

MONOFLO
INTERNATIONAL, INC.

defining what comes next.

Monoflo for Automotive and Manufacturing
Container and Pallet Systems

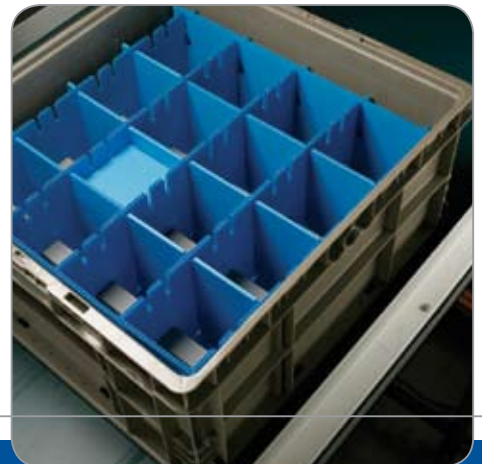




> *When a major airbag manufacturer needed 8,000 containers in a hurry to satisfy their client's deadline, Monoflo's sales team assessed the situation, worked with their team of packaging engineers, and delivered the finished product a week ahead of schedule.* <

About Monoflo

Monoflo has more than 30 years of experience in the materials handling industry. From reusable distribution totes to the collapsible products we pioneered, Monoflo is a leading manufacturer of high-quality, injection-molded plastic containers. Our wide array of clients – from Nissan to Magna to TRW – relies on us to keep business moving. As part of our commitment to continuously provide what our clients need, we are pleased to introduce our new, extensive line of container and pallet systems for automotive and manufacturing operations.



Our Manufacturing Process

At Monoflo, we provide our customers with the best products at the lowest possible price. Through our investment in state-of-the-art injection molding technology, prime raw materials, and meticulous in-house testing, we consistently offer our customers quality and affordability.

Our ISO-certified manufacturing facility is the most efficient in the industry, operating 24 hours a day, seven days a week. Monoflo's high-performance equipment and fast-cycling molds enable us to achieve faster production cycles to ensure on-time delivery.

Smart investment – not lower investment – is what makes our products affordable.



What it takes...in 10 simple steps.

1. *Husky® high-speed injection molding machine equipped with a magnetic clamping system and quick couplings is powered up.*
2. *High-quality, container mold is clamped into place. Cooling water, compressed air, hydraulic lines and mold heater cables are connected using quick couplings.*
3. *Prime HDPE material and color concentrate are mixed and heated.*
4. *Heated material and color are injected into mold.*
5. *Mold is cooled using a high volume of chilled water.*
6. *Molding machine opens.*
7. *Container is ejected using hydraulic ejectors and compressed air.*
8. *Press operator hot stamps container and attaches card holders.*
9. *Finished container is placed on pallet and is ready for shipment.*
10. *Repeat as necessary to fill order.*



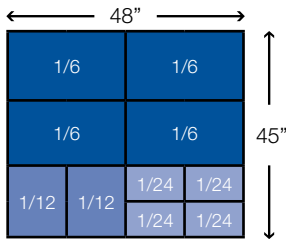
*Elapsed time to make one NRSO2415-7: **35 seconds***

> AIAG RC-9
test confirms
Monoflo products
are suitable
for strenuous
automotive
applications. <

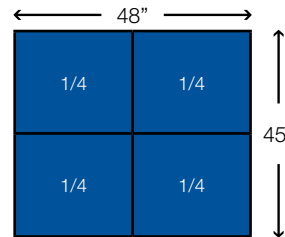
Straight Wall Containers

Monoflo's new reusable straight wall containers are available in multiple sizes and compatible with other containers. Features and benefits of our straight wall containers:

- > Straight, smooth interior wall design offers maximum cube utilization and easy cleaning
- > Deep ergonomic handles for improved safety and comfort
- > Reinforced external ribbing provides maximum strength and secure stacking
- > Compatible with 48" x 45" AIAG pallet systems
- > Optimized strength-to-weight ratio
- > Perimeter bumper for optimal product protection
- > Drain holes in bumper and handles for easy washing
- > Cross-stacking designed bottom ensures a secure fit — even when stacking multiple sizes (also available in smooth bottom)
- > Available in 12" x 15", 24" x 15", and 24" x 22" footprints, with multiple heights
- > Option of detached lid 24" x 15" and 12" x 15"



Container Footprint (Fraction of Pallet)
24" x 15" (1/6)
12" x 15" (1/12)
12" x 7" (1/24)



Container Footprint (Fraction of Pallet)
24" x 22" (1/4)

Straight Wall Container Specifications

Model	Pallet Modularity AIAG 48"x45"	Outside Dimensions				Inside Dimensions				53' TL Qty.	Total Container Height*	Product Clearance#	Weight (lbs.)	Volume (cu. ft.)
		Top		Bottom		Top		Bottom						
		L	W	L	W	L	W	L	W					
Containers†														
RSO1207-5	1/24	12.0	7.4	12.0	7.4	9.7	5.8	9.4	5.5	12,480	5.0	4.5	1.2	0.13
NRSO1215-5	1/12	12.0	15.0	12.0	15.0	9.7	13.3	9.4	13.0	6,240	5.0	4.4	1.8	0.32
NRSO1215-7	1/12	12.0	15.0	12.0	15.0	9.7	13.3	9.4	13.0	3,744	7.5	6.8	2.6	0.56
NRSO1215-9	1/12	12.0	15.0	12.0	15.0	9.7	13.3	9.4	13.0	2,808	9.5	8.8	3.1	0.65
NRSO2415-5	1/6	24.0	15.0	24.0	15.0	21.7	13.3	21.4	13.0	3,120	5.0	4.4	3.3	0.72
NRSO2415-7	1/6	24.0	15.0	24.0	15.0	21.7	13.3	21.4	13.0	1,872	7.5	6.8	4.6	1.09
NRSO2415-9	1/6	24.0	15.0	24.0	15.0	21.7	13.3	21.4	13.0	1,560	9.5	8.8	5.0	1.42
NRSO2415-11	1/6	24.0	15.0	24.0	15.0	21.7	13.3	21.4	13.0	1,248	11.0	10.4	6.0	1.67
NRSO2415-14	1/6	24.0	15.0	24.0	15.0	21.7	13.3	21.4	13.0	936	14.5	13.8	6.7	2.20
NRSO2422-7	1/4	24.0	22.5	24.0	22.5	21.7	20.8	21.4	20.5	1,352	7.5	6.8	6.2	1.64
NRSO2422-11	1/4	24.0	22.5	24.0	22.5	21.7	20.8	21.4	20.5	832	11.0	10.4	7.8	2.56
NRSO2422-14	1/4	24.0	22.5	24.0	22.5	21.7	20.8	21.4	20.5	624	14.5	13.8	8.5	3.50
1215-Lid	1/12	12	15							30,576	.85		.93	
2415-Lid	1/6	24	15							15,288	.85		1.52	
Fastener Container (comes standard with attached lid)														
RSO1408-7		14.0	7.5	14.0	7.5	11.3	5.7	11.1	5.5	6,552	6.6	5.75	2.0	.228

*When containers are stacked on top of each other, approximately 1/2" is lost to nesting. Example: Bottom container in a stack is 7.5" in height. Containers of the same height stacked on top of it are 7.0" in height. Actual product dimensions and weight may differ nominally from these specifications.

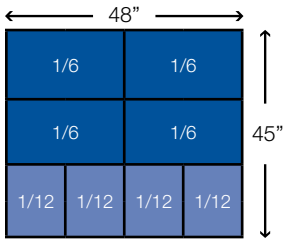
†NRSO containers available with both cross-stacking and solid, smooth bottom.

Dimensions shown are flat bottom container. Cross stack bottom clearance is approximately .5" less.

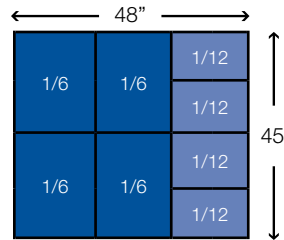
Collapsible Containers

Monoflo's new reusable, collapsible containers are available in multiple sizes. Features and benefits of our collapsible containers:

- > Collapsible tote knock down ratios as high as 5:1
- > "True Form" ergonomic handles are designed for safer lifting
- > Lower transportation costs and warehouse storage costs
- > Compatible with 48" x 45" AIAG pallet systems
- > Optional lids offer increased protection
- > Collapsible functionality brings significant savings on inbound freight



Series I Container Footprint
(Fraction of Pallet)
24" x 15" (1/6)
12" x 15" (1/12)



Series II Container Footprint
(Fraction of Pallet)
22" x 15.5" (1/6)
15.5" x 11" (1/12)

Collapsible Container Specifications

Model	Outside Dimensions		Inside Dimensions		Total Container Height*	Product Clearance	Weight (lbs.)	Volume (cu. ft.)	Return Ratio
	L	W	L	W					
Series I Containers									
RC 1215-075†	15.0	12.0	13.5	10.6	7.5	6.8	3.1	0.56	3:1
RC 1215-089†	15.0	12.0	13.5	10.6	8.9	8.2	3.4	0.70	3:1
RC 2415-075	24.0	15.0	22.5	13.6	7.5	6.8	4.4	1.20	3:1
RC 2415-089	24.0	15.0	22.5	13.6	8.9	8.2	4.8	1.50	4:1
RC 2415-111	24.0	15.0	22.5	13.6	11.1	10.4	5.5	1.80	5:1
RC 2415-147	24.0	15.0	22.5	13.6	14.7	14.0	6.8	2.50	5:1
RC 2422-111†	24.0	22.0	22.0	20.80	11.0	10.25	8.8	2.72	3:1
Series II Containers									
RC 1*†	15.5	11.0	13.9	9.7	7.0	6.25	3.0	0.51	3:1
RC 1.5*†	15.5	11.0	13.6	9.7	13.1	12.1	4.8	0.92	4:1
RC 2*†	22.0	15.5	20.3	14.25	7.0	6.25	4.4	1.01	3:1
RC 3*†	22.0	15.5	20.3	14.25	10.5	9.75	5.2	1.67	4:1
RC 5*†	22.0	15.5	20.3	14.25	14.0	13.2	7.2	2.24	5:1
RC 6*	32.0	14.75	30.5	13.25	10.5	9.75	7.4	2.34	3:1

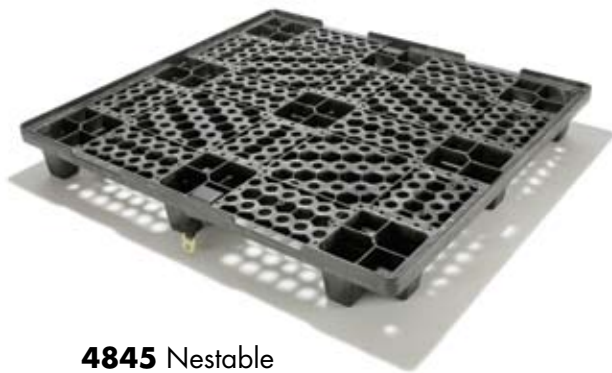
*When containers are stacked on top of each other, approximately 1/2" is lost to nesting. Example: Bottom container in a stack is 7.5" in height. Containers of the same height stacked on top of it are 7.0" in height. Actual product dimensions and weight may differ nominally from these specifications.

†Available with attached lids.

Pallet Systems

Monoflo's new pallet systems optimize the efficiency of your automotive and manufacturing materials handling while providing durability and compatibility. Features and benefits of our pallet systems:

- > Designed to standard AIAG 48" x 45" pallet footprint to maximize trailer capacity
- > Pallet and top cap system available with optional "seat belt" straps to secure and stabilize load
- > Constructed with structural foam molding to enhance static load capacity and reduce deflection
- > Durable designs optimizes strength-to-weight ratios
- > Features 4-way forklift entry



4845 Nestable

> 48" x 45" footprint reusable pallets are perfect for automotive parts, electronics and general manufacturing applications. <



4845 Heavy Duty Stackable



4845 Pallet Cap



Monoflo 45 x 48 Pallet & Top Cap System

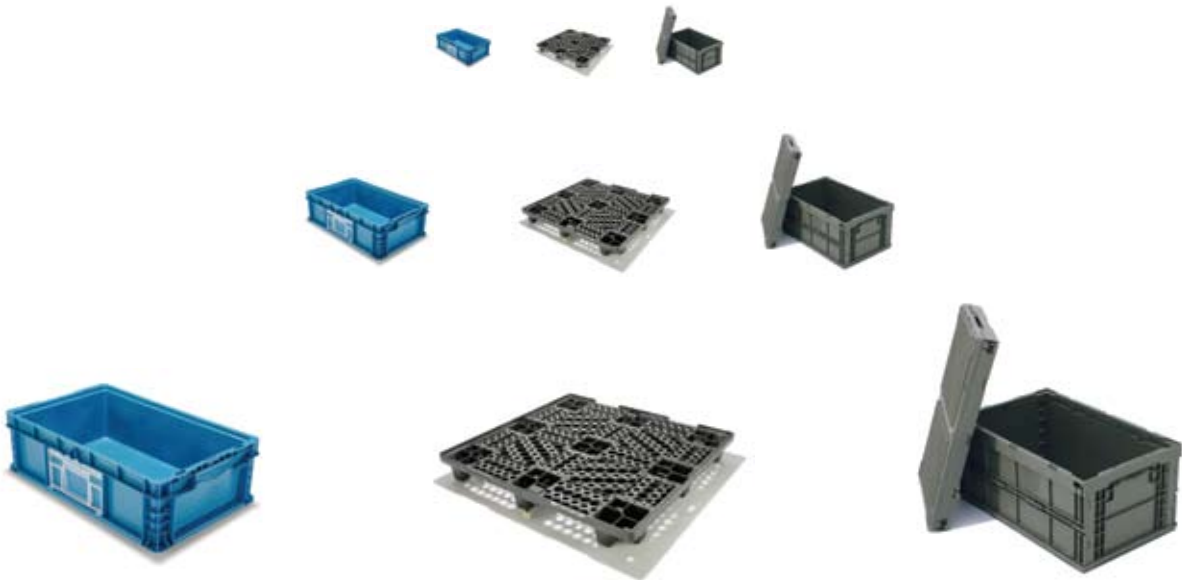
Monoflo Part #	Dimensions (in.)			Weight (lbs.)	Load Capacity (lbs.)		Truckload Quantity*		Nest Ratio
	Length	Width	Height		Static	Dynamic	48' Trailer	53' Trailer	
4845 Pallet with 1" lip	48.7	45.7	6.6	41	15,000	2,500	888	962	2.6:1
4845 Pallet with seatbelts and 1" lip	48.7	45.7	6.6	43	15,000	2,500	888	962	2.6:1
4845DF-Pallet	45.0	48.0	6.0	72.0	30,000	4,000	408	442	1:1
4845-Topcap	45.0	48.0	1.0	20.0	NA	NA	1,080	1,170	

*Nest ratio and truckload quantities based on 2 seatbelt option. For details on other seatbelt configuration options please contact Customer Service. Actual product dimensions and weight may differ nominally from these specifications.

The Monoflo Advantage

Our commitment to developing new products and technologies defines Monoflo as an industry leader. When our long-time customers think of Monoflo, they think of superior products at the lowest prices. They also think of our dedication to reliable and responsive customer service — many times we respond to requests in minutes where competitors take days. At Monoflo, every aspect of business brings value and savings directly to our customers.

Monoflo is there – defining what comes next.



Commitment to the Environment

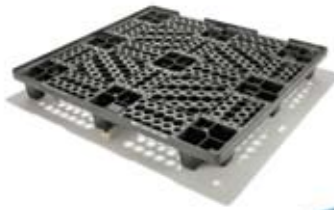
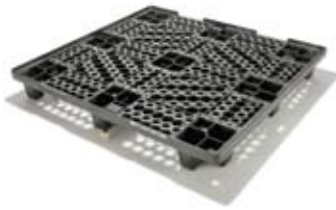
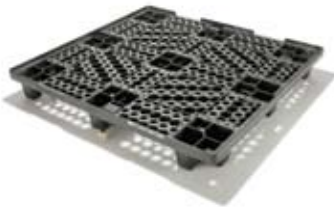
As an industry leader, Monoflo demonstrates an earnest commitment to the environment through our product design and manufacturing processes. We believe in reusing plastic and partner with our customers in these efforts. Please contact your Monoflo Sales Representative to find out how we can help you to recycle once your products have reached their lifespan.

Reduce. Reuse. Recycle.





> *Monoflo doesn't wait for the materials handling industry to change. We recognize needs and respond to them with innovation. Our process incorporates the latest technology, human capital and 30 years of problem solving resulting in products that define the industry.* <



MONOFLO
INTERNATIONAL, INC.

defining what comes next.



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