricated reinforced concrete.

Reduced space footprint with minimum visual impact at the surface, as the complete volume for waste deposition is buried and the deposition head is small and functional.

The lower underground temperatures slow down bacteria growth, contributing to odour reduction.

Waste compression by its own weight allows higher density than surface containers.

The investment and operating costs are low due to its simplicity, high capacity and fast collection operation, with no need of hydraulic systems or other mechanical systems.

## Deposition columns

**blue bee™**



**green bee**



**red bee (\*)**



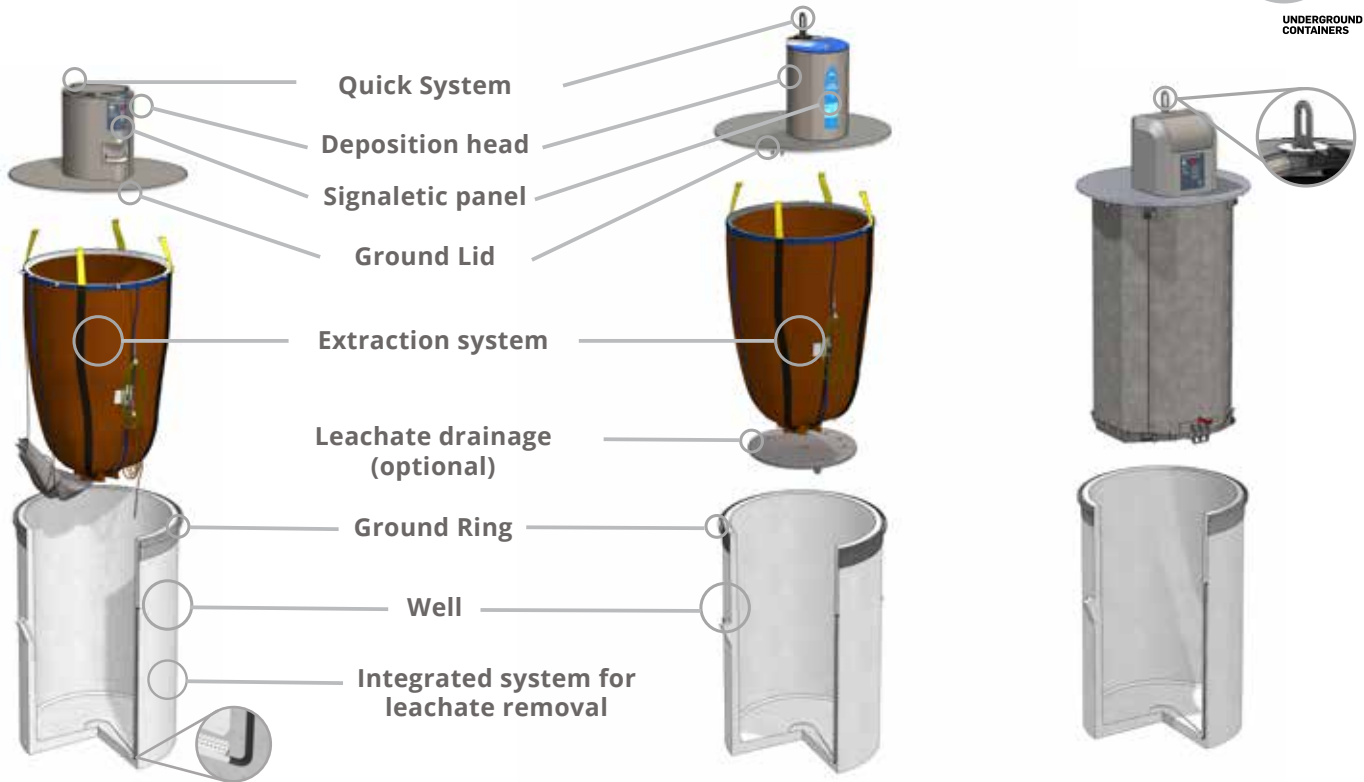
## Ground Lids

**OLIVE LEAF**



**PAVEMENT**





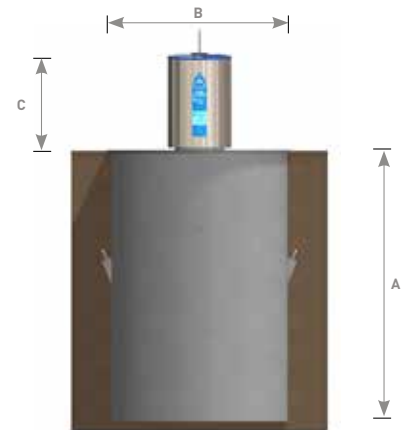
Components	Description
<b>Deposition Head</b>	<p>All available deposition columns ensure a vertical waste disposal axis up to a 5% gradient; they can feature a battery box and a bag dispenser for canine waste, being compatible with an access control system.</p> <p><b>blue bee™:</b> with design authored by Henrique Cayatte, it features a handle, a pedal and lid with no impact closure (with shock absorber); made of steel with anti corrosion treatment and finished with powder dusted painting in light or dark grey..</p> <p><b>green bee:</b> in stainless steel; optionally, it is possible to incorporate a pedal.</p> <p><b>red bee:</b> in steel with textured polyurethane painting or elastomeric resin coating highly resistant to impact; It includes a volumetric unit of double-drum type in stainless steel (used in access control systems)</p>
<b>Quick System</b>	Single hook, double hook (**) or kinshoffer system (**), incorporated in the deposition column.
<b>Ground Lid</b>	<p><b>Olive Leaf:</b> in steel with non-slip finish.</p> <p><b>Pavement:</b> for the same finishing as the surroundings.</p>
<b>Ground Ring</b>	In hot-dip galvanized steel. It has connection to rainwater; option for a retractable safety barrier.
<b>Extraction system</b>	<p><b>Flexible:</b> Standard bag: In polypropylene double layer. Reinforced with high resistance PVC layer for glass waste. Masterbag™ (Patent EP2194005 A1): In polypropylene double layer and high resistance PVC layer, provides a watertight element for waste extraction that allows retention of leachate.</p> <p><b>Rigid:</b> Steel Container with single hook: made of hot-dip galvanized steel, bottom opening with single door; enables leachate retention. Fire classification is M0. Steel Container with double hook/kinshoffer: made of hot-dip galvanized steel, bottom opening with double door; enables leachate retention; with double hook or kinshoffer system with flexible chain and anti rotation "mushroom" for better and easy manoeuvring; Fire classification is M0.</p>
<b>Well</b>	Monobloc well, in concrete C40/50, designed to resist impulsion forces. It also has an innovative integrated system for an easy and quick leachate removal.
<b>Integrated System for quick and easy leachate removal</b>	The concrete tank is provided with a conical bottom that directs leachate into a drain tank which is connected to an in-built wall pipe, allowing leachate vacuuming, making the cleaning operation extremely quick and effective.
<b>Signaletic panels</b>	The, front and top signaletic panel are available in thermo lacquered aluminium with silkscreen printing or high resistance vinyl with UV lamination and digital printing.



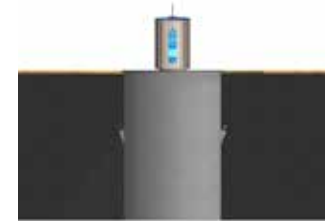
Optional	Description
Battery Box	Integrated in the deposition column
Bag dispenser for canine waste	Integrated in the deposition column head
Retractable safety barrier	Vertical safety barrier
Safety platform (*)(**)	Horizontal safety platform.
Leachate drainage	Only for containers with flexible bag; prevents contact between collection bag and possible leachates.

Dimensions

	3M <sup>3</sup>	5M <sup>3</sup>
<b>A.</b> Total height buried area	1990 mm	2870 mm
<b>Ø B.</b> Ground lid diameter	1850 mm	1850 mm
<b>C.</b> Deposition head height	blue bee™: 800mm/green bee: 900mm/red bee: 800mm	
<b>Ø</b> Diameter of the deposition duct	550 mm	550 mm
Head weight + ground lid	approximately 200Kg	approx. 200Kg
Well weight	approx. 3ton	approx. 4ton
Average thickness of the well side walls = 92,5mm (85mm on top and 100mm on bottom)		
Well bottom thickness is 140mm		



Installation



STANDARD INSTALLATION

01. Dig a pit with a depth of 2,0m (3m<sup>3</sup>) or 2,9m (5m<sup>3</sup>), and a width of 2,45m.
02. Create a well-compacted layer and stabilize the bottom.
03. Place the set well-ground ring inside the pit ensuring its vertical positioning.
04. Proceed by filling the empty spaces around the container with well compacted filling material.
05. Connect the ground ring to a rain water sewer system and finish the surrounding area.
06. Placement of the set deposition column and extraction system in the installed well.

Maintenance

The lasso™ underground containers are characterized by their high strength and low maintenance, having been designed for intensive use under extreme environments for an extended period of useful life.

Certificates, Standards and Patents

In compliance with the EN13071-1/EN 13071-2 Standards | Directive 2000/14/CE (Noise): LW 64,9 dB / LWA 63,7 dB(A) Collection Bag: EN 21898:2001 (EFIBCA 006) | Well: Certificate EN 206-1: Minimum Strength Class: C40/50, Certificate EN-206-1: Fire Classification Certificate: A1 (A1 FL) / M0 | Quality and environment management system for the design, production, distribution and installation of semi-underground containers certified according to ISO 9001 and ISO 14001. Patent EP2194005 A1 (masterbag™).



Intelligent systems for the management of Municipal Solid Waste

The lasso™ underground containers are compatible with access control systems and filling level monitoring systems enabling the implementation of PAYT systems and optimization of the collection process.

