

EDGESEIL™ MOBILE Operating Manual

Table of contents

Product Overview	3
Operation	4
Safe Use & Maintenance	6
Quick Assembly Guide	7
Maintenance	12
Technical Specification	16

Product Overview

The Working at Height 2005 Act necessitates a safe system of work when there is a risk of a fall or a safe system of work is required for maintaining buildings.

EdgeSeil[™] mobile is a lightweight counter balance mobile davit system with a 1200mm reach. The product is tooless assembly from delivery and the unit can be easily wheeled between abseil points. Manufactured from 6082 structural aluminium and 316 stainless steel the unit can also be sited permanently. EdgeSeil[™] mobile is designed for lifting and lowering personnel and materials, complying with EN795:2012, type B & E.

Due to its demountable design, it can be easily assembled and dismantled to almost flat for storage or transport. The assembly of EdgeSeil[™] mobile is from only 4 components and each is held with detent pins or wingnuts. EdgeSeil[™] mobile features foot operated heavy duty levelling castors.



Operation

- Ensure that operation instructions have been read and fully understood prior to commencing work with EdgeSeil[™] mobile.
- EdgeSeil[™] Mobile is supplied as a 1 user or 2 user system. Single user systems are supplied with 302 Kg of counterweights whereas two user systems are supplied with 517 Kg of counterweights.
- EdgeSeil[™] Mobile is rated to 13KN, BS EN795:2012, Type B & E in wet and dry conditions and up to a 5 deg. roof pitch.
- All counter balanced weights be used, 14 for 1 User and 24 for 2 User. These should be securely fastened with wing nuts. Each weight is 21kg.
- All foot operated breaks should be deployed before use. This should be checked before and after rigging.
- It is recommended that the Supervisor and rigging of the davit system is level 3 IRATA qualification for rope access systems.
- Users of EdgeSeil[™] Mobile must be competent and experienced. They must be trained in the safe use of the system and working at height.
- Users of EdgeSeil[™] Mobile must be competent and experienced. They must be trained in the safe use of the system. It is recommended that the user operators of the davit system is level 1 IRATA qualified.
- Periodic inspection and maintenance is required for EdgeSeil[™] Mobile. It must not be used if it has an overdue service date.
- It is recommended that the use of EdgeSeil[™] Mobile is in accordance with the system design principles within BS7883:2019.
- The system and its components must be inspected for signs of deterioration and deformation prior to use. It must not be used if deterioration and deformation are present.

- If the system has been damaged or arrest has occurred due to a fall, ensure that it is not used again until it has been inspected and recertified.
- Ensure that fixings, all pins are located and components are securely fastened. Any adjustments required will need to be performed by a height safety inspector.
- Should rope lines pass over an edge, then rope protectors must be used.
- There must always be 2 people during the operation of the system. In the event of an emergency, one person can provide rescue assistance and first aid.
- The maximum permitted surface pitch which the system can be utilised on is +/- 5 degrees.
- It is recommended the system is used on firm/level ground. Use sedum or gravel roofs should be determined by the System Designer or Access Contractor
- Do not tamper with, modify or remove any part of this system, unless authorised by Sayfa Group.

Safe Use & Maintenance

- Single user EdgeSeil[™] Mobile systems are rated for a 100Kg user, with 150kg SWL load for materials lifting or lowering.
- Two user EdgeSeil[™] Mobile systems are rated for a 100Kg each user, with 250kg SWL for materials lifting or lowering.
- The brake pedals should be deployed during use; however, the product has been internally tested to ensure it remains safe in case one or more of these are accidentally missed.
- Check all pins, fixings and wingnuts are present and secure.
- Check for LOLER Inspection labels.
- Recertification of this system is required to be performed by a LOLER competent individual, our recommendation by a LEEA or BSIF member company. The recommended intervals for the conditions below are:

EN ISO 12944-2 C1 – C3 Environments : Intervals of 6 months.

EN ISO 12944-2 C4 – CX Environments : Intervals of 3 months*.

*For these environments please contact Sayfa group for product finishing options <u>enquiries@sayfagroup.co.uk</u>

Please contact Sayfa Group for Inspection Plan cost or view approved contractors at <u>www.sayfagroup.co.uk</u>

Quick Assembly Guide

Step 1





Place the base component at a location where the system is required to be used, on even ground.

Step 2



Drop the mast on top of the base component, through the gap of the two mast connecting plates, as illustrated in figure 3. Secure using 3 quick release pins.

Step 3

With the mast securely fastened to the base component, insert the shoulder component into the mast and secure using 3 quick release pins which are provided.





With the shoulder component securely in place, insert the boom on the end of the shoulder component, as illustrated in figure 5 and secure them using the 3 quick release pins provided.

Step 5



With the system now assembled and all components secured with quick release pins, drop 14 counterweights on the rear leg of EdgeSeil[™] mobile and fasten one wing nut on each stack of weights to complete the system, as illustrated in figure 5 and figure 6. Double user EdgeSeil[™] Mobile systems will require 24 counterweights.

Step 6



Wheel the unit into the final position.

Step 7

Ensure that the brakes are engaged before each use, As illustrated in figure 7.



Figure 7

Rope configurations



For the correct utilisation of the system,

rigging rope must first be passed through the two rollers at the rear boom. The rope must then be passed over the top of the mobile davit and through the rollers at the front. The rope should be rigged to both eye bolts at the base of the system. The correct method of rigging is illustrated in figure 8.

Figure 9 illustrates the incorrect rigging of the system.

Maintenance

EdgeSeil[™] mobile must be assessed and recertified by a LOLER trained competent person at intervals of 6 months or shorter for corrosive and harsh environments. In these environments the minimum inspection period should be 3 months.

EdgeSeil[™] mobile must be cleaned using a damp or dry cloth. Chemicals which can damage its components must never be used.

If there is evidence of deterioration or deformation due to overloading of the system, then it must be reported to the responsible person.

A record of inspections must be kept up to date.

The following checklist outlines the criteria for ensuring the safe use of the davit system.

Component	Inspection criteria	Pass Y/N	Action taken	Date
C C C C C C C C C C C C C C C C C C C	Rollers Inspect the rollers and roller supporting plates to ensure that there is no deformation or deterioration of the plates. The rollers must freely roll. Ensure that fixings are securely fastened.			
	Load transferring brace Inspect the plates and ensure that there is no severe deterioration & deformation due to overloading. Inspect the quick release pin holes and ensure that there is no deformation and elongation due to overloading. Ensure that fixings are securely fastened.			

0	Quick release pin Inspect the quick release pin and ensure that there is no deformation or deterioration due to arrest or overloading of the system. Ensure that the detent ball is not damaged and functions correctly.		
G • • •	Boom Inspect the boom to ensure that there is no damage and it is not deformed. Ensure that there is no elongation of the pin holes due to overloading of the system.		
	Mast Inspect the mast to ensure that there is no damage and it is not deformed due to overloading. Inspect pin holes to ensure that there is no deformation or elongation due to overloading of the davit system.		

Foot operated levelling castor Inspect the foot operated levelling castor to ensure that it is not damaged or deformed due to overloading of the system.		
Mast connecting plate Inspect the mast connecting plate and ensure that there is no deterioration or deformation due to overloading of the system. Ensure that all fixings are securely fastened.		
Base plate Ensure that there is no deterioration or deformation of the base plate and fixings due to overloading of the system. All fixings must be securely fastened.		
Counterweight Inspect the counterweight and ensure that there is no deterioration of the component.		

	Rear rollers Inspect the rollers and roller supporting plates to ensure that there is no deformation or deterioration of the plates. The rollers must freely roll. Ensure that fixings are securely fastened.		
	Supporting legs Ensure that there is no deterioration present on the supporting legs. Ensure that there is no deformation due to overloading. All fixings must be securely fastened.		
Component key 1. Rolers for safe rigging 2. Boom 3. Quick release pins for assembly 4. Load transferring brace 5. Mast 6. Rigging anchor point 7. Counter weights 8. Foot operated leveling castor 9. Wing nut	Fixing Nuts & Bolt Torque test all Nuts & Bolt to Pre-Load levels determined by ISO898-2:2013.		
EDGESEILTM Serial No 232214.22 Svi 600 K3 Type 650-2500-2500 Date Manufacture 21.03.2023 Test Date 21.03.2023 ENQUIRES@SAYFAGROUP.CO.CK medicologisation res	Product label Ensure that information is clearly identifiable.		

Technical Specification

Materials

All structural components and load bearing components are manufactured from anodised 6082-T6 extruded aluminium or 316 stainless steel enabling the unit to be sited externally permanently for specific abseiling points if necessary.

The no-structural weights are S275 mild steel, zinc plated and polyester powder coated for long term durability and hazard identification.

Features

Locking pin - Facilitates rapid assembly and disassembly of the davit whilst providing a secured assembly.

Stackable counterweights - Enables the unit to be stacked to a pallet

Foot operated heavy duty levelling castors – Ensures that the system can be fully planted before use.

Smooth Nylon Rollers - Ensure safe rope path

Cast Eyebolts - Provide easy rigging

Storage

EdgeSeil[™] is suitable for permanent external siting, moving between projects or roofs and storing away in a compact size.

Rating

12kN single user. 100kg safe working load.

13kN two users. 100kg safe working load for each user, 200kg total.

Dimensions

Code: ESM.1500.3800.1U

- Width: 918 mm
- Height: 1695 mm

System weight: 371 Kg

Reach: 1084mm

Rating: 12 kN







Dimensions

Code: ESM.1500.3800.2U

Width: 918 mm

Height: 1695 mm

System weight: 587 Kg

Reach: 1084mm

Rating: 13 KN







Material specification

S235 Mild Steel Weights Bright Zinc Plated and Polyester Powder coated

316 Stainless Steel Base Structural and Reinforcing plates

316 Stainless Steel Rigging Support plates, polyester powder coated

A4/1.4401 A80 Grade M16 Bolts

A4/1.4401 A70 Grade M16 Pins

6082-T6 Structural Aluminium Post

Finish

Polyester powder coating.

Anodising AA20.

Installation / fixings

Free standing.

Test standards

-BS EN 795 Personal fall protection equipment type B & E. Anchor devices. -PD CEN/TS 16415 Personal fall protection equipment. Anchor devices.

Related standards

- BS 7883 Code of practice for the design, selection, installation, use and maintenance of anchor devices conforming to BS EN 795.

- BS 7985 Code of practice for the use of rope access methods for industrial purposes.

- BS ISO 22846 Personal equipment for protection against falls.

- BS 8437 Code of practice for selection, use and maintenance of personal fall protection systems and equipment for use in the Workplace.

Testing

Testing and performance are in accordance with BS EN 795 Personal fall protection equipment type B & E, PD CEN/TS 16415 Personal fall protection equipment.

Dynamic testing: 12kN

Static testing: 12kN for 1 user systems and 13kN for 2 user systems.

Product warranty

5 Years Standard Warranty

10 Years SAYFA+ Warranty

Please refer to the Warranty Application available on <u>www.sayfagroup.co.uk</u>.



GET IN TOUCH

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