Functionality

Container Dollies







Made in Germany

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Toolwell
North America

Cone Fitting



Twist Lock Fitting



Container dollies come in two different versions:

Outfitted with cone fittings or

Outfitted with twist lock fittings.

INDOOR USE

OUTDOOR USE

Cone Fittings

Low profile dolly

Twist Locks

Large rollers



For pavements

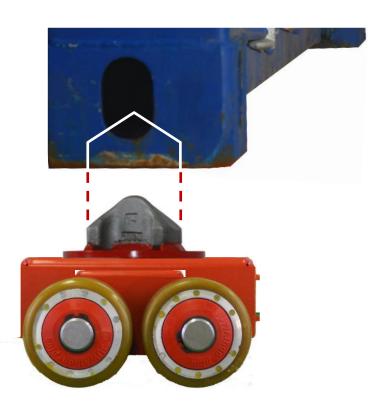
The indoor version has low profile rollers and cone fittings for smooth-surface use.

The outdoor version has large rollers and twist lock fittings for indoor and outdoor pavement use.



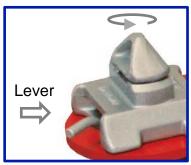
For smooth surfaces

Cone fittings prevent horizontal slipping of dollies

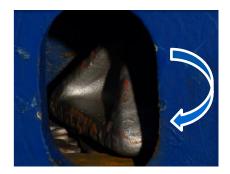


The cone fitting sits inside the container corner hole to prevent the dolly from slipping.

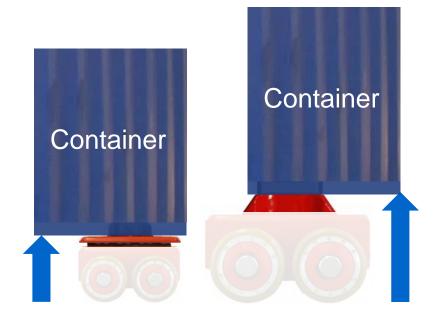
Twist locks prevent horizontal AND vertical slipping of dollies







Turning the handle on the twist lock causes the tip to rotate inside the container corner hole. This then locks the dollies into the container.



The indoor version carries the container close to the ground.

The outdoor version has a container seat that is higher off the ground and provides more ground clearance.



Cone fittings hook on





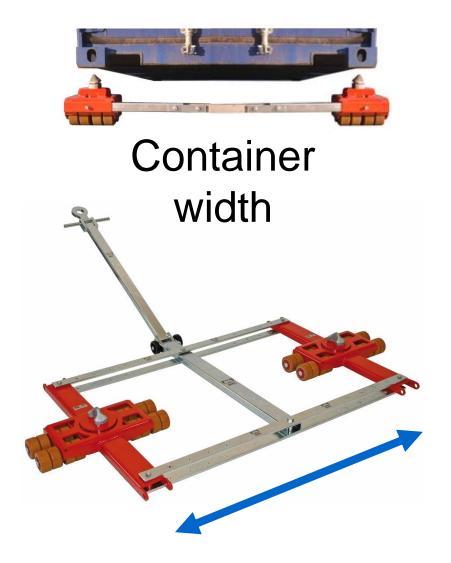
Cone fittings hook onto dolly.

Twistlocks are permanently welded on.

Twist lock fittings welded on

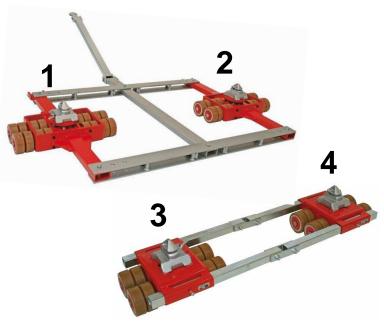






The connecting bars spread the dollies to exactly 89 inches to fit standard 8 ft (96 inches) ISO freight containers.

Steerable

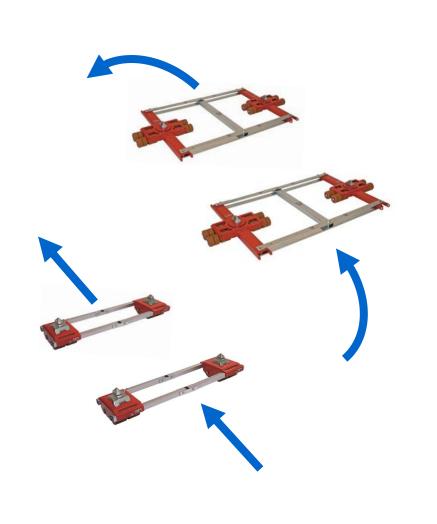


Straight-line

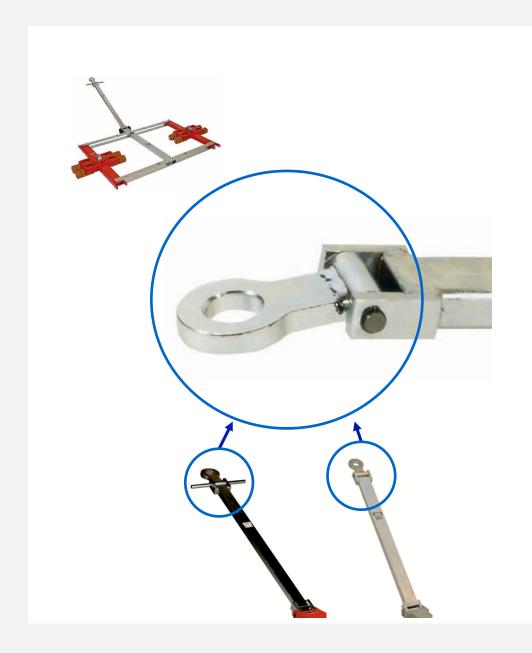
A standard configuration consists of one steerable container dolly combined with one straight-line rear dolly.



This combination provides maneuverability like your car, as the front steers and the rear follows in a straight line.

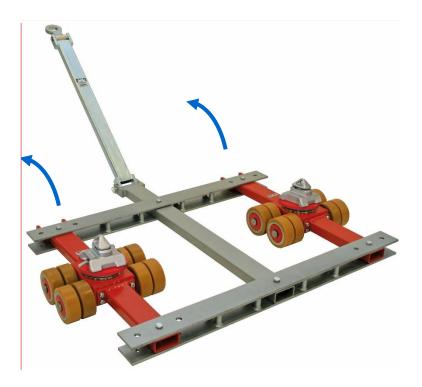


However, the dollies can be mixed and matched to various combinations as needed.



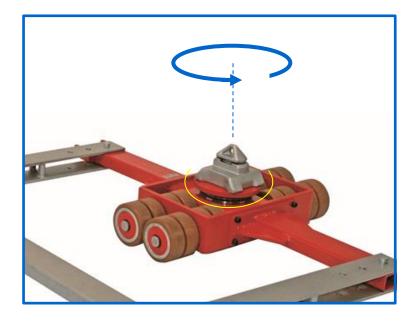
The steerable dollies come with a pulling handle. The towing eye allows for a connection to a forklift or other pulling vehicles.



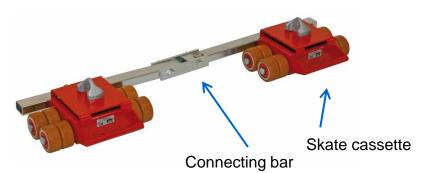


The pulling bar aligns
the front and rear
connecting bars into
the direction of
movement and
synchronizes the
turning of the left and
right loading
cassettes.





The loading seat consists of a 360degree swiveling turntable. It allows for easy turning and steering of the dolly underneath the load. The dolly spreads the weight out over a large footprint, and this reduced floor pressure facilitates easy turning.





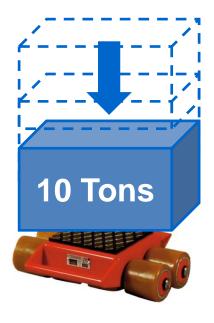
The straight-line dollies come with connecting bars and a pair of skate cassettes.





These dollies have a stationary loading platform.

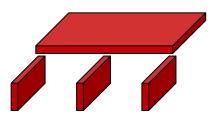
Impact Loading



Our dollies are made to withstand the impact force from loading.

Steel Bending Technology





OLD: Welded frame using thick rigid steel

Will snap under shock





NEW: Frame created by bending steel

Absorbs shock through higher strength & elastic construction

The impact loading resistance is achieved through:

1. Steel bending technology that provides higher strength and elasticity

. . .

Welding Seams



Steel bending reduces number of welding seams

... 2. Fewer welding seams and higher quality welding seams through welding robot

Welding robots ensure higher quality welds



Shock resistant rollers



OLD: hard brittle roller

Will crack under shock

... 3. Elastic shock absorbent roller material.



Absorbs shock through elasticity



JUWAthan Rollers







Traditional Rollers
Nylon, Steel, Urethane, Composite



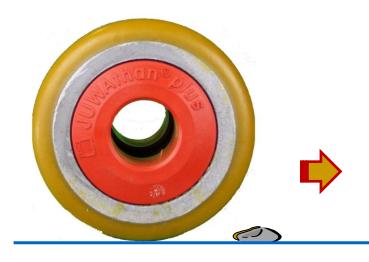




40 years of development has led to a roller material called "JUWAthan," which is superior in performance and durability over traditional polyurethane, composite or steel rollers. Here is why:

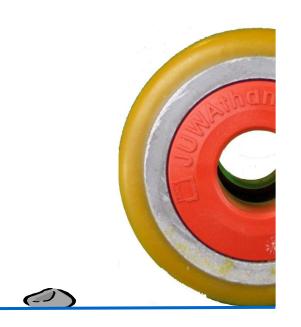


1. Traditional polyurethane rollers get punctured by metal shavings, nails or rocks. The debris can become embedded in the roller, wearing down the material and resulting in a short life expectancy.

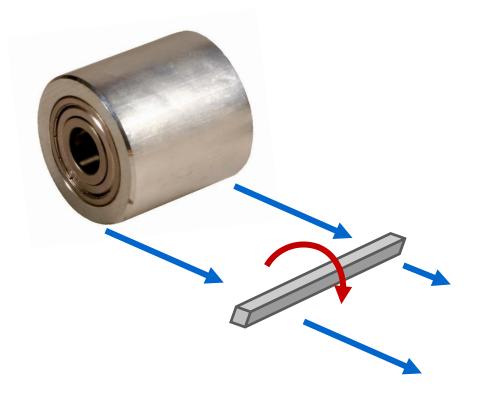


Our patented
JUWAthan material is
elastic and will mold
around obstacles on
the ground like the
tires on your car.



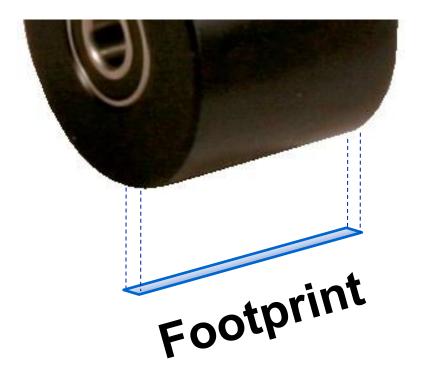


Obstacles will not puncture or become imbedded in the rollers and therefore cannot break down the material. The result is a roller with much higher durability.

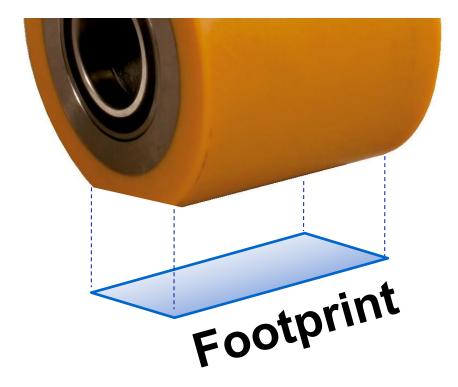


2. In addition, this elasticity means that the rollers do not have to get up and over the obstacle.

Loads are not stopped as they would be with steel, nylon or hard polyurethane rollers.



3. Traditional rollers have a small footprint because only a small surface area touches the ground.



The elastic JUWAthan spreads out under the weight to increase the contact area with the floor. The larger footprint of each dolly divides the weight over a larger area so that the pressure onto the floor is reduced.





Radically reduced floor pressure means that even under extreme loads the rollers are:

1. Non-marking &2. Non-damaging

You can take the dollies over tiled floor or sensitive epoxy without damaging or marking the floor.

- Steering
- Move forward
- Break-out from standstill



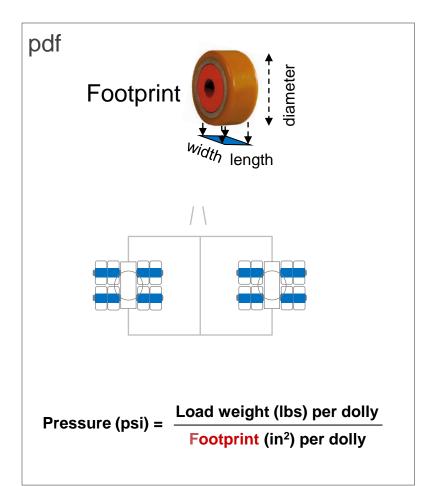


Less Manpower

Reduced pressure on the ground also means:

- Easy steering
- Easy rolling
- Easy break out from standstill

...which translates into fewer manpower requirements.



If you are travelling over thin floors (like on a submarine) and are worried about breaking through, please consult our guide to calculate the exerted pressure per square inch. You will find the information under the link "Pressure for Thin Floors."



You can leave your load sitting on top of the dollies for extended periods of time. This will not damage the dollies or rollers. The rollers will begin to sag until the load starts moving, and then the roller material will return to its original shape.



To maintain the round shape without warping over time, the roller has an aluminum or steel core (depending on the dolly size). Two precision ball bearings are held inside.



The rollers become larger for heavier loads, compensating for the difficulty of getting over obstacles. All of our dollies maintain the ability to bridge small ledges, gaps and obstacles.

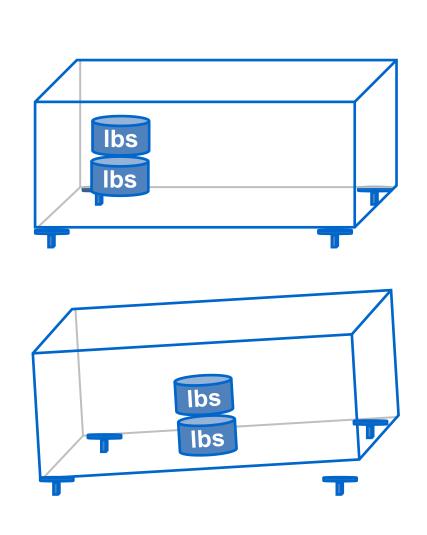


Because of their elasticity, the rollers perform well both inside and outside: in workshop facilities with metal scrap on the floor, on rough parking lots, over cracks in concrete or even over countersunk rail tracks.

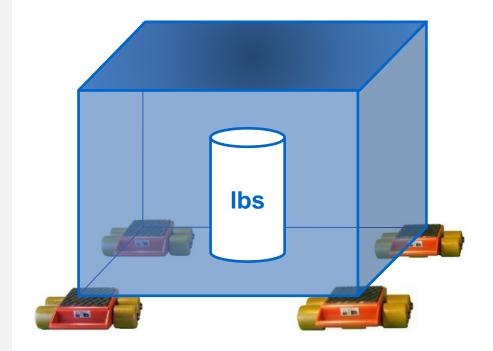


However, the rollers are designed for low profile applications so they're small in size. The dollies will get stuck in gravel or soft surfaces, like grass... so use the dollies only on hard surfaces.

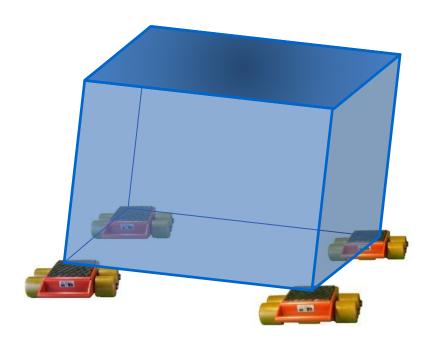
Load Capacity



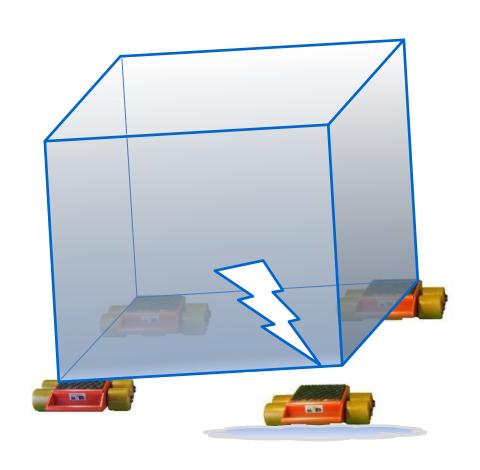
Be aware that the weight may NOT be evenly divided between each dolly...



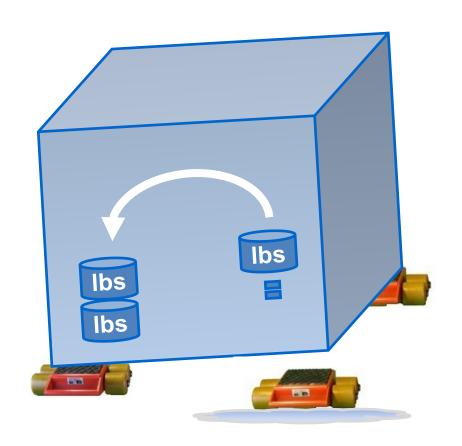
... even if the weight is perfectly distributed and the center of gravity is in the middle.



If you are traveling
over an uneven
surface, your load will
rock
just like a 4-legged
chair on uneven
ground.



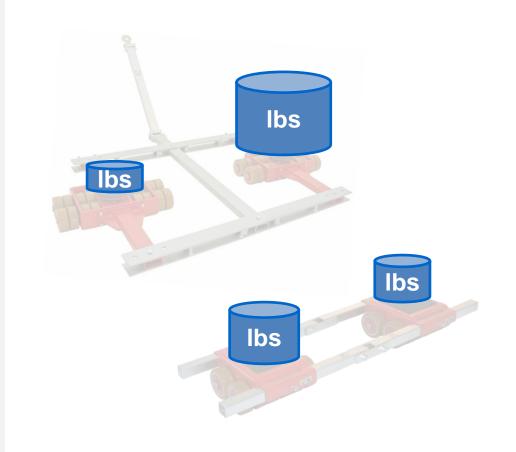
One dolly may lose contact with the load...



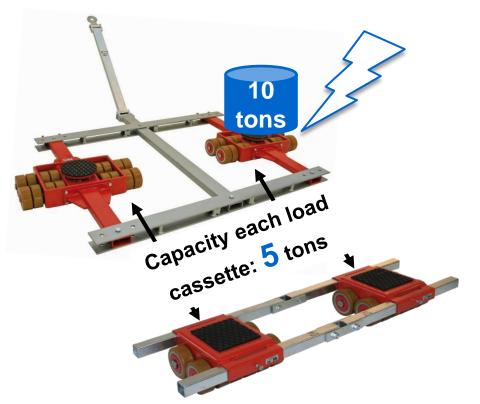
...causing the remaining dollies to carry more weight



Loads almost never travel over perfectly level surfaces. Floors slant towards drains, concrete is often full of cracks, and there are often ledges to overcome.



So please be aware that the weight may NOT be evenly divided between each loading point.

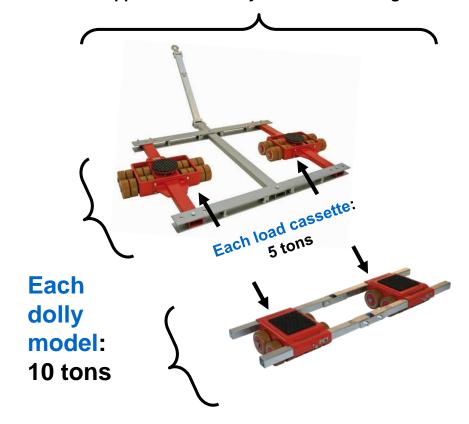


So make sure the load capacity for <u>each load</u> <u>cassette</u> is not exceeded.

Load Capacity

Combined: 20 tons

applies if each dolly carries same weight



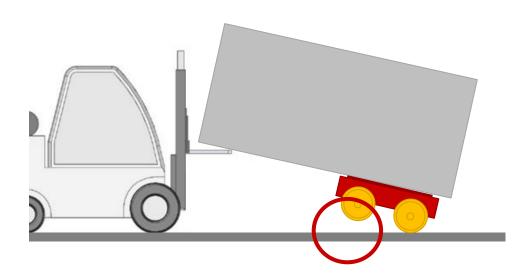
Please understand load capacity as being listed:

- Combined
- Each dolly model
- Each load cassette



All our dollies have a significant safety capacity above and beyond the rated load bearing capacity. So even if you max out the allowed weight, you will maintain maneuverability and the dollies will not break.

Exaggeration



Please use caution when using the dollies to support one end of a load with a forklift on the other. The height difference will tilt the dollies and lift up one row of rollers, overloading the remaining ones. For this, please use a dolly with twice the load capacity.



Made in Germany



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