

Personal Protective Equipment used in rescue situations



ASAP mobile fall arrester



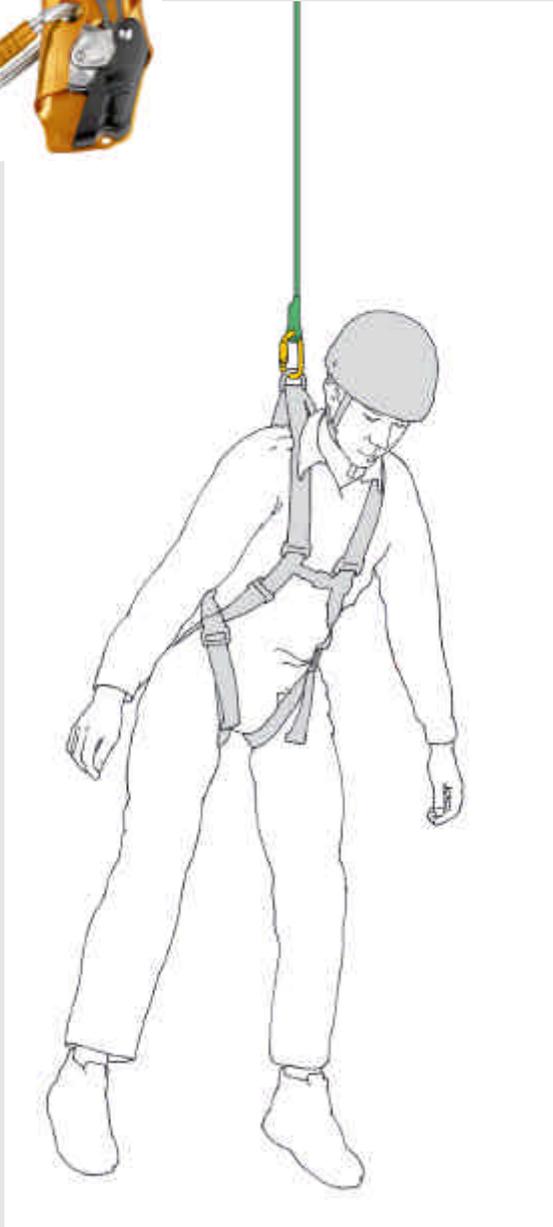
I'D descender

Introduction

- Personal Protective Equipment is subject to the Directive 89/686/EEC
 - « any device designed to be worn or held by an individual for protection against one or more potentially simultaneous risks »
- hence, PPE is not supposed to be used with a two-person load
- however, both rope access and rescue may need to, under exceptional circumstances, use PPE with a two-person load

ASAP mobile fall arrester





ASAP - Introduction

- inert suspension in a harness can have serious physiological consequences



ASAP - Introduction

- Personal Protective Equipment CE certified to EN353-2 – Mobile fall arrester on a flexible anchor line
- however, potential use with a two-person load under exceptional circumstances to rescue a victim on ropes

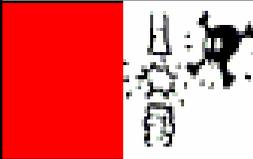
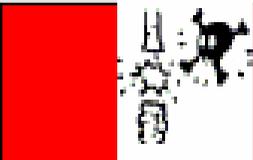
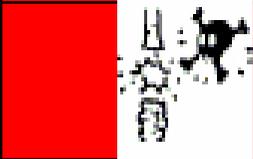
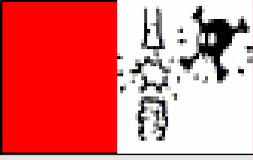
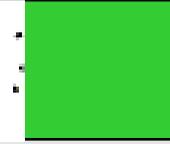
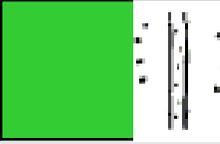


ASAP – Test parameters

- Rope :
 - Béal Antipodes 10,5 mm
 - Figure of eight knot
 - Knot tightened up to 2 kN
- ASAP :
 - Positioned 30 cm below anchor, unlocked
- Test mass :
 - Rigid test mass, 200 kg



ASAP – Test results

		Fall Factor = 1		Fall Factor 2	
OK TRIACT					
ASAP'SORBBER 20 cm					
ASAP'SORBBER 40 cm					
ABSORBICA I (80 cm)					
ABSORBICA					



ASAP – Conclusion and advice

- The ASAP is not designed to arrest a two-person fall. Each person should have his own fall arrest system.
- The use of a single ASAP to back-up two people must remain exceptional and done only if all of the following conditions are met:
 - for rope rescue work - emergency rappel pick-off of an immobile hanging victim.
 - when all the risks of falling and shock loading (anchor failure, pendulum, sudden loading, etc.) are minimized.
 - when the operation is led by a person experienced with this type of rescue.
 - when using the ABSORBICA L57 absorbing lanyard, without an extension.

I'D S descender





I'D S - Introduction

- Personal Protective Equipment CE certified to EN341 - Descenders
- However, both rope access and rescue may use the I'D with a two-person load under exceptional circumstances
- Situation of use with a rescue load:
 - Lower a two-person load
 - Belay a two-person load



I'D S as a descent control device

- Extra-friction must be added in order to handle a rescue load on the I'D
- The amount of friction to be added depends on the characteristics of the rope (diameter, construction...) and the rescue system itself (redirection or not)



I'D as a belay device

- Test parameters
 - Fall Factor : 0,3
 - Test mass : 200 kg for 10,5 mm and 11 mm ropes



I'D Small as a belay device

- Test parameters
 - Test mass : 200 kg
 - Fall Factor : 0,3 (0,5 m fall on 1,5 m rope)

	Impact force	Slide distance
Béal Antipodes 10,5 mm (CE, EN1891)	7,1 kN	40 cm
Béal Antipodes 11 mm (CE, EN1891)	8,3 kN	25 cm
Petzl VECTOR 11 mm (NFPA 1983, "Light Use")	9,5 kN	10 cm

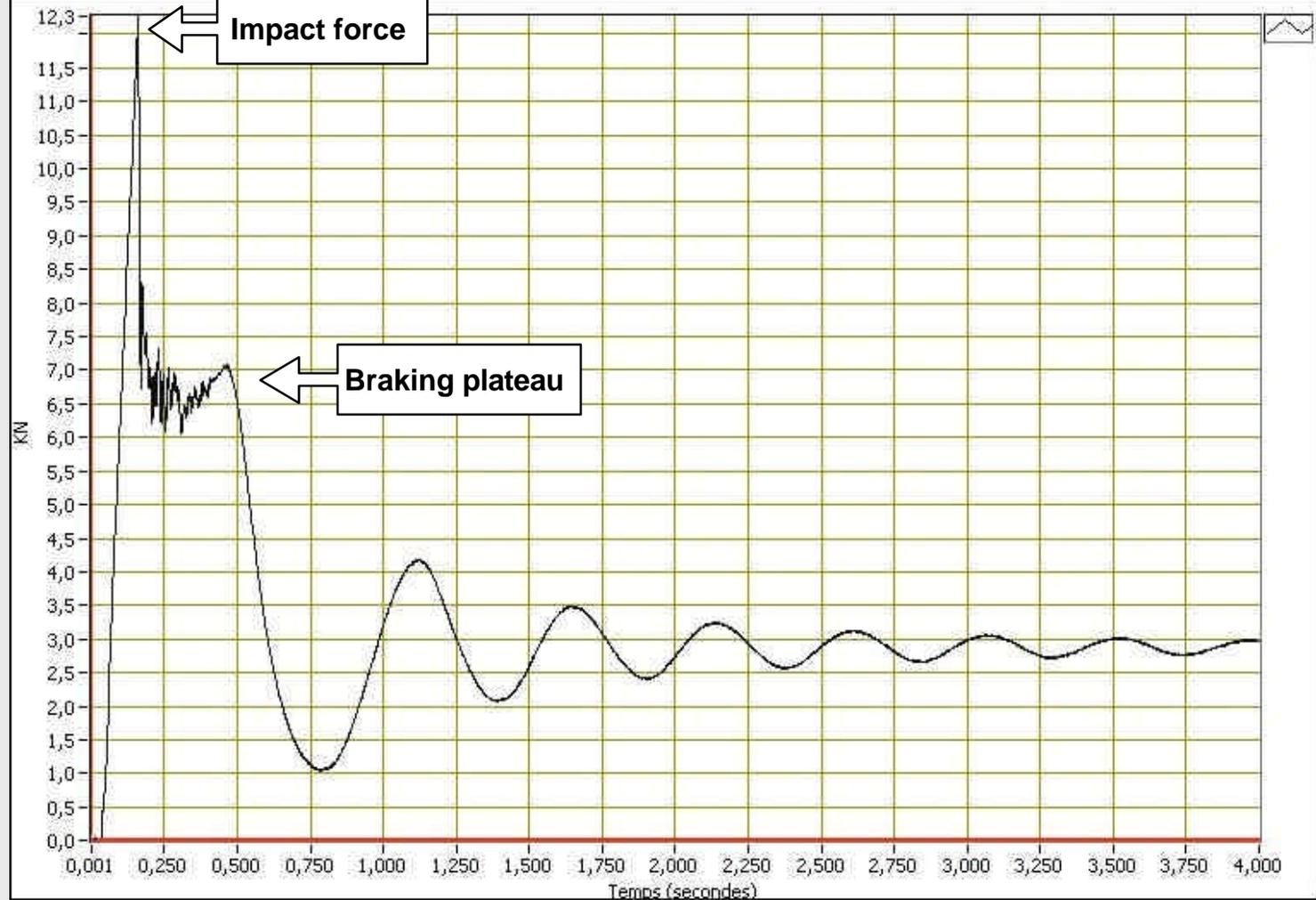
COMPTE-RENDU D'ESSAI



charlet moser

Plafond1

Objet : Plafond Capteur(s) : AP-1000-1 Conditionneurs : AP1003-3 Le : jeudi 25 novembre 2004 à 15:15 N°01



Cursor 0 0,00 0,02 Cursor 1 0,00 0,02 Temps KN

Thanks for your attention!