

A delicate topic! For this reason, many professional acro pilots get their harnesses tailor-made to suit their needs. Fortunately, nowadays there are guite a few good acro harnesses on the market. The optimal harness depends on the pilot's preferred sitting position and individual body measurements.

All specific acro harnesses on the market have special reinforcement with the belts forming closed loops, two reserve pockets, and are suitable for sitting in a very upright position. However, we consider none of the harnesses available on the market to be perfect.

The harness should be strong enough that it does not tear apart in the event of a downplane. Being capable of withst a 12 G load is desirable.

1 Test All harness adjustments must stay in position over time and under load. For this reason, many pilots fix their optimal sitting position by sewing the straps in position.

> The harness should not have any parts that stick out. This is not just for aesthetic reasons but also to minimise the aerodynamic resistance of the harness and to avoid slack lines being caught up.

HERE IS A LIST OF THINGS TO LOOK OUT FOR WHEN **BUYING AN ACRO HARNESS:** 

The main suspension straps should form a closed loop around the seat plate. Both ends of this loop should meet under the seat where they are protected from UV. dust. dirt and wear and tear.

The geometry of the harness should be checked as **7** it is important that the shoulder straps in the back of the pilot run downwards, under the connection for the chest strap, further down to the buttocks of the pilot and to the main suspension and the leg loops. 📊

The reserve positioning should not affect the pilot's centre of gravity and should be as close as possible to the middle of the body.

The reserve handles must be positioned so that they can be reached even when the pilot is subjected to a high centrifugal force, but out of the way so as to minimise the risk of accidental deployment.

Mhen reaching for the reserve handle there must be no possibility that you could grab another part of the harness by accident e.g. speed bar line.

> Front containers aren't recommended. They hinder active flying and if they get twisted they cannot be deployed anymore.

0 📁 The speed bar line must not rub against any loadbearing part of the harness when in use and under tension. It must also be impossible for it to get tangled in the reserve handles. If there is a stirrup it should not be in a position where it could get tangled with the reserve container when deployed, and it should not be possible for it to get tangled on the harness when not in must be erer part of The Horness during flapping, grinding or harness during flight. There should be no possible place for a slack line to get caught. When the reserve has been deployed, the hanging creaking,

1 Fin The back protector must not hinder

the pilot's mobility in the air or on the

ground.



The harness must be checked regularly for wear and tear. Areas especially susceptible to wear and tear are:

- **••** the main suspension at the karabiners and on the edges of the seat plate,
- **••** side straps and their attachments at the back of the harness
- $\rightarrow$  all straps where they pass through metal parts.

For competitions it is important that the harness can easily be taken apart for it to dry quickly.

## VERY IMPORTANT: THE SIZE MUST BE CORRECT.

Your back is only correctly supported if the size is right. If the upper body is not correctly supported in high G-force manoeuvres, serious injuries to the spinal column can occur.

The side straps and back part should run as near as possible to the pilot's arm pits without hindering mobility.

position should not cause the pilot to be strangled by the back part of the harness, which may slip upwards, or even the helmet. You should check this out with a helmet in a simulator. 🛌



## PROTECTOR

As acro falls outside certification, the choice of back protector is purely the pilot's preference. Most acro pilots use back protectors that have a thickness of 10 to 15 cm. In competitions, many pilots fly without any protector because the foam absorbs water guickly, becomes very heavy and takes days to dry out. Airbags are not suitable for acro because of their high air resistance and extreme buoyancy in water. They also partly empty in manoeuvres such as SAT and disturb the flight path.