



DESIGN RISK ASSESSMENT

70208 – Mobile Anchor Rescue Cube c/w Mast

Product Description

The **BTRENCHSAFE®** Mobile Anchor Cube (MAC) provides for a practical solution for individuals working around open trenches & excavations where there is a risk of falls into unprotected edges. The counterweighted design requiring no permanent fixation. The MAC has built-in lifting pockets allows the unit to be moved around a site with relative ease. The MAC provides fall protection for 2 workers and can be set-up with type 2 and/or type 3 inertia reels with rescue recovery winch feature.

Assumptions for Risk Assessment

During the process of carrying out this risk assessment, various assumptions had to be taken into consideration:

- 1) The user has read the instructor's manual that is provided with the product by the manufacturer prior to its use;
- 2) The product is only used for its recommended application by the manufacturer;
- 3) The user has the appropriate certification/qualification required for the use of the product;

Risk Matrix

Likelihood	Consequences					Extreme Risk – Immediate action required
	Insignificant (A)	Minor (B)	Moderate (C)	Major (D)	Catastrophic (E)	
Almost Certain (5)	5A	5B	5C	5D	5E	High Risk
Likely (4)	4A	4B	4C	4D	4E	
Possible (3)	3A	3B	3C	3D	3E	
Unlikely (2)	2A	2B	2C	2D	2E	
Rare (1)	1A	1B	1C	1D	1E	
						Moderate Risk
						Low Risk – Manage by routine procedures

Legend

Likelihood		
Almost Certain (5)	Is expected to occur, almost inevitable	< 95% probability
Likely (4)	Will occur in most circumstances, not surprised if it happens	51% – 91% probability
Possible (3)	Might occur in some circumstances	11% - 50% probability
Unlikely (2)	Could occur in some circumstances, surprised if it happens	0.1% - 10% probability
Rare (1)	May occur but only in exceptional circumstances, may happen but it would be highly unexpected	0.01% - 0.1% probability

Consequences	
Insignificant (A)	Non-injury incident
Minor (B)	Injury or ill health requiring first-aid
Moderate (C)	Injury or ill health requiring medical attention
Major (D)	Injury or ill health that could cause a permanent disability
Catastrophic (E)	Fatality/Death

Product Description (type, manufacture, model and serial or asset number)	70208 Mobile Anchor Cube MAC		
Conducted By	M. Mann	Date	24/07/2024

S.No.	Hazard	Risk Factor (Before)	Control Action	Risk Factor (After)
1	Slip, Trip or fall from heights or structure tipping over	5D	The product's main objective is to provide a restraint type system and an arrest / retrieval system (when used in conjunction with an approved Full body harness and an SRL) in case of falls. The base weighing approximately 2500kg when filled with concrete acts as a counterweight for the system preventing it from tipping over. The manual and warning labels on the unit instructs proper installation, maintenance and usage of the product to ensure safe operation. The user must work within the safe working zone as indicated in the user manual The manual outlines specific site requirements for the use of the product – such as levelled surface for installing the system to ensure stability.	2C
2	Moving/transporting the system	4C	The base is designed with forklift pockets to conveniently move the unit around site using an appropriately rated forklift. Manual and warning labels indicate the need to lower the mast completely before moving the unit around site. Also, the unit can be moved with a forklift up to 1.6km at speeds not exceeding 5km/hr. The unit must be disassembled into components for transporting through longer distances.	2B
3	Entangling, Cutting or Shearing hazard	4C	System drawings, manufacturing processes and QC inspections ensure to remove sharp edges or rough welding spots. System has been marked with warning labels at points of risks for pinching skin. Operator's manual advises the use of appropriate PPE such as gloves.	2B
4	Incorrect Operation	5D	The product is supplied with a complete instruction manual for installation and inspection to enable a person to become competent in using the system.	2C

S.No.	Hazard	Risk Factor (Before)	Control Action	Risk Factor (After)
			Design of the system enables a competent end user to operate unit with ease. Warning labels on the system provide safety warnings to the user.	
5	Electrical Hazard	4C	Operator's manual advises to inspect the surroundings, beware of overhead power lines and to stay clear of such areas. Cubes and mast have been electrically isolated from each other through the use of rubber pads and non-conductive plastic sheaths.	2B
6	Ergonomic Hazard	4C	The bases can be moved short distances over smooth level ground surfaces with the use of a 5T pallet truck. The product is only meant to be moved or transported around with use of a forklift or for longer distances using a truck or similar vehicle. Training and care must be taken with any manual handling process and users must know their own fitness and strength limits before attempting manual handling of this product.	2B

Additional Comments	
Comments:	
Approved by Name & Title	M. Mann E.D.M
Signature	
Date	24/07/2024