

*Designed and manufactured in Australia*



**SINGLE ROPE TECHNIQUE EQUIPMENT (SRTE)**

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**Certificate of Conformity:** This product complies with manufactures specifications &/or relevant standards.

**SRTE Rescuemate and New Series SRTE Rescuemates™** patented  
*Rescuemate, Rescuemate Compact, Rescuemate Hauler and Rescuemate Micro*

Thankyou for selecting an SRTE **Rescuemate** to complement your system. We at SRTE are confident that you will be happy with your acquisition. If you have any questions or product suggestions relating to this or any other product in our range, please contact our Customer Service Centre at the above address.

The SRTE **Rescuemate** was originally developed for retrieval work for rescue personnel. However **Rescuemates** are widely accepted by industrial personnel for use in access work. The SRTE **Rescuemate** is one of the family of SRTE Pulleys and SRTE Specialised Pulleys that were originally developed to fill the gap left by other manufacturers who did not make pulleys small and strong enough for personal equipment kits. SRTE now has the largest range on the market with a combination of single, double or triple sheaves, single or double becket (karabiner hole), aluminium or stainless steel sheaves or cheeks.

The ingenious design of the SRTE **Rescuemate** incorporates a pulley sheave, with an ascender cam. The cam acts as a brake and supports the load between raising operations. The **New Series Rescuemates™** patented, have a unique design which makes it possible to make them smaller and lighter than the original whilst maintaining the same strength and versatility. The new series of **Rescuemates** have a new body design that is extruded offset with a 30° angle. This offset makes it possible to reduce the unit size and keep multiple ropes from rubbing against each other, or other parts of the body. The cam and cam enclosure remain the same in size and strength, except the **Rescuemate Micro Hauler** which has a smaller cam and cam enclosure.

All SRTE Pulleys and SRTE Specialised Pulleys, including SRTE **Rescuemates**, are permanently stamped with MAX Load and SWL at both the pulley and cam. When using the SRTE **Rescuemate** in a system, only use the SWL at the cam; the SWL at the pulley can only be used if the SRTE **Rescuemate** is used as a conventional pulley and the cam is disengaged. The SRTE **Rescuemate** is manufactured using the latest materials and technology. The body is machined from one solid piece of tempered extruded aluminium which has been anodised gold for corrosion protection. The extrusion design features variation of metal thickness giving the flexibility of placing metal where it is most needed for the combination of minimal weight and maximum strength; this also means SRTE **Rescuemates** are not subject to stress fractures (from being bent or welded). The sheave covers (made from extruded aluminium with gold anodising for corrosion protection) extend beyond the surface of the rope to protect the rope from abrasion.

The sheaves are machined from extruded aluminium; have sintered bronze, self-lubricating bearings and a stainless steel axle. The cam is investment cast from duplex stainless steel. The investment cast design features a one-piece casting and does not require additional machining, due to the close tolerances and better finishes. It also gives unidirectional strength and has increased corrosion resistance; this means they are not brittle like tempered steel cams can be. The teeth and cam face curvature were specially designed to do the least damage to the rope while still holding the greatest load even in adverse conditions. The tooth pattern channels dirt away from the rope so as not to clog the cam and interfere with the locking mechanism. If residue does remain, it is easy to remove manually using a damp cloth. The teeth may become worn after extended use; when this happens, it is imperative to have the cam replaced to avoid rope slippage. It is time to replace the cam when any of the teeth are worn by more than one third. The axles, catch and springs are made from stainless steel. Lock nuts are used to deter untrained personnel from tampering. All components are NATA tested.

By combining SRTE Pulleys and SRTE Specialised Pulleys together you can increase the mechanical advantage (MA) making your systems as unique and specialised as your situation. The rated strength of the SRTE **Rescuemate** is limited by the cam, which is rated at 900kg maximum (on 11mm static rope). Alternately, SRTE have Vertical Extrication Device (VED) kits available which incorporate the SRTE **Rescuemate** with pulley(s), ascender(s), karabiner(s), harness(es), equipment pack(s) and rope (cut to your required length).

**Caution:** Mechanical advantage can produce incredible lifting power – reducing the amount of effort required to lift a load.

**Warning:** Maintain constant oral or visual communication with the worker; with a 6:1 MA it would be very easy to injure the worker accidentally if some part of the worker's body were caught under a ledge and you continued hauling. As little as **20kg** is required to lift a load (a person) of 100kg using a MA of 6:1.

**HOW TO USE YOUR NEW SERIES SRTE RESCUEMATE**

This instruction sheet is not a fully comprehensive instruction manual.

Contact TRAC INTERNATIONAL on (61) 0418 674 678 for information on SRTE approved Training Courses.

**Note:** Rescue, industrial and sporting activities are by their nature, potentially hazardous. Any person using SRTE products is personally responsible for learning the proper techniques through instruction by qualified instructors well versed in all appropriate safety techniques and back up systems. The mechanical advantage you require will govern the type of SRTE Pulley you use with your SRTE **Rescuemate**.

READ THE INSTRUCTIONS CAREFULLY AS THERE ARE DIFFERENCES IN THE USE OF THE DIFFERENT MODELS OF THE **New Series SRTE Rescuemate**.

**SAFETY CHECK**

To be made before and after use - details should be noted on history card

- ✓ Rescue Mate in Working Order
- ✓ Pulley in Working Order
- ✓ Ascender in Working Order
- ✓ The safety catch must be engaged at all times - unless replacing the rope
- ✓ Be sure all locking karabiners are in working order and have the screw gate locked closed when in use
- ✓ Check Harness is fitted correctly and buckles doubled back as appropriate
- ✓ Backup system is connected
- ✓ Cam 900kg/ SWL 90kg; SWL 2:1 = 180kg; SWL 4:1 = 360kg

**BELAY and RETRIEVAL** – two person technique

Person 1 – the operator – controls all working operations of the VED kit, and may assist the worker (backup). The operator must maintain visual or oral communication with the worker at all times.

Person 2 – the worker – guides the operator to position the worker correctly so the worker can perform the task effectively. The worker must maintain visual or oral communication with the operator at all time.

**SELF BELAY and SELF RETRIEVAL** – one person technique

The worker controls all working operations of the VED kit and performs the task effectively.

**Note:** for safety reasons, SRTE recommends that you always have a minimum of two people per belay operation, e.g, an operator and a worker.

**SRTE Rescuemate, New Series SRTE Rescuemate Compact, Hauler\* and Micro\***

\*Please note additional instructions for SRTE **Rescuemate Hauler** and SRTE **Rescuemate Micro** in the reverse position.

**\*Rescuemate Hauler /Micro (Reverse position)**

SRTE **Rescuemate Hauler** can be used as a standard **Rescuemate** attached to a top anchor with diversion pulley (Anchor pulley = P2ANCHOR) SRTE **Rescuemate Hauler** cam has been reversed to make it possible to have **Rescuemate Hauler** close to, or directly onto operators harness for self control. In this case the pulley is to be attached to the top anchor and the SRTE **Rescuemate Hauler (Reverse)** travels. When disengaging cam to move the **Rescuemate Hauler** down, NEVER let go of the rope as this is the only control of descent.

**Rescuemate Micro** can be reversed by using the top anchor, unlike the **Rescuemate Hauler**, it does not need any extra pulley when the Rescue Mate Micro is at the top anchor.

**THREADING** –

1. Pull the cam catch down and rest on the side of the **Rescuemate**, holding the cam open.
2. Thread the rope through the SRTE **Rescuemate** pulley and continue down through the cam.
3. Release the cam catch ensuring the cam is closed against the rope.
4. DO NOT TOUCH THE CAM CATCH AGAIN, UNTIL YOU ARE FINISHED USING THE **RESCUEMATE** AND ARE REMOVING THE ROPE.

**LOWERING** – feeding rope and lowering load

1. Using your finger or thumb, push the cam down as far as you can – only push the cam, not the catch.
2. The rope cannot come out because the cam will not open completely; the catch prevents that from happening.
3. With the cam pushed down (or up as required), the rope can run freely through the SRTE **Rescuemate** – cam disengaged.
4. Slide the two SRTE Ascenders down the tail of the rope so that they are approximately 300mm below the SRTE **Rescuemate**.
5. Release the cam on the SRTE **Rescuemate**; the cam will return to its relaxed position, locking the rope in place – cam engaged.
6. Remove any slack between your SRTE Lanyard and your SRTE Ascender, thus lowering the load.
7. Always use two ascenders when lowering; move each ascender approximately 300mm each time.
8. Repeat these steps till your load reaches the required destination.

**RAISING TECHNIQUE** –

Ensure the **Rescuemate** is in the Locking-ACTIVE MODE.

The operator simply pulls on the haul line lifting the worker to safety. The cam automatically suspends (supports) the load between hauling intervals, therefore preventing the worker from falling. It is recommended to use the SRTE A1 Ascender when hauling, as it retains (grips) the rope preventing rope burn. The safety lanyard attached to the SRTE A1 Ascender should be securely attached to the wedgetail safety harness worn by the operator at all times. If a second safety belay is used it should be hauled at the same speed/time as the **Rescuemate** to reduce slack in the safety line between the belay device and the worker. Contact the manufacturer/distributor for training in this area.

**LOWERING TECHNIQUE** –

Ensure the **Rescuemate** is in the Free Running-INACTIVE MODE.

**Overhang/hole Situation**

This technique can be controlled by a single person, the operator simply lowers the worker in increments by using the SRTE A1 Ascender. The SRTE A1 Ascender retains (grips) the rope preventing rope burn. The safety lanyard attached to the SRTE A1 Ascender should be securely attached to the wedgetail safety harness worn by the operator at all times. If a second safety belay is used it should be lowered at the same speed/time as the **Rescuemate** to maintain tension in the safety line between the belay device and the worker. Contact the manufacturer/distributor for training in this area.

### Ladder Situation

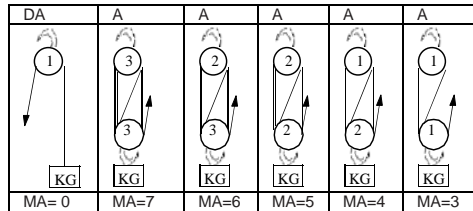
The worker may simply climb down the ladder, while the operator controls the amount of slack from the **Rescuemate** using the SRTE A1 Ascender. The ascender retains (grips) the rope preventing rope burn. The safety lanyard attached to the ascender should be securely attached to the wedgetail safety harness worn by the operator at all times. If a second safety belay is used it should be lowered at the same speed/time as the **Rescuemate** to maintain tension in the safety line between the belay device and the worker. Contact the manufacturer/distributor for training in this area.

### SELF BELAY TECHNIQUE –

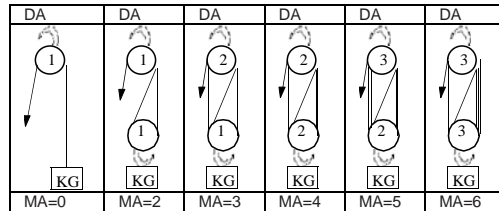
Ensure the **Rescuemate** is in the Locking-ACTIVE MODE when raising and in the Free Running-ACTIVE MODE when lowering. Self belay simply means the worker (hereafter known as the working operator) will control the haul line. In this situation the working operator must attach the SRTE A1 Ascender to the haul line to enable the working operator to move in increments in the direction required. The ascender retains (grips) the rope preventing rope burn. The safety lanyard attached to the ascender should be securely attached to the full body safety harness worn by the working operator at all times. For ultimate control two SRTE A1 Ascenders and leg loops should be used, one to support the line while the other allows the working operator to move in the direction required (up or down). If a second safety belay is used it should be hauled at the same speed/time as the **Rescuemate** to reduce slack in the safety line between the belay device and the worker. Contact the manufacturer/distributor for training in this area.

### MECHANICAL ADVANTAGE –

The following diagrams indicate the type of equipment required to obtain particular mechanical advantages. After viewing these diagrams you should notice that when OPERATING THE SYSTEM (controlling the tail end of the rope) from the TOP, the last sheave only acts as a redirection sheave and supports little load (this is called disadvantage – pulling with gravity). Whereas, when OPERATING THE SYSTEM (controlling the tail end of the rope) from the BOTTOM the last sheave supports the load, increasing the mechanical advantage (this is called advantage – pulling against gravity). Although using a system which works in the advantage increases your mechanical advantage, it is not an efficient system for belay, retrieval, self belay or self retrieval when using auto locking pulleys. SRTE recommend having auto lock specialised pulleys at the top of the system and a minimum of two people operating for safety reasons.



DA = Disadvantage      A= Advantage



### MAINTENANCE

The SRTE **Rescuemate** may be maintained easily (re-rigged) in the field although it is recommend that you have it serviced and the rope replaced every 12 months. Occasionally oil the cam spring, sheave axles and bearings. If the cam or sheaves become clogged with grit they can be cleaned with kerosene. The following is a quick reference guide for field inspection and maintenance repairs. The main advantage of this is to keep the unit in the field where it is required.

**Note:** Dismantling of the **Rescuemate** voids the warranty.

<b>Inspect</b>	<b>Maintenance Repair</b>	
1 Squeaky Cam	Lubricate	1
2 Flat Teeth (1/3 or more worn on first row of teeth on cam)	Return to manufacturer for inspection	2
3 Cam Gritty	Wash in Kero and lubricate	3
4 Sheave not Spinning	Lubricate	4
5 Sheave Gritty	Wash in Kero and lubricate	5
6 Suspect Rope	Contact manufacturer for Rope replacement	6

### SPECIFICATIONS

#### MATES (Sheave and Cam)

Model	Number of Sheaves	Material of Sheaves	No of Becketts	Cheek Material	Sheave, Outer Dia,	Sheave, Inner Dia,	Rope Size (up to)	Length	Width	Thickness
<b>Rescuemate</b>										
RM1a	1	Aluminium with Stainless Steel Cam	2	Aluminium	60mm	49mm	13mm	260mm	80mm	40mm
RM12a	2	Aluminium with Stainless Steel Cam	2	Aluminium	60mm	49mm	13mm	260mm	80mm	60mm
RMC1	1	Aluminium with Stainless Steel Cam		Aluminium	50mm		13mm			
RMC12	2	Aluminium with Stainless Steel Cam		Aluminium	50mm		13mm			
RMH12a (K & RK)	2	Aluminium with Stainless Steel Cam		Aluminium	50mm		13mm			
RMMic (K & RK)	1	Aluminium with Stainless Steel Cam		Aluminium	40mm		9mm			

Model	Maximum Load, kg	SWL (5:1), kg	Weight, g
<b>Rescuemate</b>			
RM1a	5100 cam 900	1000	700
RM12a	5100 cam 900	1000	800
RMC1a	5100 cam 900	1000	540
RMC12a	5100 cam 900	1000	630
RMH1a	5100 cam 900	1000	660
RMH12a	3000 cam 700	1000	690
RMMic	3000 cam 700	600	550
P2ANCHOR	3000	600	175

**CAUTION:** The **SRTE Rescue Mate** is a safe hauling/lowering device if used correctly. However it is the obligation of the Operator to determine whether or not each item is suited for its intended use. In no event shall liability extend beyond the replacement cost of any item. However, no responsibility is implied or assumed for any accident or injury caused or related to its use, correct or otherwise. It is recommended to have a second safety belay when using this equipment and always use two separate anchor points. The manufacturer recommends not to exceed a load of 500kg on the cam as different ropes and conditions can reduce rope strength immeasurably.



**Rescuemate RM**



**Compact RMC**



**Hauler RMH**

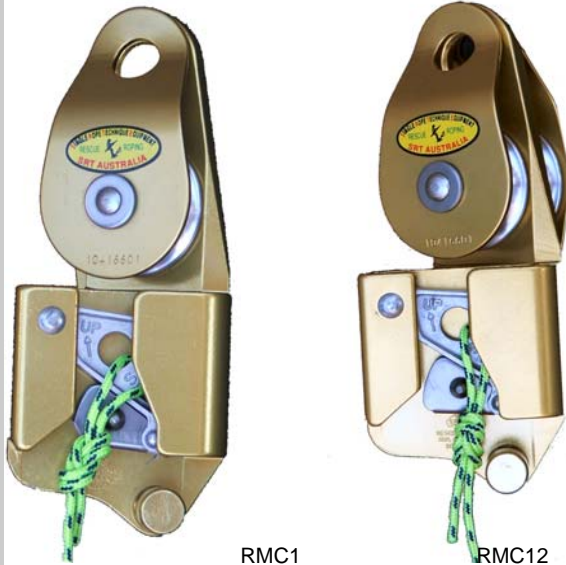


**Micro RMMic**



**RM1**

**RM12**



**RMC1**

**RMC12**

