

Ascender

Gear that can be fixed to rope by gripping or biting the rope. Shape varies according to application. Mainly used during rope ascent and lifting heavy objects.

Basic Ascender

A cam with unidirectional spikes bites into the rope surface and can lock at any position on the rope. Basic form with high versatility for ascent and hauling.

Cut through rope sheath at around 600Kg.

Therefore cannot be used as the main device for Tyrolean bridges tensioned using mechanical advantage systems.



Chest Ascender

Specialized as an ascender for chest attachment. Cam section plate is minimally sized for easy rope attachment/detachment.

The bottom hole is angled so the chest ascender remains parallel to the body. They have the same strength as basic types.



Hand Ascender

Basic ascender with handle attached. Shape specialized for handheld use. Used together with foot loops. Can be attached/detached with one hand. Strength is the same as basic types.



Foot Ascender

Auxiliary ascender for ankle attachment. Not necessary but make the climbing much easier when mastered. Strictly auxiliary gear and must not be recognized as a self-belay equipment.

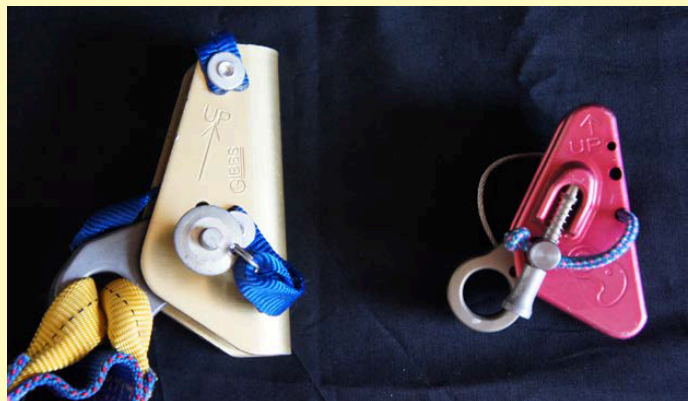


Gibbs-type Clamp

A cam with unidirectional spikes bites into the rope surface and can lock at any position on the rope. Basic form with high versatility for ascent and hauling.

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Shunt

This is an ascender with a unique mechanism in which a metal bar presses and grips the rope when load is applied to the attachment point.

Attachment to and removal from the rope is cumbersome, and response time under load is slow. It can be used in conjunction with an ATC to add an auto-stop function. Like the ATC, it can be used with either single or double ropes.

When using double ropes, do not use ropes of different diameters. Only the thicker rope will be locked, and there is a possibility that the thinner rope may slip through.



Descender

There are many types of descenders, all of which control descent speed by creating friction between metal components and ropes. In this document we will focus on the most used device in SRT PETZL's RIG and ATC.

Rig

This is a single-bobbin descender developed for work solutions. It can be hard-locked using only the lever operation. The attachment hole on the front plate is clip-style, allowing the descender to be attached to the rope without removing it from the carabiner.

When the rope is thin or the bobbin is worn, adding a hard lock similar to that of the Stop can be effective.



ATC

Used in combination with a carabiner, they function as a belay device or descender. They do not have an auto-stop function, but can be used in conjunction with a prusik or Shunt to add an auto-stop function.

Can be used with double ropes.

