



**DHV TESTREPORT EN926-2:2005**

**SWING ARCUS 7.26**

**Type designation** Swing Arcus 7.26  
**Type test reference no** DHV GS-01-1986-12  
**Holder of certification** [Swing Flugsportgeräte GmbH](#)  
**Manufacturer** [Swing Flugsportgeräte GmbH](#)  
**Classification** B  
**Winch towing** Yes  
**Number of seats min / max** 1 / 1  
**Accelerator** Yes  
**Trimmers** No

**BEHAVIOUR AT MIN WEIGHT IN FLIGHT (80KG)**

**BEHAVIOUR AT MAX WEIGHT IN FLIGHT (105KG)**

Test pilots



**Beni Stocker**

The manufacturer does not want the videos of this test flight to be published.



**Harry Buntz**

The manufacturer has agreed to publish the videos of this test flight.

<b><u>Inflation/take-off</u></b>	<b>A</b>	<b>A</b>
<b>Rising behaviour</b> Smooth, easy and constant rising		Smooth, easy and constant rising
<b>Special take off technique required</b> No		No
<b><u>Landing</u></b>	<b>A</b>	<b>A</b>
<b>Special landing technique required</b> No		No
<b><u>Speeds in straight flight</u></b>	<b>A</b>	<b>A</b>
<b>Trim speed more than 30 km/h</b> Yes		Yes
<b>Speed range using the controls larger than 10 km/h</b> Yes		Yes
<b>Minimum speed</b> Less than 25 km/h		Less than 25 km/h
<b><u>Control movement</u></b>	<b>A</b>	<b>A</b>
<b>Symmetric control pressure</b> Increasing		Increasing
<b>Symmetric control travel</b> Greater than 60 cm		Greater than 65 cm
<b><u>Pitch stability exiting accelerated flight</u></b>	<b>A</b>	<b>A</b>
<b>Dive forward angle on exit</b> Dive forward less than 30°		Dive forward less than 30°
<b>Collapse occurs</b> No		No
<b><u>Pitch stability operating controls during accelerated flight</u></b>	<b>A</b>	<b>A</b>
<b>Collapse occurs</b> No		No
<b><u>Roll stability and damping</u></b>	<b>A</b>	<b>A</b>
<b>Oscillations</b> Reducing		Reducing
<b><u>Stability in gentle spirals</u></b>	<b>A</b>	<b>A</b>
<b>Tendency to return to straight flight</b> Spontaneous exit		Spontaneous exit
<b><u>Behaviour in a steeply banked turn</u></b> ⚠️	<b>A</b>	<b>A</b>
<b>Sink rate after two turns</b> Up to 12 m/s		12 m/s to 14 m/s
<b><u>Symmetric front collapse</u></b>	<b>A</b>	<b>A</b>
<b>Entry</b> Rocking back less than 45°		Rocking back less than 45°
<b>Recovery</b> Spontaneous in less than 3 s		Spontaneous in less than 3 s
<b>Dive forward angle on exit</b> Dive forward 0° to 30°		Dive forward 0° to 30°
<b>Change of course</b> Keeping course		Keeping course

<b>Cascade occurs</b>	No	No
<b>Symmetric front collapse in accelerated flight</b>		<b>A</b>
<b>Entry</b>	Rocking back less than 45°	Rocking back less than 45°
<b>Recovery</b>	Spontaneous in 3 s to 5 s	Spontaneous in less than 3 s
<b>Dive forward angle on exit</b>	Dive forward 0° to 30°	Dive forward 0° to 30°
<b>Change of course</b>	Keeping course	Keeping course
<b>Cascade occurs</b>	No	No
<b>Exiting deep stall (parachutal stall)</b>		<b>A</b>
<b>Deep stall achieved</b>	Yes	Yes
<b>Recovery</b>	Spontaneous in less than 3 s	Spontaneous in less than 3 s
<b>Dive forward angle on exit</b>	Dive forward 0° to 30°	Dive forward 0° to 30°
<b>Change of course</b>	Changing course less than 45°	Changing course less than 45°
<b>Cascade occurs</b>	No	No
<b>High angle of attack recovery</b>		<b>A</b>
<b>Recovery</b>	Spontaneous in less than 3 s	Spontaneous in less than 3 s
<b>Cascade occurs</b>	No	No
<b>Recovery from a developed full stall</b>		<b>A</b>
<b>Dive forward angle on exit</b>	Dive forward 0° to 30°	Dive forward 0° to 30°
<b>Collapse</b>	No collapse	No collapse
<b>Cascade occurs (other than collapses)</b>	No	No
<b>Rocking back</b>	Less than 45°	Less than 45°
<b>Line tension</b>	Most lines tight	Most lines tight
<b>Asymmetric collapse 45-50%</b>		<b>A</b>
<b>Change of course until re-inflation</b>	Less than 90°	Less than 90°
<b>Maximum dive forward or roll angle</b>	Dive or roll angle 15° to 45°	Dive or roll angle 0° to 15°
<b>Re-inflation behaviour</b>	Spontaneous re-inflation	Spontaneous re-inflation
<b>Total change of course</b>	Less than 360°	Less than 360°
<b>Collapse on the opposite side occurs</b>	No	No
<b>Twist occurs</b>	No	No
<b>Cascade occurs</b>	No	No
<b>Asymmetric collapse 70-75%</b>		<b>A</b>
<b>Change of course until re-inflation</b>	Less than 90°	Less than 90°
<b>Maximum dive forward or roll angle</b>	Dive or roll angle 15° to 45°	Dive or roll angle 0° to 15°
<b>Re-inflation behaviour</b>	Spontaneous re-inflation	Spontaneous re-inflation
<b>Total change of course</b>	Less than 360°	Less than 360°
<b>Collapse on the opposite side occurs</b>	No	No
<b>Twist occurs</b>	No	No
<b>Cascade occurs</b>	No	No
<b>Asymmetric collapse 45-50% in accelerated flight</b>		<b>A</b>
<b>Change of course until re-inflation</b>	Less than 90°	Less than 90°
<b>Maximum dive forward or roll angle</b>	Dive or roll angle 15° to 45°	Dive or roll angle 0° to 15°
<b>Re-inflation behaviour</b>	Spontaneous re-inflation	Spontaneous re-inflation
<b>Total change of course</b>	Less than 360°	Less than 360°
<b>Collapse on the opposite side occurs</b>	No	No
<b>Twist occurs</b>	No	No
<b>Cascade occurs</b>	No	No
<b>Asymmetric collapse 70-75% in accelerated flight</b>		<b>B</b>
<b>Change of course until re-inflation</b>	90° to 180°	90° to 180°
<b>Maximum dive forward or roll angle</b>	Dive or roll angle 15° to 45°	Dive or roll angle 15° to 45°
<b>Re-inflation behaviour</b>	Spontaneous re-inflation	Spontaneous re-inflation
<b>Total change of course</b>	Less than 360°	Less than 360°
<b>Collapse on the opposite side occurs</b>	No	No
<b>Twist occurs</b>	No	No
<b>Cascade occurs</b>	No	No

<b><u>Directional control with a maintained asymmetric collapse</u></b>	<b>A</b>	<b>A</b>
<b>Able to keep course</b>	Yes	Yes
<b>180° turn away from the collapsed side possible in 10 s</b>	Yes	Yes
<b>Amount of control range between turn and stall or spin</b>	More than 50 % of the symmetric control travel	More than 50 % of the symmetric control travel
<b><u>Trim speed spin tendency</u></b>	<b>A</b>	<b>A</b>
<b>Spin occurs</b>	No	No
<b><u>Low speed spin tendency</u></b>	<b>A</b>	<b>A</b>
<b>Spin occurs</b>	No	No
<b><u>Recovery from a developed spin</u></b>	<b>A</b>	<b>A</b>
<b>Spin rotation angle after release</b>	Stops spinning in less than 90°	Stops spinning in less than 90°
<b>Cascade occurs</b>	No	No
<b><u>B-line stall</u></b>	<b>A</b>	<b>A</b>
<b>Change of course before release</b>	Changing course less than 45°	Changing course less than 45°
<b>Behaviour before release</b>	Remains stable with straight span	Remains stable with straight span
<b>Recovery</b>	Spontaneous in less than 3 s	Spontaneous in less than 3 s
<b>Dive forward angle on exit</b>	Dive forward 0° to 30°	Dive forward 30° to 60°
<b>Cascade occurs</b>	No	No
<b><u>Big ears</u></b>	<b>A</b>	<b>A</b>
<b>Entry procedure</b>	Dedicated controls	Dedicated controls
<b>Behaviour during big ears</b>	Stable flight	Stable flight
<b>Recovery</b>	Spontaneous in less than 3 s	Spontaneous in less than 3 s
<b>Dive forward angle on exit</b>	Dive forward 0° to 30°	Dive forward 0° to 30°
<b><u>Big ears in accelerated flight</u></b>	<b>B</b>	<b>A</b>
<b>Entry procedure</b>	Dedicated controls	Dedicated controls
<b>Behaviour during big ears</b>	Stable flight	Stable flight
<b>Recovery</b>	Recovery through pilot action in less than a further 3 s	Spontaneous in less than 3 s
<b>Dive forward angle on exit</b>	Dive forward 0° to 30°	Dive forward 0° to 30°
<b>Behaviour immediately after releasing the accelerator while maintaining big ears</b>	Stable flight	Stable flight
<b><u>Behaviour exiting a steep spiral</u></b>	<b>A</b>	<b>A</b>
<b>Tendency to return to straight flight</b>	Spontaneous exit	Spontaneous exit
<b>Turn angle to recover normal flight</b>	Less than 720°, spontaneous recovery	Less than 720°, spontaneous recovery
<b>Sink rate when evaluating spiral stability [m/s]</b>	14	14
<b><u>Alternative means of directional control</u></b>	<b>A</b>	<b>A</b>
<b>180° turn achievable in 20 s</b>	Yes	Yes
<b>Stall or spin occurs</b>	No	No
<b><u>Any other flight procedure and/or configuration described in the user's manual</u></b>		
No other flight procedure or configuration described in the user's manual		