



An MHF Holdings Company



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WHO WE ARE

MHF Packaging Solutions is a leading provider of flexible and rigid packaging products for a wide range of industrial and environmental applications. Our products are used for hazardous and non-hazardous waste, materials and byproducts.

All of our products are expertly designed and carefully crafted to ensure complete safety and reliability. They are fully compliant with applicable regulations and industry standards.

The products detailed in this catalog are used for shipping, storage or disposal of virtually any type of material -- including bulk solids, bulk liquids, debris and cargo.

For a fast price quote, please call us or submit a request form electronically at: <http://www.mhfpackagingsolutions.com>.

*Whatever your packaging and containment needs,
we want to be your #1 supplier.*

ABOUT MHF HOLDINGS COMPANY

MHF Holdings Company is your complete logistics provider, offering an array of logistics, packaging, and transportation solutions. The company is comprised of five complementary business units serving the total logistics needs of the general commodities market, nuclear, environmental, mining, metals, chemical, and petrochemical industries. Our innovative, project-specific solutions include private, high-capacity equipment; patented stock and custom-made flexible and durable packaging; multi-modal transportation options; warehousing; and supply chain management. Founded in 1994 to offer rail-centric solutions to clients with high-volume or sensitive shipping demands, MHF continues to diversify and expand to meet our clients' ever-changing needs with integrated, vertical services.

For more information, please visit www.mhfholdingscompany.com.

877.452.9300 | www.mhfpackagingsolutions.com



Notes

OUR QUALITY COMMITMENT

We stand by every packaging and containment product we sell.

Our products meet or exceed all regulations and industry standards.

Our manufacturing process includes strict engineering protocols and rigorous testing. Plus, we routinely survey our clients to gather feedback on our products and then incorporate those real-life experiences into product design and enhancements.

*Whatever your packaging and containment needs,
we want to be your #1 supplier.*

MHF was able to convert several waste streams from truck to rail without impacting schedule or having to repackage the waste. They came up with this unique cargo container over-pack system that could be shipped by rail. MHF reduced our shipping costs by 49 percent over the methods we were using. In fact, the cost savings paid for our rail upgrades on the project, which opened the door for future waste to be shipped by rail. They are an extremely customer-oriented company whose sole purpose is to reduce your shipping costs, without impacting quality or safety.

Margaret (Peggy) Loop
Environmental Engineer III
West Valley Nuclear Services Co.

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CUSTOMIZED SOLUTIONS

In addition to the products in this catalog, we can customize a packaging or containment solution to fit your specific needs.

Want to package hazardous materials at a remote location? We can build a temporary packaging system for use on site, anywhere in the world.

Have materials that are unusually shaped or require a specific package density? We can manufacture materials to your exact specifications.

Require packaging fabricated from metal, textile or fiberboard? We can do it.

And much more.

Please contact us to discuss your customized packaging or containment requirements.

MHF was able to quickly provide intermodal containers and railcars to ship mixed wastes to EnergySolutions. We were under pressure from Ohio EPA to have the waste removed from our site or suffer penalties. MHF and its project people were able to have the containers to us, pass through our inspection process and get the waste off the site. It was the first time we used intermodals to perform work. MHF made this activity unproblematic and cost-effective.

Jyh-Dong (JD) Chiou
Project Director, Soil and Disposal Facility
Fluor Daniel Fernald

TARPAULINS

MHF-PS Tarps are custom-manufactured utilizing quality engineering and the latest technology in high-strength, yet lightweight fabrics. Reinforced hems and industrial-strength grommets are standard features of MHF-PS Tarps.

Typical Applications

- Roll-off containers
- Dump trailers
- Landfill covers

Features and Advantages

- High-strength mesh options
- Vinyl alternatives
- Canvas
- High-heat fabrics
- Flame-retardant materials
- Custom sizes welcome



Tarp Bungees/
Accessories



Landfill Covers



Raincap Covers



Railcar Top Cover and Liner Products

Item #	Size	Thickness	Closure
Top Cover			
10-TC4810	48'	18 mil	Rope
10-TC5010	50'	18 mil	Rope
10-TC5310	53'	18 mil	Rope
10-TC6510	65'	18 mil	Rope
Super Load Wrapper™			
10-SLW4910	48'	18 mil	Rope
10-SLW5010	50'	18 mil	Rope
10-SLW5310	53'	18 mil	Rope
10-SLW6510	65'	18 mil	Rope
Load Wrapper			
10-L4810	48'	12 mil	Bungee
10-L5010	50'	12 mil	Bungee
10-L5310	53'	12 mil	Bungee
10-L6510	65'	12 mil	Bungee
Lightweight Liner			
10-LV-4810	48'	8 mil	Bungee
10-LV-5010	50'	8 mil	Bungee
10-LV-5310	53'	8 mil	Bungee
10-LV-6510	65'	8 mil	Bungee
Zipper Mid-Weight Liner			
10-ZIP-4810	48'	16 mil	Zipper
10-ZIP-5310	53'	16 mil	Zipper

FEATURE PRODUCT — CUSTOM TARPS



Custom Tarping/Equipment Wrap Systems

Our unique system and wrapping materials allow you to protect and package your over-sized equipment. These systems can be fabricated with velcro, zipper, rope or tie closures utilizing different types of cover material depending on the application.



FEATURE PRODUCT - CUSTOM PACKAGES

Every project has its own packaging specifications that may be different from “off-the-shelf” products. MHF Packaging Solutions can look at your specific needs, whether it’s a DOT- regulated material or consumer product, and our professional team can design and manufacture the right package.



RAILCAR TOP COVERS AND LINERS

Super Load Wrapper

A form-fitted heavy-duty liner for radiological and hazardous waste materials. Meets the USDOT definition of IP-1.



Gondola Top Cover

Easy-to-install top cover, custom-fitted to any gondola railcar.



DISPOSABLE CONTAINER LINERS

Roll-offs, End Dumps and Intermodals

MHF-PS Liners are disposable polyethylene container liners used in the transportation of bulk solids and liquids. MHF-PS Liners can be utilized in roll-off containers, end dump trailers, intermodals and rail gondolas.

Features and Advantages

- Easy installation
- Form-fitted design
- Excellent leak protection
- Reduced washout costs
- Odor and freeze control
- Extended container life
- Helps meet regulations
- Various liner sizes and thicknesses available
- High quality, American-made product
- Huge inventory to ensure quick delivery
- Custom sizes welcomed



LIFT-LINER™ SYSTEM

Up to 24,000 lbs. packaging

What is a Lift Liner™?

- A soft-sided package
- Interim packaging solution
- Efficient loading/unloading
- No decontamination



CAUTION: NOT ALL PACKAGING SYSTEMS ARE THE SAME

When You're Moving Sensitive Materials,
It Pays to Look for Proven Safety and Reliability

Are all soft-sided packaging systems the same?

In a word, no.

Consider, for example, our patented Lift Liners™. They have earned their reputation for unsurpassed quality and reliability through the experience of our clients around the world. For more than a decade, our diverse clientele have used our Lift Liners™ to transport low-level radioactive waste and other types of hazardous materials.

Our clients — utilities, government agencies and others — rely on our Lift Liners™ because of their reliability and dependability in a wide range of applications. And because our Lift Liners™ are patented, their key design elements cannot be replicated.

Indeed, our Lift Liners™ are uniquely different than any soft-sided packaging that has come on the market in recent years.



Our enhanced tie system ensures that your package is closed and secured for the entire duration of its shipment.

LINERS/COVERS/TARPS

LINERS AND ACCESSORIES

Item #	Product Description
Liners	
LCY03C	3 mil, Low Density Polyethylene, Clear Cubic Yard Liner
LCY06B	6 mil, Low Density Polyethylene, Black Cubic Yard Liner
LCY08B	8 mil, Low Density Polyethylene, Black Cubic Yard Liner
LCY12PVC	12 mil, Heavy-Duty PVC Clear Cubic Yard Liner
Accessories	
HPAPOC	3 mil, Clear Polyethylene Outdoor Cubic Yard Cover
HPASB	Woven Polypropylene Bulk Sludge Bag
HPACC	Corrugated Cubic Yard Cap
PAN4W	New Pallet with 4-Way Entry





**37 Cubic Yard
Cargo
Type A/7A**



**25.4 Cubic Yard
Type A/7A
Intermodals**



**25.4 Cubic Yard
Intermodals**



**20 and 40 Foot
"Strong-Tight"
Cargo Container**



Our patented lift system includes independent straps that surround the load for maximum safety.

For example, our Lift Liner™ has 23 independent closure ties on the package. That means that the package will stay closed during handling and transport. Other manufacturers use one dependent zipper, and if any part of that zipper becomes damaged or the zipper's teeth do not hold during handling and transportation, you might be facing the unpleasant situation of spillage or noncompliance.

Another concern for safety could be the lifting and rigging of the package itself. Our Lift Liner™ has 18 independent lifting straps that run completely around the package, sewn in as an integral element of the lift system.

The system exceeds the requirements of STD1090 (the U.S. Department of Energy's lift and rigging standard).

There's a reason our Lift Liners™ are certified by the International Union of Operating Engineers, US Army Corps of Engineers and the U.S. Department of Energy, among others:

Simply put, our Lift Liners™ are the best on the market.



Lift Liner™ System Products

Item #	Name	Size	Rating	Closure
11-LL7224	Lift Liner	48 CF	IPI or IP2	Tie
11-LL7248	Lift Liner	96 CF	IPI or IP2	Tie
11-LL9666	Lift Liner	242 CF	IPI or IP2	Tie
11-LL9688	Lift Liner	264 CF	IPI or IP2	Tie
Optional Inner Liners (Geo Textile)				
11-IL7224-Geo	Geo Textile	48 CF		Fold
11-IL7248-Geo	Geo Textile	96 CF		Fold
11-IL9666-Geo	Geo Textile	242 CF		Fold
11-IL9688-Geo	Geo Textile	264 CF		Fold
Optional Inner Liners (Poly)				
11-IL9666-4EB	6 mil poly	242 CF		Twist/tie
11-IL9688-4EB	6 mil poly	264 CF		Twist/tie

Custom sizes, liners and closure systems available.

ROLL-OFFS/CARGO CONTAINERS

Our containers are designed to be transported by truck, rail or ship — they're tough and can stand up to any shipping method.

All containers are fully certified by:

- The American Bureau of Shipping (marine)
- The American Association of Railroads (rail)
- The U.S. Department of Transportation (truck and other modes)

Because of the multiple certifications, our containers can be used for seamless, intermodal shipping (rail, truck and/or marine), which means you can avoid unnecessary loading and reloading.

Highlights

- 25 Cubic Yard Bulk Intermodal — our most popular container. Depending on the type of materials being transported, a variety of lid designs and configurations are available.
- “Seavan” Cargo Container — 10’ and 20’ designs, widely used in the nuclear industry for low-level radioactive waste. These containers are similar to ones you might see on ocean-crossing vessels. Also available in side-loading door systems.
- Shielded Type-A Container System — designed for radioactive waste and other hazardous materials, this top-loading, lead-lined container may be transported securely on rail cars, trucks and ships.

All containers are available through direct purchase, lease or lease-to-purchase.



HAZ-WASTE ENCAPSULATION BAGS

Roll-offs, End Dumps, Rail Gondolas and Luggage Boxes

MHF-PS Drawstring Liners

Our premium polyethylene container liners utilize a unique drawstring design to keep the liner in place, even under extreme conditions. After loading, the drawstring also provides a way to close off the liner and encapsulate the waste stream.

Features and Advantages

- Inexpensive option to costly bladder bags
- Helps meet regulations in “Dust Free” landfills
- Easy installation
- Excellent leak protection
- Reduced washout costs
- Odor and freeze control
- Extended container life
- Drawstring design to keep the liner in place
- Provides superior tear and burst resistance
- Various liner sizes and thicknesses available
- Huge inventory to ensure quick delivery
- Custom sizes available



“Dust Free” Disposal

HAZARDOUS/NON-HAZARDOUS WASTE PACKAGING MATERIALS

The Flexi-drum™ 1.0 & 5.0 Cubic Yard Packages

One Cubic Yard Package

- 2000 lbs. capacity
- Tare weight 17 lbs.
- Empty size 2 cubic foot
- Loaded size 36” x 36” x 40” (L x W x H)
- Fabric is woven and coated polypropylene with 6 mil poly liner
- UN Certified 11HH/Y/0805/+AA4583/1814/915



Five Cubic Yard Package

- Five cubic yard volume
- 10,000 lbs. capacity
- Tare weight 48 lbs.
- Empty size 5 cubic foot
- Loaded size 8’ x 4’ x 4’ (L x W x H)
- Fabric is woven and coated polypropylene
- Optional 6 mil liner can be used for asbestos waste containment
- Sift-proof certification meets a variety of contaminants, hazardous materials and waste products



The MHF Packaging Solutions self-standing five-yard package is an inexpensive package that we utilized on one of our environmental projects. MHF was able to quickly ship the package to our site for our needs, and the package worked very well. It was easy to use and allowed us to complete our task quickly and without any issues.

Pete Long

Account Executive

The Environmental Quality Company



WastePack™ 1.0 & 1.6 Cubic Yard Bags

- DOT/UN Approved X Rating for Packing Groups I, II and III
- Woven polypropylene construction with heavy-duty hardwall inserts
- 3000 lbs. capacity



Item #	Components Include:	DOT/UN Specifications*	Dimensions (inches)
WPI06	Bag, Liner, Inserts	11HH2/X/USA/2501/1360	36 x 36 x 36
WPI66	Bag, Liner, Inserts	11HH2/Y/USA/2501/1360	42 x 42 x 42

WasteSack™ Cubic Yard Bag

- DOT/UN Approved Y Rating for Packing Groups II and III
- Woven polypropylene construction
- 2200 lbs. capacity



Item #	Components Include:	DOT/UN Specifications*	Dimensions (inches)
WS03	Bag, Liner	13H3/Y/RP/1800/1000	36 x 36 x 36

DrumPack™ Collapsible Container

- DOT/UN Approved Y Rating for Packing Groups II and III
- Woven polypropylene construction with hardwall inserts
- 800 and 255 lbs. capacity



Item #	Components Include:	DOT/UN Specifications*	Dimensions (inches)
DP5503	Bag, Liner, Inserts	13H4/Y/USA/0/364	20 x 20 x 35
DP3003	Bag, Liner, Inserts	13H4/Y/USA/0/116	20 x 20 x 20

* UN specifications subject to change.

PORTABLE STORAGE TANKS

MHF-PS Portable Storage Tanks are collapsible, flexible storage tanks that provide temporary as well as long-term liquid storage.

◆ Water ◆ Oil ◆ Chemicals ◆ Fuel

Typical Applications

- Potable water tanks
- Chemical storage
- Oil storage
- Fuel storage



Sizes*

- 8' W x 5' L x 3' H
- 12' W x 8' L x 3' H
- 22' W x 11' L x 3 1/2' H

Valves

- Fill valve is a 2" threaded valve
- Drain is a 2" unthreaded valve

As a safety precaution, to eliminate the chance of these tanks becoming mobile, we highly recommend that each storage tank be secured with some type of berm system, concrete barrier, or that a depression in the ground is used to hold the bag in place.



Fill Valve



Drain

* Approximate dimensions based on tank when filled



DEWATERING BOX LINERS

Turbo and Standard Box Liners, Self-dumping Hoppers and Sediment Bags
 MHF-PS Filter Bags are form-fitted filter liners utilized in dewatering containers during solid / liquid separation of sludge. Transportation and disposal costs are reduced by minimizing waste streams on site before transfer. MHF-PS Filter Bags are custom-manufactured to fit the various shapes and styles of dewatering containers in use today. After dewatering, retained solids are ready for disposal-eliminating further solidification costs.

Typical Applications

- Industrial sludge
- Cooling tower sludge
- Settling pond sludge
- Paint sludge
- Storm drains, ditches and sump cleaning



Standard Dewatering Box Liner



Open-ended Bread Bag

Features and Advantages

- Eliminates further solidification cost at disposal site
- Cost savings due to reduced volumes
- Various cloth and mesh options customized to fit any dewatering container and most applications
- Disposable



Turbo Dewatering Box Liner



Sediment Bag (Bladder Bag Style)

BulbPack™ Fluorescent Lamp Recycling Boxes and Drums

- Comply with universal waste regulations
- Reduce environmental liability

Item #	Product Description	Capacity
Boxes		
BP948SW	4' Lamp Recycling Box, 9" x 9" x 48"	40 Lamps
BP1248SW	4' Lamp Recycling Box, 12" x 12" x 48"	70 Lamps
BP996SW	8' Lamp Recycling Box, 9" x 9" x 96"	35 Lamps
Drums		
DFN1548H	4' Lamp Recycling Drum, 15" x 48"	85 Lamps
DFN2048H	4' Lamp Recycling Drum, 20" x 48"	110 Lamps
DFN1596H	8' Lamp Recycling Drum, 15" x 96"	85 Lamps



HexPack™ Boxes

- DOT/UN Approved 4G Packaging
- Ideal for labpack applications
- Economical, efficient and easy to set up
- Space saver — ships flat



Item #	Capacity (gallons)	DOT/UN Specifications*	Inside Dims. (inches)	Wt. Capacity (pounds)
HX054G	5	UN4G/Y22.7/S	6.75 x 6.75 x 11.75	50 lbs.
HX104G	10	UN4G/Y45.5/S	8 x 8 x 15.25	100 lbs.
HX154G	15	UN4G/Y54.4/S	8 x 8 x 21.75	120 lbs.
HX204G	20	UN4G/Y61.2/S	10 x 10 x 19.5	135 lbs.
HX304G	30	UN4G/Y79.4/S	11 x 11 x 26.75	175 lbs.
HX404G	40	UN4G/Y104.3/S	11.25 x 11.25 x 29.5	230 lbs.
HX554G	55	UN4G/Y158.7/S	14 x 14 x 24.75	350 lbs.

* UN specifications subject to change.



HazPack™ V Cubic Yard Box

- DOT/UN Approved X Rating for Packing Groups I, II and III
- Heavy-duty five-wall corrugated construction
- 2500 lbs. capacity



Item #	Components Include:	DOT/UN Specifications*	Dimensions (inches)
HP050804	Box, Liner, Nail Kit, Pallet	11G/X/USA/2176/1163	36 x 36 x 36
HP0508	Box, Liner, Nail Kit	11G/X/USA/2176/1163	36 x 36 x 36

HazPack™ III Cubic Yard Box

- DOT/UN Approved X Rating for Packing Groups I, II and III
- Heavy-duty triple-wall corrugated construction
- 2000 lbs. capacity



Item #	Components Include:	DOT/UN Specifications*	Dimensions (inches)
HP030604	Box, Liner, Nail Kit, Pallet	11G/X/USA/1814/481 11G/Y/USA/3401/934	36 x 36 x 36
HP0306	Box, Liner, Nail Kit	11G/X/USA/1814/481 11G/Y/USA/3401/934	36 x 36 x 36

* UN specifications subject to change.

BLADDER BAGS

MHF-PS Bladder Bags

Custom-manufactured to be utilized in roll-off containers, dump trailers, rail gondolas, and lugger boxes to contain specialized dry or wet waste streams. High-strength material options, such as woven polypropylene, woven polyethylene and high-heat fabrics, are available to give our customers the right bag for the job. MHF-PS Bladder Bags are also available with different loading options and inner barrier polyethylene liners to meet job-specific demands.

Typical Applications

- Asbestos
- Sludge waste
- Streams
- Odorous materials
- Powders
- High heat applications
- Grinding dust
- Metal shavings



Double Spout Bag with Vent Feature

Features and Advantages

- Labor and cost savings over smaller waste packaging
- Easy installation
- Reduced worker exposure
- Storage savings
- Increased loading speed
- Air venting features available
- Various loading options



Lugger Box Bag with Vent Feature



EMERGENCY RESPONSE/REMEDATION PACKAGING

SPILL CONTAINMENT

MHF-PS Spill Berms

Manufactured from top-quality industrial fabrics to provide excellent UV and chemical compatibility. Angle brackets ensure rigid sidewall support. Just unfold the berm and insert the angle brackets into the in-wall pockets. It's that simple!

Typical Applications

- Industrial equipment and vehicles
- Tanker trucks
- Pumps
- Storage tanks
- Wash pads



- ◆ E-Z Set-up ◆ Low Cost ◆ Reusable ◆ Portable ◆ Lightweight
- ◆ UV and Chemical Resistant ◆ Quick Turnaround on Custom Sizes
- ◆ Reduces Chance of Costly Clean-ups and Fines

MHF-PS Spill Pans

Durable containment systems for freight vans and intermodal containers. High-quality, chemical-resistant polyethylene provides protection from spills and contaminants. MHF-PS Spill Pans are a great alternative to heavy and expensive steel containment pans.

- Durable
- Economical
- Lightweight
- Chemical resistant
- Custom sizes available



DRUMS

DOT/UN Approved Closed Head Steel Drums



Item #	Capacity (gallons)	DOT/UN Specifications*	Outside Diameter (inches)	Outside Height (inches)	Lid Type	Approx. Tare Weight
New						
DSN55CY	55	1A1/X1.8/300	23.5	34.75	2 Bung	38 Lbs.
DSN30CY	30	1A1/Y1.4/300	19.2	38.75	2 Bung	25 Lbs.
Reconditioned						
DSR55CY	55	1A1/X1.8/300	23.5	34.75	2 Bung	38 Lbs.

DOT/UN Approved Closed Head Plastic Drums



Item #	Capacity (gallons)	DOT/UN Specifications*	Outside Diameter (inches)	Outside Height (inches)	Lid Type	Approx. Tare Weight
New						
DPN55CY	55	1H1/Y1.8/100	23.75	35	2 Bung	23 Lbs.
DPN30CY	30	1H1/Y2.3/100	19.25	29.5	2 Bung	15.5 Lbs.

* UN specifications subject to change.





DOT/UN Approved Open Head Steel Drums

Item #	Capacity (gallons)	DOT/UN Specifications*	Outside Diameter (inches)	Outside Height (inches)	Lid Type	Approx. Tare Weight
New						
DSN55HY	55	1A2/Y1.5/100	23.85	34.8	Ring & Bolt	50 Lbs.
DSN30HY	30	1A2/X150/S	19.6	29	Ring & Bolt	29 Lbs.
Reconditioned						
DSR55HY	55	1A2/Y1.5/100	23.85	34.8	Ring & Bolt	50 Lbs.



DOT/UN Approved Open Head Plastic Drums

Item #	Capacity (gallons)	DOT/UN Specifications*	Outside Diameter (inches)	Outside Height (inches)	Lid Type	Approx. Tare Weight
New						
DPN55HY	55	1H1/Y1.8/100	23.75	35	Lever-lock	23 Lbs.
DPN30HY	30	1H1/Y2.3/100	19.25	29.5	Lever-lock	15.5 Lbs.

* UN specifications subject to change.

DRUMS (Cont.)

DOT/UN Approved Plastic OverPack and Steel Salvage Drums

Item #	Capacity (gallons)	DOT/UN Specifications*	Outside Diam. (inches)	Outside Height (inches)	Lid Type	Approx. Tare Weight
Plastic Salvage Drums						
DPN95HX	95	1H2/X300/S	31	43	Screw-On	47 Lbs.
Steel Salvage Drums						
DSN110HX	110	1A2/Y400/S	31.5	43	Ring & Bolt	102 Lbs.
DSN85HX	85	1A2/X440/S	27.625	39	Ring & Bolt	78 Lbs.



Plastic



Steel

New DOT/UN Approved Plastic and Steel Pails

Item #	Capacity (gallons)	Product Description
DPN05HYSN	5	Open Top Pail with Snap-On Lid
DPN05HYSC	5	Open Top Pail with Screw-On Lid
DPN05CY	5	Closed Top Pail with Spout
DSN05HY	5	Closed Top Steel Pail with Crimp-On Lid
DSN05CY	5	Closed Top Steel Pail with Spout

