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-009-17
Size	S	**Certification date**	01.05.2017
Serial n°	BG02-Q82P0016P		

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	12760	5	+/-2%	**7,69**	
1/2 Trailing Edge	x	6520	5	+/-1%		
Chord A	1	2076	1	+/-1%		
Chord B	22	1823	1	+/-1%	Scale factor	1,03

Number cells
109

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

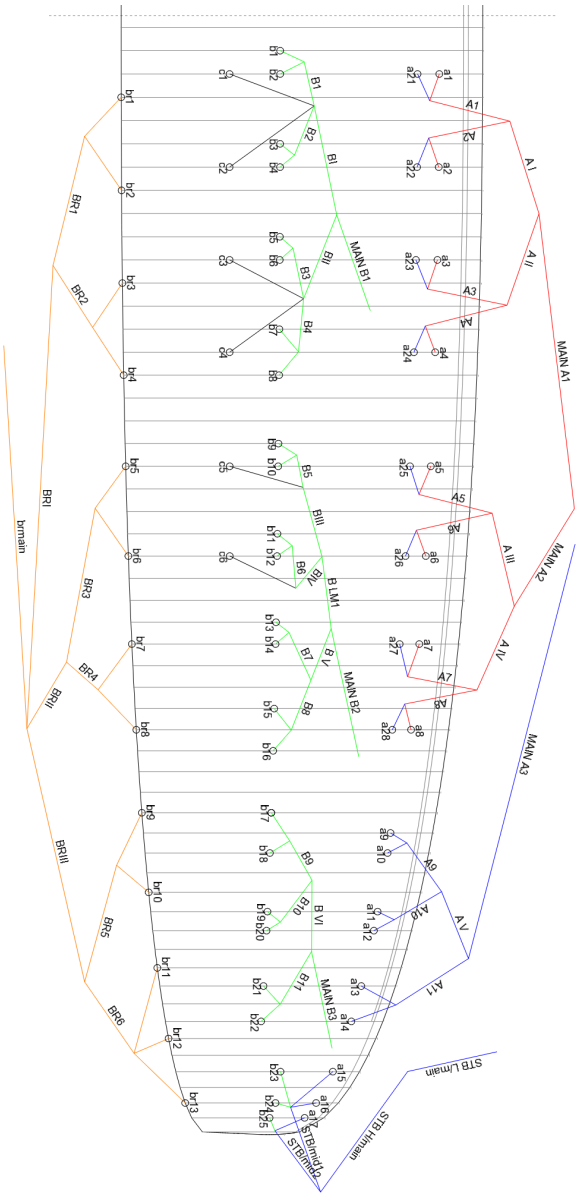
(The tab A & B & C can be on different rib, take care to specify it)

On first lined rib (from center)	Rib n° from center	Distance [mm]	Tension [daN]	Manual tolerances
Chord	2	2060	1	+/-1%
Top of inlet	2	1973	1	+/-1%
Bottom of inlet	2	1940	1	+/-1%
Tab Aa*	3	1804	1	+/-10mm
Tab Ab*	3	1684	1	+/-10mm
Tab B*	2	914	1	+/-10mm
Tab C*	3	625	1	+/-10mm

On last lined rib of Group 2 (from center)	Rib n° from center	Distance [mm]	Tension [daN]	Manual tolerances
Chord	32	1535	1	+/-1%
Top of inlet	32	1474	1	+/-1%
Bottom of inlet	32	1454	1	+/-1%
Tab Aa*	32	1355	1	+/-10mm
Tab Ab*	32	1265	1	+/-10mm
Tab B*	33	678	1	+/-10mm
Tab C*	24	539	1	+/-10mm

On last lined rib (stabilo, from center)	Rib n° from center	Distance [mm]	Tension [daN]	Manual tolerances
Chord	53	557	1	+/-1%
Tab A*	53	479	1	+/-10mm
Tab B*	53	325	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	8151	8143	-8	8122	8114	-8	8164	8159	-5
2	8036	8034	-2	8005	8001	-4	8107	8102	-5
3	8001	7994	-7	7971	7962	-9	8008	8004	-4
4	8049	8039	-10	8023	8016	-7	8000	7996	-4
5	7965	7955	-10	7937	7927	-10	7975	7967	-8
6	7846	7837	-9	7821	7813	-8	7964	7957	-7
7	7799	7790	-9	7776	7768	-8	8006	7998	-8
8	7819	7810	-9	7802	7795	-7	8090	8082	-8
9	7651	7655	4				7988	7984	-4
10	7610	7614	4				7931	7925	-6
11	7527	7526	-1				7837	7837	0
12	7520	7516	-4				7832	7825	-7
13	7457	7452	-5				7794	7788	-6
14	7451	7442	-9				7782	7774	-8
15	7302	7299	-3				7806	7796	-10
16	7256	7249	-7				7868	7859	-9
17	7250	7244	-6				7675	7666	-9
18							7586	7579	-7
19							7506	7503	-3
20							7498	7493	-5
21							7441	7444	3
22							7434	7429	-5
23							7305	7303	-2
24							7278	7278	0
25							7270	7270	0

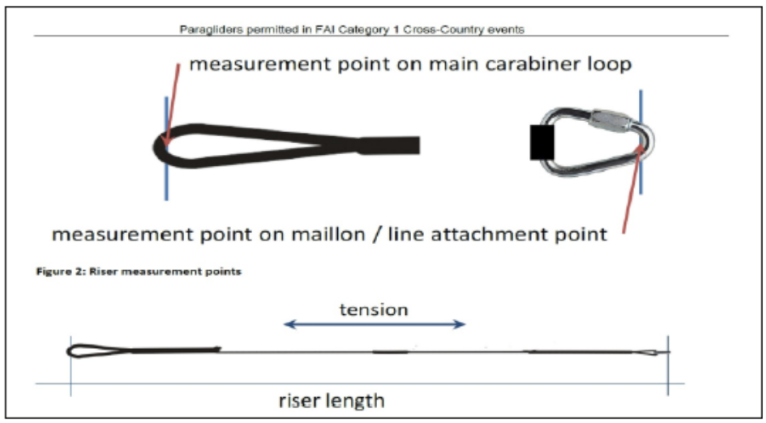
Lined Rib n°	C		
	Manual	Glider	Delta
1	8190	8183	-7
2	8085	8077	-8
3	8047	8042	-5
4	8118	8111	-7
5	8017	8008	-9
6	7916	7908	-8

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	519	493	514	519	0	

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



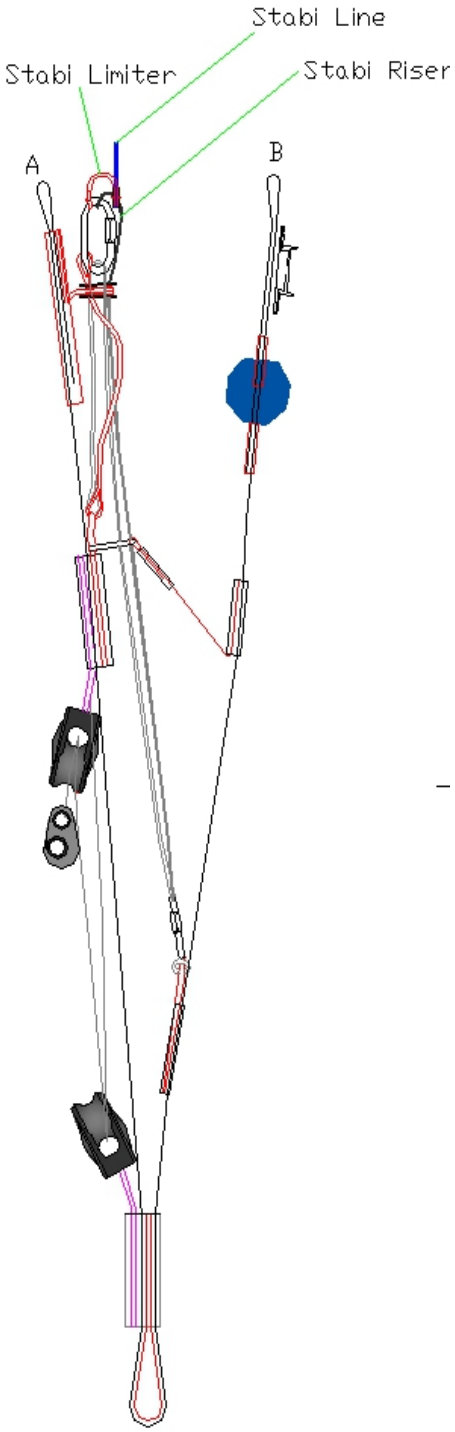


Table of lines quality

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	8000/U-050	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		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			

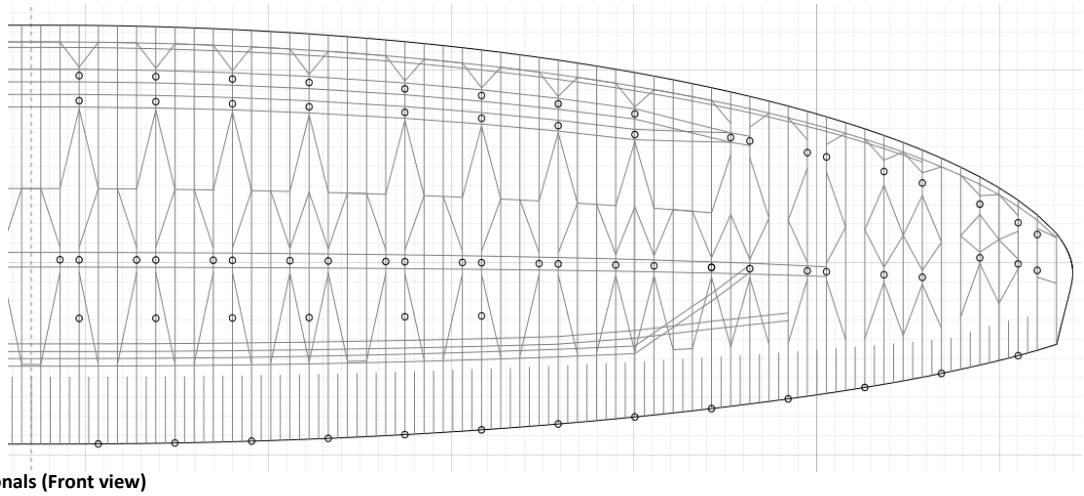
Main

	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						

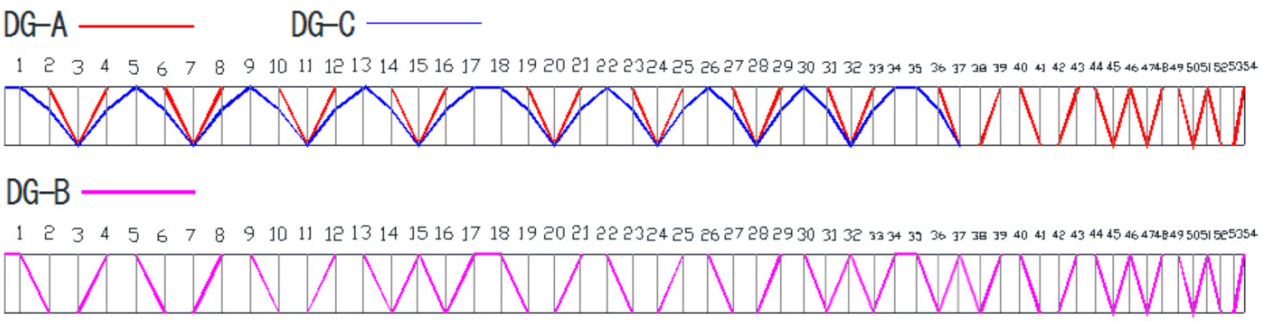
Upper and lower line loop reinforcement: all Edelrid 8000 lines have upper and lower reinforcements

Other pictures & drawings requested from test House

Diagonals, Hstraps and Mini Ribs (top view)



Diagonals (Front view)



Vent (Inlet) shape