



Mobile Storage

Force-Multiplier for Military Logistics

SHARKCAGE is a mobile storage system that enable seamless transition between storage, transport and operation.





MOBILE STORAGE



SHARKCAGE®
— MOBILITY – FLEXIBILITY – SECURITY —





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DISCLAIMER

Some of the information contained herein was obtained through publicly available sources or are estimates and may not be accurate.



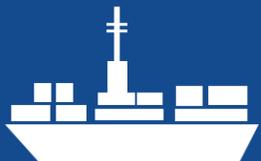
Installation Storage

Save warehouse space
Increase accountability
Reduce pilferage



Staging

Drastically reduce load time
Limited dunnage and less mistakes
Container planning made simple



Transport

Reduce containers by 30-50%
Material security and protection
Rapid platform transition



Operations

Increased readiness
Easy equipment access
97% First-Time Pull Rate



Redeployment

Intermodal flexibility
Rapid customs inspection
Efficient consolidation



Reset

Expedited reorganization
Faster container turn-in
Accountability for sensitive items



80%

Load time reduction

With minimal need for dunnage, the time required to stage and load is significantly reduced. The same is true of the container planning headache. This leads to faster and more predictable vessel turnaround time.



50%

Typical footprint reduction

Up to 75%, depending on current load configuration and requirements.



97%

Inventory accuracy

APS-3 has significantly improved First-Time Pull Rate, from low seventieth to an astonishing 97%.



5600 \$

Daily average cost per US troop in Afghanistan

2500 \$

Typical labor and material cost to load a container

150 \$

Typical daily rate per container onboard a vessel, including port charges

“We have significantly improved load time, footprint and first-time-pull-rate with the SharkCage.”

APS-3

APS-3 ASLAC

Between 2003 and 2007, the US Army's Afloat Bn had all vessels downloaded in theatre to support the war effort. In a process starting in 2007, and completed in 2010, all vessels were re-outfitted and uploaded with the newest equipment.

From 2007 to 2010, APS-3 had their hands full finding storage solutions that would minimize container footprint, marshalling, and vessel turn-around and deployment time, while maximizing First-Time Pull Rate. Now recognized as a great success, the SharkCage was a vital component when it came to solving the puzzle.

Most important solutions

1. SharkCage Container Warehouse
2. SharkCage Wheel Storage & Transport
3. SharkCage XL for Tents
4. SharkCage Secondary Load for UBL on MTV

Getting maximum value out of every dollar should be a priority, especially when spending the taxpayer's money. We are therefore proud that the SharkCage not only increased mission capabilities, but also had a short payback time of a little more than one APS Afloat rotation.

When setting up the business case for SharkCages,

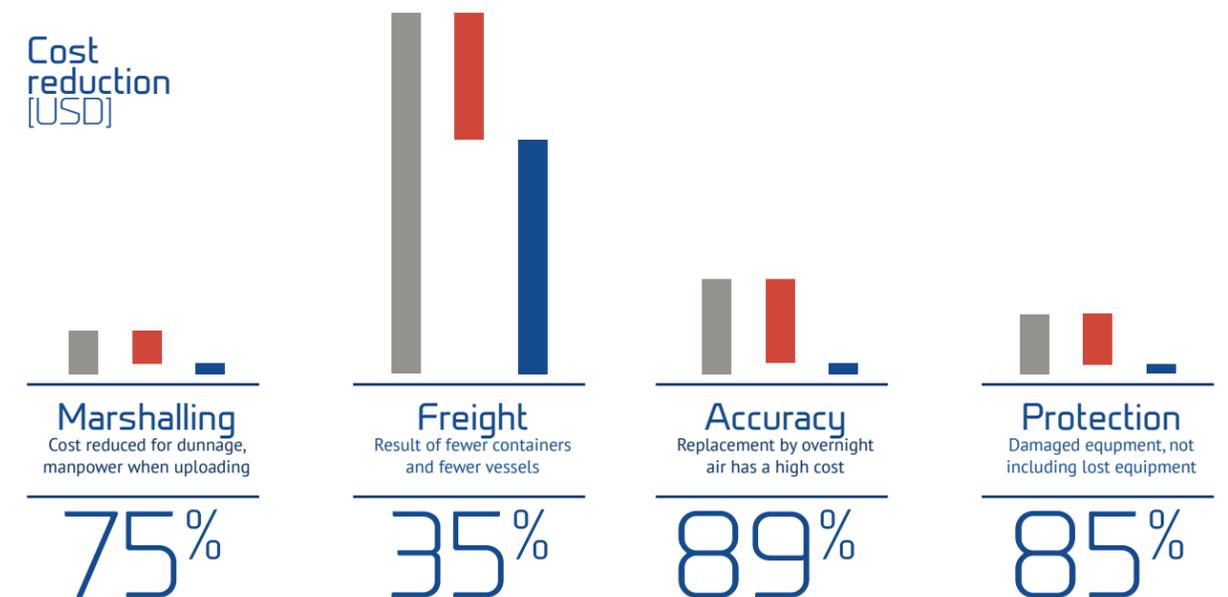
we had to make several assumptions and, at the same time, acknowledge that we were not able to put a dollar figure on every improvement the SharkCage offered.

The process for APS-3 started with inventory accuracy, loading and then marshalling. The cost savings included in this part of the process are man-hours and material for blocking-and-bracing.

Reduction in freight correlates directly with the footprint reduction. The SharkCage Container Warehouse did not necessarily reduce footprint, but increased capabilities.

Although the biggest cost resulting from low accuracy is waiting time and mission failure, we have included the cost to replace by air transport. This is also the same for protection, where we have included only the cost to repair damaged equipment.

Cost reduction



Payback time for the investment in SharkCage was less than one rotation, and that is without taking into account lost or damaged equipment, retro-

grade and, most importantly, rapid issue. The average daily cost of a trooper in Iraq was more than \$5000, meaning waiting is expensive.



97%

First-Time Pull Rate

80%

Time saved through customs

100%

Access while in container



APS-3 Container Warehouse

The biggest advantage of using the Container Warehouse is rapid issue. The 100% accurate inventoried maintenance or supply warehouse is ready to issue from the moment the container is downloaded. Battles are won based on initiative, and the SharkCage Container Warehouse takes care of this.

It was the most important cage in increasing first-time pull rate, which APS-3 was able to increase from low seventieths to an astonishing 97%.

The SharkCage Container Warehouse does not maximize the internal space in a container, leaving an aisle down the center. The unused space in the center of the container is often used in transit for storing ancillary equipment that is not normally stored on shelves or in the SharkCage

Since each compartment was sealed, see-through and accessible without emptying the container, the time required to move through customs was reduced dramatically.



80%

Time saved on marshalling

65%

Footprint reduction

95%

Reduction in damaged wheels



APS-3 Wheels & Tires

The Joint Service Manual for Storage and Materials Handling requires pneumatic tires to be stored vertically or rotated every 6 months. Downloading the wheels to rotate them would have made the APS mission impossible. Another challenge is that, as a result of up-armored vehicles, some wheels can only be stacked 3-high.

The DOL responsible for APS-3 recognized the challenge when receiving the mission of repack-

ing 3,000 wheel assemblies into containers for a 30-month rotation on a ship.

MSS worked with the DOL to create the SharkCage WST. The WST not only enabled vertical storage, but also reduced handling time by 70% and reduced container footprint by 65%.



PRODUCTS

- SHARKCAGE CONTAINER INSERT 18
- SHARKCAGE HAZ MAT 24
- SHARKCAGE CONTAINER WAREHOUSE 26
- SHARKCAGE WHEEL STORAGE 28
- TACTICAL BASKET 32

PRODUCT PORTFOLIO

We have selected the products we think is the most relevant for container transport in this brochure. In 2014 75% of our sales came from custom products, but we leveraged existing solutions to drive down development costs for our customers.

Our products are strong, durable and flexible to serve the missions of today and tomorrow.

Technology

Stackable fully loaded



Slingloadable



Easy assembly



Adjustable shelves



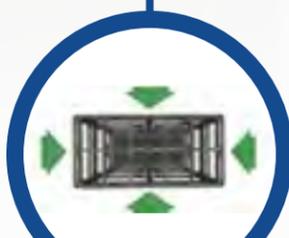
Lockable compartments



Internal and external tie downs



4-way forkliftable



Flatpackable



Vibration dampening



PATENT PENDING



15 years of focusing on a small niche has made us world leaders in mobile storage systems. We are constantly improving our products, based on both customer feedback and the new technology available to us.

We have worked closely with the steel producer SSAB out of Sweden to find the optimal steel for mobile storage devices. SSAB has a long tradition of steel innovation from working with Volvo on the creation of structures that can absorb energy in a collision.

When creating a cage that works well for mobile operations, the ability to absorb shock is key to preventing damage to both the contents and the cage. At the same time, it is important to keep weight to a minimum. Focus should be on the strength-to-weight ratio, with the aim of making it as high as possible.

There are mainly four ways of increasing the ratio:

1. Use more sophisticated materials
2. Distribute strength evenly
3. Use the strength of one part in multiple directions
4. Add flexibility and dampening

We tackle all four of these in the following ways: ultra-high-strength steel, sophisticated FEM analysis, vibration absorb-ing bends and, most importantly, real life testing.

Several of our cages are approved for ammunition transport at Defense Ammunition Center (TP-94-01), to ensure the quality of our products.

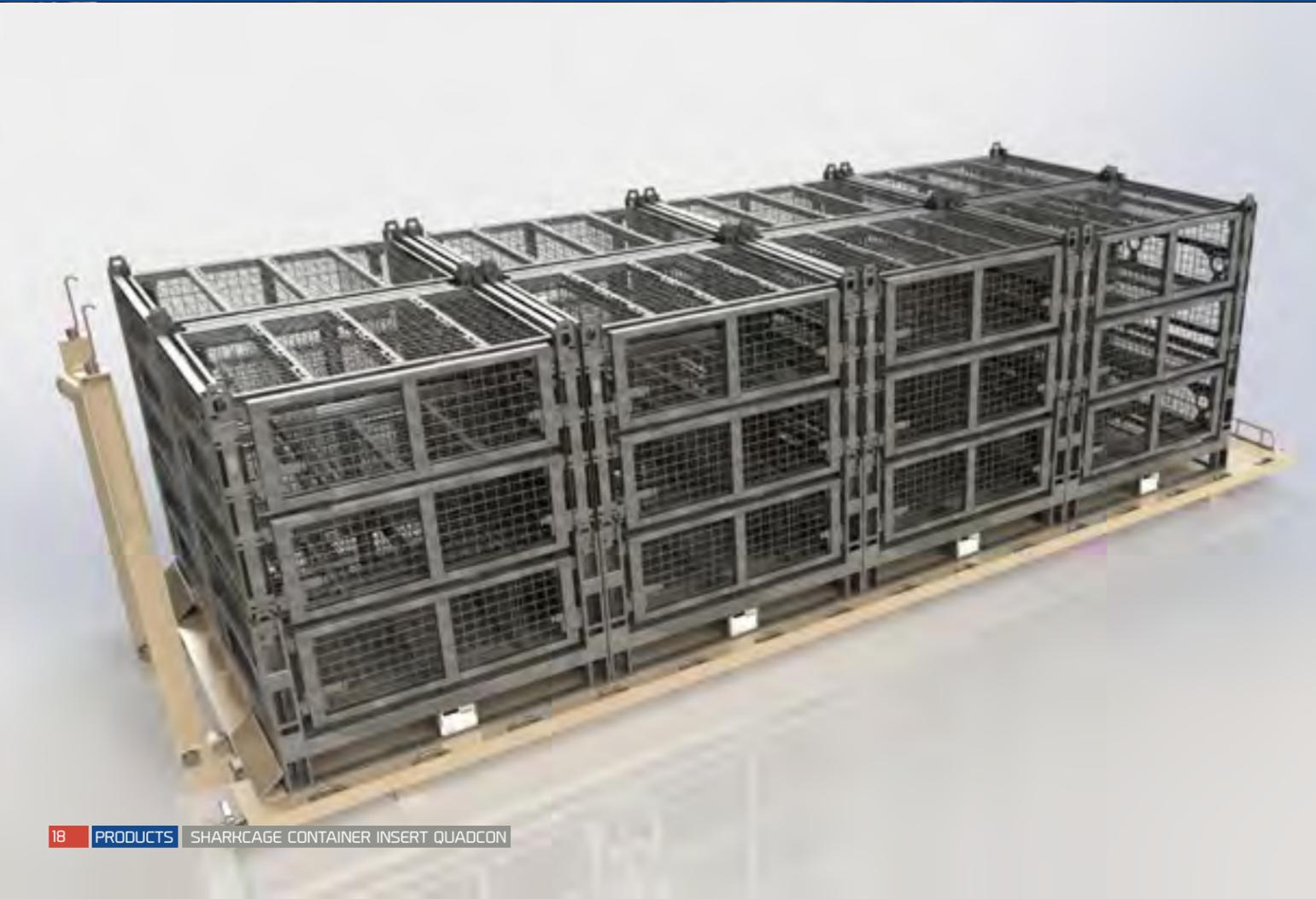


SHARKCAGE **SMALL FOR QUADCON**

QUADCON
2 ea maximize a QUADCON container

463L AIR
4 ea maximize Air Pallet footprint

20 FT
FIT 8 ea in standard 20 ft container and CROP/PLS



Partno.	150693
Size (LxWxH) [in]	52x42x68
Tare weight	430 lbs
Capacity (total)	4,000 lbs
Material	Extra High Strength Steel
Finish	Hot-dipp galvanized, anti sparking and non corrosive
Stackability	4 cages
Sling loadable	Yes
Forkliftable	4-ways
Shelves and compartments	3
Ammunition certified by DAC	Yes





SHARKCAGE **MEDIUM** FOR TRICON

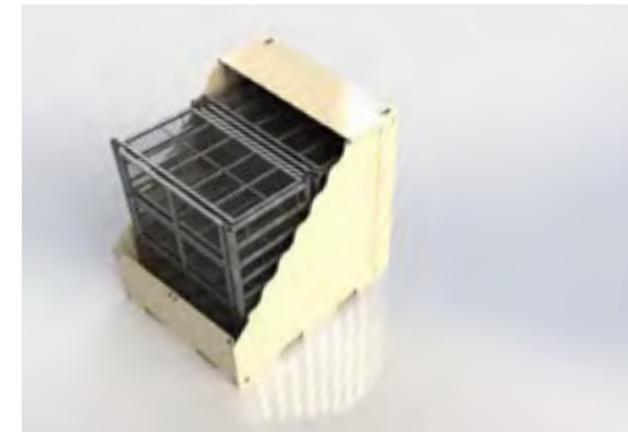
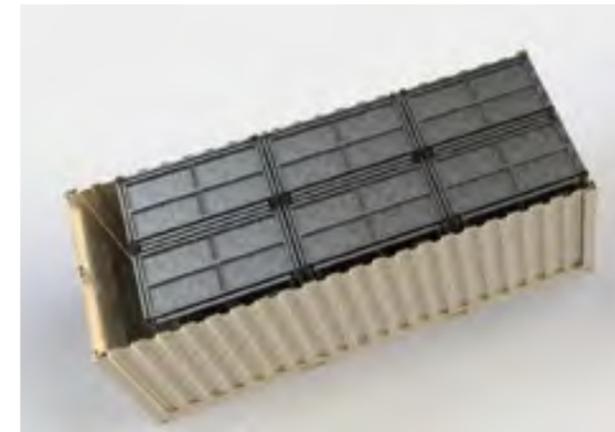
TRICON Fit 2 ea maximize TRICON footprint

20FT Fit 6 ea in standard 20 ft container and CROP/PLS

463L AIR 2 ea fit Air Pallet



Partno.	150369
Size (LxWxH) [in]	70x42x78
Tare weight	630 lbs
Capacity (total)	5,000 lbs
Material	Extra High Strength Steel
Finish	Hot-dipp galvanized, anti sparking and non corrosive
Stackability	3 cages
Sling-loadable	Yes
Forkliftable	4-ways
Shelves and compartments	3 + 3
Ammunition certified by DAC	Yes





Scan to watch a video of the testing at Defense Ammunition Center, McAlester OK.



SHARKCAGE LARGE FOR 10 & 20 FT

20 FT

5 ea maximize standard 20 ft container or CROP/PLS

463L

2 ea maximize 463L Air Pallet footprint

AMMO

Certified for ammunition transport by DAC



Partno.	150686
Size (LxWxH) [in]	84x45x85
Tare weight	860 lbs
Capacity (total)	5,000 lbs
Material	Extra High Strength Steel
Finish	Hot-dipp galvanized, anti sparking and non corrosive
Stackability	3 cages
Sling-loadable	Yes
Forkliftable	4-ways
Shelves and compartments	4 + 4
Ammunition certified by DAC	Yes





150690 FITS WELL ON MTV



150690 TWO FIT ON A 463 L PALLET

Haz Mat storage & transport SHARKCAGE HAZ MAT

CLASS III P

Complies with storage regulations by collecting spills from each shelf level

FOOTPRINT

36 ea. standard issue 5 gallon cans

ACID

Special coating to accommodate battery storage



150690 STORAGE IN WAREHOUSE



150690 ACID RESISTANT RESERVOIR

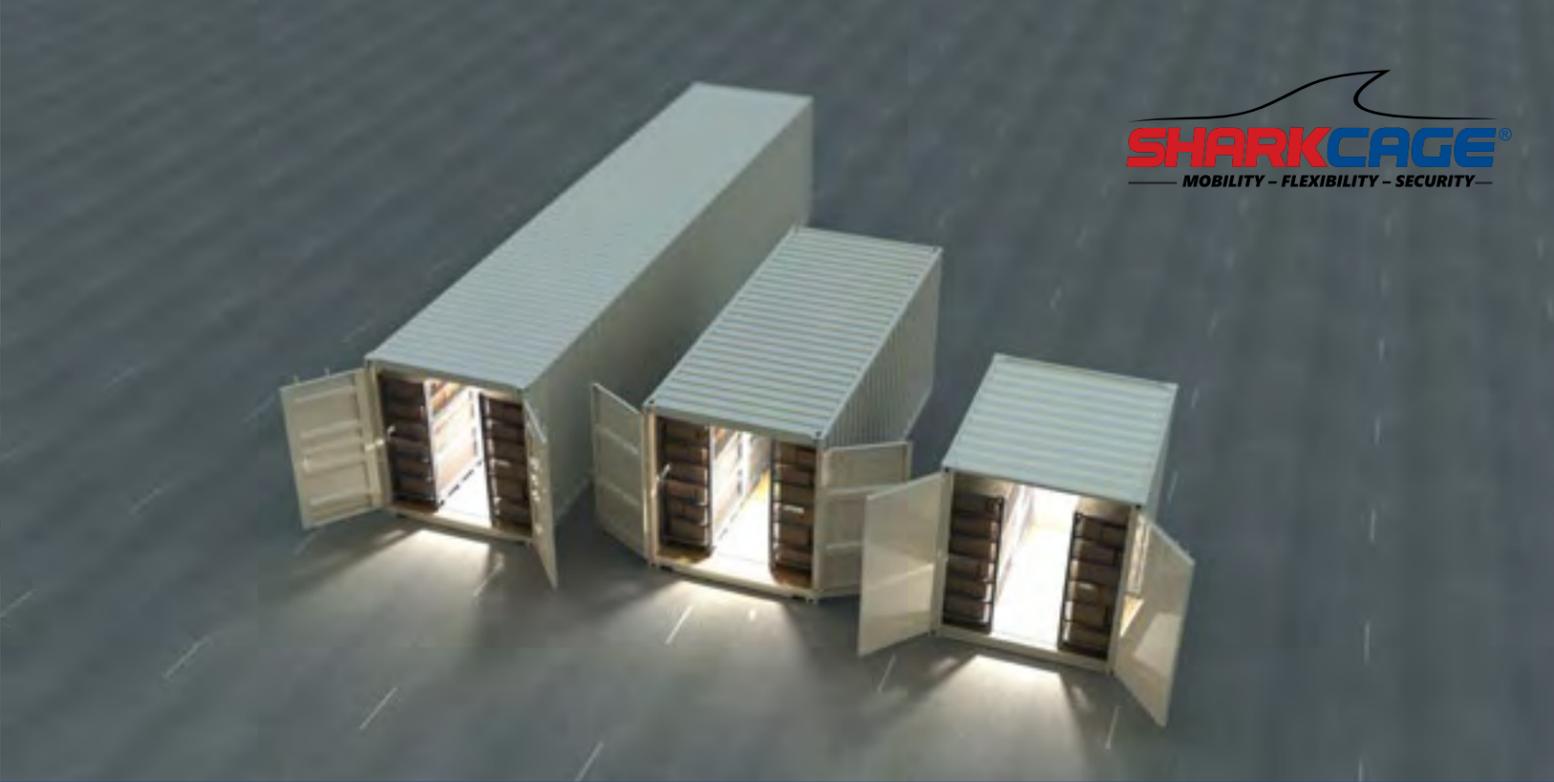
Partno.	150690
Size (LxWxH) [in]	70x44x60
Tare weight	600 lbs
Capacity (total)	4,500 lbs
Material	Galvanized High Strength Steel and stainless steel
Stackability	3 cages
Sling-loadable	Yes
Forkliftable	4-ways
Reservoir size	18 gallon
Capacity of 5 gallon cans	36 cans in each cage



150690 FLATPACK WHEN NOT IN USE



150690 FIT 6 EA ON CROP/PLS



SHARKCAGE
MOBILITY - FLEXIBILITY - SECURITY

SHARKCAGE CONTAINER WAREHOUSE II KIT

ACCESS

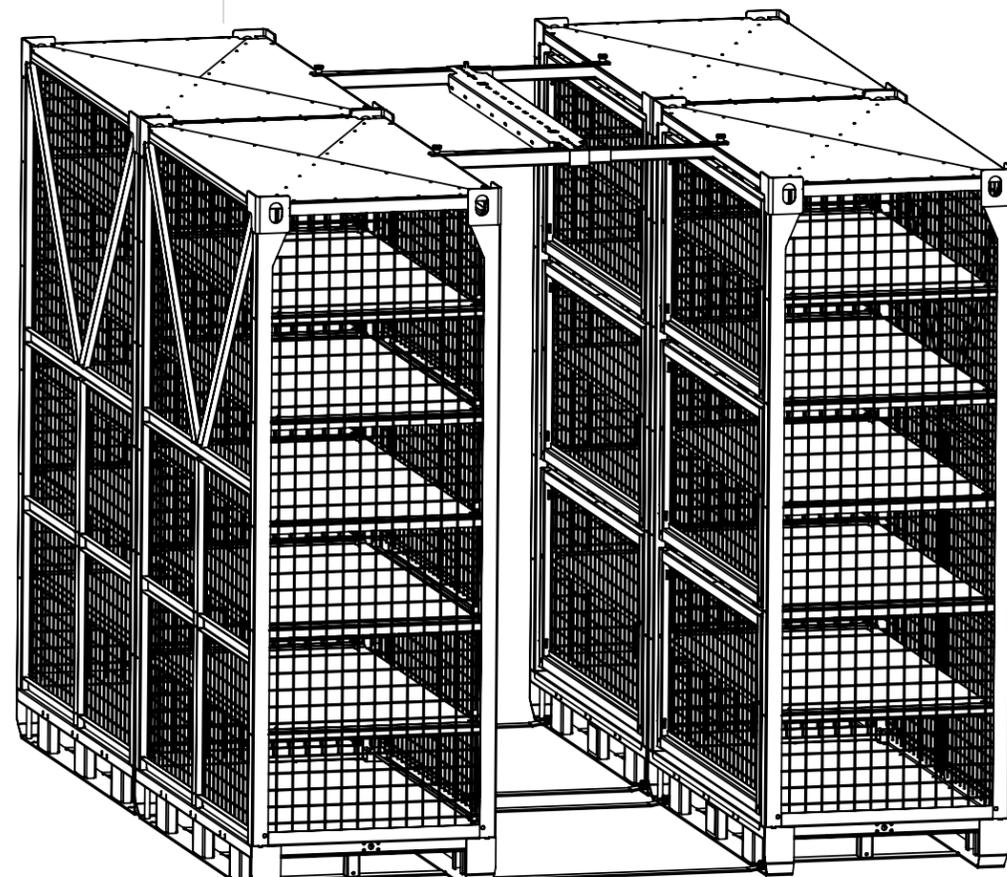
Access content without emptying container

MOVE

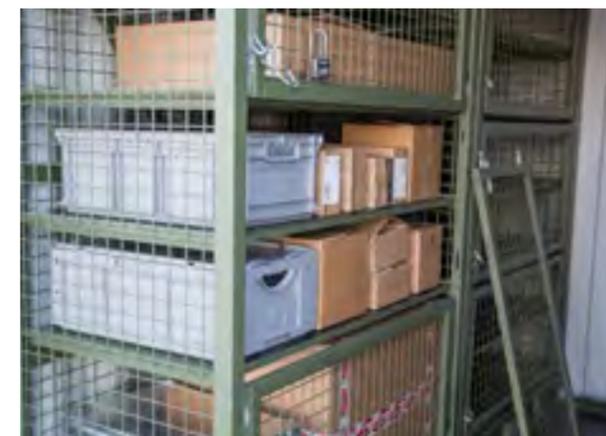
Pack and store in the warehouse. Load into container with forklift.

ADAPT

Fits standard 10', 20' and 40' shipping containers without modification



Partno.	150266
Size (LxWxH) [in]	55x30x83
Tare weight	500 lbs
Capacity (total)	5,000 lbs
Material	Extra High Strength Steel
Finish	Hot-dipp galvanized, anti sparking and non corrosive
Stackability	2 cages
Sling-loadable	Yes
Forkliftable	4-ways
Shelves and compartments	6 / 3
QTY to outfit 20' container	8





SHARKCAGE WHEEL RACK

ACCESS

Access content even while on the vessel.

MOVE

Pack and store in a warehouse. Load into container with forklift.

FLEXIBLE

Reconfigure shelf heights without tools. Fits standard shipping containers.



Partno.	150691
Size (LxWxH) [in]	104x42x31
Tare weight	600 lbs
Capacity (total)	5,000 lbs
Material	Extra High Strength Steel
Finish	Hot-dipp galvanized, anti sparking and non corrosive
Stackability	2 cages
Sling-loadable	Yes
Forkliftable	4-ways
Shelves and compartments	4 + 4
Lockable	Yes





SHARKCAGE®
MOBILITY - FLEXIBILITY - SECURITY

SHARKCAGE WHEEL RACK HEAVY DUTY

ACCESS

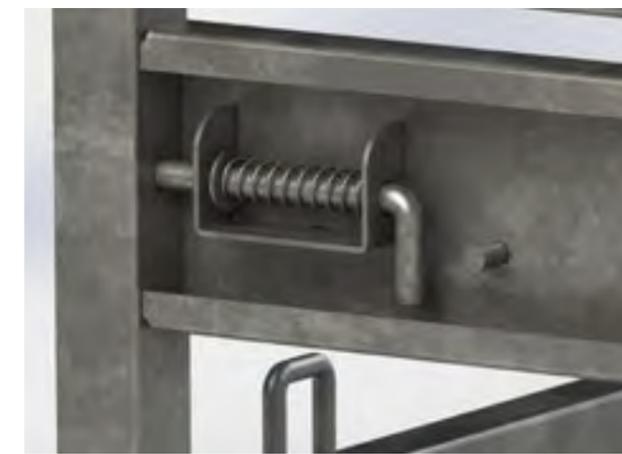
Access content even while on the vessel.

MOVE

Pack and store in a warehouse. Load into container with forklift.

FLEXIBLE

Reconfigure shelf heights without tools. Fits standard shipping containers.



Partno.	150692
Size (LxWxH) [in]	104x42x31
Tare weight	600 lbs
Capacity (total)	5,000 lbs
Material	Extra High Strength Steel
Finish	Hot-dipp galvanized, anti sparking and non corrosive
Stackability	2 cages
Sling-loadable	Yes
Forkliftable	4-ways
Shelves and compartments	4 + 4
Lockable	Yes





1409-47 150606 STD



150694 TWO FIT ON A 463 L PALLET

Heavy duty basket
TACTICAL BASKET

STRONG

The SharkCage Tactical Basket is strong enough to hold 7000 lbs

STACK

Stack up to 7 Tactical Baskets high.

463L

Two fit on a 463L Pallet.



150694 STORAGE IN WAREHOUSE



150694 SLINGLOADABLE

Partno.	150694
Size (LxWxH) [in]	104x42x31
Tare weight	600 lbs
Capacity (total)	7,000 lbs
Stackability (stationary)	7 cages or 35,000 lbs
Basket top lid	
Partno.	1409-47



150694 INTERNAL FORKLIFT POCKETS



150694 FIT 4 EA ON CROP/PLS



Stay in Touch

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