



MONOFLO FOR MANUFACTURING

**More durable.
Longer product life.
Lower total cost.**

miworldwide.com

Manufactured in the U.S.A. | 540-771-3077

MONOFLO
INTERNATIONAL





Significant investment lowers costs.

Monoflo products perform better, last longer and cost less.

Simply put, Monoflo's investment in technology drives higher quality, faster cycle times and lower costs for our customers. Throughout our manufacturing process, we leverage expertise in design, engineering and production to make products that outlast and perform better than any competitive products.

Quality & consistency: Automation and high-speed robotics are an integral part of our manufacturing philosophy, allowing us to maintain the highest possible repeatable quality and consistency. We continue to invest in cutting edge manufacturing technologies.

Product performance: Design, engineering, planning and process enhancements increase product durability and cycle-time efficiency, ensuring Monoflo's products are the highest performing, lowest cost products available.

Output & efficiency: Achieving faster cycle times means more throughput and shorter lead times. Combined with our streamlined process, Monoflo effectively manages large scale and higher volume projects.

People drive our business.

While we offer the most efficient, highest performing products available, it's our team of experts who ensure you receive the service and the right product mix to positively impact your bottom line.

Dedicated to their craft, our engineers, sales, operations, logistics and technical personnel are some of the finest in the industry.

Each of our customers works with an industry expert ensuring everyone receives the focused attention needed to enhance the development and implementation of their reusable packaging strategies.



Monoflo drives your business.

For reusable transport packaging and other internal applications, automotive and durable goods manufacturers look to Monoflo for bulk containers, pallets and a wide range of tote options. Monoflo understands that manufacturers require optimum performance and that grueling demands are placed on our products every day. For over 40 years, our breadth of high quality products have outperformed competitive products—test after test, product after product.

Industry-Leading Innovation: Bulk Containers



No other bulk container compares. Monoflo's high-pressure, injection-molded bulk containers are built to perform. With hundreds of thousands of containers in service, the Monoflo bulk container is the proven choice.

Our continued investment in equipment, automation and high-speed robotics guarantees quality, consistency and on-time delivery. Monoflo containers are engineered for strength, 100% recyclable, repairable and competitively priced.

Proven Performance:

Our unique combination of the latest high pressure injection molding technology and our tested and proven welding process yield the best strength-to-weight ratio available.



BC 4844.5-34
with open access door

Repairable: If a break occurs, every piece of Monoflo's bulk containers is repairable in the field in a matter of minutes.

Sustainable: Our bulk containers are 100% recyclable. Additionally, with no fiberglass or metal reinforcements, our bulk containers are easy to repair. Lower product weight is achieved by combining high pressure injection molding with hot plate welding thereby reducing raw material consumption.

Durable: Monoflo's unique "I-Beam" construction is a two-piece welded design that makes the strongest, most durable base in the industry.



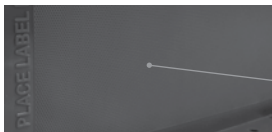
Cross section of our I-Beam welded technology which increases base strength up to 40%

Two footprints. Varying heights. Ready to work.

Bulk Containers



BC 4844.5-42



New textured label areas eliminate the need for placards



BC 4844.5-34, folded



BC 4844.5-27

- Best in class strength-to-weight ratio
- High pressure injection molded—best durability, longest life
- Unique, welded base provides structural integrity that outperforms the competition... Test after test
- All plastic, repairable, ergonomic latches
- Eliminate placards—now available with dedicated textured label area
- Available heights up to 50" tall

Engineered to do more for you.



New footprint allows for 252 folded bulk containers per 53' truck trailer

Monoflo's latest Bulk Container now features a 48x44.5 footprint meaning 252 can be shipped in a single 53' truck—compared to 234 previously. And, the smaller footprint doesn't mean less volume. It has the same interior dimensions as the previous 48x45.

Upright, 112 new 4844.5-27 bulk containers provide 20% more volume per 53' truck compared to standard 25" tall containers



Comparing heights: 25" 27"



Additionally, the new 27" container height provides 20% more load volume in the trailer than a traditional 25" high bulk containers.

Bulk Containers

Model	Outside Dimensions			Inside Dimensions			To Fill Line	Height Collapsed	Weight	Volume	Trailer Qty Opened	Trailer Qty Collapsed
	L	W	H	L	W	H						
BC 3230-25	32.0	30.0	25.0	29.5	27.5	19.3	18.5	12.6	50.0	8.7	240	540
BC 3230-34	32.0	30.0	34.0	29.5	27.5	28.3	27.5	12.6	62.0	12.9	180	540
BC 2444-25	44.5	24.0	25.0	41.0	21.0	19.2	18.4	12.5	66.0	9.1	208	468
BC 4844.5-25	48.0	44.5	25.0	44.5	41.5	19.2	18.2	12.5	99.0	19.5	112	252
BC 4844.5-27	48.0	44.5	27.0	44.5	41.5	21.2	20.2	12.5	102.0	21.5	112	252
BC 4844.5-33 (Storage Bottom)	48.0	44.5	33.0	44.5	41.5	27.2	26.0	20.5	117.0	27.8	84	140
BC 4844.5-34	48.0	44.5	33.8	44.5	41.5	27.9	27.0	12.5	118.0	28.9	84	252
BC 4844.5-42 (Extended Height with Collar System)	48.0	44.5	41.8	44.5	41.5	35.9	35.0	20.5	136.5	37.4	56	140
BC 4844.5-50 (Extended Height with Collar System)	48.0	44.5	49.8	44.5	41.5	43.9	43.0	28.5	155.0	46.0	56	84
TC 4845-3-IM-III	48.9	45.9	2.6	N/A	N/A	N/A	N/A	N/A	14.1	N/A	N/A	1,742

Precise, long-lasting in a range of sizes.

Straightwall Containers

Finally, the straightest walls, every time.

Through years of design engineering, testing and significant investment in technology, Monoflo has achieved the straightest straight wall containers in the industry. Made using high density polyethylene (HDPE), we have created a line of straight wall containers that have truly straight side walls and repeatable quality, order after order.

- Compatible with Monoflo 48" x 45" AIAG pallet system
- Available in 12"x15", 24"x15" and 24"x22" footprints
- Designed for maximum cube utilization and easy cleaning
- Reinforced external ribbing provides maximum strength and secure stacking
- Ergonomic carrying handles
- Optional textured sides eliminates need for placards



NSO 2422-07



NSO 2415-07



New textured label areas eliminate the need for placards



NSO 2415-07, flat bottom (L), cross-stacking bottom (R)



NSO 1215-09

Straightwall Containers

Model	Outside Dimensions		Inside Dimensions		Total Height	Product Clearance (inches)		Weight (lbs.)		Volume	Trailer Quantity (AIAG pallet)
	L	W	L	W		Flat	Cross	Flat	Cross		
NSO 1207-05	12.0	7.0	9.4	5.5	5.0	4.5 (flat bottom only)		1.3 (flat bottom only)		0.1	13,104
NSO 1215-04	12.0	15.0	9.4	13.0	4.0	3.4	2.9	1.6	1.8	0.2	8,112
NSO 1215-05	12.0	15.0	9.4	13.0	5.0	4.4	3.9	1.7	2.0	0.3	6,552
NSO 1215-07	12.0	15.0	9.5	13.1	7.5	6.9	6.4	2.3	2.6	0.5	4,056
NSO 1215-09	12.0	15.0	9.4	13.0	9.5	8.9	8.4	2.7	2.9	0.7	3,120
NSO 2415-05	24.0	15.0	21.5	13.1	5.0	4.4	3.9	2.9	3.4	0.7	3,120
NSO 2415-07	24.0	15.0	21.5	13.1	7.4	6.8	6.3	3.7	4.2	1.1	2,028
NSO 2415-09	24.0	15.0	21.5	13.1	9.5	8.9	8.4	4.3	4.8	1.4	1,560
NSO 2415-11	24.0	15.0	21.4	13.0	10.8	10.2	9.7	4.7	5.3	1.7	1,404
NSO 2415-14	24.0	15.0	21.5	13.1	14.5	13.9	13.4	5.7	6.3	2.3	936
NSO 2422-07	24.0	22.0	21.5	20.6	7.4	6.8	6.3	4.9	5.6	1.7	1,352
NSO 2422-09	24.0	22.0	21.5	20.6	9.5	8.9	8.4	5.6	6.3	2.1	1,040
NSO 2422-11	24.0	22.0	21.4	20.5	10.8	10.2	9.7	6.1	6.8	2.6	936
NSO 2422-14	24.0	22.0	21.4	20.5	14.5	13.9	13.4	7.4	8.0	3.5	624
1215-Lid	12.0	15.0	N/A	N/A	0.9	N/A		0.9		N/A	31,200
2415-Lid	24.0	15.0	N/A	N/A	0.9	N/A		1.5		N/A	13,780

Straightwall Containers are available with either Flat or Cross-Stacking Bottoms

Strong and secure. Flexible use.

Collapsible Containers

- Foldable tote knock down ratios as high as 5:1
- Foldable functionality brings significant savings on inbound freight
- Compatible with straight wall containers and AIAG pallet systems
- Available with vented or solid side walls
- Optional access doors available
- Available with flat or cross stack bottom
- 100% recyclable



KD 2415-07



KD 2415-09
two stacked

Collapsible Containers

Model	Outside Dimensions		Inside Dimensions		Total Height	Product Clearance	Folded Height	Weight (lbs)	Volume (cubic feet)	Trailer Qty 53'
	Top		Top							
	L	W	L	W						
KD 2415-07	23.9	15.0	22.2	13.6	7.4	6.6	2.8	5.3	1.2	6,240
KD 2415-09	23.9	15.0	22.2	13.6	9.5	8.5	3.5	6.1	1.6	4,992
KD 2415-11	23.9	15.0	22.2	13.6	10.9	9.9	3.5	6.5	1.8	4,992

Durable and stackable.

Pallet Systems

- High pressure injection molded—best impact resistance, longest life
- Unique two-piece welded design offers increased durability and impact resistance
- Available options for zero, two or four seat belts for cargo strapping
- Manufactured to the AIAG footprint
- Made with 100% recyclable plastic materials



NSO 2415s on SP 4845-5-IMW-I
Pallet with top cap TC 4845-3-IM-II
including seat belts



SP 4845-5-IMW-I

Durable Manufacturing Pallets

Model	Entry	Outside Dimensions (inches)			Weight	Static Load (lbs)	Dynamic Load (lbs)	Nest Ratio	Stack Qty	Trailer Qty 53'
		L	W	H						
SP 4845-5-IMW-I	4-Way	48.0	45.0	5.0	50.0	30,000	4,000	1:1	21	546
TC 4845-3-IM-II	N/A	48.0	45.0	2.6	16.0	N/A	N/A	N/A	50	1,170
NP 4845-6-SF-II	4-Way	48.0	45.8	5.8	36.0	30,000	2,000	1.96:1	35	910
TC 4845-3-IM-III	N/A	48.9	45.9	2.6	14.1	N/A	N/A	N/A	67	1,742

Monoflo Durable Manufacturing Pallets are not intended to be edge racked.

Contact your Monoflo sales representative to discuss your application and maximum load ratings for all Monoflo products.

IF YOU DON'T SEE EXACTLY WHAT YOU NEED, TALK TO US. CUSTOMIZING YOUR PERFECT CONTAINER IS AN IMPORTANT PART OF OUR UNIQUE APPROACH.

The benefits of service.

Monoflo's comprehensive services lead to deeper relationships and benefit your bottom line.



Design & Development. If you're faced with an internal challenge or don't see precisely what you need, Monoflo's Design Engineers and Industry Specialists can create and roll-out custom solutions that suit your requirements and time lines.



Recycling. In each Monoflo facility, containers, totes and pallets that have reached their end-of-life are sorted, granulated and re-pelletized on-site in our state of the art reprocessing and recycling line. The resulting materials are used in making superior-quality, recycled containers.



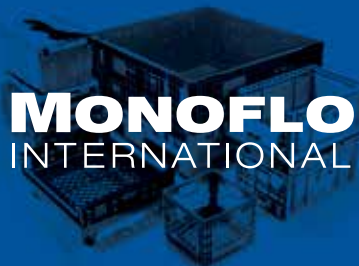
Monoflo has a dedicated team whose sole responsibility is to buy back containers that have reached their end-of-life.



Dunnage Support. Monoflo offers a broad range of protective, returnable dunnage options to meet any application. From thermo formed trays to plastic corrugated dividers or sewn fabric bags, custom dunnage design and fabrication is available and ready for use with any Monoflo product.



Rental & Leasing. As a critical part of each customer's supply chain, Monoflo created a flexible, industry-leading, rental and leasing program specifically suited to your operational and capital management needs.



miworldwide.com

Manufactured in America | 540-771-3077