



The milk never stops, **Neither does our packaging supply**



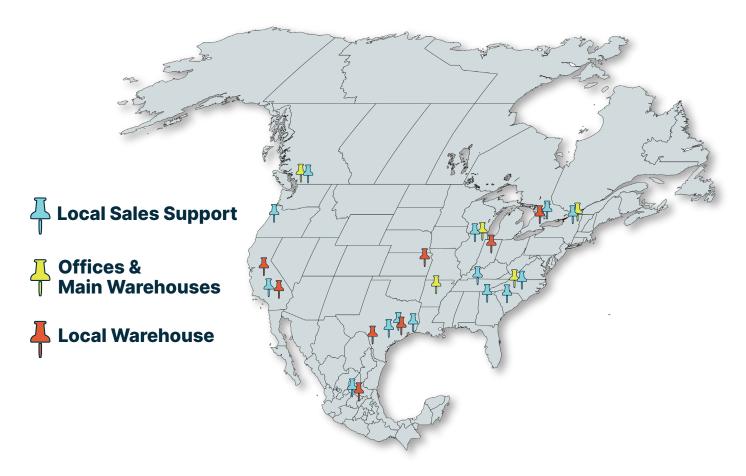


Let Gravis solve your toughest dairy storage and transportation challenges



Never worry about running out of high quality bags again. Ever.

Supply and Support Across North America



Downtime is not an option

Quality packaging is a necessity and you need a local team that can meet your needs every time you need them.

Cows don't respond to market trends

Dairy is not seasonal. Instead, the milk just keeps coming. Why not partner with a quality-focused supplier that maintains a locally stored guaranteed supply.





Food Grade Bulk Packaging For:

Milk Powders • Whey-Based Powders • Casein Powders • Lactose & Derivatives
Cultured Dairy Powders • Fat-Based Dairy Powders • Infant Formula

Key Advantages of Polypropylene FIBC Bulk Bags with PE Liners

Product Protection & Food Safety

- Moisture Barrier: Inner polyethylene liner prevents clumping, spoilage, and nutrient degredation common in dairy powders.
- **Contamination Control:** Liner creates a hygienic barrier that meets food-grade standards.
- Reduced Powder Loss: Sealed liner prevents fine powder leakage.

Cost Efficiency

- Lower Packaging Cost per Ton: One FIBC holds up to 1,000-2,000 kg, replacing 40-80 paper bags or woven polypropylene bags at 25kg each.
- Reduced Labor & Handling: Fewer bags to fill, seal, palletize and store lowers labor costs.
- **Freight Savings:** Bulk bags optimize container/truck load density vs. drums or rigid totes.

Operational Flexibility

- **U-Panel or 4-Panel Strength:** Proven stability for stacking, warehouse safety, and pallet utilization.
- **Custom Liners:** Available with form-fit, barrier, or anti-static depending on powder type.
- **Easy Integration:** Works with existing bulk powder filling and discharge systems.



Supply Chain & Quality

- Improved Hygiene in Transport:

 Bulk bags minimize handling steps, reducing contamination risks during transport and storage.
- Global Standardization:
 FIBCs are widely used across dairy and food industries, making them a recognized and trusted format.
- **Versatility:** Suitable for export shipments, long-distance transit, and storage in varying climates.



All New FIBC Option from Gravis

Same Food Grade Protection... No More Liners.



Smarter Bulk Packaging for Dairy Powders

Unmatched Product Protection

- Zero Sewing Holes: No needle punctures in the contaminent area, eliminating common contamination risks in powdered dairy.
- Liner-Free Performance: Built-in barrier coatings remove the need for a separate liner, reducing cost and complexity.
- Metal-Free Assurance: No sewing equipment in the bag means zero risk of needle fragments or metallic contamination.

Engineered for Consistency & Quality

- **Computer-Controlled Precision:** Automated sealing and vision inspection deliver the highest tolerances in the bulk bag industry.
- Superior Moisture Barrier: Coated constructionkeeps milk powders, whey proteins, and other dry dairy ingredients safet and dry.
- **Reliable Every Time:** Tight tolerances ensure dependable performance across every load.



Seamless Integration

- Compatible with Current Systems: designed to work on existing dairy filling and discharge equipment.
- Robotics Ready: Consistent sizing and structure open the door for robotic handling and automation.
- **Efficiency Gains:** Reduced reliance on liners and fewer handling issues streamline production and lower costs.



Multi-Wall Paper vs. Woven Polypropylene

Both 10-50kg bag options have their advantages







Strength &
Durability

Good Mechanical strength but more prone to puncture compared to woven polypropylene.

Very high tensile strength, resists tearing and punctures, ideal for long-distance shipping.

Lined Woven Polypropylene

Moisture Protection

Built-in polyethylene liner provides reliable moisture and oxygen barrier.

Requires inner PE liner or lamination, strong protection when lined.

Stackability & **Palletizing**

Good stackability, paper exterior adds friction, reducing pallet slippage.

Excellent rigidity and shape retention; stable for stacking.

Food Safety Compliance

Long-established industry standard for food powders; widely accepted for export.

Can be produced with food grade polypropylene and liners.

Printing & Branding

Excellent print quality on kraft surface, often preferred for regulatory text and branding.

High-quality multi-color printing possible on polypropylene fabric or laminated surface

Cost

Slightly higher cost due to multi-wall kraft paper + liner construction.

Generally lower cost per bag across large volumes.



Not Just Another Supplier...Gravis is a True Packaging Consultant



Building the Relationship

Our sales team works with you on-site to learn your processes from receiving raw materials to shipping out finished product. We will help identify packaging challenges that Gravis can solve.



The Right Solution Everytime

Gravis has a team of engineers that take your information and work with our manufacturers to design the perfect custom solution.



Reliable Long Term Partner

We continue to work closely with you to assist with managing orders, tracking inventory and maintaining the reliable quality that you expect from Gravis.





Save Space, Time, and Money

with multiple pallet options from Gravis.

Designed to compliment our dairy dry bulk packaging.

FirmaLoad® Corrugated Pallets

- · Safer and more stable than traditional pallets
- Designed specifically for FIBC Bulk Bags
- Approved for export
- 82% lighter than wooden pallets
- Eliminates risk of bag puncture and splinters
- Space Saving: 1,200+ per truckload compared to 540 standard wooden pallets, enhancing logistical and warehousing efficiency.





FirmaMax™ HD Plastic Pallets

- Eliminates the risk of wood contamination
- Engineered for heavy-duty applications
- Ideal for double-stacking and open-racking
- Reusable & Recyclable, promoting sustainability
- Resistant to impact and weather

FirmaMax™ Nestable Plastic Pallets

- Ideal for items requiring one-way shipment
- Suitable for shipping FIBC Bags
- Up to 15lbs. lighter than wood pallets
- Available in 100% recycled materials
- Space Saving: 1,500+ per truckload compared to 540 standard wooden pallets, enhancing logistical and warehousing efficiency.



