How to Read and Apply Data Plates - Combined

Follow these three steps to identify if the loads described can be lifted safely according to the data plates. Assume the loads are evenly spaced, ie, the centre of the length distance will be the load's centre of gravity.

1. Identify the weight of the load. Compare that weight with the maximum weight shown in the vertical position on the data plate. If the weight is the same or less than the data plate figure put a ☑ in the Yes box. If the weight is above, put a ☒ in the No box.
2. Identify the weight of the load. Compare that weight with the maximum weight shown in the tilted position on the data plate. If the weight is the same as or below the data plate figure put a ☑ in the Yes box. If the weight is above, put an ☒ in the No box.
3. Divide the load's length by 2 to get the load's centre. Compare your answer with the load centre on the data plate information. If your answer is the same as or less than the data plate put a ☑ in the Yes box. If your answer is more that the load centre on the data plate, put ☒ in the No box.

If you have put a ☑ next to everything, then the load is safe to lift. If you have put an ☒ in any box, you have identified where data plates limits are exceeded.

The next 4 pages demonstrate the process to assess a load against a forklift's data plate. When you understand this, confirm you understanding by analysing the loads shown on the last 4 pages without referring to the examples.

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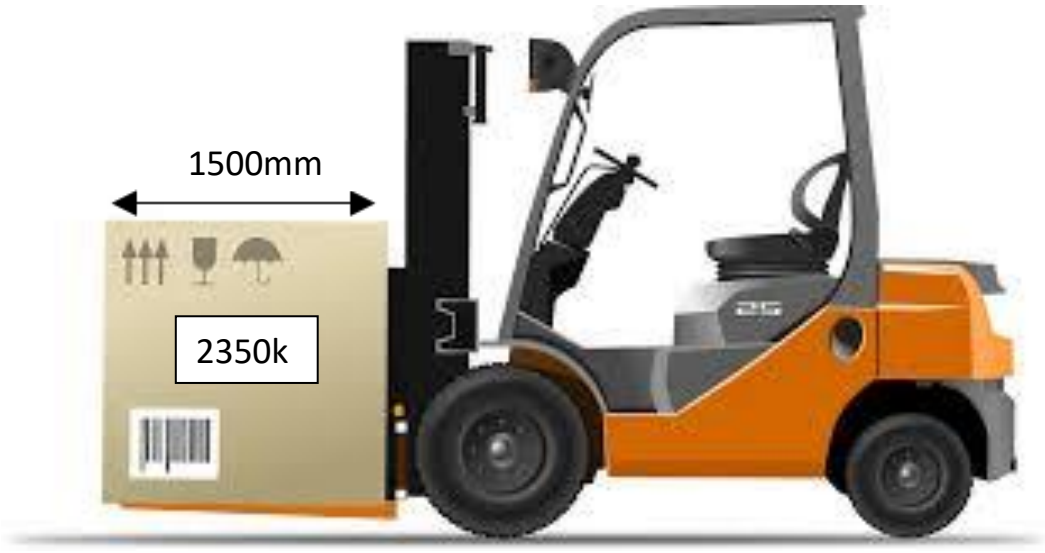
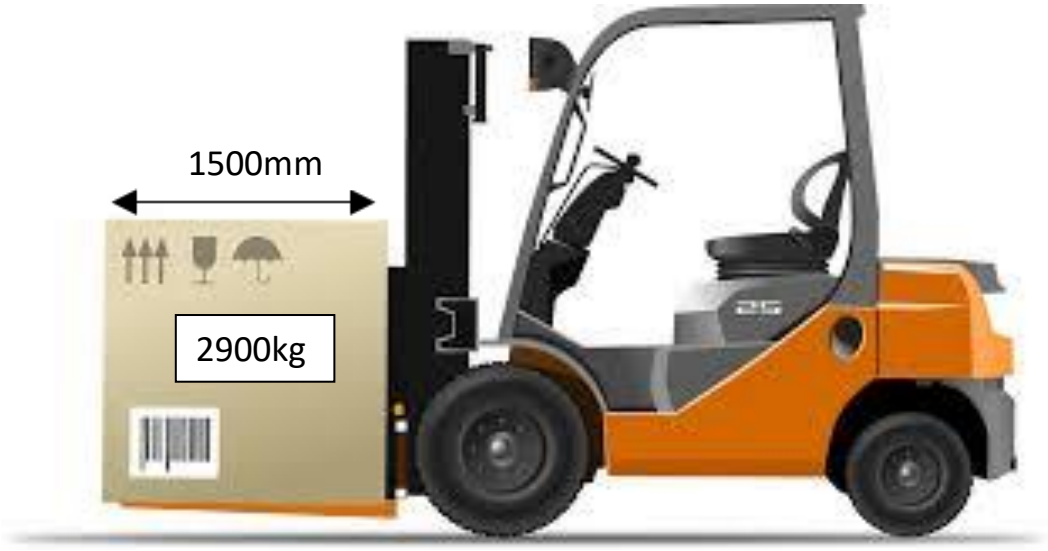
DATA PLATE 1	
Item	**Maximum Capacity**
Vertical mast	2000kg
Tilted mast	1600kg
Load centre	600mm
Check load against data plate limits	**Show you calculations and reasons below**
1. Is the load weight within the data plate limit for a vertical lift? ☑ Yes ☐ No	Load's 1790kg Vs. 2000kg. OK, within limit.
2. Is the load weight within the data plate limit for a tilt lift? ☐ Yes ☒ No	Load's 1790kg Vs. 1600kg. No, maximum exceeded!
3. Is the load's centre of gravity within the data plate limit for load centre? ☑ Yes ☐ No	Load's centre 1200mm ÷ 2 = 600mm. OK, within limit.

DATA PLATE 2	
Item	**Maximum Capacity**
Vertical mast	2300kg
Tilted mast	1590kg
Load centre	700mm
Check load against data plate limits	**Show you calculations and reasons below**
1. Is the load weight within the data plate limit for a vertical lift? ☐ Yes ☒ No	Load's 2350kg Vs. 2300kg. OK, within limit.
2. Is the load weight within the data plate limit for a tilt lift? ☐ Yes ☒ No	Load's 2350kg Vs. 1590kg. No, maximum exceeded!
3. Is the load's centre of gravity within the data plate limit for load centre? ☐ Yes ☒ No	Load's centre 1500mm ÷ 2 = 750mm. No, maximum exceeded!

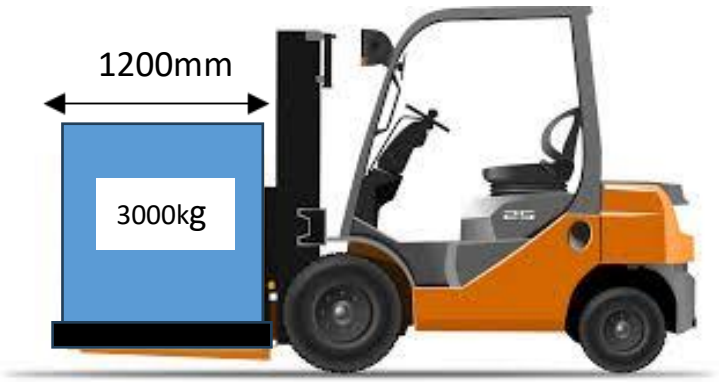


DATA PLATE 3	
Item	**Maximum Capacity**
Vertical mast	3100kg
Tilted mast	2960kg
Load centre	750mm
Check load against data plate limits	**Show you calculations and reasons below**
1. Is the load weight within the data plate limit for a vertical lift? ☑ Yes ☐ No	Load's 2900kg Vs. 3100kg. OK, within limit.
2. Is the load weight within the data plate limit for a tilt lift? ☑ Yes ☐ No	Load's 2900kg Vs. 2960kg. OK, within limit.
3. Is the load's centre of gravity within the data plate limit for load centre? ☑ Yes ☐ No	Load's centre 1500mm ÷ 2 = 750mm. OK, within limit.



In this instance, you must calculate the load's gross weight before deciding if the load is within the forklift's data plate limits. The tare weight of this load is the pallet the load is on and it weighs 40 kg. Calculate the gross weight of the load to check against the data plate. (Gross weight = load weight + tare weight).

DATA PLATE 4	
Item	**Maximum Capacity**
Vertical mast	3400kg
Tilted mast	3250kg
Load centre	600mm
Calculation/Reason for answer	**Show you calculations below**
1. Is the load weight within the data plate limit for a vertical lift? ☑ Yes ☐ No	Load weight + tare weight = 3040kg. Data plate maximum vertical is 3400kg. OK within limit.
2. Is the load weight within the data plate limit for a tilt lift? ☑ Yes ☐ No	Load weight + tare weight = 3040kg. Data plate maximum tilted is 3200kg. OK within limit.
3. Is the load's centre of gravity within the data plate limit for load centre? ☑ Yes ☐ No	1200mm ÷ 2 = 600mm = OK, load centre exceeds data plate limit.



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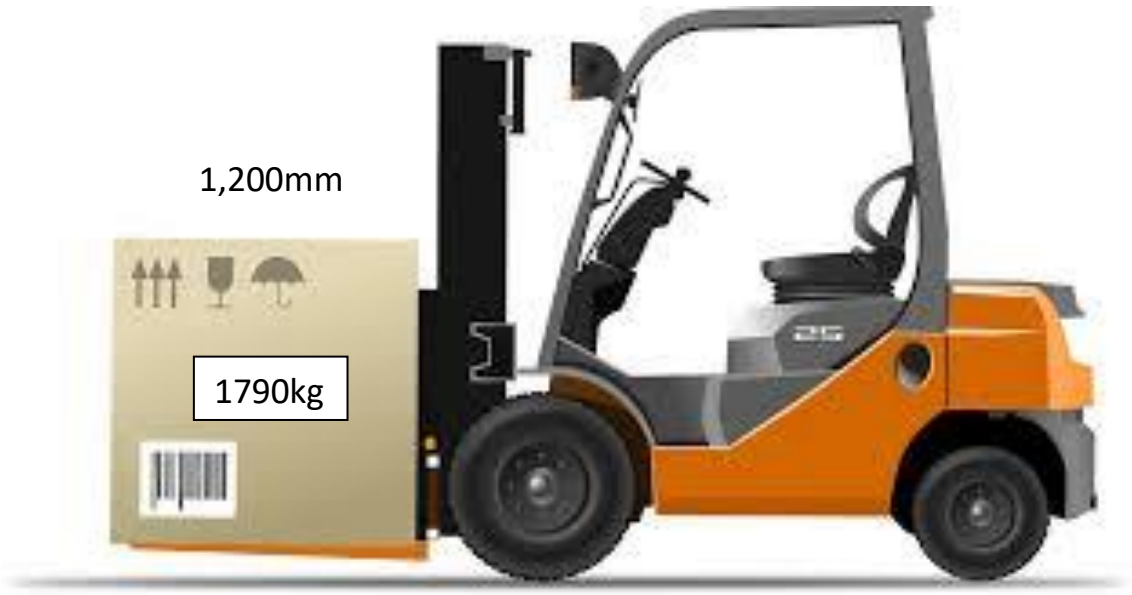
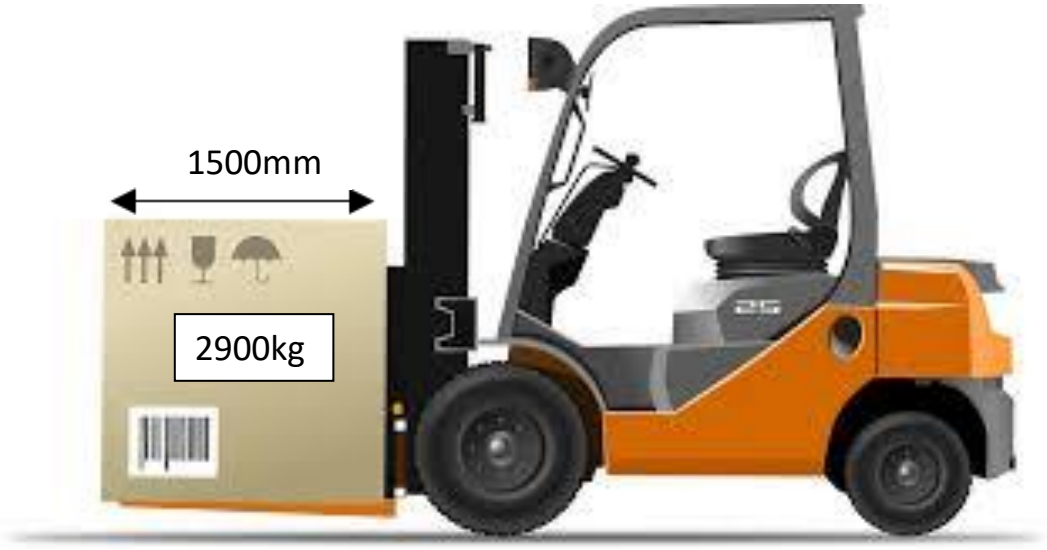
By now you should understand how to read and apply data plate information. Complete the assessment on the next 4 pages without referring to the previous examples.

DATA PLATE	
Item	**Maximum Capacity**
Vertical mast	2300kg
Tilted mast	1590kg
Load centre	700mm
Check load against data plate limits	**Show you calculations and reasons below**
3. Is the load weight within the data plate limit for a vertical lift? ☐ Yes ☐ No	
4. Is the load weight within the data plate limit for a tilt lift? ☐ Yes ☐ No	
4. Is the load's centre of gravity within the data plate limit for load centre? ☐ Yes ☐ No	

DATA PLATE	
Item	**Maximum Capacity**
Vertical mast	2000kg
Tilted mast	1600kg
Load centre	600mm
Check load against data plate limits	**Show you calculations and reasons below**
4. Is the load weight within the data plate limit for a vertical lift? ☐ Yes ☐ No	
5. Is the load weight within the data plate limit for a tilt lift? ☐ Yes ☐ No	
6. Is the load's centre of gravity within the data plate limit for load centre? ☐ Yes ☐ No	



DATA PLATE	
Item	**Maximum Capacity**
Vertical mast	3100kg
Tilted mast	2960kg
Load centre	750mm
Check load against data plate limits	**Show you calculations and reasons below**
3. Is the load weight within the data plate limit for a vertical lift? ☐ Yes ☐ No	
4. Is the load weight within the data plate limit for a tilt lift? ☐ Yes ☐ No	
4. Is the load's centre of gravity within the data plate limit for load centre? ☐ Yes ☐ No	



In this instance, you must calculate the load's gross weight before deciding if the load is within the forklift's data plate limits. The tare weight of this load is the pallet the load is on and it weighs 40 kg. Calculate the gross weight of the load to check against the data plate.

DATA PLATE 4	
Item	**Maximum Capacity**
Vertical mast	3400kg
Tilted mast	3250kg
Load centre	600mm

Calculation/Reason for answer	**Show you calculations below**
3. Is the load weight within the data plate limit for a vertical lift? ☐ Yes ☐ No	
4. Is the load weight within the data plate limit for a tilt lift? ☐ Yes ☐ No	
4. Is the load's centre of gravity within the data plate limit for load centre? ☐ Yes ☐ No