kurraglen industries
Livestock handling & yard equipment plans

1000 Litre

IBC Trailer

Plans

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1000 Litre IBC Trailer

An IBC (Intermediate bulk container), also known as water pod, IBC tote, IBC plastic water tank or pallet tank, is a useful item to have around the farm. When mounted on a trailer, it can be used for fire fighting with a suitable pump and hose fitted, carting water for livestock or for weed spraying.

This IBC trailer is designed for a standard 1000 litre IBC which has dimensions of 1000mm wide x 1200mm long. If the IBC you intend to use is a different size, then you will need to adjust the size of the main frame to suit.

To make the best use out of your lengths of steel, we have a free-to-use Cutting List Optimiser on our website. Visit https://www.kurraglenindustries.com.au/linear-cutting-list-calculator.htm

The following steel and materials are required to build the IBC trailer:

100x50x3.0 RHS – 10 metres	Trailer coupling and bolts/nuts
100x6 flat bar – 1.8 metres	Jockey wheel, mounting bracket and bolts/nuts
75x8 flat bar – 150mm (or size to suit coupling)	Leaf spring set
12mm round bar – 300mm	Axle and hubs
Floorplate (checker plate) – 2.1mm thick	Wheels to suit hubs

Cutting List for the IBC trailer				
Item No	Quantity	Material	Size (mm)	Notes
1	2	100x50x3.0 RHS	1230	Refer to diagram 1 for mitre cut details
2	2	100x50x3.0 RHS	1030	Refer to diagram 1 for mitre cut details
3	1	100x50x3.0 RHS	930	
4	2	100x50x3.0 RHS	1500	
5	1	100x50x3.0 RHS	750	18 degree mitre on both ends
6	1	100x50x3.0 RHS	290	18 degree mitre on both ends
7	1	100x6 flat bar	105	
8	8	100x6 flat bar	200	
9	1	75x8 flat bar	150	Check size to suit coupling
10	2	12mm round bar	150	U bolts be used instead

1. Begin by cutting all of the steel as indicated in the cutting list. Label each with the item number on it using a marking pen and set aside. Take note of the mitre cuts for the RHS to ensure that they are cut the correct way.
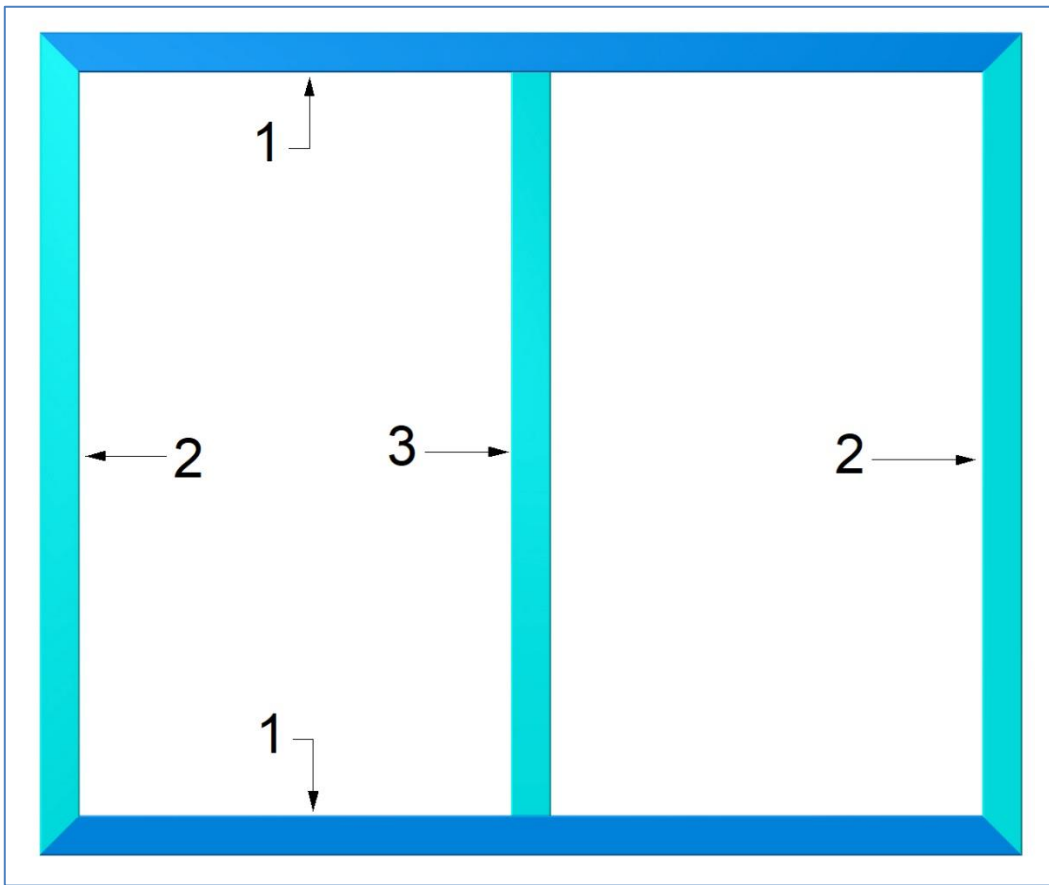

Diagram 1

2. Tack weld the main frame together as shown in diagram 1. Check that the frame is square and fully weld.
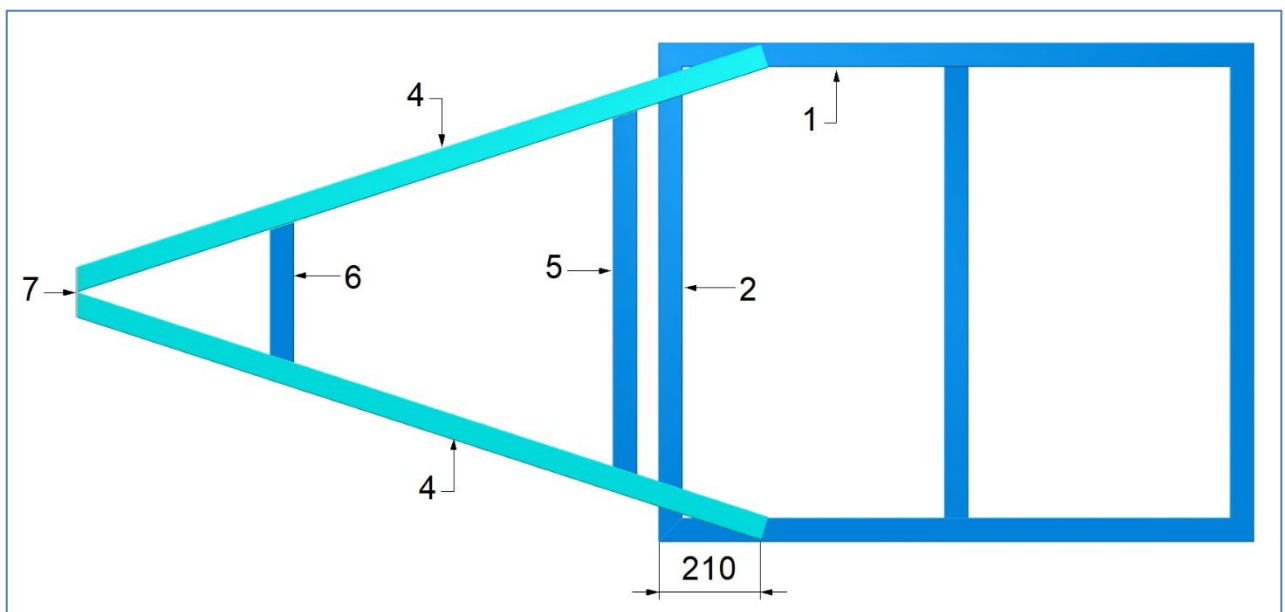

Diagram 2

3. Tack weld items 4, 5 and 6 as shown in diagram 2. Check that the drawbar is centred with the main frame and fully weld. Weld item 7 over the ends of items 4. When welding items 4 to items 2, **do not** weld across the top side as this creates a weak point in the drawbar.

4. Weld the spring hangers onto items 1 of the main frame. When welding the spring hangers in place, only weld the sides of the hanger to items 1 as welding across the face also creates a weak point. Refer to diagram 3. The dimensions shown in diagram 3 are generalised as this will depend on the springs that you intend to use.
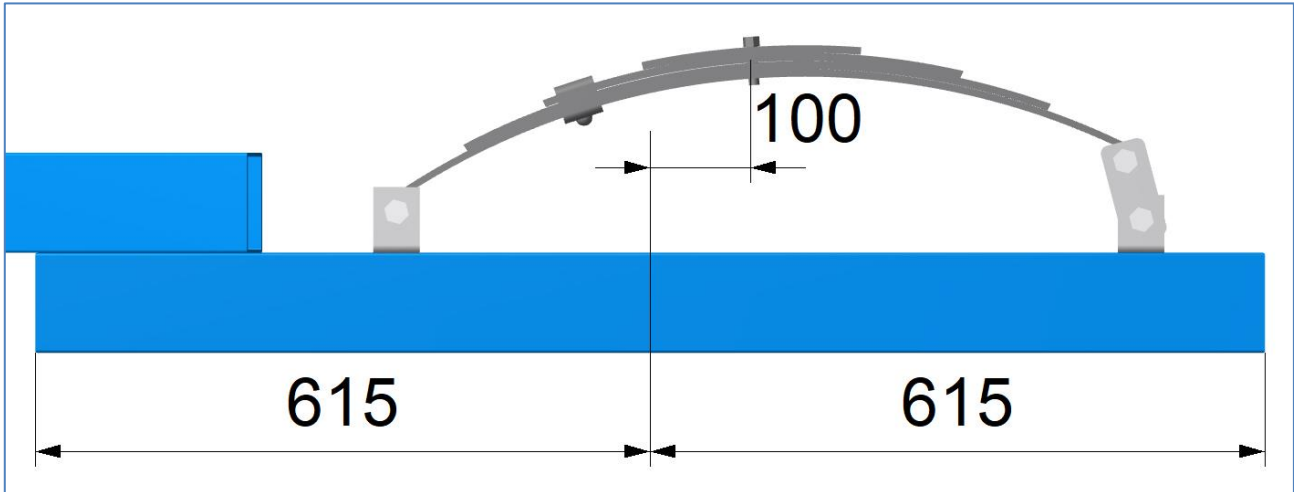

Diagram 3

5. Turn the trailer frame over and install items 8. Refer to diagram 4.
6. Cut and drill item 9 flat bar to suit your coupling. Weld in place.
7. The tie down points (items 10), can either 12mm round bar bent into a "U" shape or you may choose to purchase suitable U bolts.
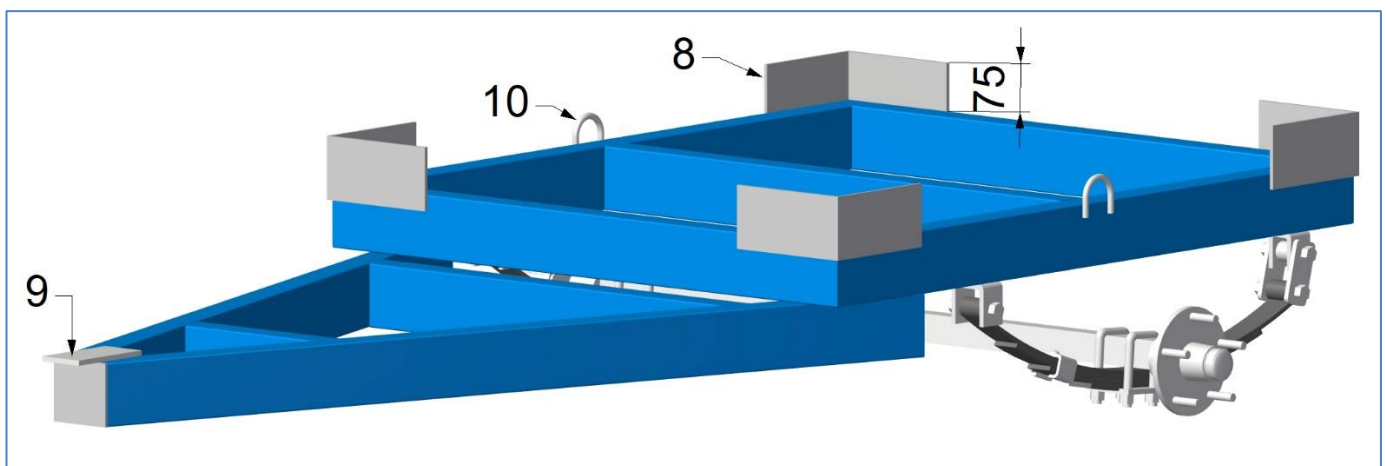

Diagram 4

8. Cut the floorplate (checker plate) to size and weld in place. This is to mount any equipment such as a pump or hose reel. Refer to diagram 4 for dimensions.
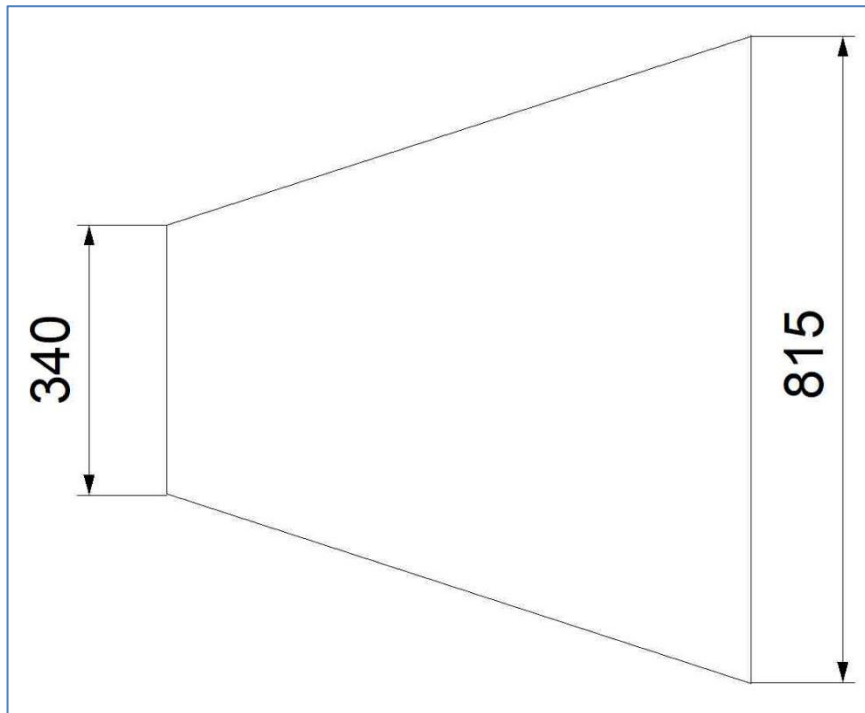
Diagram 5

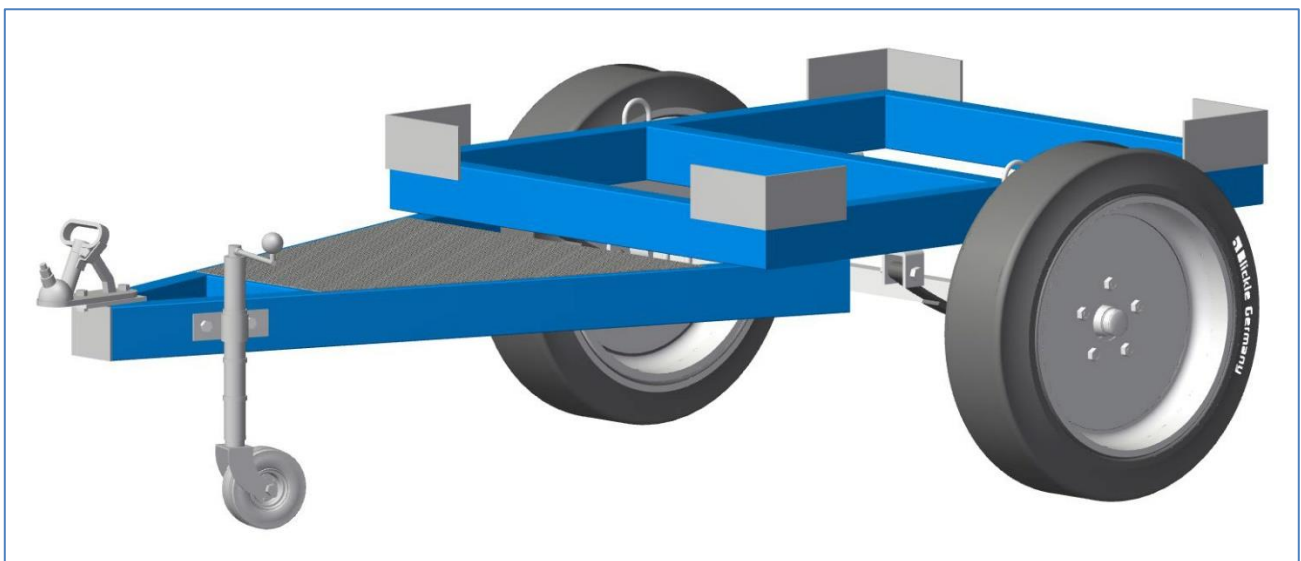9. Clean up any welds using a flap disc or grinding disc and paint as required.

Diagram 8

10. Install axles and hubs.
11. Mount wheels to hubs and fit jockey wheel and coupling.

Proud of your project? Email us the photos of your equipment or yards that you have made from our books and we will put them up on our website for others to admire. You can even be in the photo if you would like to be. Be sure that you include your name, where you are from and a brief description. Please make sure that the photos are of good quality, in jpg (jpeg) or png format, at least 72 dpi and at least 900 pixels by 600 pixels. Email your photos to: projects@kurraglenindustries.com.au