Measurement request from test house for CCC certification
From February 2016

Brand	Gin Gliders Inc.	**Test house name**	DHV
Model	Boomerang 11	**CCC certification n°**	DHV CCC-007-17
Size	M	**Certification date**	01.05.2017
Serial n°	BF10-Q000004PD		

Canopy dimensions

Position	Rib n° from center	Distance [mm]	Tension [daN]	Manual tolerances	Aspect ratio < 7.90 4*span / (chord A+2.5*Chord B)	
Full Span	x	13312	5	+/-2%	**7,63**	
1/2 Trailing Edge	x	6810	5	+/-1%		
Chord A	1	2181	1	+/-1%		
Chord B	22	1920	1	+/-1%	Scale factor	1,08

Number cells
109

Chord lenght, inlet position, tabs position measured from trailing edge.

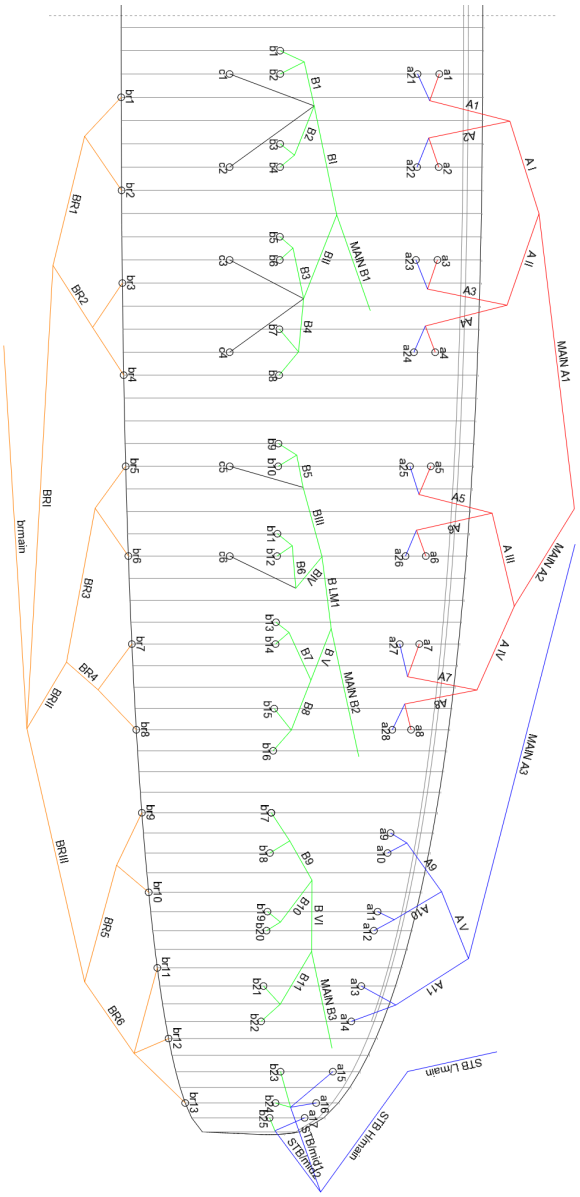
(The tab A & B & C can be on different rib, take care to specify it)

On first lined rib (from center)	Rib n° from center	Distance [mm]	Tension [daN]	Manual tolerances
Chord	2	2176	1	+/-1%
Top of inlet	2	2091	1	+/-1%
Bottom of inlet	2	2052	1	+/-1%
Tab Aa*	3	1882	1	+/-10mm
Tab Ab*	3	1756	1	+/-10mm
Tab B*	2	957	1	+/-10mm
Tab C*	3	672	1	+/-10mm

On last lined rib of Group 2 (from center)	Rib n° from center	Distance [mm]	Tension [daN]	Manual tolerances
Chord	32	1614	1	+/-1%
Top of inlet	32	1542	1	+/-1%
Bottom of inlet	32	1518	1	+/-1%
Tab Aa*	32	1406	1	+/-10mm
Tab Ab*	32	1309	1	+/-10mm
Tab B*	33	714	1	+/-10mm
Tab C*	24	561	1	+/-10mm

On last lined rib (stabilo, from center)	Rib n° from center	Distance [mm]	Tension [daN]	Manual tolerances
Chord	53	573	1	+/-1%
Tab A*	53	492	1	+/-10mm
Tab B*	53	337	1	+/-10mm

*Bridle (tab) position measuremt:
end of trailing edge to center bridle (tab)



ABSOLUTE LINE LENGHT

Absolute line length from bottom riser to canopy in mm with 5daN of tension (Manual tolerances +/-10mm)

Lined Rib n°	A1			A2			B		
	Manual	Glider	Delta	Manual	Glider	Delta	Manual	Glider	Delta
1	8482	8487	5	8452	8462	10	8492	8501	9
2	8363	8371	8	8331	8341	10	8433	8441	8
3	8327	8337	10	8296	8305	9	8333	8342	9
4	8379	8389	10	8352	8361	9	8325	8333	8
5	8292	8296	4	8264	8270	6	8302	8310	8
6	8169	8174	5	8143	8152	9	8292	8294	2
7	8120	8129	9	8096	8104	8	8343	8334	-9
8	8141	8150	9	8124	8130	6	8434	8425	-9
9	7967	7957	-10				8317	8324	7
10	7923	7914	-9				8258	8267	9
11	7836	7829	-7				8161	8170	9
12	7829	7825	-4				8156	8163	7
13	7764	7764	0				8118	8125	7
14	7758	7756	-2				8107	8108	1
15	7611	7602	-9				8137	8129	-8
16	7562	7552	-10				8205	8196	-9
17	7557	7549	-8				8007	7998	-9
18							7913	7918	5
19							7825	7832	7
20							7817	7827	10
21							7757	7765	8
22							7750	7759	9
23							7614	7605	-9
24							7586	7577	-9
25							7579	7572	-7

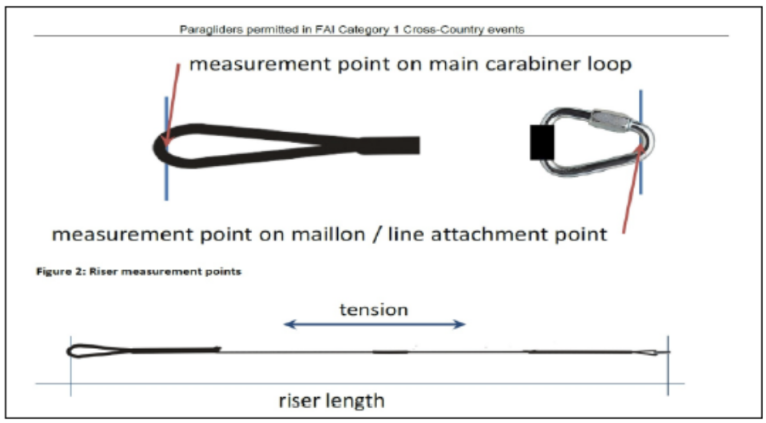
Lined Rib n°	C		
	Manual	Glider	Delta
1	8519	8527	8
2	8412	8419	7
3	8378	8375	-3
4	8459	8459	0
5	8347	8349	2
6	8243	8246	3

Riser length

From bottom riser to top maillon on each branche in mm with 5daN (Manual tolerances +/-5mm)

Trimm speed setting	A1	A3	Stabi	B	Δt (= A1-B)	Attachment rod diameter [mm]
Manual	520	495	510	520	0	10
Glider	520	493	513	521	-1	

Full speed setting	Δa (=B-A1)	B-A3	Total speed Range (Δa+Δt)
Manual	140	120	140
Glider	142	119	141



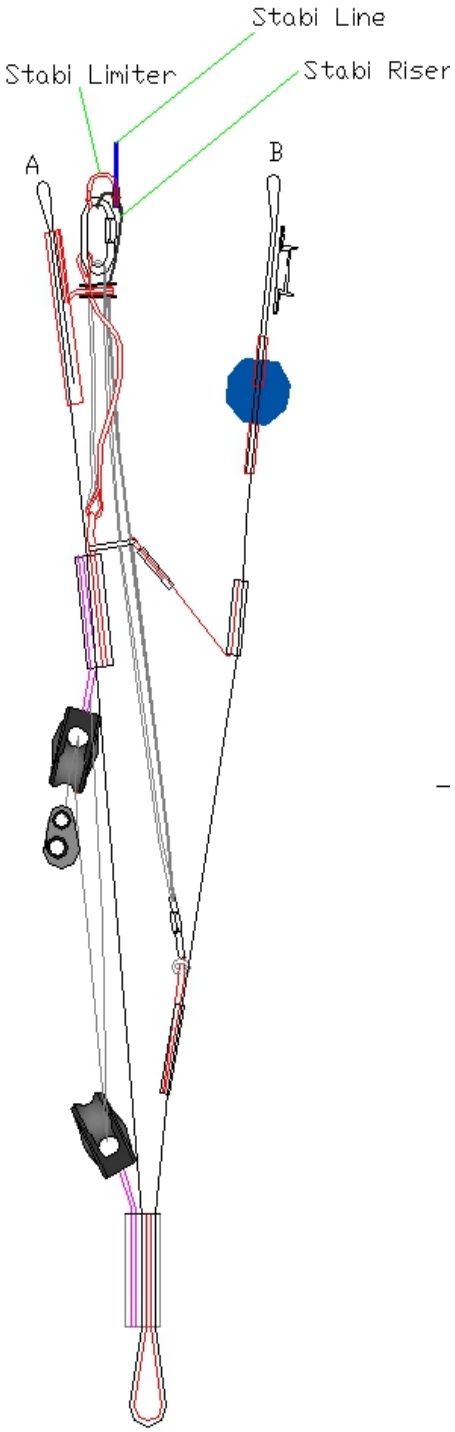


Table of lines quality

Upper

	A1		A2		B		C		BR	
1	Edlerid	8000/U-090	Edlerid	8000/U-090	Edlerid	8000/U-050	Edlerid	8000-025	Edlerid	8000-025
2	Edlerid	8000/U-070	Edlerid		Edlerid		Edlerid		Edlerid	
3	Edlerid	8000/U-050	Edlerid		Edlerid		Edlerid		Edlerid	
4	Edlerid	8000/U-070	Edlerid		Edlerid		Edlerid		Edlerid	
5	Edlerid	8000/U-090	Edlerid	8000/U-050	Edlerid		Edlerid		Edlerid	
6	Edlerid	8000/U-070	Edlerid		Edlerid		Edlerid		Edlerid	
7	Edlerid	8000/U-050	Edlerid		Edlerid				Edlerid	
8	Edlerid	8000/U-070	Edlerid		Edlerid				Edlerid	
9	Edlerid	8000/U-050			Edlerid				Edlerid	
10	Edlerid				Edlerid				Edlerid	
11	Edlerid				Edlerid	8000-025			Edlerid	
12	Edlerid				Edlerid				Edlerid	
13	Edlerid				Edlerid				Edlerid	
14	Edlerid				Edlerid					
15	Edlerid	8000-025			Edlerid					
16	Edlerid				Edlerid					
17	Edlerid				Edlerid					
18					Edlerid					
19					Edlerid					
20					Edlerid					
21					Edlerid					
22					Edlerid					
23					Edlerid					
24					Edlerid					
25					Edlerid					

H/middle

	A			B			BR H/Middle	
1	Edlerid	8000/U-130		Edlerid	8000/U-050		Edlerid	800-025
2	Edlerid			Edlerid			Edlerid	
3	Edlerid	8000/U-090		Edlerid			Edlerid	
4	Edlerid	8000/U-130		Edlerid			Edlerid	
5	Edlerid	8000/U-090		Edlerid			Edlerid	
6	Edlerid			Edlerid			Edlerid	
7	Edlerid	8000/U-070		Edlerid				
8	Edlerid			Edlerid				
9	Edlerid			Edlerid				
10	Edlerid	8000/U-050		Edlerid				
11	Edlerid			Edlerid				
STB/mid1				Edelrid	8000-025			
STB/mid2				Edelrid				

Middle

	A			B			BR L/Middle	
1	Edlerid	8000/U-190		Edlerid	8000/U-090		Edlerid	8000/U-050
2	Edlerid			Edlerid			Edlerid	
3	Edlerid			Edlerid			Edlerid	
4	Edlerid	8000/U-130		Edlerid	8000/U-070			
5	Edlerid			Edlerid				
6				Edlerid	8000/U-050			

L/Middle

				B				
1				Edlerid	8000/U-090			

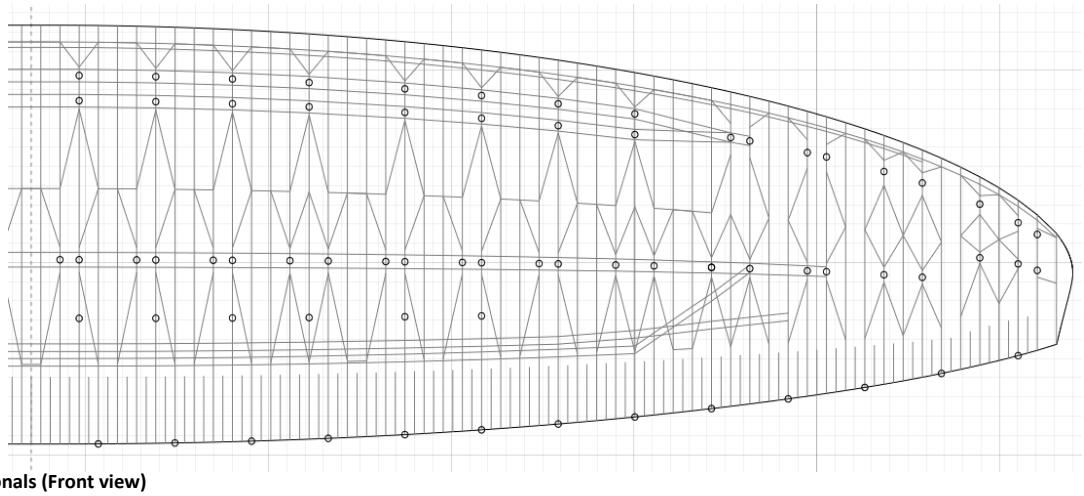
Main

	A			B			BR H/Main	
1	Edlerid	8000/U-360		Edlerid	8000/U-190		Edelrid	8000/U-090
2	Edlerid			Edlerid	8000/U-130		**BR L/Main**	
3	Edlerid	8000/U-190		Edlerid	8000/U-050		Liros	PPSL160
STB H/Main	Edlerid	8000/U-050						
STB L/Main	Liros	DSL70						

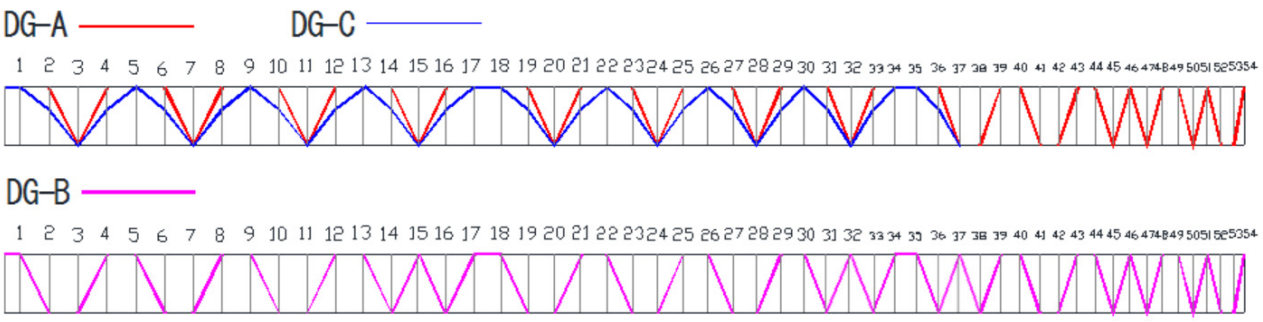
Upper and lower line loop reinforcement: all Edelrid 8000 lines have upper and lower reinforcements

Other pictures & drawings requested from test House

Diagonals, Hstraps and Mini Ribs (top view)



Diagonals (Front view)



Vent (Inlet) shape