

SaeboMAS

Patented

Product Manual

Maximizing Function

While Improving Proximal Strength



 **Saebo**


No Plateau In Sight[®]

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Symbols used

Symbols used in this Product Manual

	Attention! Read these parts extra carefully for they contain important information regarding safety
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Symbols used on the *SaeboMAS*

	<i>SaeboMAS</i> is a CE class I Medical Device
	Manufacturer's name and address
	Production date; Country of Manufacture
	Serial number
	Warning; Crushing of hands. Closing mechanical parts can injure hands
	Warning; Moving parts can crush
	Refer to instruction manual/booklet
 WARNING To avoid risk of injury reduce tension to "1" prior to securing or unsecuring this bar to the frame	Warning! Reduce tension to the lowest level prior to securing or unsecuring this bar to the frame, in order to avoid risk of injury
WARNING Secure only to stable surfaces Avoid plastic or wheeld tables	Warning! Secure the table clamp only to stable surfaces. Avoid plastic tables or tables with wheels

Introduction

Saebomas dynamic mobile arm support system is a zero gravity upper extremity device specifically designed to facilitate, as well as challenge, the weakened shoulder and elbow during functional tasks and exercise drills.

Patients suffering from neurological and orthopedic conditions that exhibit proximal weakness can benefit from the support and facilitation that the **Saebomas** offers. Performing exercise drills with minimal compensation, as well as ADL tasks such as eating or drinking, are just a few of the activities patients will be able to achieve with the **Saebomas**. Additionally, patients with proximal weakness can now participate in proven treatment techniques consisting of highly repetitive task-oriented activities that would have otherwise been difficult or impossible.

Possible benefits

- Increase motor control
- Increase strength
- Increase range of motion
- Improve self-care performance
- Minimize over-use injuries and unwanted movement
- Provide an opportunity for the patient to perform highly repetitive tasks

Contraindications

- The **Saebomas** should not be used with individuals who exhibit severe shoulder and elbow pain

Precautions



To decrease risk of bodily injury, please be sure to lower the Tension Indication Knob completely until you feel a stop (knob parallel with bottom arrow) prior to opening or closing the *SaeboMAS* (clipping or unclipping).

The *SaeboMAS* must be mounted to a sturdy table. The device should not be mounted to unstable surfaces or tables on wheels. Do not mount to plastic tables.

Do not perform hand-to-mouth activities without the Elbow Support. The Elbow Support must be attached. Without the Elbow Support attached, the Forearm Support may migrate distal (i.e., slip downwards) towards the wrist. In some cases, the Forearm Support may slip completely off the arm.

For some individuals, the Forearm Support may migrate distally (i.e., slip downwards) toward the wrist during use. Add non-slip material, such as waffled shelf liner to minimize migration.

Warnings

Subject	Warning
Amount of support	 Too much support can result in shoulder pain
Swivel stop	 Be sure to loosen the Swivel Stop Knob prior to use to avoid damage.

Parts list

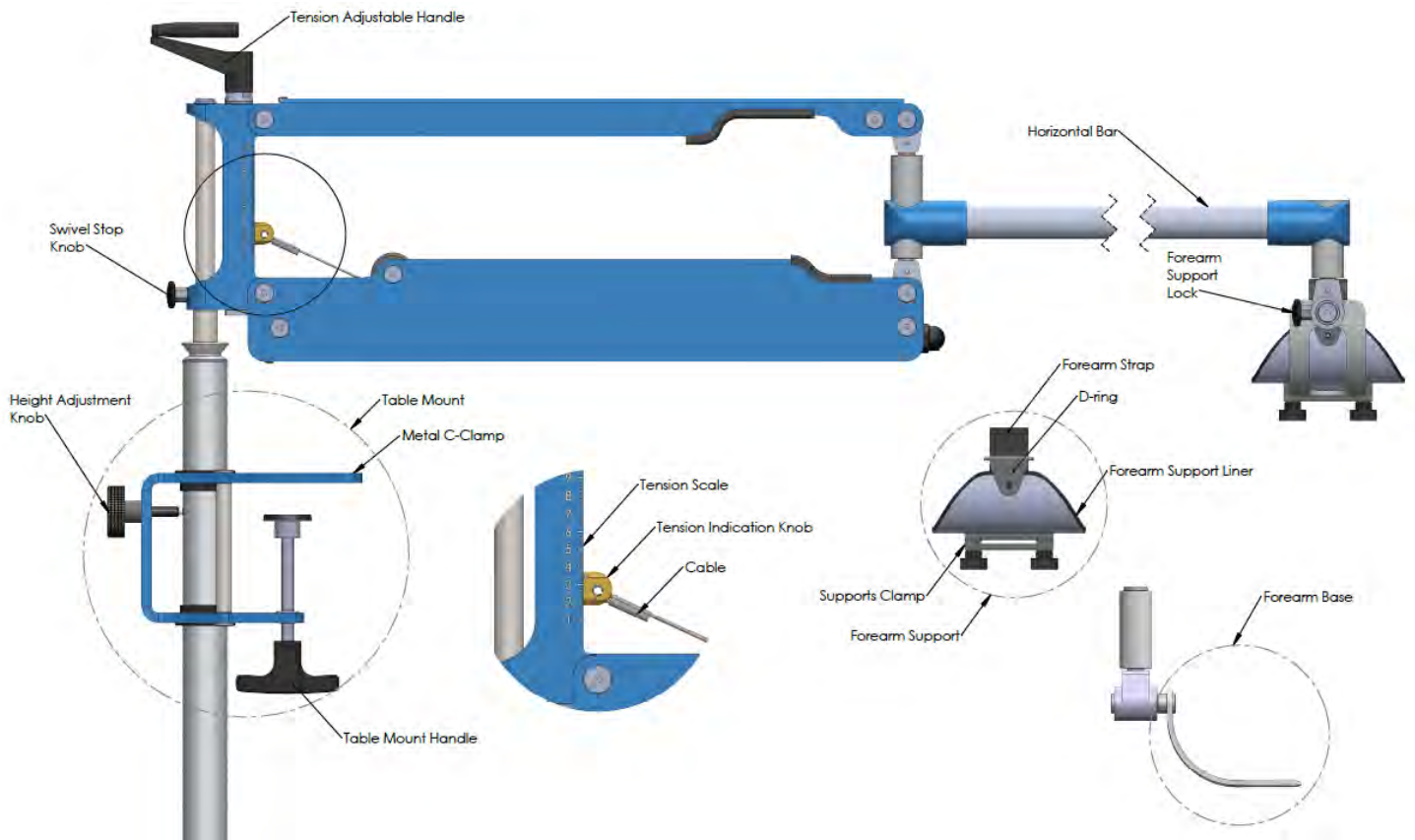


Figure 1

Accessories list

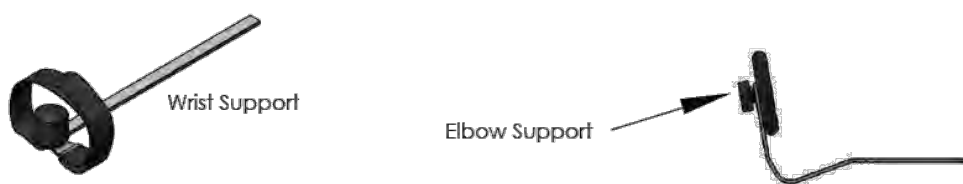


Figure 2

A. Purpose Elbow Support

It is highly recommended that the elbow support be used for any activities involving elbow flexion. For example, all activities that incorporate hand to mouth movements (i.e., feeding, grooming) will need the elbow support. This will prevent the Forearm Support from migrating distally (slip downwards) towards the wrist.

B. Purpose Wrist Support

The Wrist Support is ideal for patients that exhibit "wrist drop".

SaeboMAS installation

During the installation, please keep the **SaeboMAS** in a closed position (i.e., horizontal bar secured/clipped to the frame) until the setup is complete (**see Figure 3**). Once you are finished installing the device, unclip the horizontal bar from the frame of the **SaeboMAS** to begin treatment. When you are not using the device, lower the Tension Indication Knob completely until you feel a stop (knob parallel with bottom arrow) (**see Figure 4**).



Important: To decrease the risk of bodily injury, make sure the tension is lowered completely before opening/closing the **SaeboMAS** (**see Figure 4**).



Figure 3

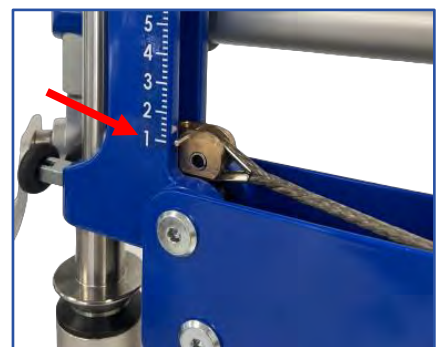


Figure 4

A. Attach the Table Mount

1. The Table Mount should be positioned on the involved side approximately 2 feet away from the user.
2. The Table Mount should be secured to a sturdy heavy surface. Ideally, the mounting surface should be 1-3 inches (2.5 - 7.5cm) thick. If you are applying the Table Mount to a counter top, be sure to have a sufficient surface area to properly secure the mount to the counter.
3. Place the Table Mount in the correct position (**see Figure 5**).
4. Tightly rotate the Table Mount Handle until the mount is secured (**see Figure 6**).



Figure 5



Figure 6

B. Attach *Saebo*MAS to Table Mount

1. Now that the Table Mount is secured to the surface, insert the *Saebo*MAS vertical pole into the opening of the Mount (**see Figure 7**).
2. Once the appropriate height is determined, secure the vertical pole by rotating the Height Adjustable Knob on the Table Mount in a clockwise direction (**see Figure 8**).
3. Be sure to keep the device in a closed position (**see Figure 3**).



Figure 7



Figure 8

C. Height Adjustment

1. To increase or decrease the height of the device, rotate the Height Adjustable Knob in a counter-clockwise direction (to loosen) and gently pull up or push down to the appropriate height. Once the appropriate height is determined, secure the vertical pole by rotating the Height Adjustable Knob in a clockwise direction (**see Figure 9**).



Important: What height should the *Saebo*MAS be positioned? The Tension Adjustment Handle of the *Saebo*MAS should be positioned at shoulder height of the user (**see Figure 9**).



Figure 9

D. Apply Forearm Support

The *SaeboMAS* includes 2 Forearm Supports (1 Small, 1 Medium/Large)

1. To remove the Forearm Support, loosen the Knobs of the Supports Clamp and remove the Forearm Support.
2. To attach a Forearm Support, place the Forearm Support in the slot of the Supports Clamp (see **Figure 11**), and slide it to the other end of the Supports Clamp. Re-secure the knobs of the Supports Clamp.
3. Forearm Support position should be approximately 1/3 of the forearm-length to the elbow. (**See Figure 10**)



Figure 10




Figure 11

Reminder: The Forearm Supports are malleable and can be shaped for an intimate fit.

E. Apply Elbow Support

1. To attach the Elbow Support, loosen the Supports Clamp Knobs. Slide the Elbow Support into the slot on the side as indicated in **Figure 12**. Re-tighten the Knobs to secure the Elbow Support to the Supports Clamp.
2. Be aware that elbow extension will be limited while using the Elbow Support.

 **Important:** Do not use the elbow support for tasks that require elbow extension.

 **Important:** Make sure that the Forearm Base is still fully through its slot



Figure 12

F. Apply Wrist Support

To attach the Wrist Support, loosen the Supports Clamp Knobs and slide the Wrist Support into the slot on the side as indicated in **Figure 15**. Re-tighten the Knobs to secure the Wrist Support to the Forearm Support.

 **Important:** Make sure that the Forearm Base remains fully through its slot



Figure 13



Figure 14

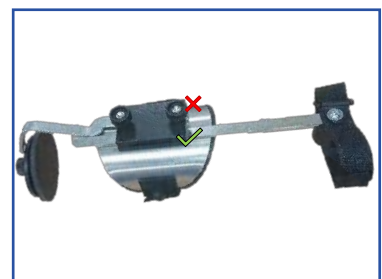


Figure 15

G. Forearm Support Lock

One of the unique features of the *SaeboMAS* is the ability to lock and unlock the forearm support as needed. For example, patients that exhibit poor strength at the elbow and forearm may require the forearm support to be in a locked position for increase stability and control (i.e., Forearm Support unable to swivel vertically/up and down). Conversely, patients that have fair or good strength at the elbow and forearm may be able to tolerate the forearm support in an unlocked position (i.e., Forearm Support able to swivel vertically/up and down).

1. To lock the Forearm Support, rotate the Knob until it latches in the slots. Rotate the Forearm Base a bit back and forth till it locks in place. **(See Figure 16).**
2. To unlock the Forearm Support, pull the black knob and rotate the knob 90 degrees



Figure 16

H. Tension Adjustments

The *SaeboMAS* includes a Tension Scale to identify and track the amount of support needed for the affected arm **(see Figure 17)**. The scale ranges from 1-10 (1=least amount of tension/support; 10=greatest amount of tension/support).



Figure 17

1. Tension Adjustments

- a. Increase Tension/Support: Rotate the Tension Adjustment Handle in a clockwise direction.
- b. Decrease Tension/Support: Rotate the Tension Adjustment Handle in a counter-clockwise direction.
- c. To avoid damage, once the desired tension is reached, be sure to move the Tension Adjustment Handle away from the frame.

2. Progressing the Program

- a. When appropriate, consider decreasing the amount of tension provided to further challenge the affected arm.



***Important:* How much support should be provided?**

Each individual will require a customized program based on his or her motor impairments. There should be enough support provided to successfully complete the functional task. At the same time, the support should be limited to challenge the user. Finding a balance between too much support and too little will be important.

I. Correct Position

The **SaeboMAS** can be used in standing or in a seated position.

1. The user should be positioned side-by-side (approximately 2 feet or 60cm away) from the **SaeboMAS**. Note the position of the parallelogram (posterior direction) when in use (**see Figure 18**).



Figure 18

2. Alternate position: Instead of positioning the **SaeboMAS** side-by-side, an alternate position is to place the **SaeboMAS** posterior-lateral to the user. In this position, the device (Vertical Pole) should be positioned 1 foot (30cm) behind the user and 1.5 feet (45cm) to the side (**see Figure 19 and 20**).

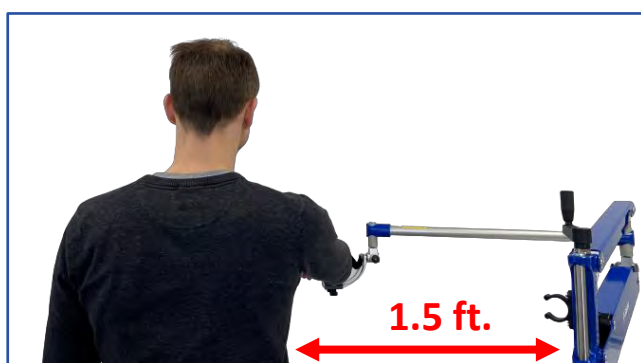


Figure 19



Figure 20

J. Swivel Stop

Apply the Swivel Stop to eliminate rotation or turning of the frame when the *SaeboMAS* is not in use. Be sure to unlock prior to use.

Unlock the Swivel Stop:

1. Pull the black knob and rotate the knob 90 degrees (**See Figure 21**)

Lock the Swivel Stop:

1. Rotate the black knob till it latches back into closed position (**Figure 22**)
2. Rotate the *SaeboMAS* till the Swivel Stop is aligned with the yellow hole (**Figure 23**)
3. At this location, the Swivel Stop will automatically lock in place



Figure 21



Figure 22



Figure 23



Important: Be sure to unlock the Swivel Stop Knob prior to use to avoid damage.

Start using *SaeboMAS*

To start working with the *SaeboMAS*, follow the steps below:

1. Determine the right height and position of the *SaeboMAS* relative to the user
2. Decide which size Forearm Support and which accessories are needed
3. If applicable, mount the accessories correctly
4. Check if the Height Adjustable Knob on the Table Mount is secure
5. Check if the accessories are securely mounted
6. Check if the Tension Indication Knob is at the lowest position
7. Loosen the Swivel Stop
8. Unclip the Horizontal Bar
9. Put the user's forearm in the Forearm Support and apply the Forearm strap
10. Apply the right compensation level

To stop working with the *SaeboMAS* follow the steps below:

1. Turn the compensation level to minimal
2. Unstrap the arm
3. Clip in the Horizontal bar
4. Tighten the Swivel Stop

Cleaning

When the **SaeboMAS** is successively used by more than one user, parts that have been in contact with the patient shall be disinfected before the successive user uses the **SaeboMAS**.

When cleaning the outer part of the **SaeboMAS**, make sure to use a soft, clean cloth dampened with lukewarm water and a non-abrasive liquid household cleaner.



Important: Avoid cleaning the cable and the bearings

Maintenance

Forearm liners are removable and can be replaced by ordering directly from Saebo. To increase the longevity of the liners, consider applying a stockinette over the client's arm prior to using the **SaeboMAS**.

Check the cable integrity regularly. Decreasing cable integrity can be recognized by cable fraying. In case cable fraying is observed, contact your distributor or email directly to the manufacturer: info@hankamp.nl.



Important: The **SaeboMAS** must under no circumstances be opened or dismantled in order to clean or check inner parts. If opening is required, contact your distributor or the manufacturer.

Warranty

Limited Warranty: The *SaeboMAS* was manufactured to meet Saebo's superior standards. However, regardless of how carefully you use, or how well you care for your mobile arm support, it will eventually begin to show age and wear. This warranty does not cover damage caused by accident, improper care, negligence, normal wear and tear, or natural breakdown of colors and materials over extended time and use. Saebo, Inc. warrants that this product will be free from physical defects for a period of two (2) years from the date of purchase. If your product does not work properly because of a defect in materials or workmanship, Saebo, Inc. (referred to as "the warrantor") will, for the length of the period, which starts with the date of original purchase ("warranty period"), at its option either (a) repair your product with new parts, or (b) replace it with a new product. The decision to repair or replace will be made by the warrantor. This warranty is given in lieu of all other warranties, written or oral, however expressed. Any and all warranties, other than this one, whether expressed or implied including implied warranties or merchantability and fitness of purpose, are hereby disclaimed.

No Liability for Damages: In no event shall Saebo, Inc., or its suppliers, be liable for any monetary damages whatsoever, including any consequential, incidental or indirect damages. This warranty does not apply if the equipment has been subject to misuse, neglect, accidents, improper installation, or put to use in violation of instructions furnished by Saebo; has been repaired or altered outside a repair facility factory sanctioned by Saebo. In the event this warranty is deemed inapplicable by Saebo, a repair estimate including parts, labor and shipping costs shall be provided to the customer, and shall be paid the customer prior to commencement of repair work.



Important: Any severe personal injury in relation to your *SaeboMAS* should be mentioned to the manufacturer

Troubleshooting Tips

1. If the user exhibits decrease wrist extension strength (i.e., wrist drop) consider applying the Wrist Support for added support.
2. During elbow flexion activities, the elbow may shift/migrate while using the Elbow Stop. For these instances, consider securing the elbow to the Elbow Support by using a Velcro strap



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