Suspension trauma

A universal problem

Suspension trauma is a risk associated with the difficulties of being suspended in an industrial safety harness. The effects are well documented with many studies done. The issue is essentially one of constricted blood flow through the groin area (femoral artery) and the knock on physiological effects that will follow.

Being suspended in a harness not specifically designed for prolonged suspension can put severe pressure on your body, pressure from leg straps constrains blood flow to your legs, toxins may accumulate in the blood trapped in your legs.

Blood pressure may fluctuate as your body tries to solve the problem, you may experience light headedness and may even lose consciousness while suspended in your safety harness. The problem can quickly compound and become very serious, even life threatening.

An effective solution

A device like the *Hilsen Harness Step*© is an effective solution to the problem of suspension trauma and its mechanism is quite simple, create a temporary step to stand in until the fall victim can be rescued in terms of a fall protection plan.

The pressure relief helps to restore blood flow to the legs and prevent the onset of critical blood pressure changes. In one endurance test a person was able to hang untroubled in the harness using the harness step for 90 minutes.

It is important to adjust the length of the step for maximum effectiveness and while awaiting rescue the fall victim should remain calm and alternate feet in the step frequently.

The *Hilsen Harness Step*

The *Hilsen Harness Step*© is a safety device for relief from suspension trauma after a fall arrest. Deploying the step is easy and intuitive, even so, training is required to ensure the user is proficient in its deployment and use:

The *Hilsen Harness Step*© is secured in a plastic sleeve. A lightweight connector protrudes beyond the edge of the sleeve allowing the user to hook a finger through to deploy the step in an emergency. Pulling firmly downward on the connector will release the step.

With the step fully deployed, pass the connector across to the lime coloured webbing eye which is permanently attached to the opposite side of the harness at the waist.

Now feed the connector through webbing eye and then loop it back. There are two webbing eyes sewn along the length of the step.

Select one of the webbing eyes and hook the connector to it. Note that whatever eye you select will determine the length of the step you have now created. You need to choose a length that best suits your leg length.

If you are quite tall and find that neither eye provides a long enough step to stand in, you also have the option of hooking the connector directly onto the webbing eye at the waist.

You can adjust the connector between eyes at any time while suspended in the harness as required.

Now that you have your step set up, go ahead and insert one or both feet into the *Hilsen Harness Step*© and straighten your legs to bring pressure to bear on the step.

As the weight of your body is transferred to the step from your harness leg straps you should feel significant pressure relief.

If you do not feel relief it may be that you have set the step up too long for your leg length. Rectify this by moving the connector to another eye as explained above.

Once you have correctly set up the step and have relieved the pressure on your upper legs you are in a position to safely await rescue or assistance.

Remain calm and alternate feet in the step frequently as required.