

Fiercely Reliable™



**CONTAINERIZED SHIPPING SOLUTIONS** 





### FIERCELY RELIABLE™ SINCE 1921.

Norseman Protective Solutions is one of the largest manufacturers and suppliers of industrial fabric, foam and film protective solutions in North America. We provide customers with sustainable and durable protective solutions designed to improve operating productivity in the most challenging conditions.

#### **GEAR2PERFORM**

We make high-performing protective gear for people, products and environments. Count on Norseman gear to help you accomplish what you've set out to do. Our gear falls into these categories:

- Industrial Fabric Solutions
- Foam Fabrication
- Construction Gear
- Portable Temporary Ducting
- Containerized Shipping Solutions

#### **OUR FIERCELY RELIABLE COMMITMENT**

Norseman has strived to be a company that customers can rely on. Our design and manufacturing teams work alongside customers to understand their projects and working environments and to develop protective solutions that help our customers outwork, outperform and overachieve.

#### MANUFACTURING EXCELLENCE

Norseman operates over 100,000 square feet of quality-controlled manufacturing facilities across North America. We can meet tight delivery requirements and supply gear year-round.

#### FABRIC, FOAM AND FILM EXPERTISE

Our long-term relationships with suppliers across the globe allow us to source superior materials to manufacture our high-performing protective gear.

#### COAST-TO-COAST CUSTOMER ACCESS

Each of our branches and distribution locations has its own unique design capabilities, expertise in engineering and manufacturing, and staff with extensive knowledge of superior industrial fabrics, foams and films. This expertise is complemented by our sales and customer-support presence across Canada and the US, ensuring that every customer has direct access and support from our team.

We are Fiercely Reliable, working side by side with our suppliers, partners and customers for 100 years.

1.800.661.8073

GEAR PERFORM





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# **AGRICULTURAL LINERS**

# **FULL**

### REINFORCED STRENGTH AND DURABILITY.

Transform standard intermodal ocean containers into dry, contaminant-free bulk transportation systems for agricultural products, including grains, malt, barley, soybeans, soymeal and pulse products.

Norseman's Agricultural Full Liners are fabricated using a coated woven Polyethylene (PE) membrane that can withstand intermodal containers' rugged surfaces. Our liners are designed with a built-in bulkhead and full-body welded seams so you can rest assured that they will keep your products free from outside contaminants.

Norseman's Agricultural Container Liners are GEAR2PERFORM.





# **FEATURES**

- Facilitates the loading of bulk agricultural products in intermodal shipping containers.
- Fabricated with durable coated woven PE fabric.
- Full-body no-leak welded seams ensure your products arrive contaminant-free.
- Built-in bulkhead acts as a fourth wall at the door end of the container to hold the product in place.
- Certified by ISO 9001–approved production facility.
- Adjustable straps and connectors make for quick easy installation.
- Lightweight and flexible for easy handling and installation.



## **SIZES**

- Available in standard 20', 40' and 40' high-cube (HC) sizes.
- Custom options available.



### **INSTALL REQUIREMENTS**

- Four steel bracing bars (A500 or A53).
- Norseman recommends a bar 1.66" OD x .125" wall minimum x 94.5" long or equivalent square tubing.





# **AGRICULTURAL LINERS**

# **PARTIAL**

# FOOD-GRADE PROTECTION FOR TRANSPORTING YOUR AGRICULTURAL COMMODITIES.

Transform standard intermodal ocean containers into dry, contaminant-free bulk transportation systems for agricultural products, including grains, malt, barley, soybeans, soymeal and pulse products.

**Norseman's Agricultural Partial Liners** are fabricated using a coated woven Polyethylene (PE) membrane that can withstand intermodal containers' rugged surfaces. Our liners are designed with full-body welded seams so you can rest assured that they will keep your products free from outside contaminants.

Norseman's Agricultural Container Liners are GEAR2PERFORM.





# **FEATURES**

- Added protection for shipping agricultural products in intermodal shipping containers.
- Quickly upgrades your container to food grade.
- Fabricated with durable coated woven polyethylene (PE) fabric.
- Full-body no leak welded seams ensure your products arrive contaminant-free.
- Liner walls are suspended by cable ties attached to roof lashing rings along the length of the container.
- Liners are lightweight and flexible for easy handling and installation.
- Certified by ISO 9001–approved production facility.



### **SIZES**

 Available in standard 20', 40' and 40' high-cube (HC) sizes.



### **INSTALL REQUIREMENTS**

- Requires the use of a bulkhead, which provides the fourth wall.
- Can be used in conjunction with the patented, engineered Norseman Bracing System.









# **CHEMICAL & RESIN FULL PE LINERS**

# ADDED PROTECTION FOR YOUR CHEMICAL AND RESIN PRODUCTS.

Convert standard intermodal containers into self-contained transport systems for bulk shipping of granular products such as resins, fertilizers and more.

Norseman's Chemical and Resin Liners are fabricated from either a coated woven Polyethylene (PE) membrane or PE film. Norseman's Full PE Liner is used for shipments with free-flowing granular or powder products. This dry-bulk liner forms a dry, clean and protective barrier between the product and the container interior. It provides a contamination-free bulk transport and storage system for dry-bulk commodities within the food, pharmaceutical, chemical and mineral industries.

Norseman's Chemical and Resin Full PE Liners are GEAR2PERFORM.







## **FEATURES**

- Protect products from contaminants and keep products contained in intermodal shipping containers.
- Fabricated with a coated woven polyenthylene (PE) fabric.
- Full-body no leak welded seams reduce contamination risk.
- Liners are lightweight and flexible for easy handling and installation.
- Certified by ISO 9001–approved production facility.



### **SIZES**

- Available in 20', 40' and 40' high-cube (HC) sizes.
- Custom options available.



### **INSTALL REQUIREMENTS**

- Five steel bracing bars (A500 or A53).
- Norseman recommends a bar 1.66" OD x .125" wall minimum x 94.5" long or equivalent quare tubing.









# **CONTAINMENT LINERS**

### LEAKPROOF PROTECTIVE LINER.

When secure containment is a must, you can count on Norseman's Containment Liners to do the job. Our liners provide a protective barrier between the product and the container, preventing leaks or contaminants from compromising the shipping container.

Norseman's Containment Liners are fabricated with a coated woven Polyethylene (PE) membrane and provide superior protection between the product and the container to accommodate the kinds of things you don't want leaking, such as wet hides or caustic or contaminated materials. Containment Liners also contain spillage from products such as contaminated soil, shredded metal, corroded products and more. Norseman's Containment Liners for 20' and 40' ocean containers are available in three grades, all fabricated with welded seams for leak protection.

#### Norseman's Containment Liners are **GEAR2PERFORM**.



# FEATURES

- A protective barrier between the product and the container to accommodate the kinds of things you don't want leaking.
- Fabricated with a coated woven PE membrane.
- Full-body welded seams reduce your contamination risk.
- Easy handling, allowing for one-person installation.
- Certified by ISO 9001–approved production facility.
- Available in three grades: Tuff, Dura and Max Liner.



### **SIZES**

Available in standard 20' and 40' sizes.



### SECURE CONTAINMENT YOU CAN RELY ON:

### TUFF LINER

- Double-layered floor lined with an additional felt layer for ultimate strength and unsurpassed protection.
- 11 mil floor beneath a 20 mil floor topped with a felt layer to absorb/contain brine and minimize forklift slippage, punctures and tears.
- Total floor thickness, including felt: 51 mil.
- Norseman's elite containment liner.

### **DURA LINER**

- Double-coated floor liner.
- Durable coated 20 mil woven poly floor welded to 12 mil liner walls.
- Compact packaging for reduced freight and storage costs.
- Total floor thickness: 20 mil.
- Norseman's most popular containment liner.

### **MAX LINER**

- Single felt floor liner.
- 20 mil woven poly floor topped with a felt layer to absorb/ contain brine and minimize forklift slippage, punctures and tears.
- Total floor thickness: 40 mil.







# **BULKHEAD SYSTEMS**

# THE COST-EFFECTIVE WAY TO CONTAIN YOUR BULK COMMODITY EXPORTS.

Norseman's Bulkhead Systems are a low-cost, one-time-use disposable product that is necessary during the exportation of bulk commodities such as peas, lentils, soybeans, malt, barley and other grains.

Norseman's corrugated-cardboard bulkheads are cost-effective containment-wall solutions. The bulkhead acts as a fourth wall at the door end of the container to hold the product in place. Lightweight, double-wall corrugated cardboard with scored flaps makes for easy installation. Simply cut the bulkhead to discharge. Our Bulkhead Systems are suitable for loading by conveyor, auger, gravity, and tilt loading equipment.

Norseman's Bulkhead Systems are GEAR2PERFORM.





# FEATURES

- Restrain bulk commodities such as peas, lentils, soybeans, malt, barley and other grains.
- Heavy-duty double-wall corrugated cardboard with scored flaps.
- All corrugated bulkheads are pre-punched to position handles and steel-bar tie placements.
- Multi-brace markings for easy placement of the Norseman Bracing System (NBS).
- Lightweight and cost-effective—can be easily installed by one person.
- For unloading, cut the bulkhead to initiate discharge.
- Custom options available.



### **SIZES**

- Can be used in 20' or 40' ocean containers.
- Custom bracing systems for 53' intermodal domestic containers and trailers available upon request. 60", 72" Height (Custom options available)



### **INSTALL REQUIREMENTS**

 Steel bar 1.66" OD x .125" Wall x 94.5" length or square tube equivalent OR Wood 2x4, 91 5/8" long #2 or better HD stamped







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# **NORSEMAN BRACING SYSTEM**

# PATENTED, 100% RECYCLABLE LOADING SOLUTION.

Norseman's Bracing Systems are used to facilitate the loading of bulk agricultural products in intermodal shipping containers. They can also be used to restrain flexible intermediate bulk containers (FIBCs) or bagged products requiring bracing at the door end.

Norseman's Bracing System is an engineered, patented system that is 100% recyclable with no special disposal conditions. The system includes a cardboard corrugated bulkhead, wood bracing, and restraining caps. It eliminates the need for ties to secure the brace to the bulkhead, as the end/ bracing cap friction fits into the U-channel of the container (ties may be required for tilt loading).

Norseman's Bracing System is GEAR2PERFORM.



# **FEATURES**

- Facilitates the loading of bulk agricultural products in intermodal shipping containers.
- Restrains FIBCs or bagged products requiring bracing at the door end.
- Patented engineered bracing system to restrain cargo within a container.
- Includes a corrugated bulkhead, wood bracing, and restraining caps.
- Wood bracing provides a viable and cost-effective alternative to steel bars.
- Can be used in conjunction with the Norseman Agricultural Partial Liner.
- Easy, one-person installation.
- 100% recyclable.



# **SIZES**

- Can be used in 20' or 40' ocean containers.
- Custom bracing systems for 53' intermodal domestic containers and trailers available upon request.



### **PATENT REGISTRATION**

- USA Patent # 8459916
- Canada Patent # 2684216









# NORDIC DRY DESICCANTS

# PROTECT YOUR CONSIGNMENT WITHOUT **COSTING THE EARTH.**

Protect your containerized goods from moisture damage with our NEW Nordic Dry Desiccants.

With the leak-proof and maximum absorbent design, Nordic Dry Desiccants absorb humidity and prevent condensation in the ocean container so your containerized cargo of shipped goods will be delivered in optimal condition, free from moisture-related issues.

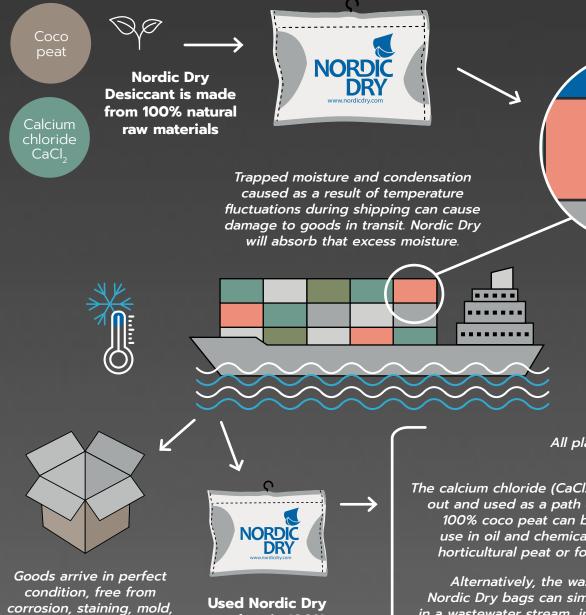
Norseman's Nordic Dry Desiccants are GEAR2PERFORM.

Non toxic. **Eco-friendly.** Sustainable.



# **FEATURES**

- High absorption capacity: Nordic Dry Desiccants contain a mix of calcium chloride (CaCl2) and coco peat as a binding agent that allows for maximum absorption of water molecules.
- Fast absorption rate: Efficient reduction of humidity.
- Leak-proof: Nordic Dry Desiccants packaging is robust and stable.
- Long lasting: The Desiccants will still be working for you more than three months after activation, providing it has not reached saturation point.
- Environmentally-friendly: Unlike many of its competitors, Nordic Dry Desiccants are 100% biodegradable.
- Non toxic: Verified to be 100% non-toxic by the ALS Laboratory Service and specifically free of acrylamide. Approved for use in all transportation of food and agricultural products.
- Available in various sizes ranging from 375g to 2000g.



All plastic parts can be fully recycled.



The calcium chloride (CaCl2) can be washed out and used as a path cleaner, while the 100% coco peat can be washed out for use in oil and chemical absorption, as a horticultural peat or for animal bedding.



Alternatively, the waste contents from Nordic Dry bags can simply be deposited in a wastewater stream, in which the CaCl2 dissolves and the coco peat biodegrades.



For more information on Norseman protective gear, contact your local Sales Representative.



mildew, fungus, caking and

the growth of bacteria.

High performance



product is 100%

recyclable

Sustainable solutions



Non toxic



Bespoke planning for your shipments









# **NORSEMAN.**PROTECTIVE SOLUTIONS

Fiercely Reliable™

For over one hundred years, Norseman has been the industry expert. Product diversity and a willingness to offer customers a 'Concept to Completion' solution that exceeds their expectations is how we plan on remaining the expert. 2021 marks the celebration of 100 successful years in business for Norseman; it is also the 60th anniversary of the Bryant family owning the company. From the beginning, Norseman has established a solid reputation for producing quality products and we are proud to continue that reputation today.

On behalf of Norseman Protective Solutions, we thank you for the last one hundred successful years and look forward to sharing the next one hundred with you.

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Ron Bryant

President and CEO, Norseman Group





### NORSEMAN, YOUR ONE-STOP SUPPLIER OF GEAR2PERFORM.





- Superior Quality: With a commitment to excellence, we ensure our gear performs to the highest standard in the most challenging conditions.
- **Extensive Experience:** Since 1921 we have provided our customers with industry-leading industrial Fabric, Foam and Film protective solutions for many industries.

For more information on Norseman protective gear, contact your local sales representative.

### CONTAINERIZED SHIPPING SOLUTIONS





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