

MOLOK®

# A Better Way to Manage Waste

Product and Service Guide

# Waste is everyone's business

Our lineup includes general-purpose waste containers and stream-specific configurations, and provides differents capacities options (M5000, M3000, M1300, MGrease, Morganic and CityScape) – so no matter your facility/environment, waste volume and profile, and stream separation requirements, the Molok<sup>®</sup> Deep Collection<sup>™</sup> system has you covered.







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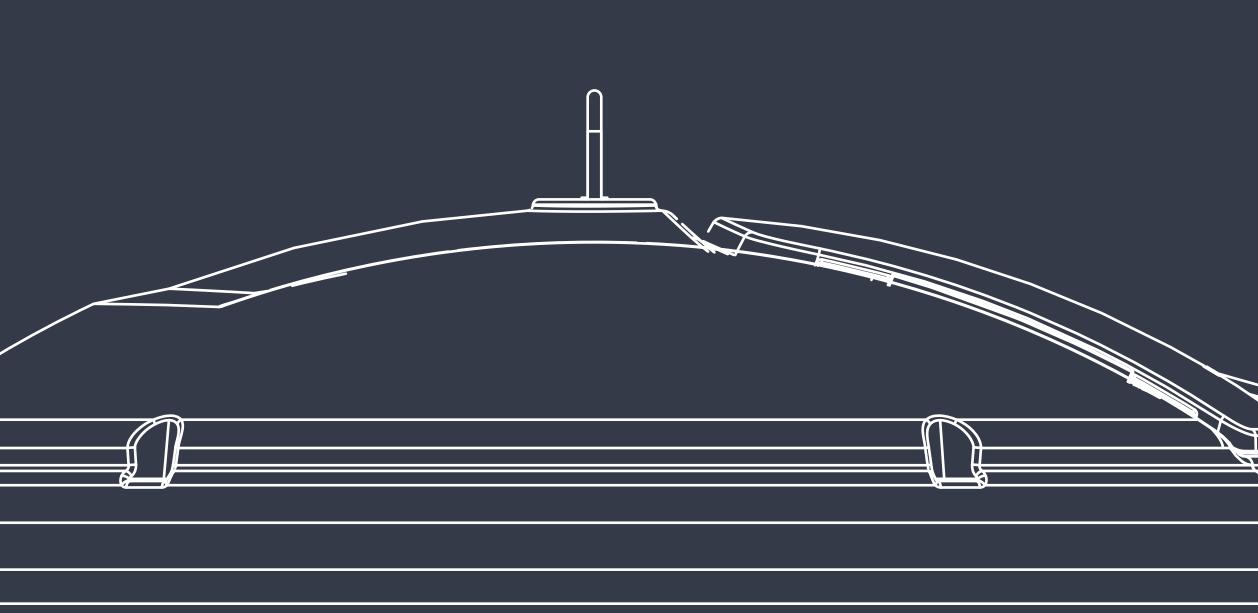
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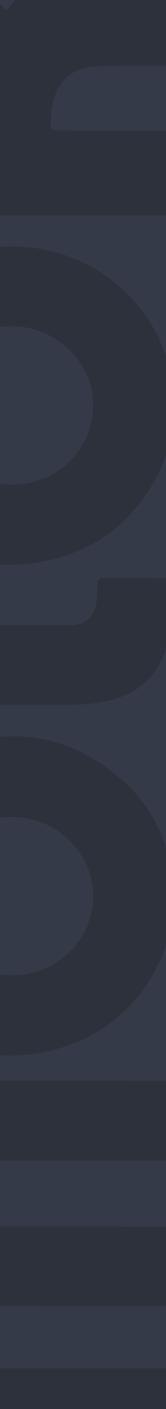
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# Company



# introduction

Since debuting in Finland in 1991, Molok<sup>®</sup> containers have been chosen by governments, business owners, property managers, architects, developers, and environmental groups in 40+ countries to lower waste management costs, reclaim valuable real estate, beautify landscapes, and increase diversion rates.

Established in 1999, and headquartered in Mount Forest, Ontario, Molok North America is proud to bring the future of waste management to Canada, the United States, and Mexico.

Driven by a vision of a sustainable world in which effective and efficient waste management practices are seamlessly integrated into everyday life, our mission is to replace costly and inefficient legacy approaches (e.g., dumpsters, wheeled carts, surface bins, and climate-controlled rooms) by making it easy to buy and use our better-looking, space-saving, cleaner, safer, and more costeffective Molok<sup>®</sup> Deep Collection<sup>™</sup> containers – whether as a standard in new builds or as a retrofit upgrade to existing facilities.

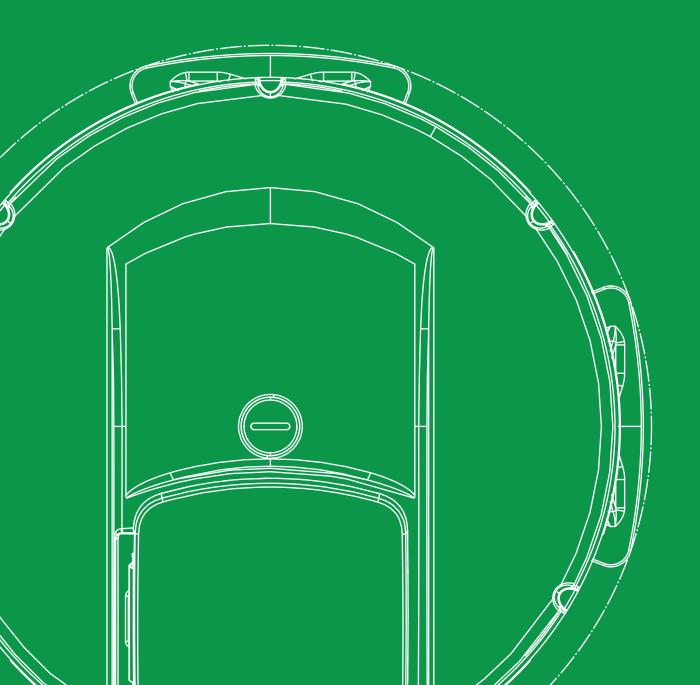
Our dedicated team is driving the industry forward with a commitment to product quality, customer service, and relationships built on earned trust – all oriented around a better way to manage waste.

Mark Hillis President & CEO Molok North America





# The Molok® Deep Collection<sup>TM</sup> System



The Molok<sup>®</sup> Deep Collection<sup>™</sup> system is a visually attractive line of multi-purpose, multi-facility waste containers that are cleaner, safer, and more cost effective than dumpsters, wheeled carts, conditioned rooms, and other legacy alternatives – while requiring a fraction of the real estate to store and service.

Every model in the Deep Collection™ lineup stores waste in a cylindrical shaft, the larger proportion of which is hidden underground, with only a customizable low-profile frame topped by a secure, easily accessible, self-closing lid visible above ground.

This approach, pioneered by Molok<sup>®</sup> in 1991 and proven in more than 40 countries in the decades since, naturally compacts waste and keeps it cool – controlling odors and substantially reducing

collection frequency while eliminating the need for dedicated waste pads and expensive protective enclosures.

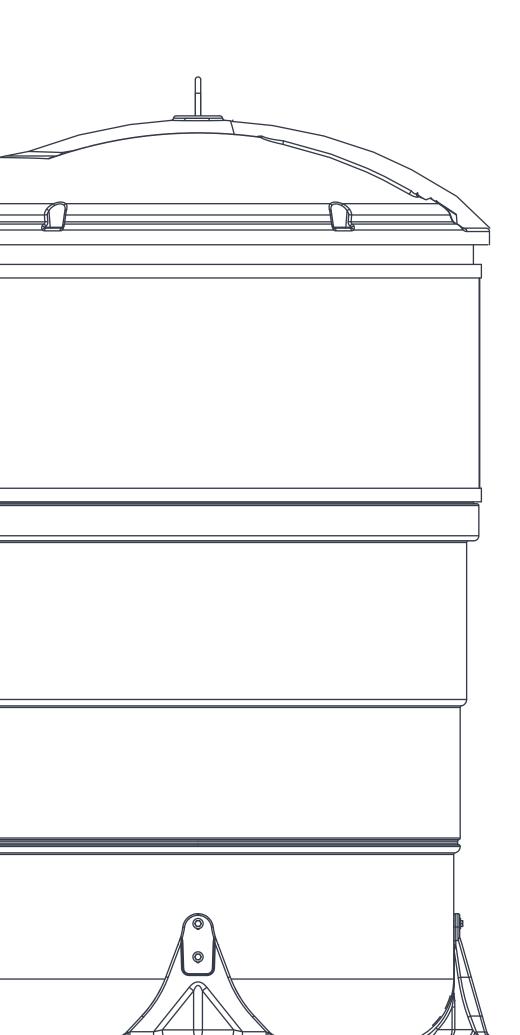
Plus, because Molok<sup>®</sup> containers are emptied by crane, by hand, or by pump, there's no need for long access laneways – a major reason why a Deep Collection™ station requires less than 10% of the surface area needed by forklifted dumpsters.

Collectively, these attributes mean that you can 'plant' Molok® containers practically anywhere you need them — in high-traffic areas, integrated into landscaping, behind obstacles, where space is tight, etc. – for flexibility, convenience, and service that alternatives just can't match.









# Major Benefits

The Molok® Deep Collection™ system delivers many benefits to customers, users, and other stakeholders with the most important being:

## **Cost Savings**

Lower the operating costs and other expenses associated with managing waste — with the savings adding up year after year.

### **Space Savings**

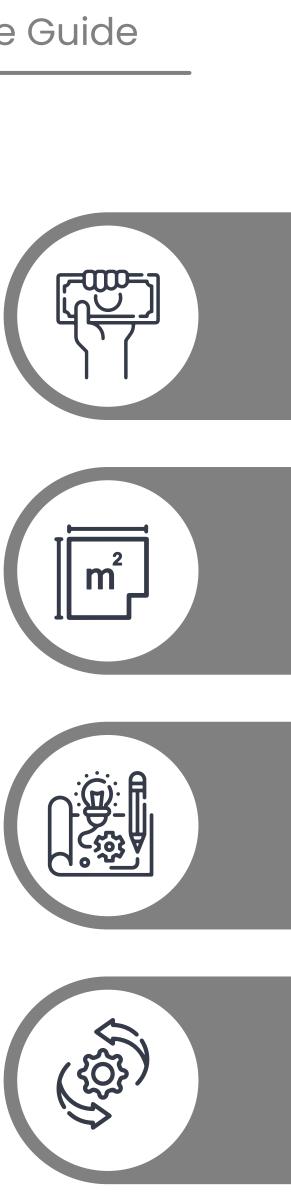
Say goodbye to concrete pads, fenced enclosures, and long access laneways – and say hello to more parking, patios, and possibilities.

#### **Improved Appearance**

Replace eyesores and 'nosesores' with clean, safe, and attractive waste stations that combine form and function like nothing else.

#### **Increased Diversion**

Extend the life of landfills, reduce processing costs (and contamination penalties), and achieve your sustainability goals.



# Molok difference



The majority of the container is underground while the user lid remains at a convenient height accessible to people of all ages and abilities.

A number of attributes collectively make the Molok<sup>®</sup> Deep Collection<sup>™</sup> system unique in the world of waste management and collection.



The vertical well naturally compacts non-liquid waste, for much higher storage density than surface bins.



Molok<sup>®</sup> containers don't require dedicated concrete pads, fenced enclosures, or long access laneways.



Molok<sup>®</sup> containers are accepted and endorsed by CPTED and are fire and explosion-resistant.



Underground storage keeps waste cool, newer waste caps older waste, and the sealed lid prevents odor escape.



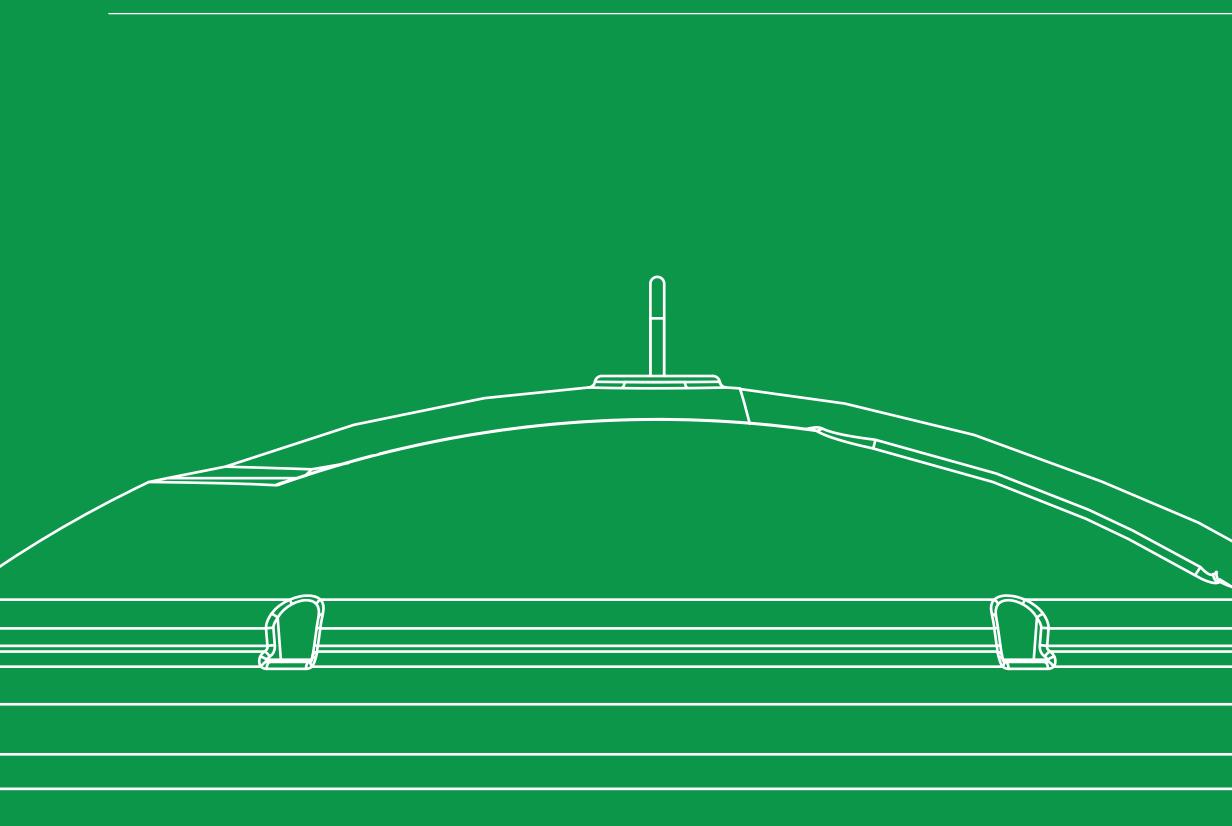
Waste is never emptied through the user lid, which keeps the user lid and visible surfaces clean.



The seamless, leak-proof HDPE design and semi-underground installation keeps containers functioning for Multi-Decade Durability.



Make your Molok<sup>®</sup> units your own, with a wide range of signage and framing options – including custom composite framing



### Product and Service Guide

# **Products**



## Products details: Containers

Our lineup includes general-purpose waste containers and stream-specific configurations, and provides capacity options from 500 to 5,000 liters (0.65 to 6.5 cubic yards).

Manufactured in a custom-built facility at our headquarters, the durable main well of each Molok® container is made of high-density polyethylene (HDPE) and is rotationally molded to ensure a seamless, leakproof, one-piece construction.

A single M-5000 can replace nearly 14 360 litre carts



# M - 5000

Our highest-capacity model, the M-5000 is an attractive, space-saving, and cost-effective solution primarily intended for larger-scale commercial, municipal, and mixed-residential facilities.

#### **Specifications**

- Capacity: 5,000 L (6.5 yd3)
- Diameter: 1.7 m (5.5 ft)

#### **Collection Streams**

- Waste
- Recycling

Note: Requires a lifting liner



# M - 3000

The M-3000 is a visually appealing and cost-effective way to free up real estate in commercial, municipal, and mixed residential facilities while increasing cleanliness, safety, and convenience.

#### **Specifications**

- Capacity: 3,000 L (4.0 yd3)
- Diameter: 1.3 <u>m (4.25 ft</u>)

#### **Collection Streams**

- Waste
- Recycling

Note: Requires a lifting liner

# M - 1300

The M-1300 is well-suited to parks, playgrounds, and athletic fields, where its low-profile design, attractive appearance, and effective odor control allow waste stations to be installed alongside amenities.

#### **Specifications**

- Capacity: 1,300 L (1.7 yd3)
- Diameter: 0.9 m (2.9 ft)

#### **Collection Streams**

- Waste
- Recycling

Note: Requires a lifting liner

\*with standard lid





# M-CityScape

With a sleek, elliptical shape that looks great in any setting, the M-CityScape is an attractive and functional way to keep downtown cores, city streets, pedestrian promenades, paths, parks – even golf courses – neat and tidy.

#### **Specifications**

- Capacity: 500 L (0.65 yd3)
  Diameter:(widest): 0.85 m (2' 9 ½")

#### **Collection Streams**

- Waste
- Recycling

Note: An above ground model (CityScape Surface) is also available for locations where excavation isn't possible

# **M-Organics**

The M-Organics equips the M-1300 (shown) or M-3000 with a hard-sided lifting container and 50-L liquid collection reservoir to conveniently and hygienically meet the organics collection needs of restaurants, residential units, and other facilities.

#### **Specifications**

- Capacity (M-1300): 800 L (1.0 yd3)\*
  Capacity (M-3000): 1.88 L (2.4 yd3)\*

#### **Collection Streams**

• Organics

Note: The M-3000 configuration is intended only for lighter organics (e.g., leaves, compostable paper waste)



## M-Grease

The M-Grease is a specially designed M-1300 container that combines aesthetics, commercial capacity, and a highly efficient grease liquefying system to provide restaurants with an attractive and safe way to contain used, strained cooking oil.

#### **Specifications**

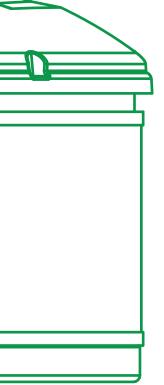
- Capacity: 800 L (1.0 yd3)
- Diameter: 0.9 m (2' 113/8")

#### **Collection Streams**

• Grease

Note: Requires a 120-volt AC electrical supply





# Products details: Lifting Liners

The crane-lifted container models (M-5000, M-3000, M-1300, M-Organics) use waste type-specific lifting liners to contain the waste as it's raised out of the well to be deposited safely into the collection vehicle's hopper.

Molok<sup>®</sup> lifting liners are certified with a safe working load (SWL), tested according to ISO 21898-standard for flexible intermediate bulk containers. To contribute to safe operation, each Molok<sup>®</sup> lifting liner is tagged with the SWL and ISO designator.

99% of units sold by Molok North America are still in service today

## Standard Lifting Bag

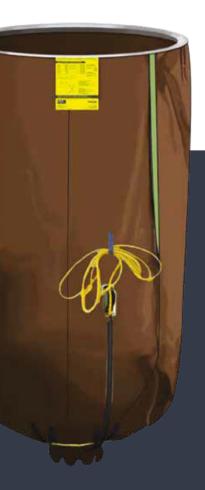
Our standard lifting bag uses a double-layer of woven polypropylene to ensure a long functional lifetime.

The inner liner is designed to protect the outer lifting bag from any sharp objects in the waste or recyclable material, while the outer lifting bag is designed to bear the weight of the waste or recyclable material.

#### Safe Working Load (SWL)

- M-5000: 2,000 kg\*
- M-3000: 1,250 kg
- M-1300: 1,000 kg

\*The M-5000 lifting quick system is engineered to , 1,250 kg



#### Waste Types

- Glass
- Plastic
- Metal
- Cardboard
- Paper

## Semi-Hard Lifting Bag



Our semi-hard lifting bag combines a double layer of woven polypropylene above a waterproof liquid reservoir engineered out of durable HDPE, aluminum, and stainless steel.

As in the Standard Lifting Bag, the inner liner protects the outer lifting bag, which bears the weight of the contents.

#### Safe Working Load (SWL)

- M-5000: 2,000 kg\*
- M-3000: 1,250 kg
- M-1300: 1,000 kg \*The M-5000 lifting quick system is engineered to 1,250 kg

#### Waste Types

• Waste with large volumes of unseparated organics



## Hard-Sided Lifting Container



Used in the M-Organics configuration, the hard-sided lifting container is engineered out of durable plastic, aluminum, and stainless steel.

A liquid collection reservoir at the container's base is emptied at the same time as the waste, using a rope-controlled latch for safe waste collection.

Safe Working Load (SWL)	Waste Typ
• M-1300 400 kg	• Heavy or

- Des
- Heavy organics
- Mix of light and heavy organics

• M-3000: 1,000 kg

- Light organics
- Mix of light and heavy organics





Within Canada, crane-lifted collection is available and competitively priced in practically every municipality with a population greater than 50,000







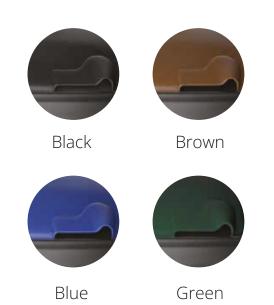
## Products details:

Lids

The main well of the M-5000, M-3000, M-1300, and M-Organics models\* is topped with a lid designed to be safe and secure, yet easy to use. Three main lid types are available, to meet the specific needs of each installation.

\*The M-CityScape lid is integrated into the unit's main body; the M-Grease uses a standard lid with a locked-out user lid







## **Standard Lid**

Our standard lid is constructed of durable plastic and aluminum, and can be secured with an electronic lock or a customer-supplied padlock.

The sturdy, lightweight user lid (available in green, brown, blue, and black) stays firmly closed when not in use, but is easy to open. The hole under the user lid can be a full opening (standard), a variation of any custom size smaller than the opening (e.g., limit to 10" in public areas to prevent illegal dumping), or can be a slot (e.g., for cardboard). In all lid sizes, the main lid can be fully hinged, for convenient use with a cart tipper. The standard lid can also be equipped with our TACtile Touchless Access Control accessory for hands-free use via a motion sensor (TACtile TM Public) or card/fob reader (TACtile TM Secure).

#### Models

- M-5000
- M-3000
- M-1300
- M-Organics



# **Bear-Resistant Lid**

This powder-coated steel lid is certified by the British Columbia Conservation Foundation and uses a finger-latched lid that closes by gravity.

#### Models

- M-5000
- M-3000
- M-1300
- M-Organics

Note: the user door in the M-5000 version is available in personal and commercial sizes.



## **Clothes Collection Lid**

This special-purpose lid makes it easy for users to donate clothes and includes a hinged intermediate compartment that prevents entry and theft.

Models

• M-5000









# **Products details:** Framing signage

Thanks to a wide variety of framing options – including a range of colors and materials, plus support for customizable composite framing – available for all our container models, managing waste has never looked so good!

But looks aren't everything, so our framing is secured at the top and bottom by decorative stainless steel bands to ensure a long functional lifetime without compromising on aesthetic appeal.



## Sleek, modern styling

This sleek, modern framing option use a graffiti resitant aluminum composite sheet available in an array of standard colors, with custom colors available upon request.



## Enhance your look with customizable framing

Composite provide limitless possibilities for artistic expression, corporate branding, or blending into surroundings.

Choose from a collection of standard colors and designs, or personalize your containers with custom graphics.

Swapping composite framing is straightforward, thanks to the easy-mount design and 'open canvas' graphic capabilities of the aluminum substrate.





# Composite Framing Options







Standard











Premium



#### Custom

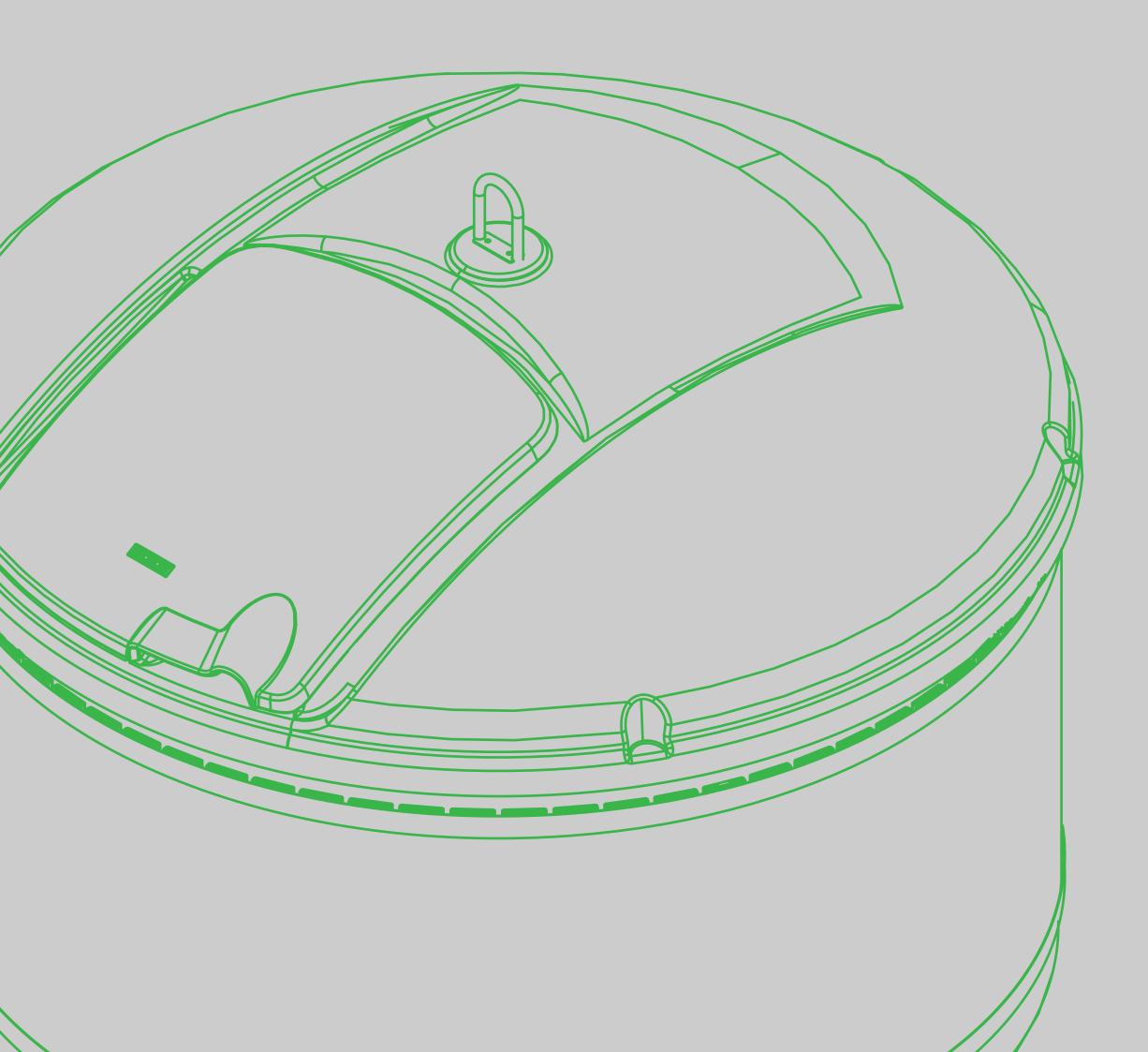








All containers have designator signage available in English, French, or Spanish to indicate use (e.g., Waste, Recyclables, Cardboard, Organics, Grease, Clothing)



## Product and Service Guide

# **Services**





We offer a number of services to help your Molok<sup>®</sup> Deep Collection<sup>™</sup> containers look great – and function safely and correctly – for years to come.



To maintain the attractive appearance of your Molok® containers, to help to ensure their safe operation, and to extend their functional lifetime, we recommend a thorough cleaning at least once a year. We are continually onboarding partners who can provide:

• Exterior Molok<sup>®</sup> Container Cleaning: Freshens the exterior surfaces (e.g., framing, lid) of your Molok<sup>®</sup> containers to keep them looking their best; includes inspection of exterior components\*

• Full Molok® Container Cleaning: Complete cleaning and disinfection of both the interior and exterior of your containers e.g., well, framing, lid, and lifting liner (when possible) – including removal of any solid waste from the well and vacuum pumping any residual liquid; includes inspection of interior and exterior components\*

\*If any worn components are detected, the cleaning provider will advise if repairs are required or can be deferred.

Contact us, if you need any of our services



# **Upgrades**/Retrofits

Molok<sup>®</sup> containers are built to last, but the 'downside' of such reliability is that your existing containers don't have the lastest tech or could benefit from a makeover.

Fortunately, many Molok<sup>®</sup> components and accessories can be upgraded on site, providing a convenient and cost-effective way to update the look and functionality of your Deep Collection™ containers.

From a framing replacement to the addition of a smart accessory like our e-lock Touchless Access Control system, our experts are here to help you take advantage of the latest and greatest product advancements.







## Collection

Through our years of operation, we have built strong collection partnerships throughout with haulers throughout North America, and we are continually working with them to learn from each other and contribute to a great customer experience.

Additionally, we maintain a list of recommended collection partners who have completed our hauler training and the regions where these services are available.

We also provide waste collection services in a number of markets, through our Deep Collection by Molok<sup>®</sup> business.





Should the need arise, practically every component of your Molok® Deep Collection<sup>™</sup> containers can be repaired or replaced, as needed.

## **Collection Partner Training**

To help our collection partners to safely and efficiently empty your containers, we offer both in-class and in-field training on best practices. Haulers who successfully complete our training join our list of recommended haulers.

Note that this training is specific to Molok<sup>®</sup> Deep Collection<sup>™</sup> containers and is not a substitute for training on collection in general, crane operation, etc.

## Installation

While we do not perform installations, we maintain a list of recommended installers who have completed our education and training program. Please reach out for more details.

## Contact us, if you need any of our services





# It's Never Too Early (or Too Late) to Make it a Molok<sup>®</sup>

### Please reach out to learn more

## **Breaking ground?**

The best time to introduce the Molok<sup>®</sup> Deep Collection<sup>™</sup> system is during design. Doing so opens up a world of possibilities by freeing you from the restrictions – and wasted real estate – of legacy approaches.

To make the design and building process as efficient and effective as possible, we have a number of resources available for architects, including:

- CAD files
- Engineered drawings
- Installation guidance



## Looking for a change?

It's never too late to introduce the Molok<sup>®</sup> Deep Collection<sup>™</sup> system.

Our team can work with you to determine which containers and configurations are best suited to your waste profile, and can provide informed guidance on the best placement options.





# Planning Your Molok® Waste Station

Each facility or location has its own waste management needs, and it can be intimidating to plan/design a waste station if you haven't done so before fortunately, the general process is quite straightforward.



## Understand your waste profile and stream/separation requirements

First, it's essential to understand how your waste has to be separated to comply with local/regional processing and disposal requirements.

Some of the most common streams we encounter are garbage, mixed recyclables (e.g., glass and plastic containers), cardboard, and organics. Of course, restaurants and other facilities with food services might also have a grease stream, and in some cases it makes sense to distinguish between types of organics (e.g., heavier food waste versus lighter leaves, brush, and grass clippings).

## Assess the volume of each stream

If you're looking to replace existing carts and dumpsters, then you probably already know how much of each waste stream your facility produces in a given period of time (e.g., per week).

If you're designing a waste station for a new facility, or for an existing facility undergoing a change that will impact its waste profile (e.g., renovations, expansion, change of tenants, etc.), then we can help you estimate your stream volumes based upon our extensive experience.

**Select your** containers and configurations

Two major factors that determine which containers and configurations will work best for your needs are capacity and collection frequency: more capacity means less frequent collections.

At the same time, you should account for the natural compaction that occurs within a Molok® container, the result of which is more weight of material per cubic volume. For example, a garbage mix inside a Molok<sup>®</sup> container can be 1.5 to 2 times more dense than in a conventional surface container, recyclables and organics are each often 1.25 times more dense, and cardboard can reach 3 times the density it would have in a surface bin.

After accounting for compaction effects and collection frequency, you're ready to select your lifting bag (where applicable) and containers:

Waste with large volumes of unseparated organics requires the Semi-Hard Lifting Bag, which is available for either the M-5000 or M-3000.

• Glass, plastic, metal, cardboard, and paper streams can use the Standard Lifting bag, which can be used with the M-5000, M-3000, or M-1300.

• Grease requires the M-Grease.

• Heavier organics (e.g., food waste) should use the smaller M-Organics, while lighter organics (e.g., leaves, grass clippings, compostable paper) can use the larger M-Organics container if volumes are sufficient.



## **Placement Considerations**

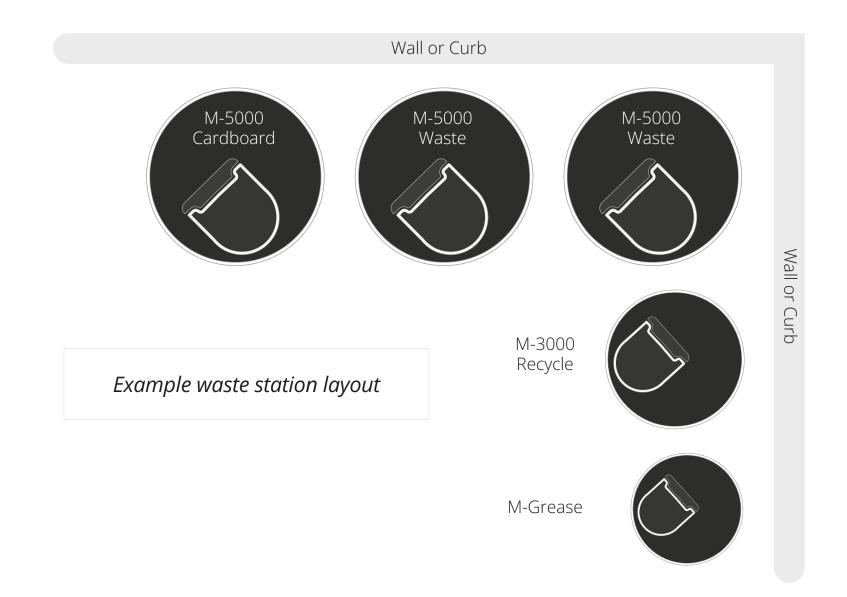
#### Molok<sup>®</sup> containers offer tremendous placement flexibility, subject to the following requirements and recommendations:

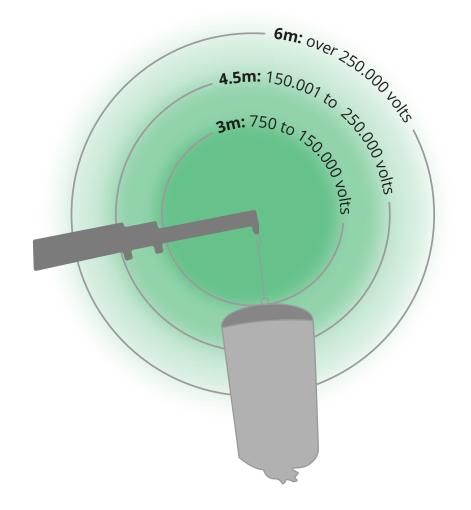
• All Molok<sup>®</sup> containers must be a minimum of 300 mm (1 foot) from any wall or other structure.

• It is recommended that Molok<sup>®</sup> containers be approximately 300 mm (1 foot) from each other. • All Molok<sup>®</sup> containers must be located no more than 7.0 meters (23 feet) from where the collection truck will access them.

• The area above Molok® containers must be free of any overhead obstacles, including trees, electrical lines, lighting.

• There must not be any underground utilities or services within 300mm (1 foot) of Molok®containers.





As the waste is collected, the reusable bag and lifting arm must at all times be a safe distance from nearby electrical sources (e.g., overhead wires, lights, etc.).

The diagram above shows the safe distances by voltage:

- 750 to 150,000 volts must be at least 3 meters away;
- 150,001 to 250,000 volts must be at least 4.5 meters away; and
- Over 250,000 volts must be at least 6 meters away.

Please note that all collection-related considerations should meet regional requirements. We recommend consulting with your local waste collection companies on specific measurements and requirements.

# Frequently Asked Questions (FAOs)

We want to make sure you have all the information you need to make an informed choice about your waste management solution – in that spirit, here are the most frequent questions fielded by our team.

### What's a realistic ROI for using Molok<sup>®</sup> containers?

Retrofits that introduce Molok<sup>®</sup> containers generally will deliver a return on investment within 24 to 36 months, primarily through lower operating costs due to increased capacity and decreased collection requirements. Molok® containers incorporated into new builds effectively pay for themselves immediately by enabling better use of valuable real estate and by avoiding capital expenses required by legacy approaches.

Note: Our product experts are happy to work with you to develop a business case unique to your situation and waste management needs.

### What facilities/locations are ideal for Molok<sup>®</sup> containers?

Molok<sup>®</sup> containers are well-suited to facilities/locations that have steady supplies of waste, including:

- Shopping malls, outdoor plazas, strip malls
- Multi-residential properties
- Restaurants (sit down, quick service, cafés)
- Hotels and motels
- Entertainment/sports venues
- Business/industrial parks and campuses
- Education institutions (schools, colleges, universities)
- Parks, paths, natural spaces, and urban areas

#### **Do Molok® containers** count as "waste enclosures"?

Some municipalities require certain facilities to maintain "waste enclosures" or "waste rooms." While regulations vary, many such regions have come to acknowledge that Molok® containers satisfy their requirements

Note: We can help you understand and interpret your requirements

#### **How do Molok<sup>®</sup>** containers save space?

### What makes Molok<sup>®</sup> containers safe?

Molok<sup>®</sup> containers don't require the long approach paths/lanes needed for front-loaded/forklifted waste receptacles (including semi-underground products). Plus, higher capacity and natural compaction contribute to an even lower footprint – in many cases, a Molok® waste station requires only 10% of the total surface area consumed by dumpsters/carts.

In addition to their superior cleanliness, several other factors make Molok<sup>®</sup> containers safer than alternatives periods.

• Due to their low height and round profile (e.g., difficult to hide behind), and their placement flexibility (e.g., because they're clean, they don't need to be hidden behind buildings or in dark alcoves), Molok<sup>®</sup> containers conform to the principles of Crime Prevention Through Environmental Design (CPTED).

• The emptying process doesn't require the collection partner to touch waste.

• During collection, the well is protected by the above ground portion of the container, which exceeds the safe railing height of 900mm as prescribed by the most building codes – alternative waste containers leave dangerous exposed pits.

 Molok<sup>®</sup> containers have also been validated as fireand explosion-resistant in extensive testing.

#### **How do Molok<sup>®</sup>** containers reduce waste management costs?

The Molok<sup>®</sup> Deep Collection<sup>™</sup> system's higher capacity and odor control mean less frequent collections; at the same time, many 'hidden' operational costs are also reduced (e.g., pest control, enclosure repairs, cleaning, employee time, HVAC for conditioned rooms)

#### **Ready to get started**, or simply want to learn more?

With thousands of containers planted and countless satisfied users, we're North America's leader in semi-underground waste containment solutions.

Our unmatched experience means that we've pretty much seen it all – and we're happy to share our knowledge and insights as you search for the solution that best meets your needs.

Please reach out. Our experts can:

- Answer your questions
- Help you explore the possibilities
- Share real-world customer examples
- Assist with building a business case
- And much more!

Have a question that isn't answered here? Please visit our website or feel free to reach out to us directly.

https://molokna.com/



# **THE FUTURE**

# **OF WASTE COLLECTION — TODAY.**

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