

# Functionality

## Pump Operated Toe Jacks



Made in Germany

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# Avoid confusion

We carry two types of jacks that look almost identical.

To avoid confusion, we will first explain the difference.

**G-plus**  
Model Jacks



**EX**  
Model Jacks



# The difference between

## G-plus Model Jacks



## EX Model Jacks



The G-plus and EX type jacks share the same design.

The difference is that one has an attached tank with pumping mechanism and the other has just a connection nipple.

## **G-plus** Model Jacks

Hand  
operated



## **EX** Model Jacks

Pump  
operated



The 'G-plus' model jacks are made to be operated by hand using the attached pumping handle.

The 'EX' model jack must be operated with an external hydraulic pump.



## EX jack

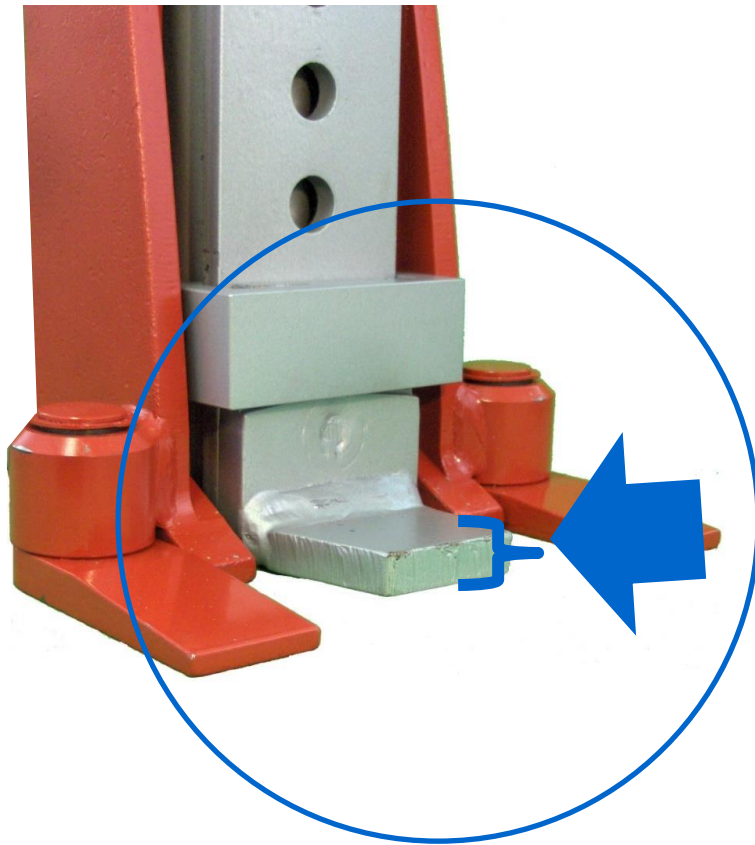
This slideshow explains the functionality of the 'EX' model jacks which have to be operated with an external hydraulic pump.





These *toe jacks* are made in Germany and have been engineered in cooperation with professional riggers for ease of use and safety.

# Functionality

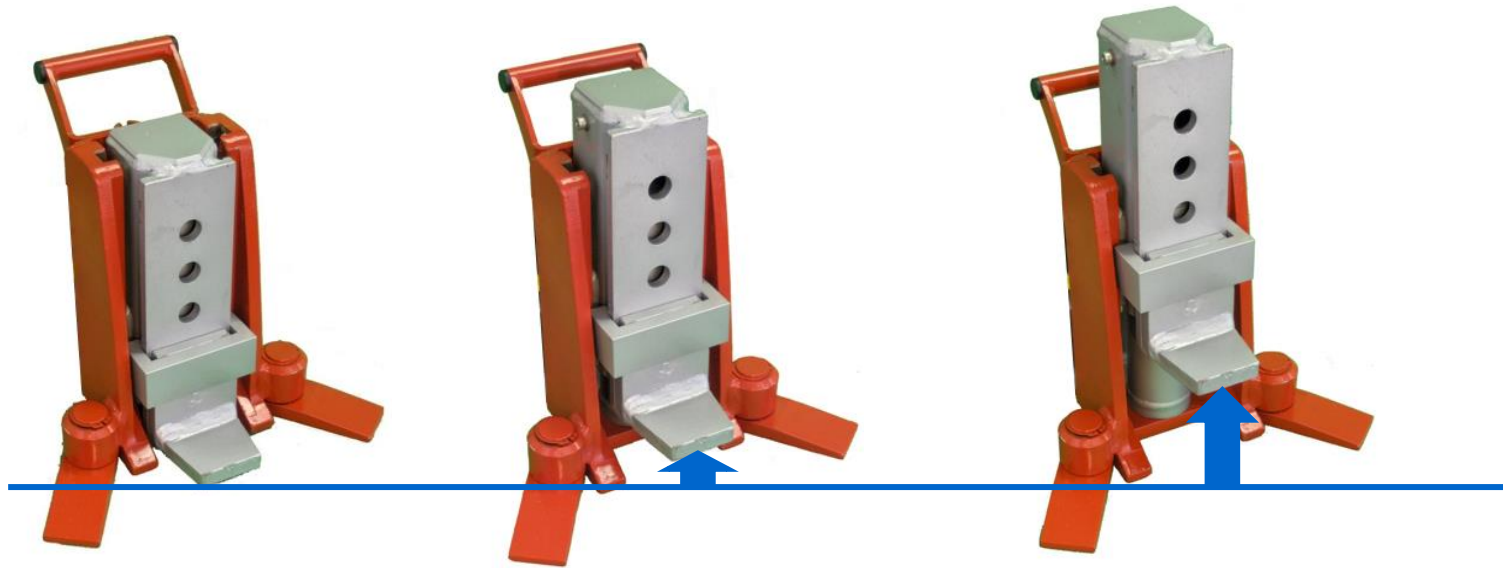


The lifting toe provides a very low profile for loads with low clearance between the bottom of the load and the ground.



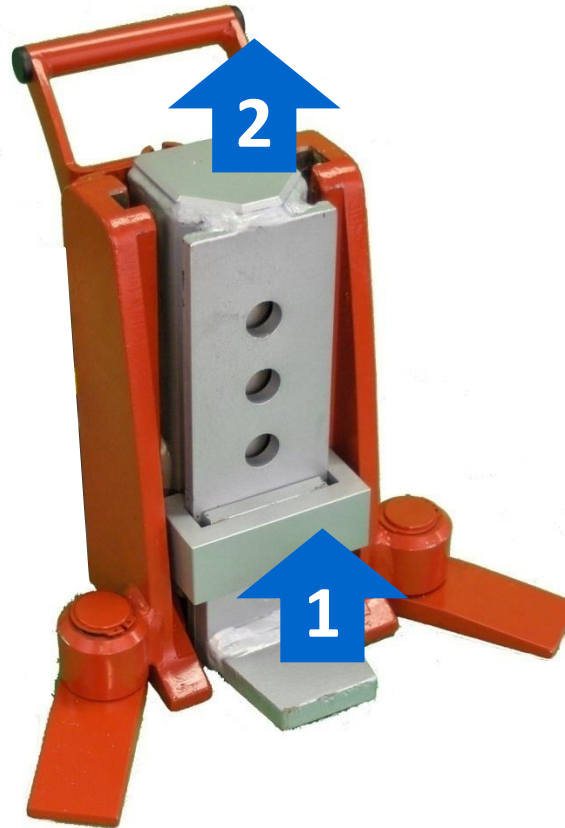


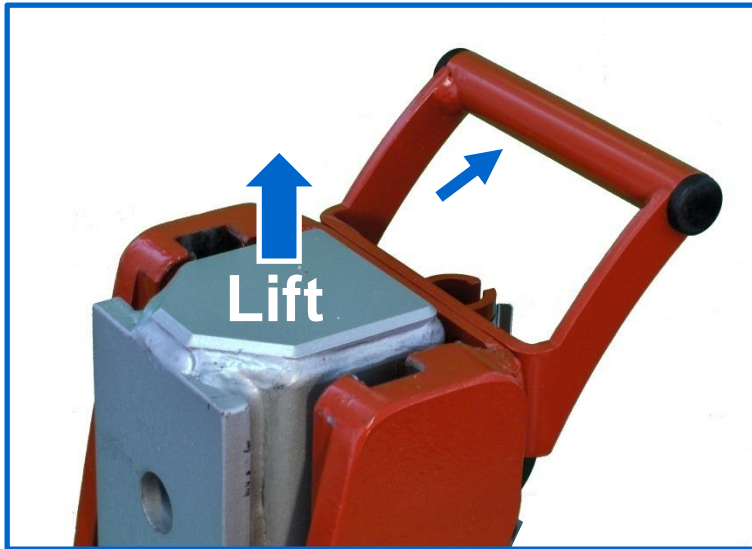
This toe can be locked into different starting positions  
...so, if the load sits on 5-inch legs, you can  
immediately position the toe at 5 inches, rather than  
having to pump up to this height.



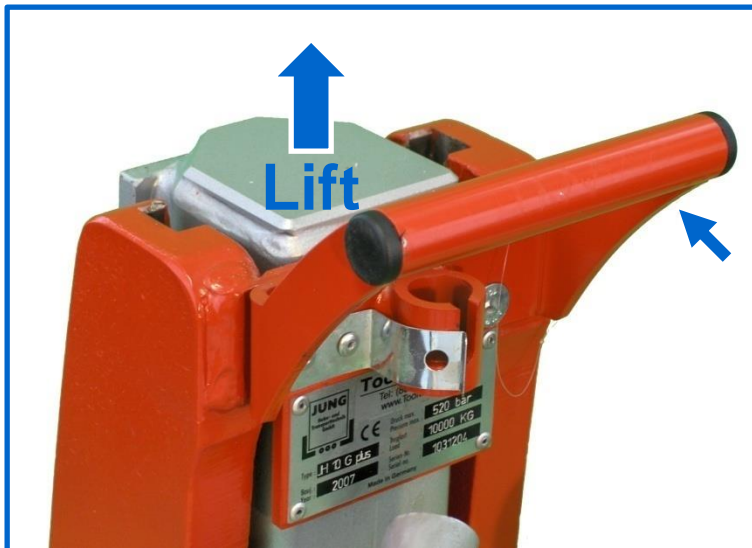
When jacking up the load, the silver lift travels upwards, guided inside the red shaft. The toe is firmly held in a vertical path so the jack does not tip forward.

You can either lift  
with the toe (1), or  
the top loading  
plate (2)

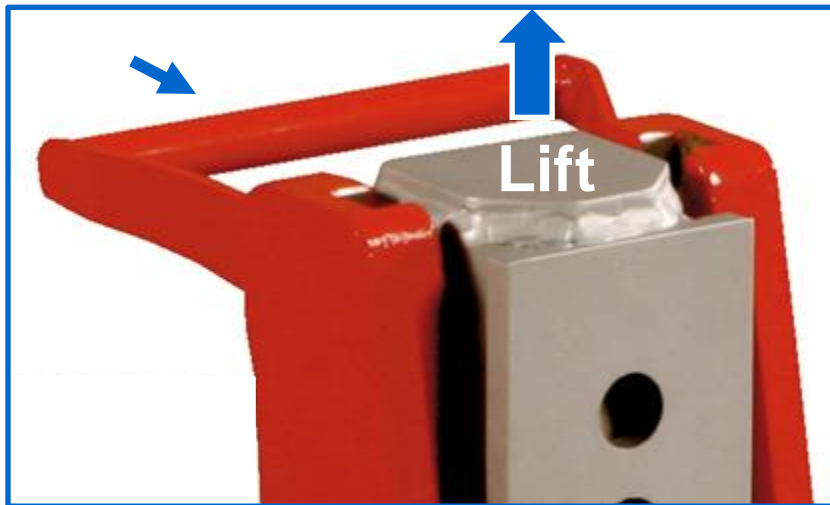




The handle is also detachable on the 10-ton jacks if more clearance is needed for lifting with the top loading plate.



JUNG  
TOL  
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520 Bar  
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937204  
H D G AS  
2007



The larger 20 and 30 ton jacks have horizontal carrying handles that provide clearance to the top loading plate.



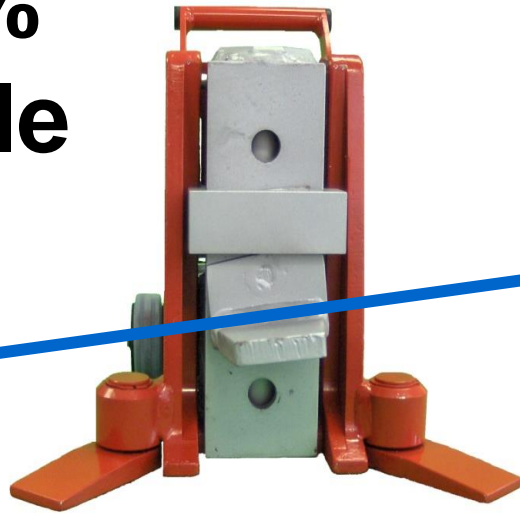
The jack comes with swivel feet to adjust to any available clearance under the load.



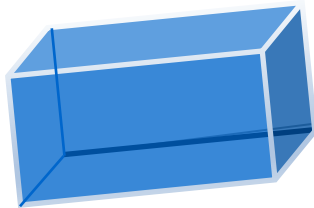


The toe will teeter to compensate for the leaning of loads.

**10%  
angle**



As the load travels upwards, it starts to lean. The toe leans with the load while the jack stays upright.





**10%  
incline**



The jack can also be used on inclining ground. As the jack leans, the toe provides horizontal support for the load.

**10  
tons**

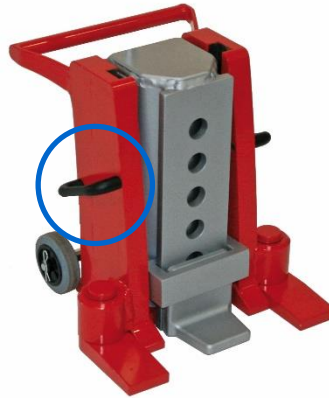


**20  
tons**



**+** Wheels for transport

**30  
tons**



**+** Wheels for transport

**+** Extra side carrying handles

The 10-ton jacks have no wheels.

The 20- and 30-ton jacks have wheels.

The 30-ton jacks have additional carrying handles.

Wheels on 20 and 30  
tons jack only



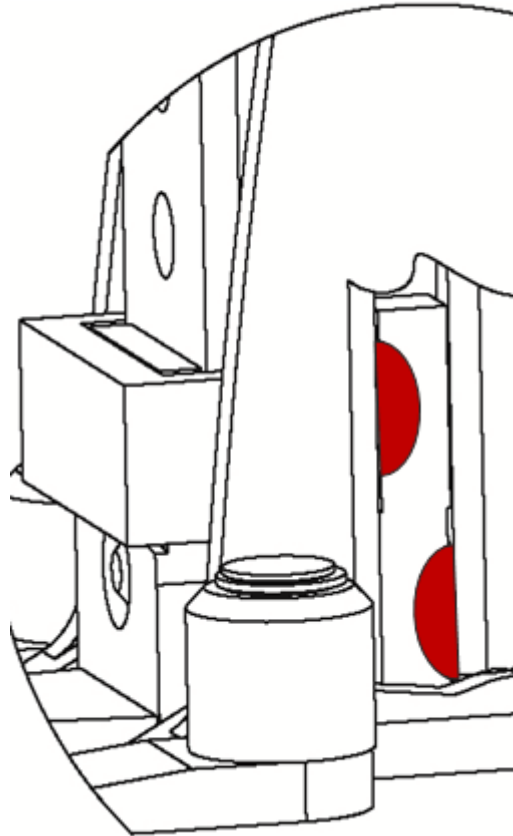
You can also lock the  
included handle in an  
upright position.

Wheels on 20 and 30  
tons jack only



Tip the jack back onto its  
rollers...  
and roll it like a vacuum  
cleaner

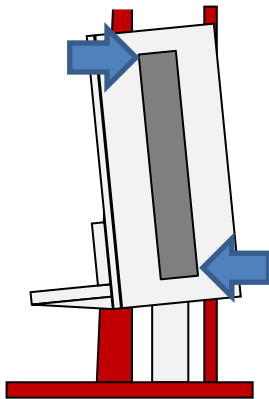
The most important feature of the jack is a slide shoe design.



**Most  
important  
feature**

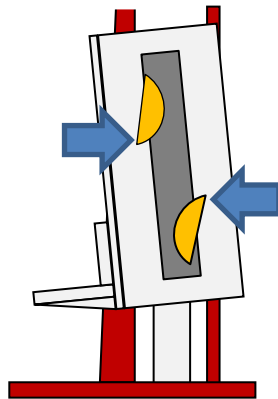
**1**

Slide leans  
& grinds



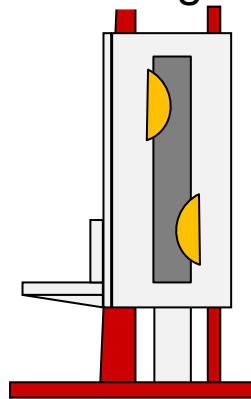
**2**

Slide shoes  
engage



**3**

Slide  
remains  
straight

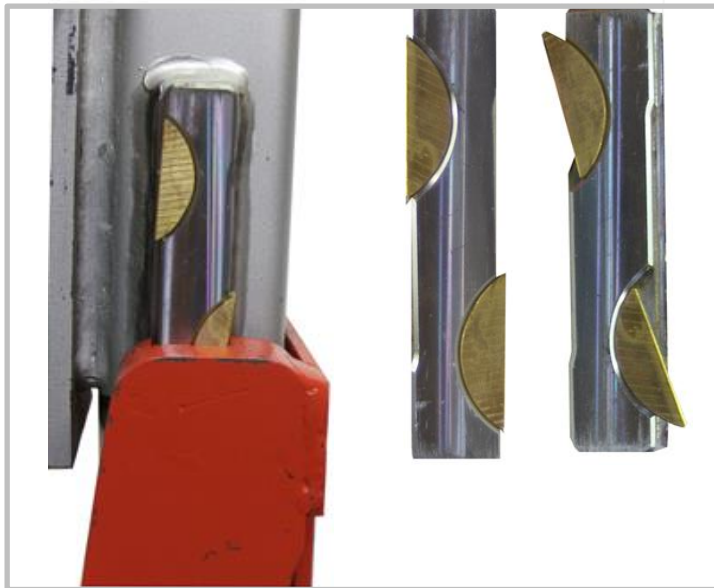


Toe jacks lean  
towards the  
weight **(1)**.

The slide shoes  
compensate **(2)**

and keep the  
lifting  
mechanism  
upright **(3)**.

This unique design results in unsurpassed performance. It is patented and exclusively built-into JUNG toe jacks.



## Advantages of Slide Shoes

- No twisting of piston
- No grinding of steel
- No total failure under impact loading
- Less wear
- Better performance
- Longer life
- Repairable
- Higher safety

Internal spring  
return. Not visible  
from the outside.



The larger 20- and 30-  
tons jacks are also  
outfitted with spring  
return. That means the  
toe will retract by itself.  
The smaller 10-ton jack  
must be pushed back  
by hand.



## Hand Pump for 10 tons jack



The 10 tons jack is easily operated with a hand pump.

An electric pump can also be used for effortless push-button operation

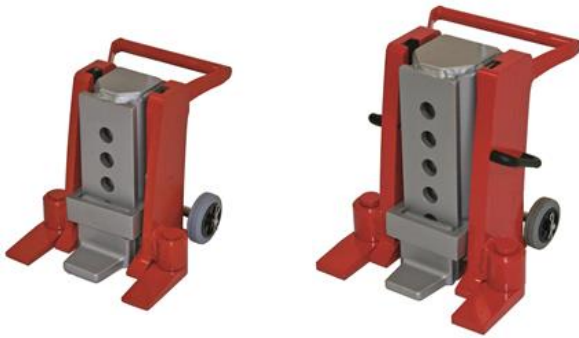
## Alternative: Electric Pump





Using a hand pump for the larger jacks is not user friendly as it requires more than 250 hand strokes to lift the jack.

Hand Pump for  
20- and 30-tons jack  
**not** recommended



# Electric Pump required for 20- and 30-tons jack

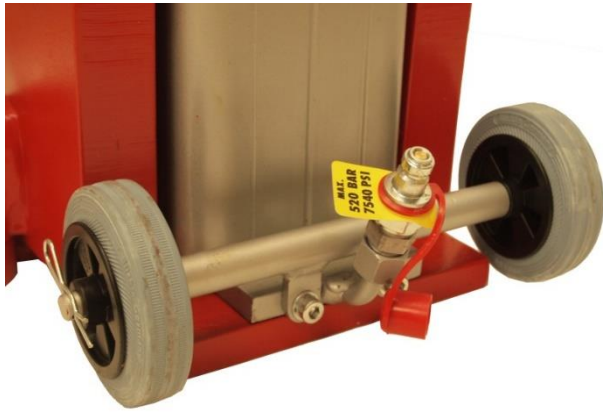


Consequently, an electric pump is recommended to use with the larger jacks.



All pumps have 2 connection nipples to operate 2 jacks simultaneously.





All hydraulic jacks, pumps and hoses are outfitted with no-drip quick connectors.





The connecting hydraulic hoses are available in various lengths to match your needs.

# Operating Pressure 7540 psi

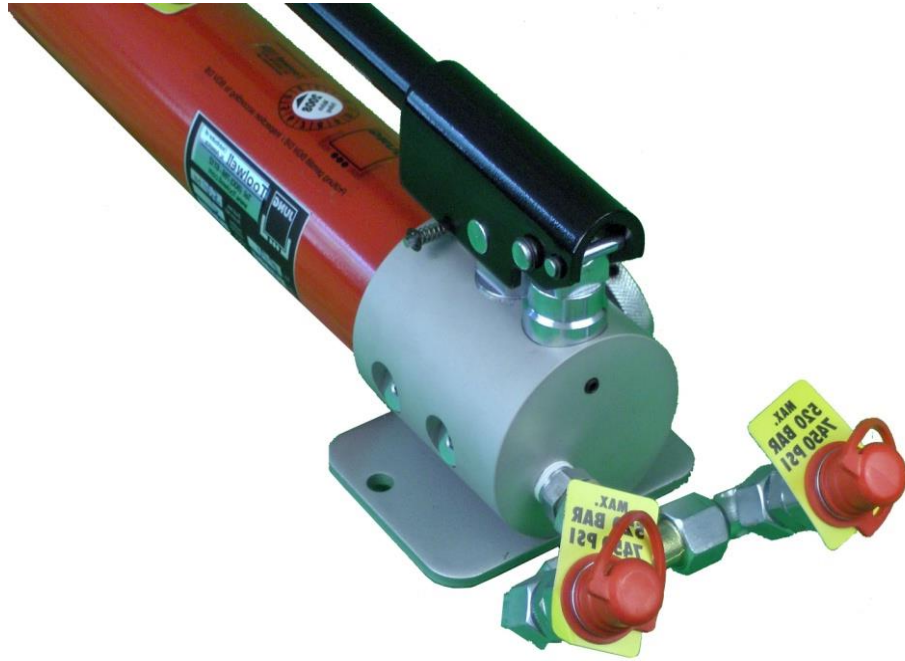


If you are using your own pump, please make sure it operates on the matching pressure. Do not use with common 10,000 psi pumps!  
Use with hydraulic pumps operating at 7540 psi only.

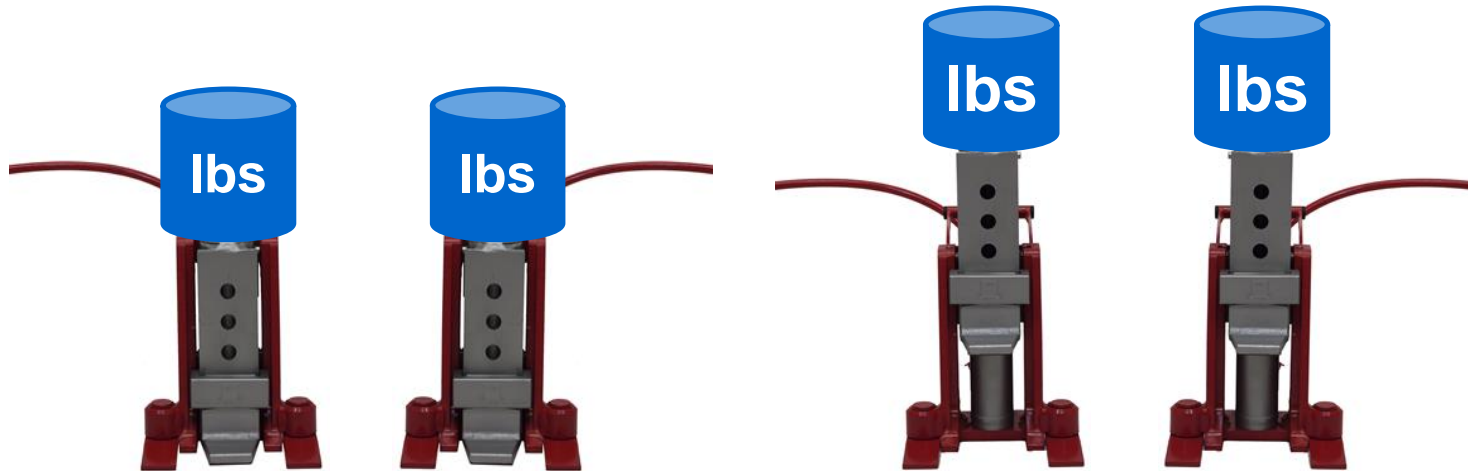
**ATTENTION !**

**It is important to understand the following concept if you plan to operate multiple jacks with one pump:**

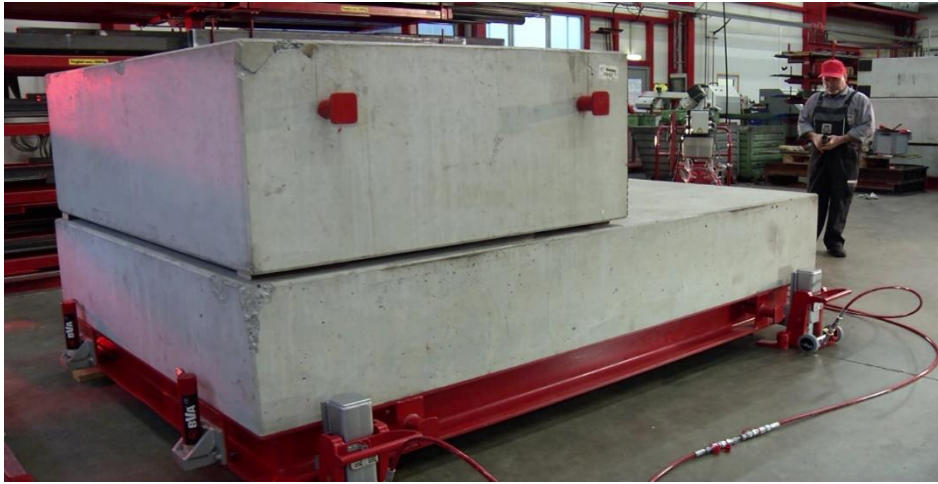




Each pump has two nozzles and can operate 2 jacks simultaneously. However: The pump supplies the same pressure to each jack via one oil supply.

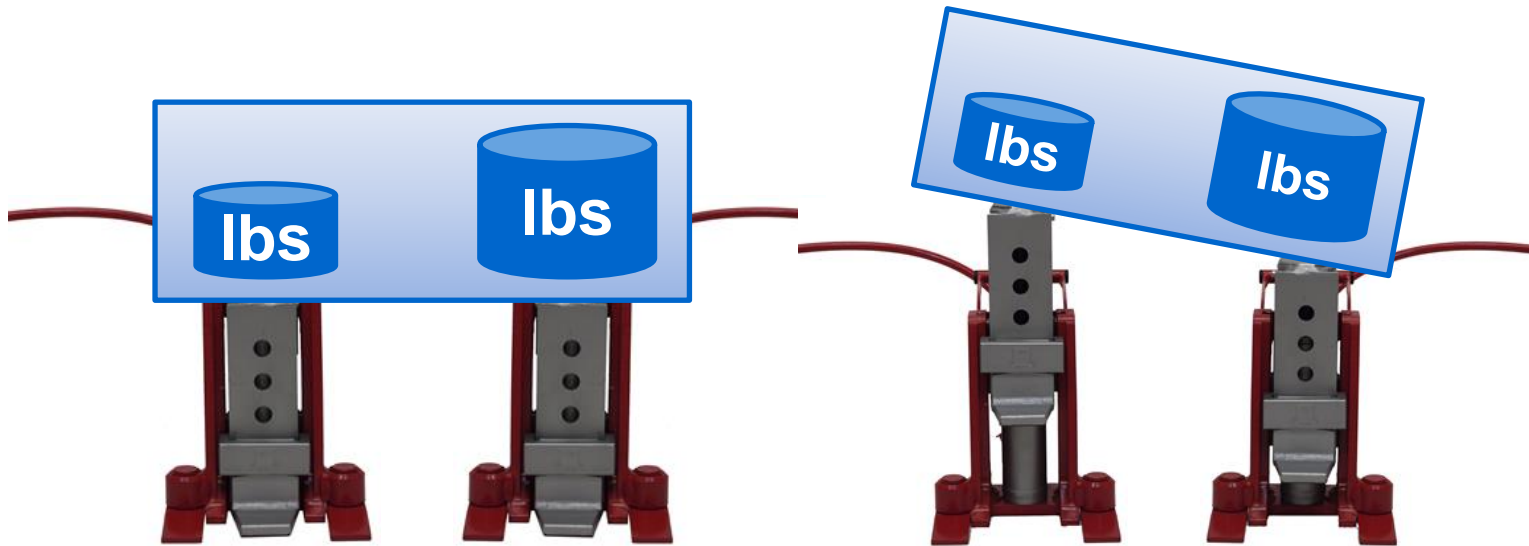


This means that both jacks will lift at the same rate when each jack carries the same weight.



BUT...if your weight is unevenly distributed across your load, each jack will be loaded with a different amount of weight.

As a result, the jack with less weight will lift faster, causing the load to tilt.





If you have uneven weight distribution, please operate each jack independently with separate pumps. This lets you manually synchronize the lifting process.

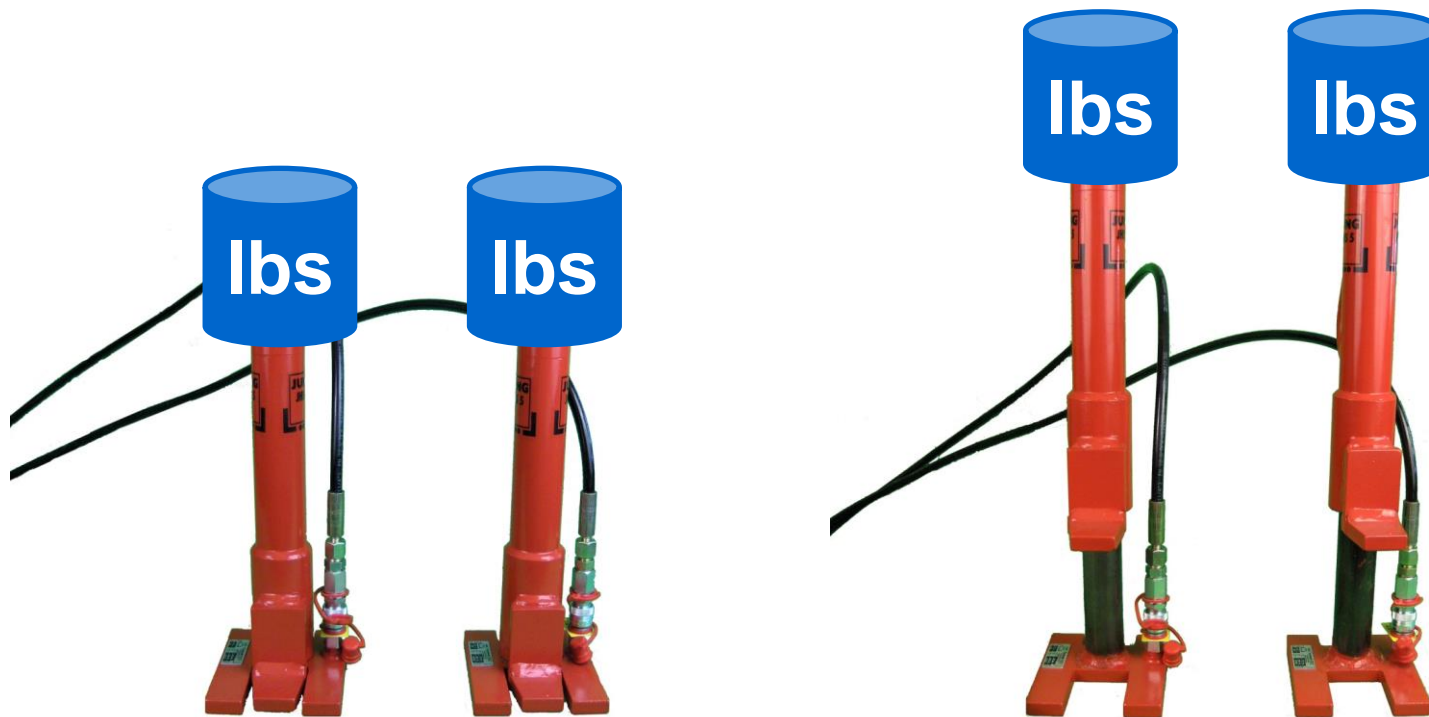




Alternatively, please compare the EX pump operated toe jacks to our G-plus toe jacks which can be operated without the external pump for independent control.

## **G-plus series Toe Jack**

**Which jack?  
at  
What capacity?**

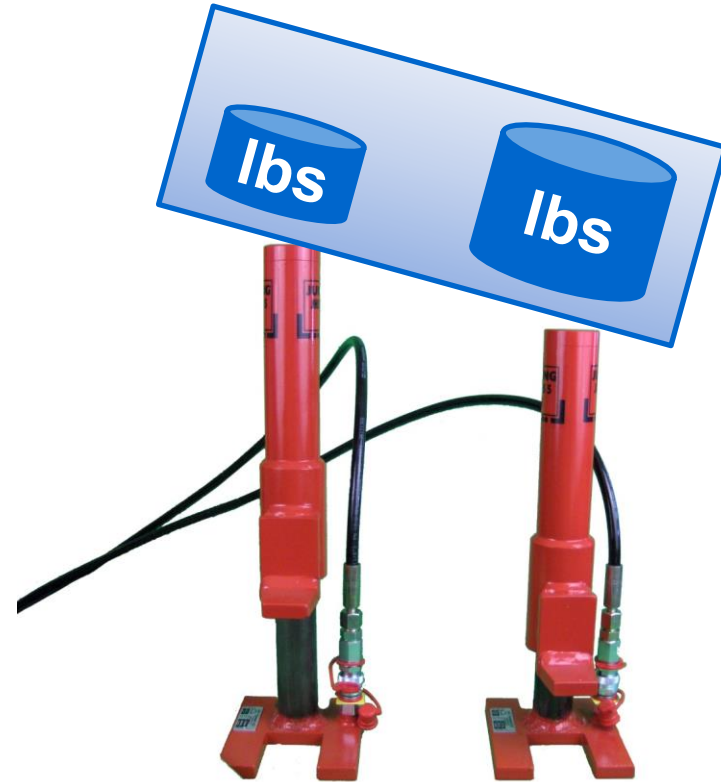
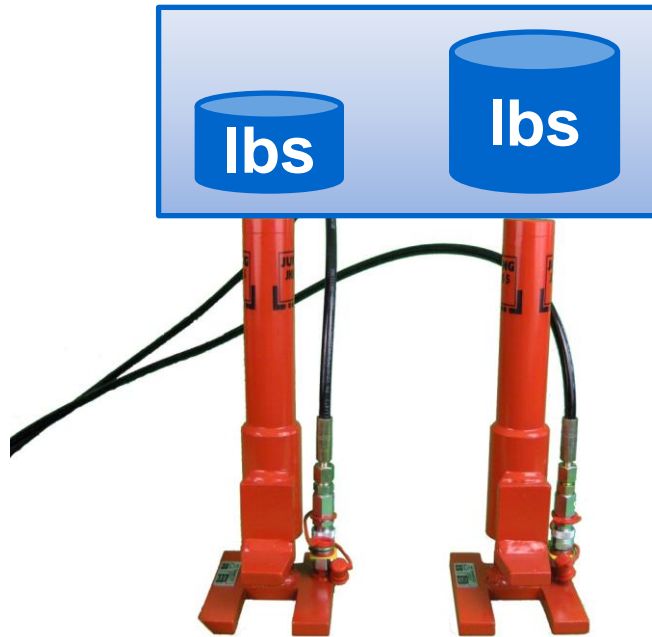


This means that both jacks will lift at the same rate when each jack carries the same weight.





BUT...if your weight is unevenly distributed across your load, each jack will be loaded with a different amount of weight.



As a result, the jack with less weight will lift faster, causing the load to tilt.





Alternatively, please compare the *confined space toe jacks* to our *G-series toe jacks* which can be operated without the external pump for independent control.

## **G-plus series Toe Jack**



Features:



Each manual pump comes with a foot plate, which holds the pump down as you operate its handle.



The lowering knob gives you precise control over gently lowering the load to the ground.





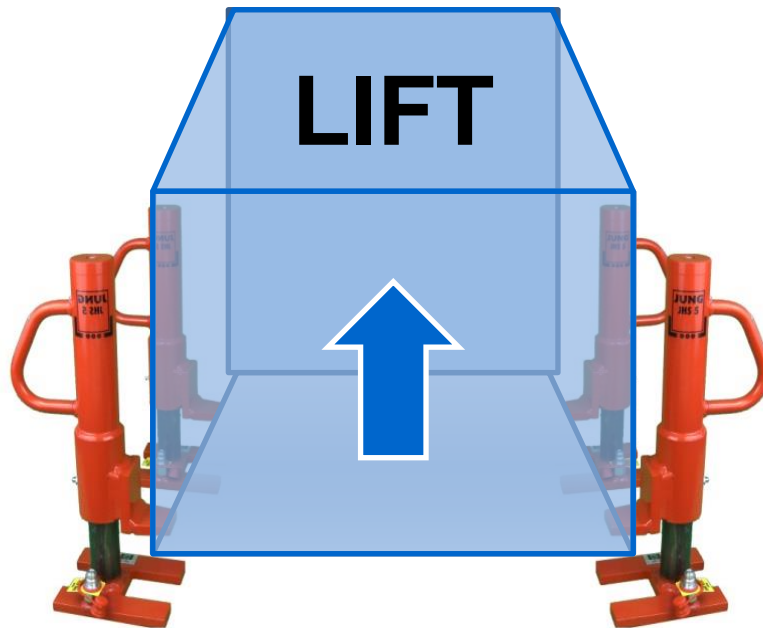
The hand pumps are also outfitted with an overload protection mechanism which safeguards the jack from breaking when overloaded.

**Overload  
protection**



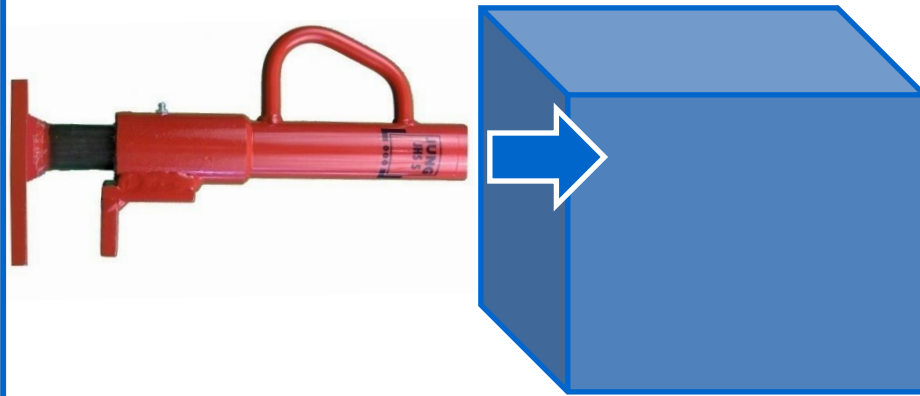


You can use the toe or the top loading plate to lift.

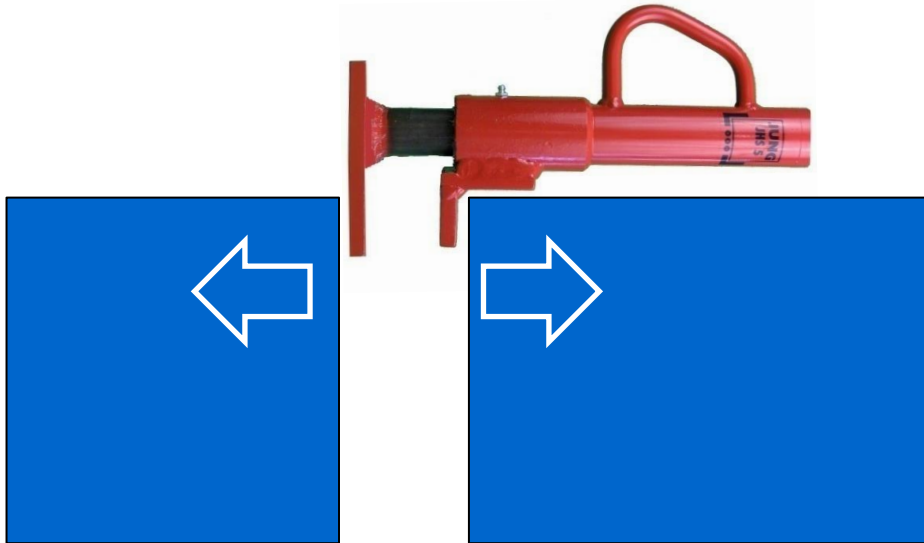


The jack can be used to lift heavy loads...

**PUSH**



...or to horizontally  
push.

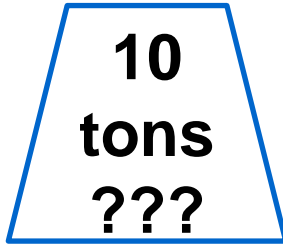


Because of the fixed toe, the C5 and C10 can be also used to separate loads.

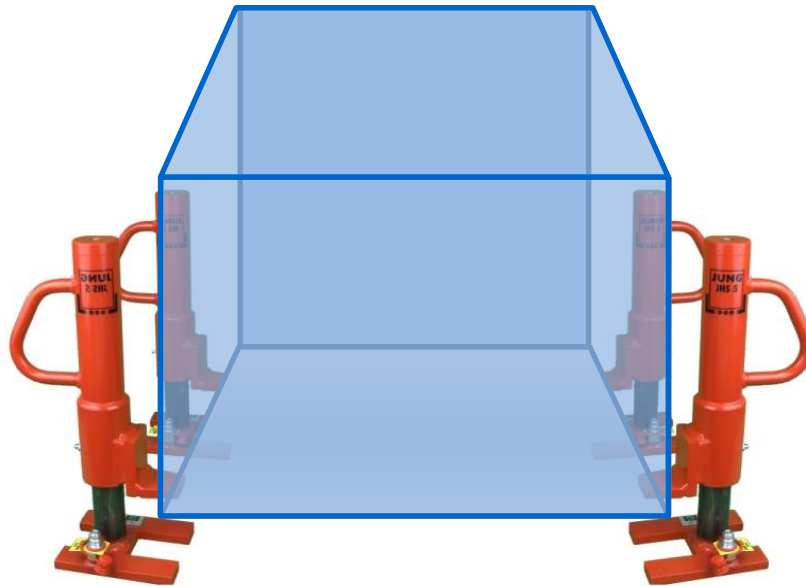
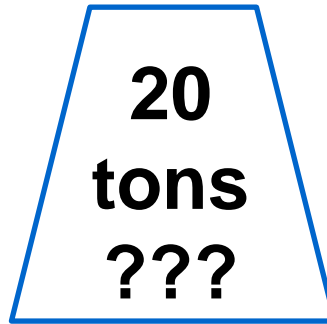
**×** The S10 has a removable toe and consequently is not ideal for this use.



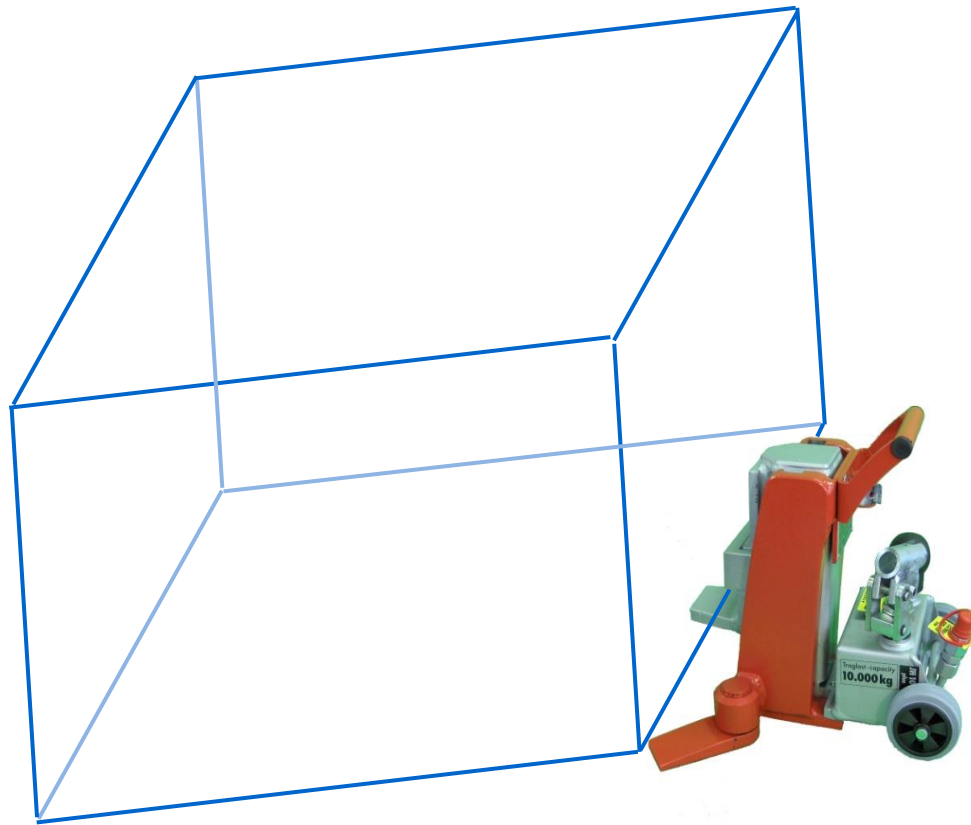
**Which jack?  
at  
What capacity?**



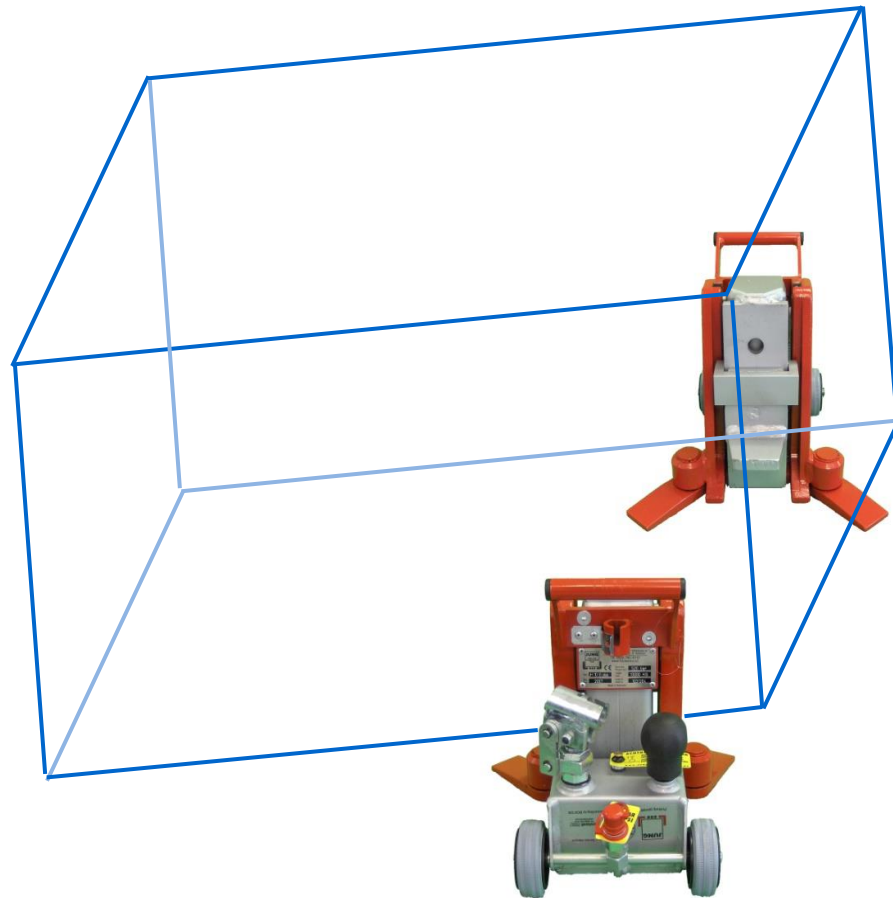
or



Before you choose a jack, you should understand how the weight of a load is divided across each jack.

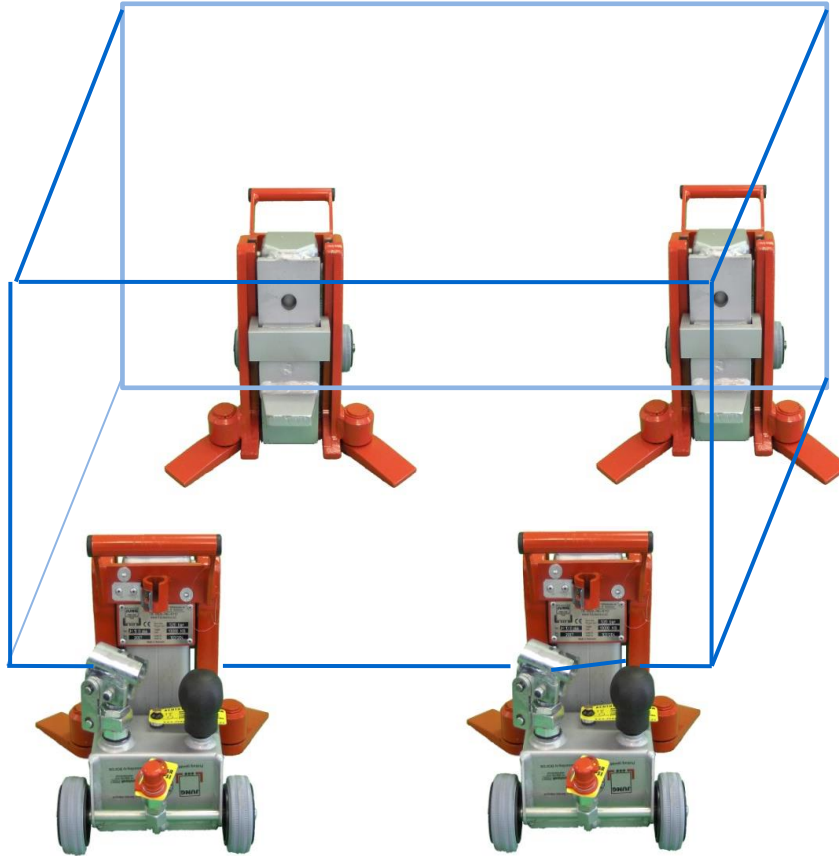


First, determine how many jacks you are going to use. The most economical solution is to use one jack to lift up one end of the load at a time.



Or use 2 jacks simultaneously to lift up one end of the load. This is often more convenient because it provides more usable clearance underneath the load.





To lift up all four corners of the load, simultaneously use 4 jacks.

# Lifting Capacity

**5  
tons**



**10  
tons**



**15  
tons**



**20  
tons**



**5  
tons**



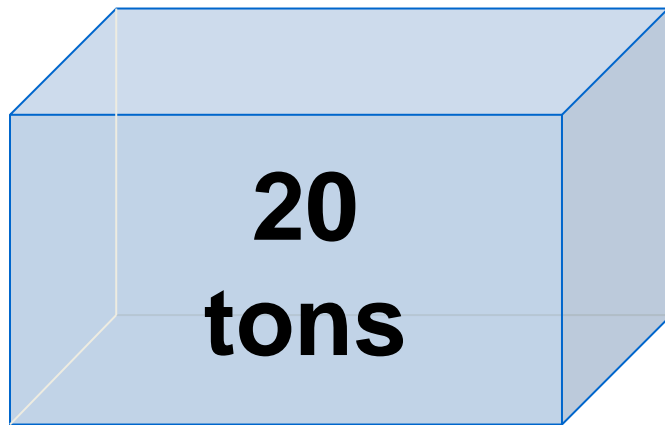
**10  
tons**



**10  
tons**



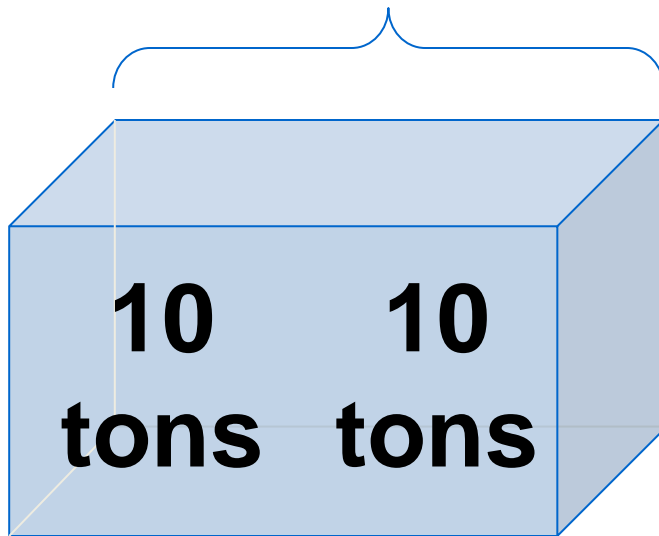
How much load capacity does each jack need for your application?



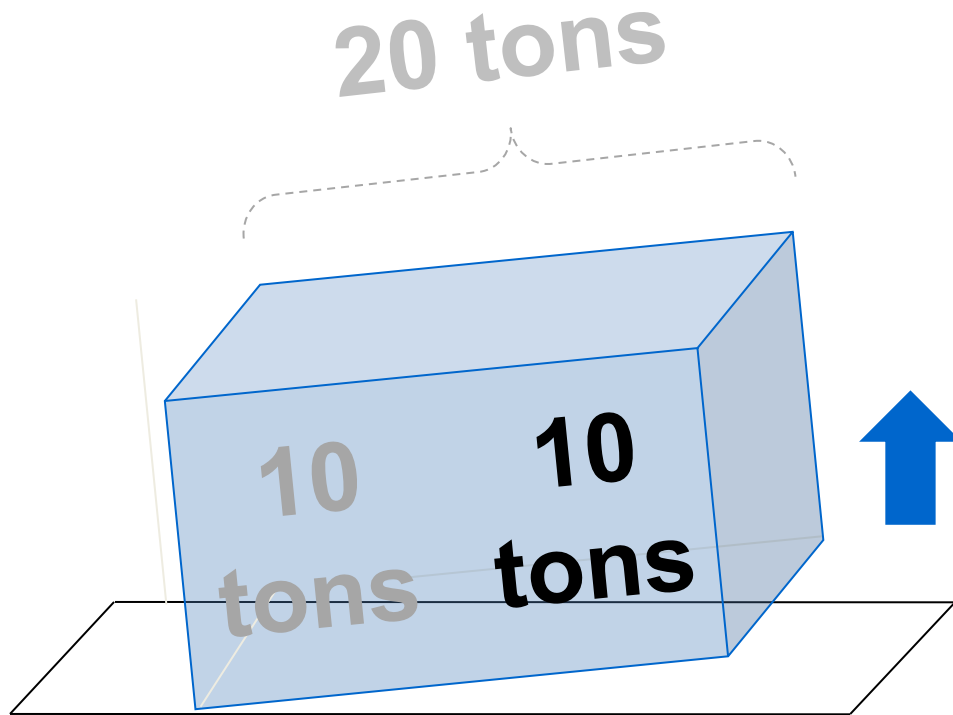
Example:

Assume you have a  
20-ton load.

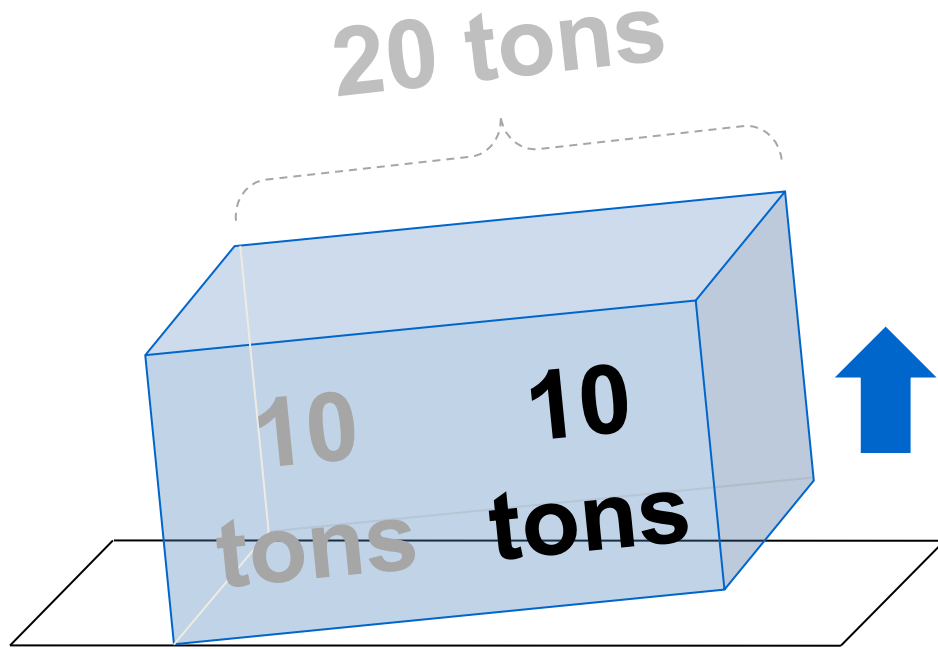
**20  
tons**



Then divide the weight  
equally into 10 tons on  
each end of the load.



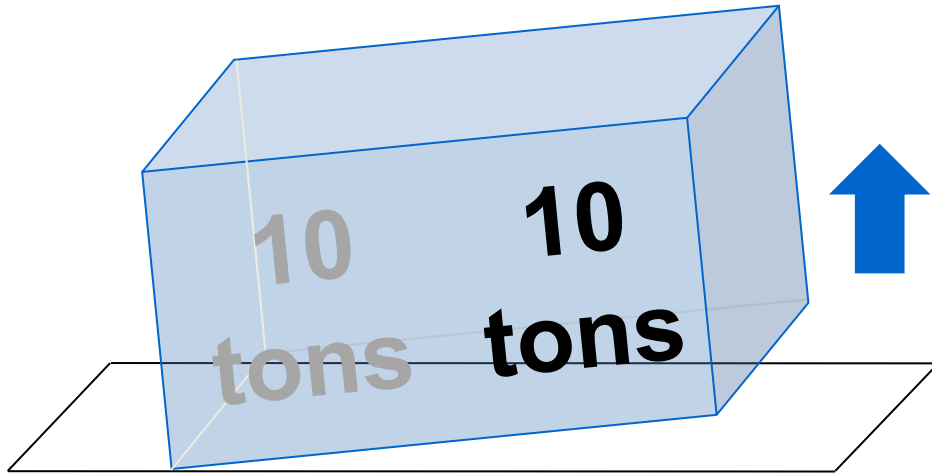
The weight to be lifted on each end is therefore 10 tons - or half the total load weight.



So if you are planning on using one single jack, use a jack with 10 tons of lifting capacity.



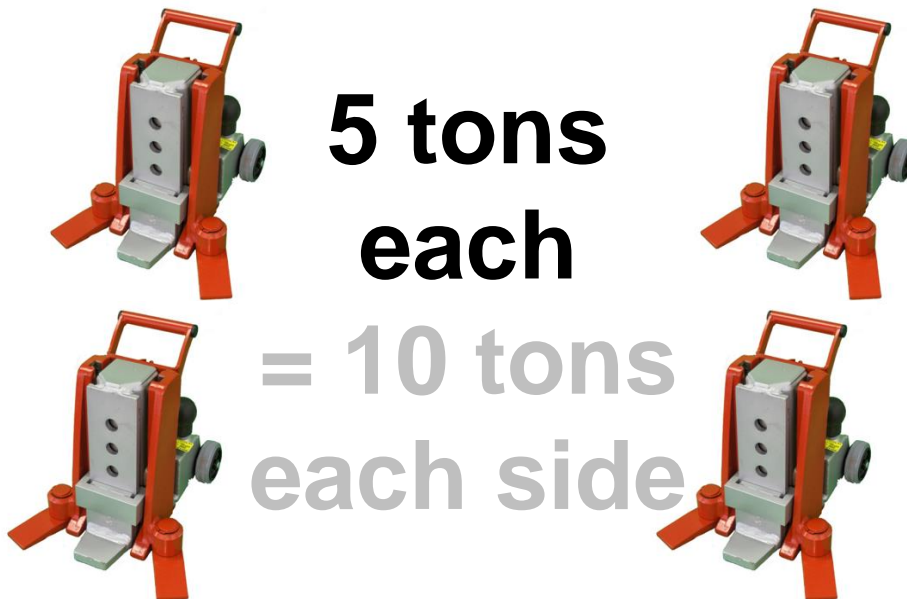
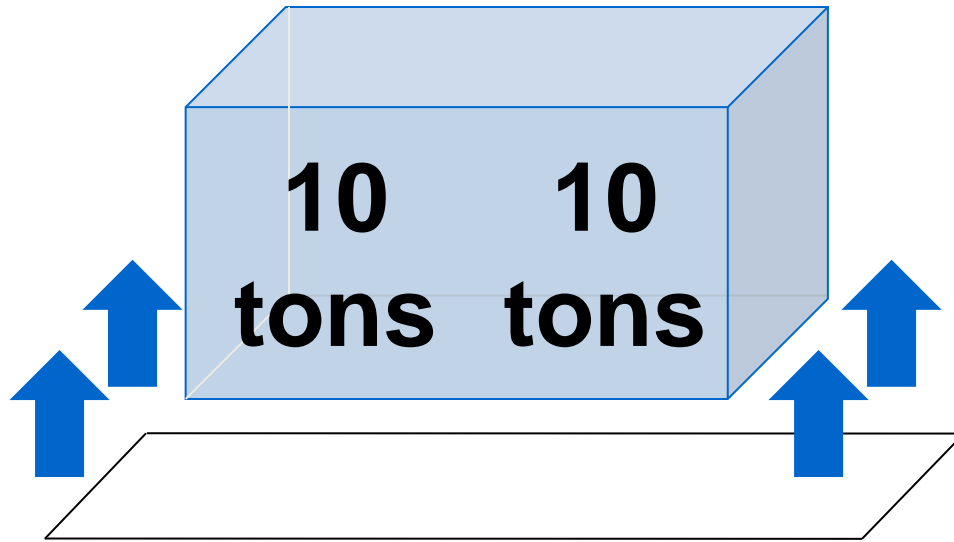
**10 tons**



Or you can use 2, 5 ton jacks, as the 10 ton weight is divided across 2 jacks.

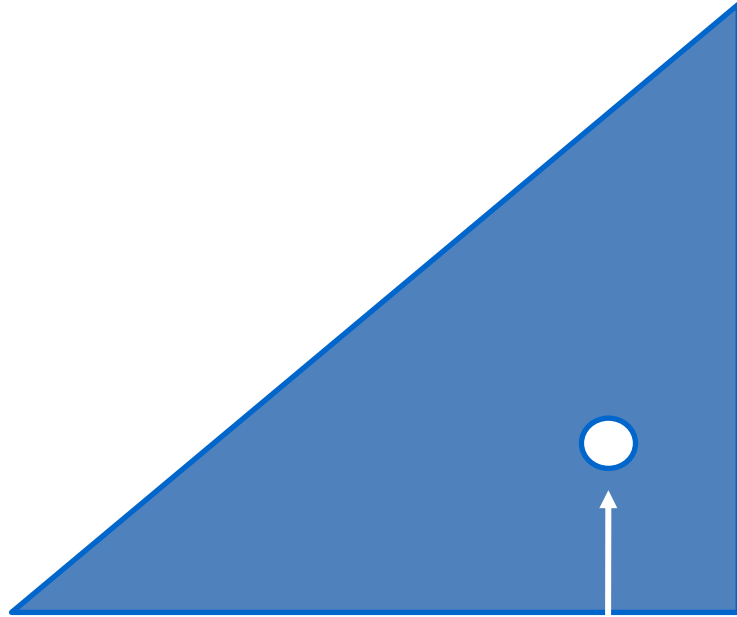


**5 tons + 5 tons**  
**= 10 tons combined**



And if you are going to lift-up all 4 corners at the same time, each jack must carry 5 tons. So, use four 5-ton jacks to carry the total weight of 20 tons.

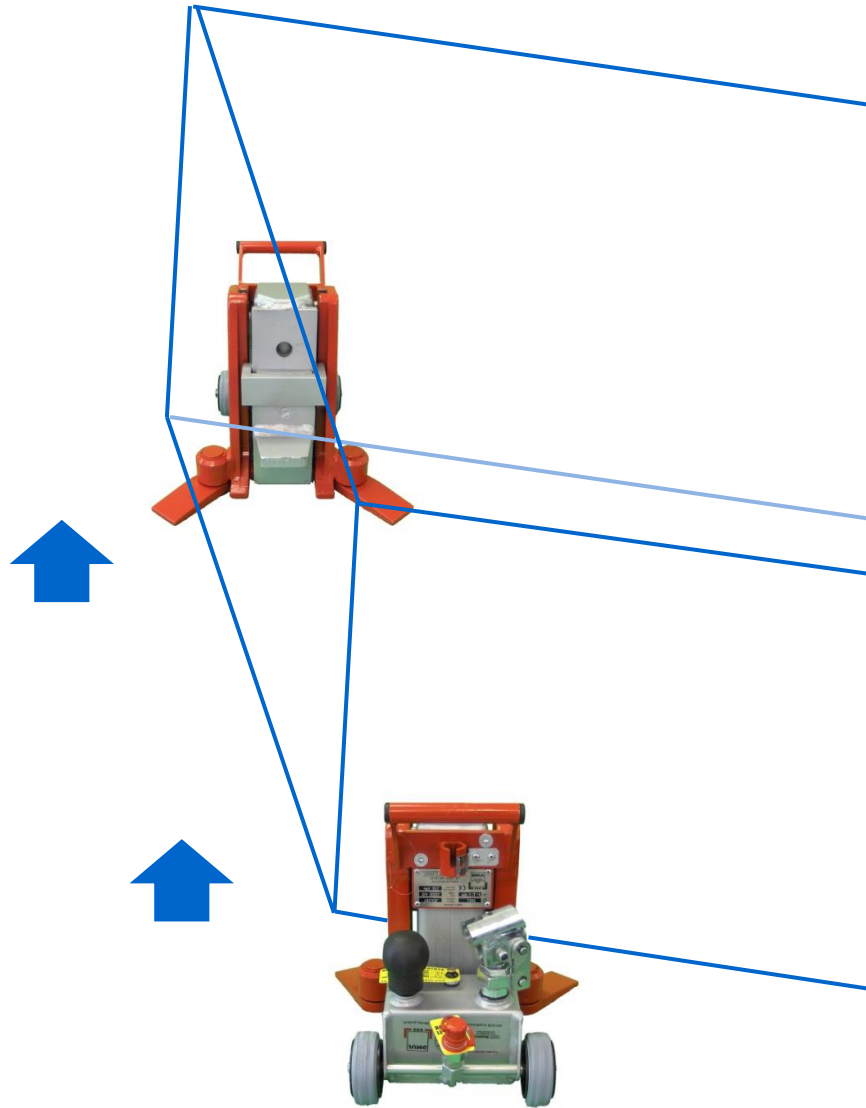




## Center of Gravity

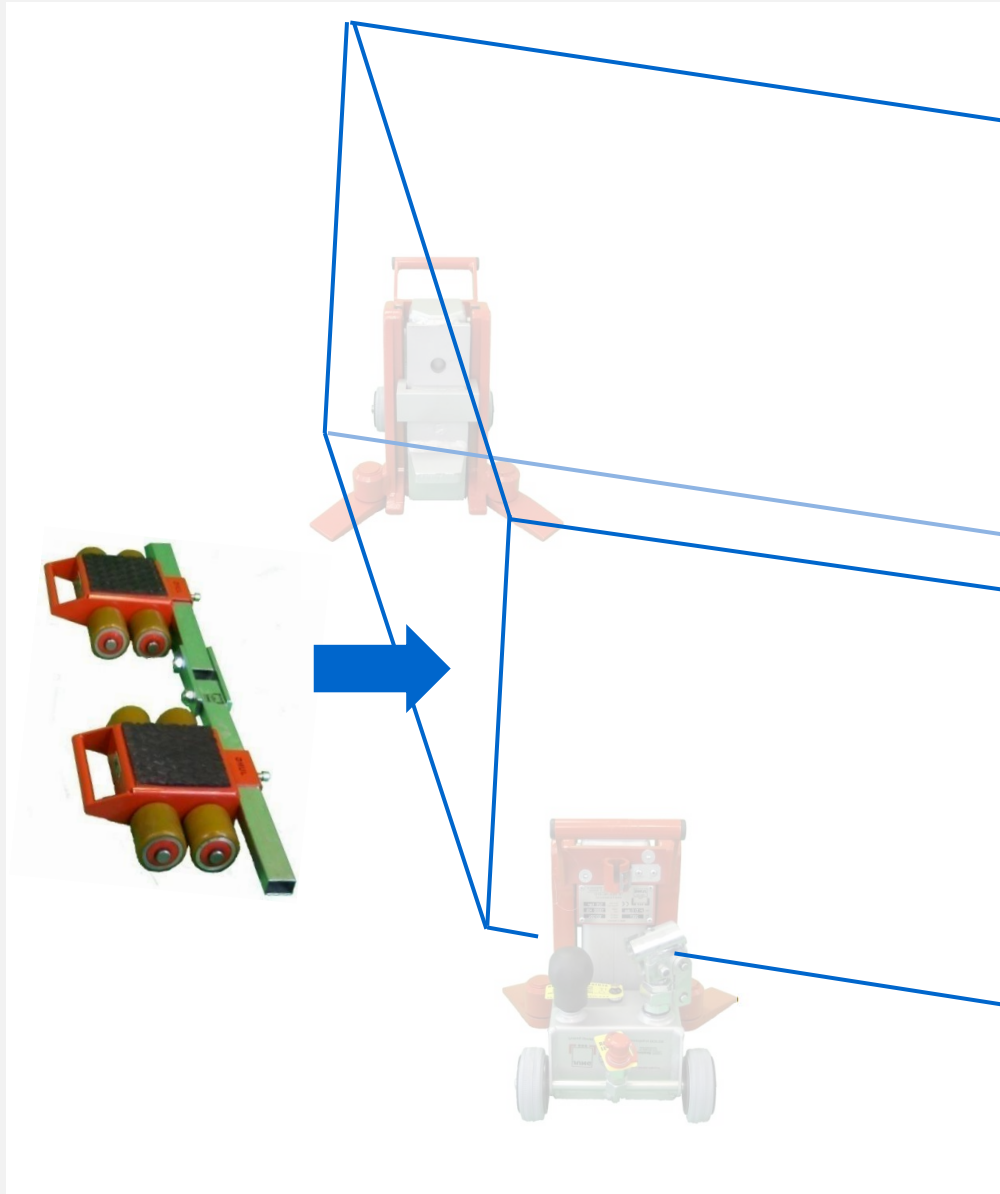
If you have an oddly shaped load with an uneven weight distribution, please call us. We will advise you which jack is suitable to use.

**How to use**



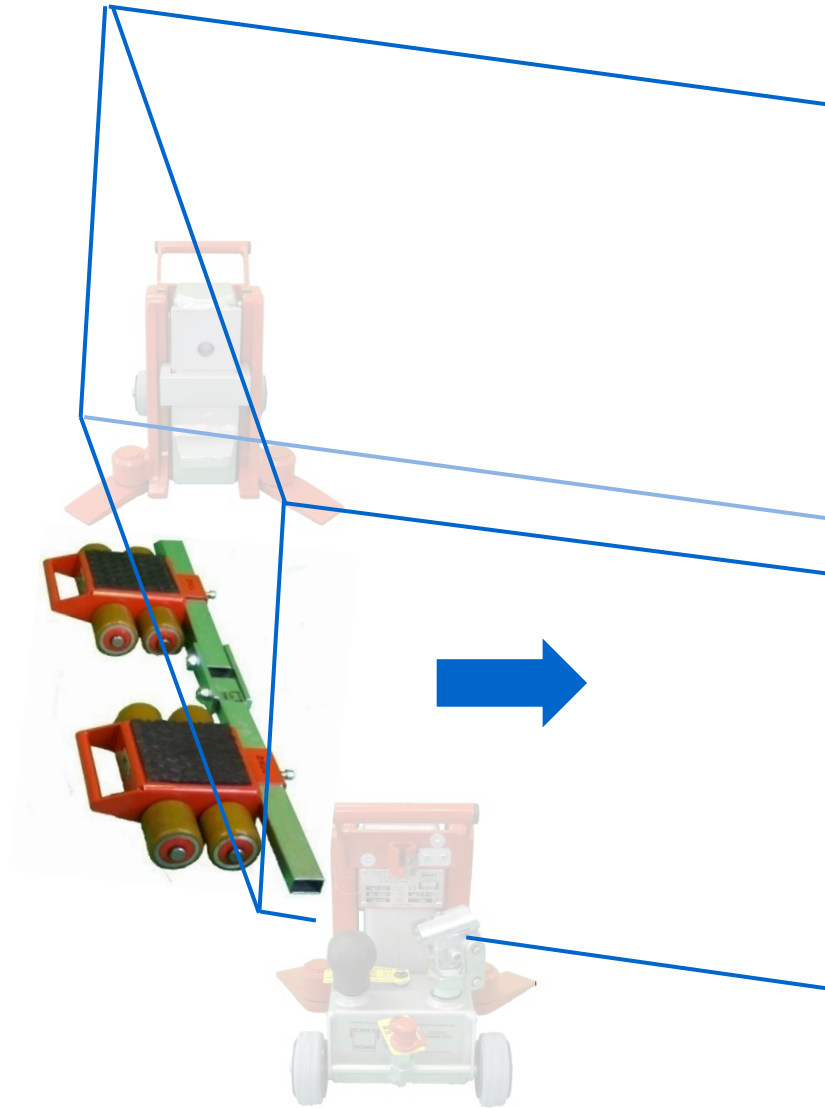
### ***Step 1:***

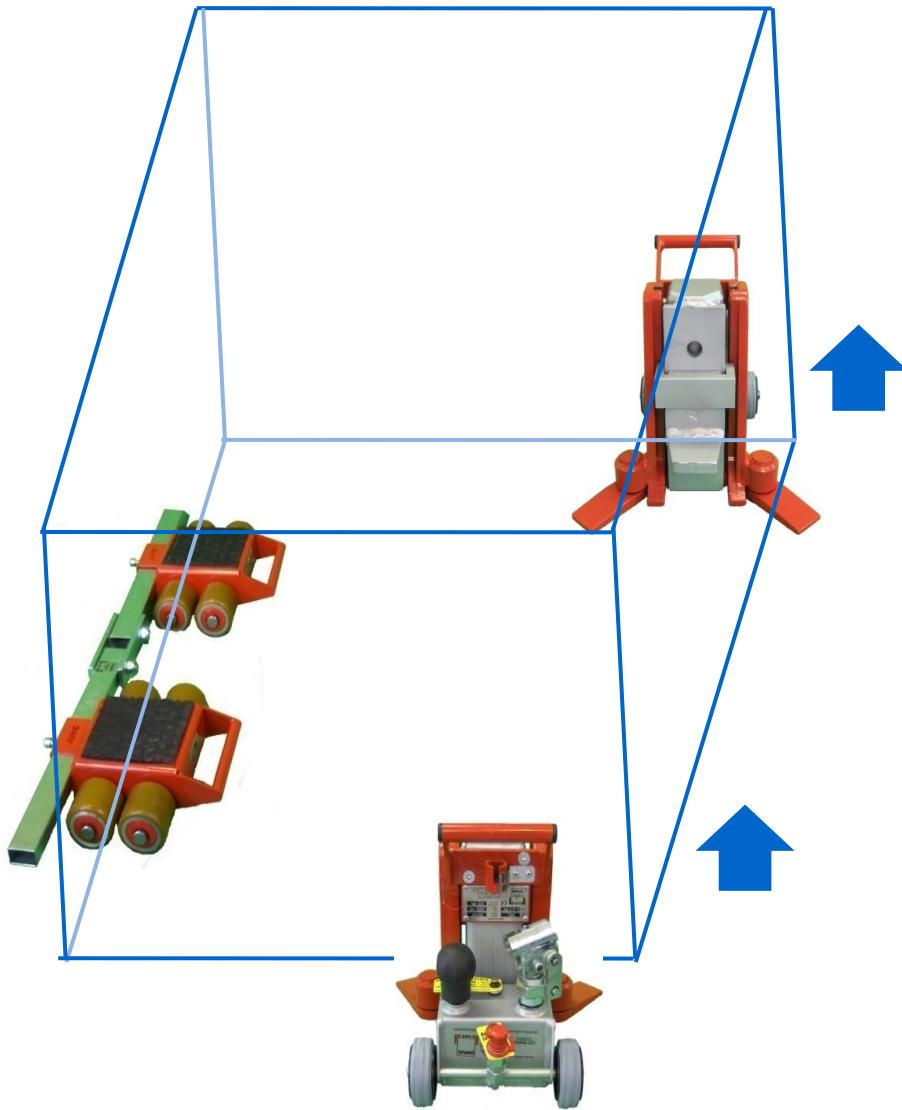
Lift-up the back end of the load first. You can use one or two jacks simultaneously.



## ***Step 2:***

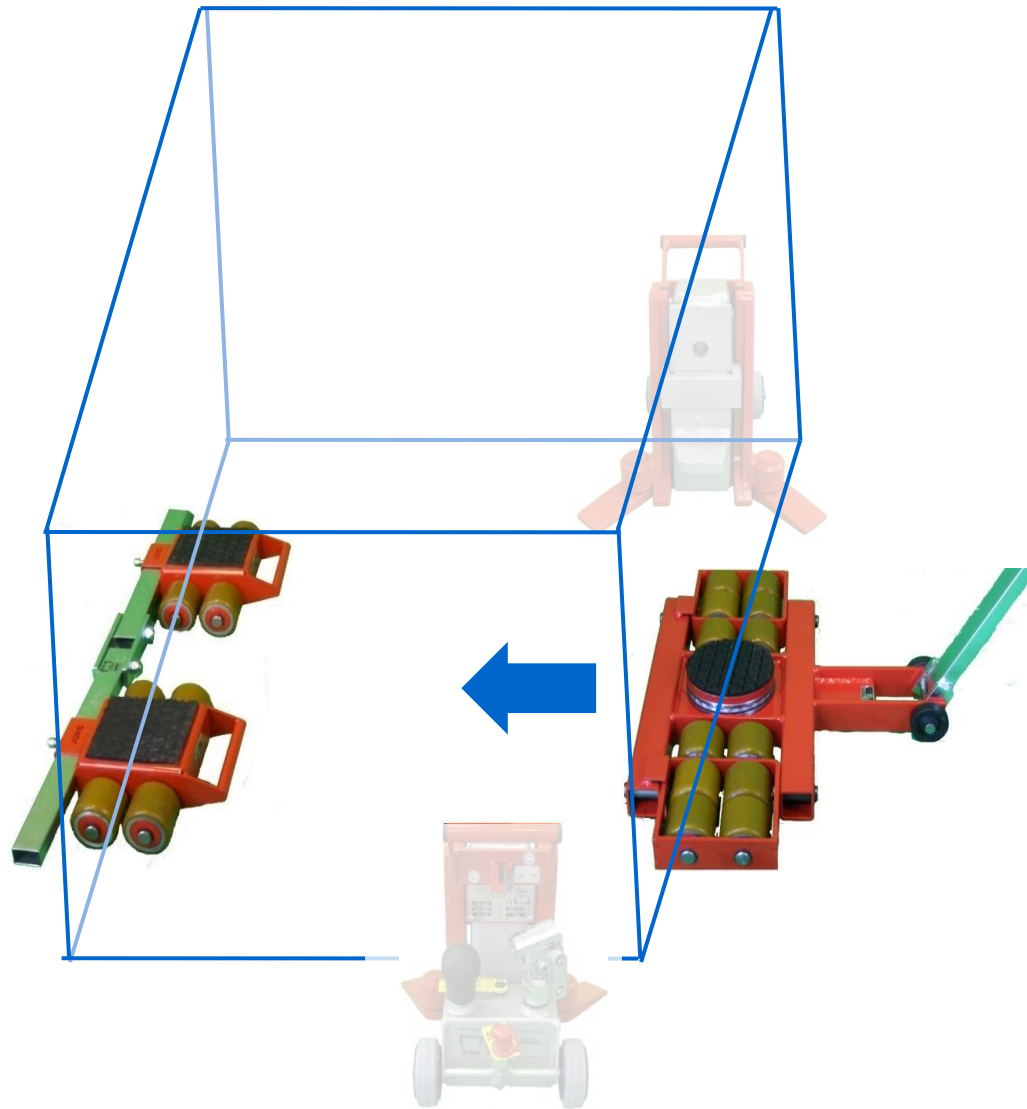
Slide the rear dollies underneath the load, then lower it onto the dollies.





***Step 3:***

Now lift-up the other  
end of the load.



***Step 4:***

Slide the single dolly underneath.



Lower the load onto the dolly.



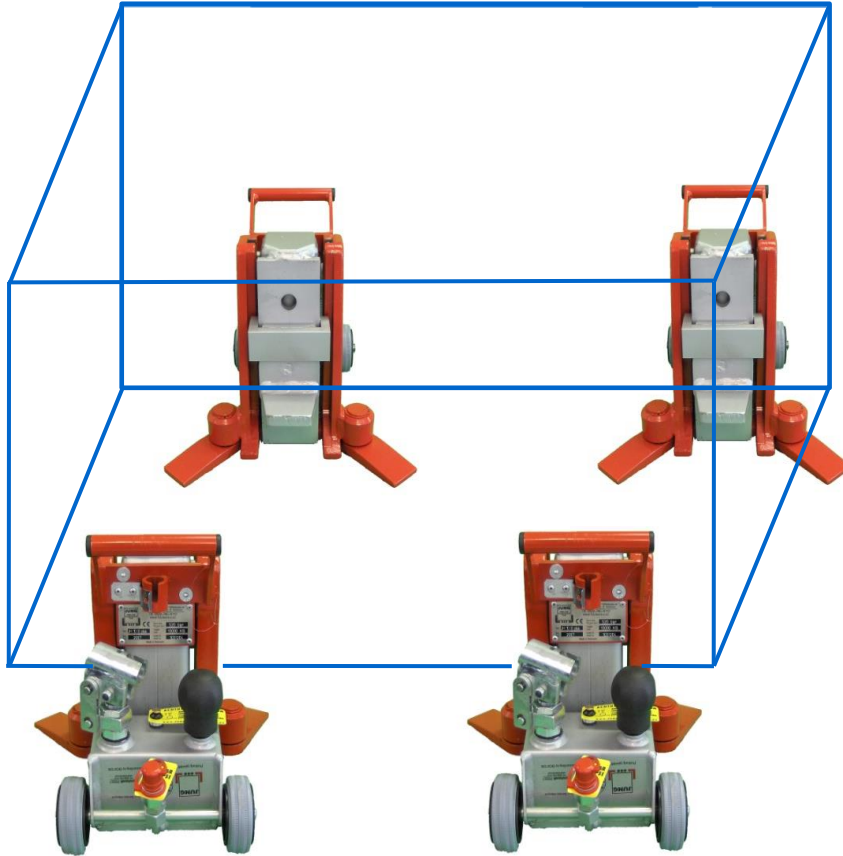


### ***Step 5:***

Now push the load.  
The pulling handle  
can also be hooked  
to a forklift for  
towing.



If you have just one jack, lift the load directly next to the single front dolly.



You can also use 4 jacks simultaneously to lift-up all four corners so you can position all dollies at the same time.



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