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PG PARAGLIDERS CCC

INSPECTION CERTIFICATE

Inspection certificate number: **CCC_017_2016**

MANUFACTURER DATA

Manufacturer name:	**Dudek Paragliders SJ**
Representative	**Wojtek Domanski**
Street:	**Ul. Centralna 2U**
Post code / place:	**86-031 Osielsko**
Country:	**Poland**

SAMPLE DATA

Name:	**CODEN PRO**	Size:	**25**
Min weight in flight [kg]:	**110**	Max weight in flight [kg]:	**130**
		Max weight load [kg]:	**130.5**
Weight [kg]:	**6.64**	Use:	**Single-seater**
Load serial number:	**P-129431**	Date of reception:	**24.02.2016**
Flight serial number :	**P-132801**	Date of reception:	**18.05.2016**

TEST REPORT SUMMARY		RESULTS	PLACE	DATE
PGCCC 1	71.8.1 | SHOCK LOAD TEST:	**POSITIVE**	Yverdon(airport)	**07.03.2016**
PGCCC 2	71.8.1 | SUSTAINED LOAD TEST:	**POSITIVE**	Payerne(airport)	**19.03.2016**
PGCCC 3	71.8.2 | FLIGHT TEST:	**CCC**	Villeneuve	**24.05.2016**
CCC1-6	CCC technical files 1-6	**POSITIVE**	Villeneuve	**06.06.2016**
PGCCC 5	71.6.3 | LINE BREAK STRENGTH:	**POSITIVE**	Villeneuve	**31.05.2016**

ISSUE DATA

Place of declaration:	**Villeneuve**
Date of issue:	**06.06.2016**
Managing Director:	**Alain Zoller**

Signature:

This signature aprouve the validity of the test reports PG 1 to PG 5 (Only if test report are applicable).

Air Turquoise SA, having thoroughly assessed the sample mentioned hereunder, declare it was found conform with all requirements defined by the following norms:

CIVL COMPETITION CLASS | CCC / 2015 Edition / Revision 3.5 / CIVL 01 Sept 2014

Present declaration's scope only extends to the conformity of a given sample, on a given date and in a given place as mentioned here above.

This inspection report contain the following test and is complete with the test report number:
PG1CCC, PG2CCC, PGCCC3, PG5, CCC 1 TO 6

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SHOCK LOADING TEST

TEST REPORT PGCCC 1

PG PARAGLIDERS

Test report ref. number: **CCC_017_2016**

SAMPLE DATA

Manufacturer name:	**Dudek Paragliders SJ**
Representative	**Wojtek Domanski**
Street:	**Ul. Centralna 2U**
Post code / place:	**86-031 Osielsko**
Country:	**Poland**

SAMPLE DATA

Name:	**CODEN PRO**
Size:	**25**
Maximum load [kg]:	**130**
Serial number:	**P-129431**
Date of reception:	**24.02.2016**

TEST DATA

Place of test:	**Yverdon(airport)**
Date of test:	**07.03.2016**
Inspector:	**Alain Zoller**
Results:	**POSITIVE**
Directive:	**CIVL COMPETITION CLASS | CCC** / 2015 Edition / Revision 3.5 / CIVL 01 Sept 2014

The paraglider is subjected to a shock load . Shock load is limited using a weak link accordind weight range.
The weak link breaks or 5 s has elapsed since the application of the shock load. The wing is then visually inspected for damage.

TEST RESULTS:		TEST ATMOSPHERE AGL	
Weak link used [daN]:	**1000**	[C°]	4
Visual inspection:	**No visible damages**	RH [%]	69
		[hPa]	1001
Uncertainty k=2 [%]	**10**	Wind [m/s]	0.5

Weak link value include the uncertainty for weight range test values (on safe side) / The uncertainty stated is the expanded uncertainty obtained by multiplying the standard uncertainty by the coverage factor k = 2. The value of the measurand lies within the assigned range of values with a probability of 95%.

WEAK LINK

INSTRUMENTS	Validity	Manufacturer	s/n
Weak link	2020	Tost	n/a
Cable	2020	Rotex	n/a
Geos n° 11 Skywatch	08.05.2017	JDC elec.	22

The validation of this test report is given by the signature of the test manager on inspection certificate CCC Inspection certificate / 71.8.1 CCC

SUSTAINED LOADING TEST

TEST REPORT PGCCC 2

PG PARAGLIDERS

Test report ref. number:	**CCC_017_2016**

MANUFACTURER DATA

Manufacturer name:	**Dudek Paragliders SJ**
Representative	**Wojtek Domanski**
Street:	**Ul. Centralna 2U**
Post code / place:	**86-031 Osielsko**
Country:	**Poland**

SAMPLE DATA

Name:	**CODEN PRO**
Size:	**25**
Maximum load [kg]:	**130**
Serial number:	**P-129431**
Date of reception:	**24.02.2016**

TEST DATA

Place of test:	**Payerne(airport)**
Date of test:	**19.03.2016**
Inspector:	**Alain Zoller**
Results:	**POSITIVE**
Directive:	**CIVL COMPETITION CLASS | CCC** / 2015 Edition / Revision 3.5 / CIVL 01 Sept 2014

The test specimen is attached to the electronic sensors on the tow vehicle.
A controller is positioned on the tow vehicle in order to operate the paraglider control lines to stabilize the wing.
The speed of the vehicle is increased as gradually as possible, enabling the controller to obtain satisfactory stabilisation of the flight path of the paraglider.
When the paraglider has stabilized, the speed is increased gradually until either:
1) the measured load exceeds a load factor of eight times the maximum total weight in flight recommended by the manufacturer, for a minimum cumulative duration of 3 s; or
2) five peaks separated by at least 0,3 s are obtained above ten times the maximum total weight in flight recommended by the manufacturer, in one run.

TEST ATMOSPHERE AGL

[C°]	**4**
RH [%]	**69**
[hPa]	**1001**
Wind [m/s]	**0.5**

RESULTS

Required breaking strength value for 3s at 8g [N]	**10202.40**	
Required breaking strength value for 5 pics at 10g [N]	**12753.00**	
Required breaking strength value for 3s at 8g at coef. 0.9 [N]	**9182.16**	
Required breaking strength value for 5 pics at coef. 0.9 [N]	**11477.70**	
Uncertainty K=2 [%]	**0.5**	
Calculed cumulative duration breaking strength value [s]	**3.19**	
Calculed max load value with 3 sec or five peaks [kg]	**130.50**	0

Calculed value include the value minus the uncertainty (on safe side) / The uncertainty stated is the expanded uncertainty obtained by multiplying the standard uncertainty by the coverage factor k = 2. The value of the measurand lies within the assigned range of values with a probability of 95%.

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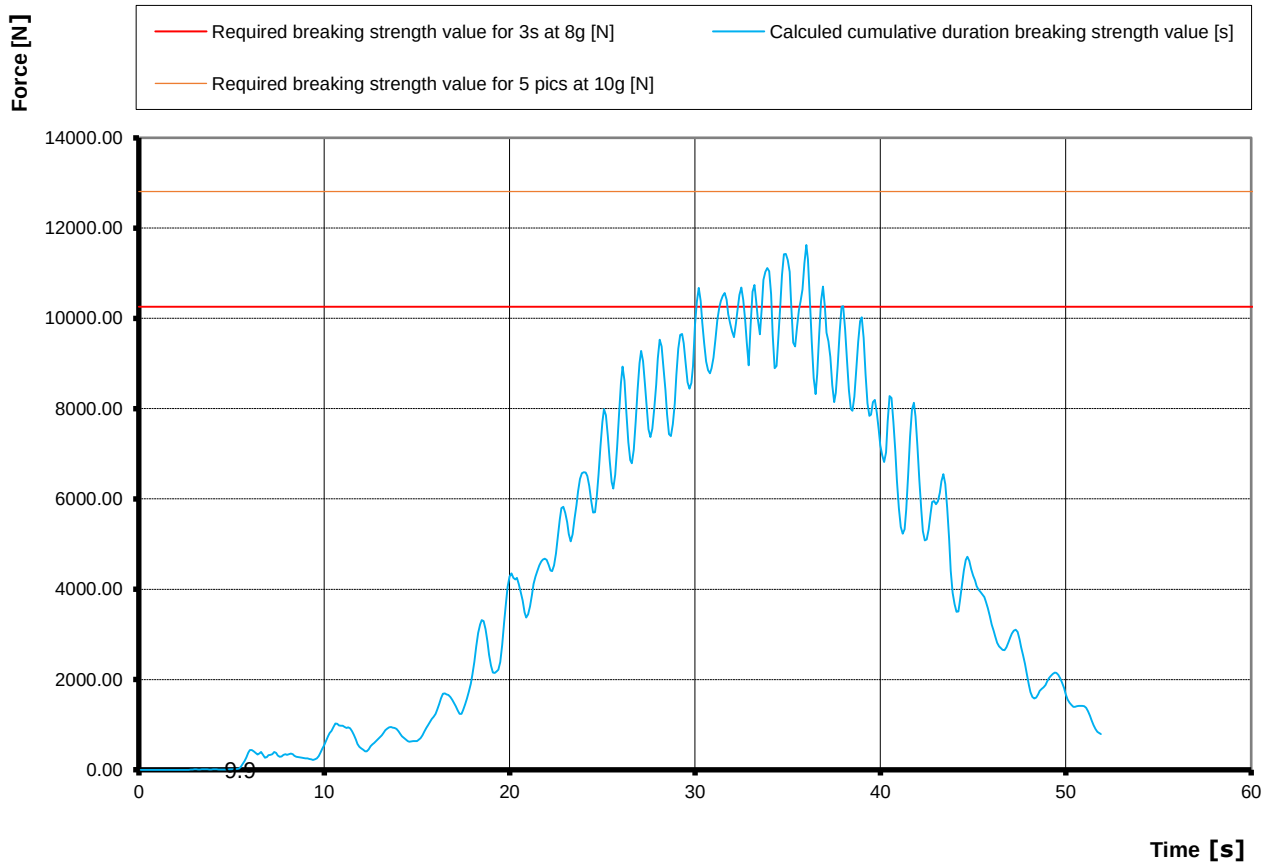
SUSTAINED LOADING TEST

TEST REPORT PGCCC 2

PG PARAGLIDERS

Test report ref. number: **CCC_017_2016**

GRAPHIQUE LOAD



DETAILED RESULTS

Calculed max load value with cumulative 3 sec [kg]	**130.50**
Calculed max load value with cumulative 3 sec [kg]	**1280.21**
Calculed max load value with five peaks [kg]	**106.70**
Calculed max load value with five peaks [kg]	**1046.70**

Calculed value include the value minus the uncertainty (on safe side) / The uncertainty stated is the expanded uncertainty obtained by multiplying the standard uncertainty by the coverage factor k = 2. The value of the measurand lies within the assigned range of values with a probability of 95%.

Instruments	Manufacturer	Type nr.	S/N
Load sensor	HBM	1-S9M/50KN-1	31314652
Geos n°11 Skywatch	JDC	Geos n° 11	0022

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Canopy dimensions REPORT

CCC 1

Test report ref. number: CCC_017_2016

Name: **CODEN PRO**
Size: **25**
Maximum load [kg]: **130**
Serial number: **P-132801**
Date of reception: **18.05.2016**

Place: **Villeneuve**
Date of measurement: **25.02.2016**
Inspector: **Gilles Berruex**
Results: **POSITIVE**

[C°] **22**
RH [%] **53**
[hPa] **1010**

CIVL COMPETITION CLASS | CCC / 2015 Edition / Revision 3.5 / CIVL 01 Sept 2014

Canopy dimensions

	RIB nb from center	**Measure** mm	**Tension**	**Tolerances**
Full Span		13575	3KG	2%
1/2 Trailing Edge		6840	3KG	1%
Chord A	1	2344	25	1%
Chord B	23	1955	3KG	1%

Aspect ratio 4*span / (chord A+2.5*Chord B)
7.51

Nbr cells (total)
98

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

First fully lined RIB of group 1 (from center)

	Rib n°	Distance	Tension	Tolerances
Chord	3	2336	3KG	+/-10mm
Top of inlet	3	2228	3KG	+/-10mm
Bottom of inlet	3	2204	3KG	+/-10mm
Tab Aa	3	2008	3KG	+/-10mm
Tab Ab	3	1901	3KG	+/-10mm
Tab B	3	1046	3KG	+/-10mm
Tab C	3	749	3KG	+/-10mm

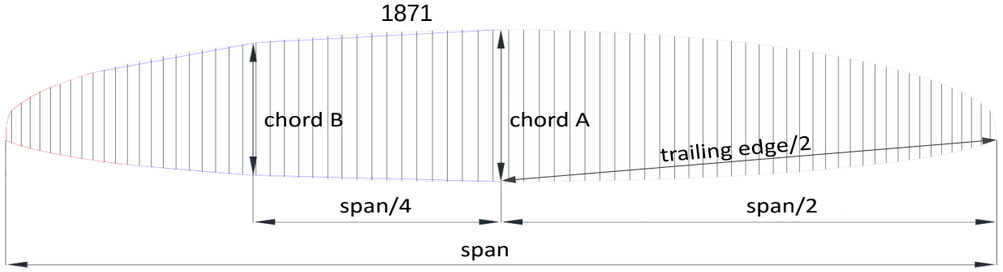
First fully lined RIB of group 2 (from center)

	Rib n°	Distance	Tension	Tolerances
Chord	23	1955	3KG	+/-10mm
Top of inlet	23	1871	3KG	+/-10mm
Bottom of inlet	23	1846	3KG	+/-10mm
Tab Aa	23	1691	21.04.2016	+/-10mm
Tab Ab	23	1601	3KG	+/-10mm
Tab B	23	864	3KG	+/-10mm
Tab C	23	613	3KG	+/-10mm

Last lined rib (stabilo) (from center)

	Rib n°	Distance	Tension	Tolerances
Chord	47	710	3KG	+/-10mm
Tab A	47	605	3KG	+/-10mm
Tab B	47	350	3KG	+/-10mm

1955
1871



The validation of this test report is given by the signature of the test manager on inspection certificate CCC Inspection certificate / 71.8.1 CCC

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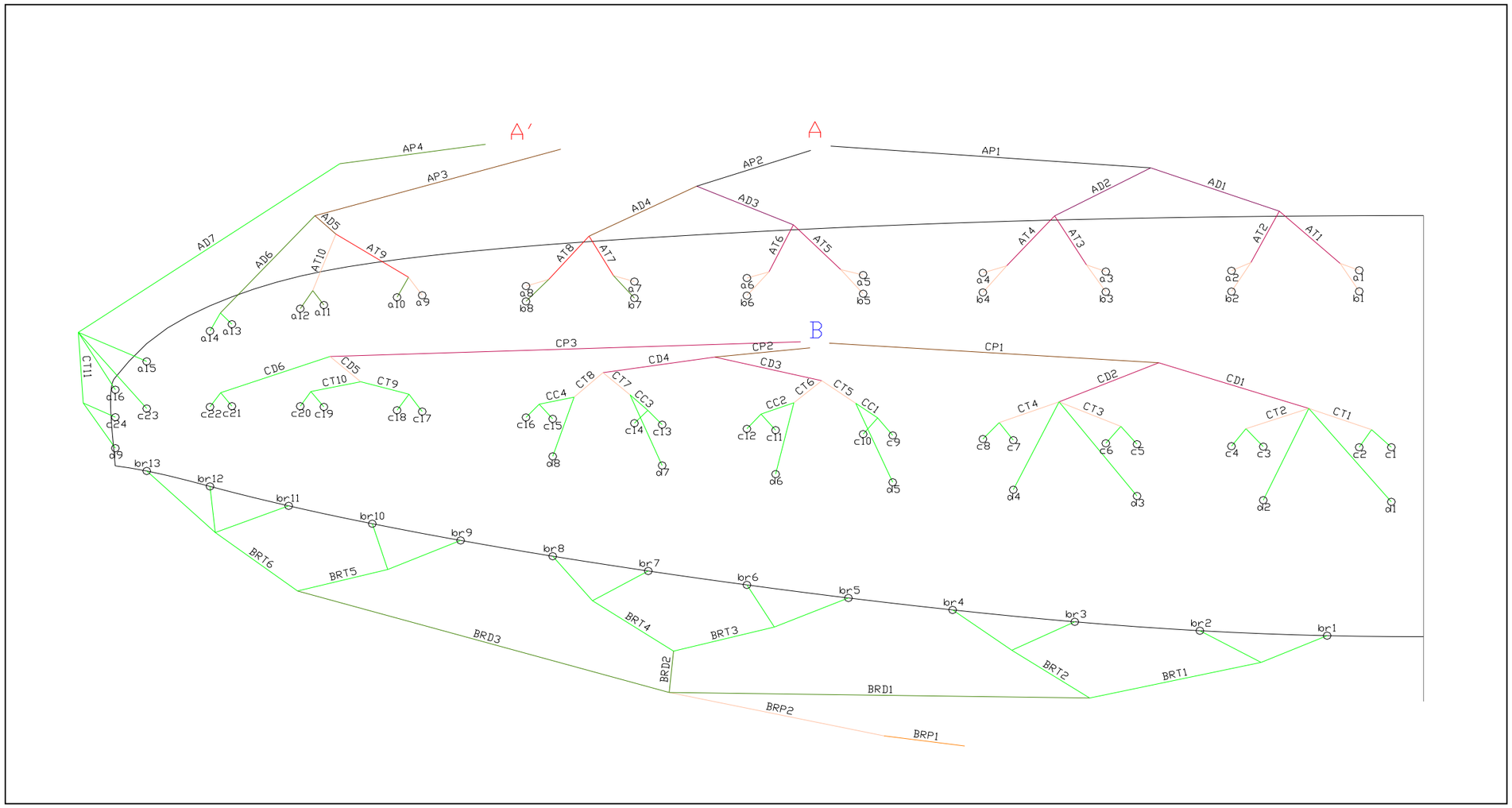
Line plan REPORT

CCC 2

Test report ref. number:	**CCC_017_2016**				
Name:	**CODEN PRO**	Place:	**Villeneuve**	[C°]	**22**
Size:	**25**	Date of measurement:	**25.02.2016**	RH [%]	**53**
Maximum load [kg]:	**130**	Inspector:	**Gilles Berruex**	[hPa]	**1010**
Serial number:	**P-132801**				
Date of reception:	**18.05.2016**	Results:	**POSITIVE**		

CIVL COMPETITION CLASS | CCC / 2015 Edition / Revision 3.5 / CIVL 01 Sept 2014

Line plan



The validation of this test report is given by the signature of the test manager on inspection certificate CCC Inspection certificate / 71.8.1 CCC

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Line measurement

CCC 3

Test report ref. number: **CCC_017_2016**

Name: **CODEN PRO** | Place: **Villeneuve** | [C°] **23**

Size: **25** | Date of measurement: **15.06.2016** | RH [%] **57**

Maximum load [kg]: **130** | Inspector: **Gilles Berruex** | [hPa] **1008**

Serial number: **P-132801**

Date of reception: **18.05.2016** | Results: **POSITIVE**

CIVL COMPETITION CLASS | CCC / 2015 Edition / Revision 3.5 / CIVL 01 Sept 2014

ABSOLUTE LINE LENGHT from inner riser to canopy in [mm] with 50 [N] of tension

		A			A'			B			B'			ST			BRAKE+STRAP			FL
		Manual	Glider	**Diff**	Manual	Glider	**Diff**	Manual	Glider	**Diff**	Manual	Glider	**Diff**	Manual	Glider	**Diff**	Manual	Glider	**Diff**	Glider
Center	1	8507	8507	0	8482	8482	0	8509	8509	0	8608	8608	0	7459	7459	0	9002	9002	0	8036
	2	8357	8357	0	8332	8332	0	8438	8438	0	8429	8429	0	7450	7450	0	8636	8636	0	7872
	3	8318	8318	0	8294	8294	0	8327	8327	0	8380	8380	0	7391	7391	0	8405	8405	0	7821
	4	8396	8396	0	8373	8373	0	8313	8313	0	8413	8413	0	7410	7410	0	8381	8381	0	7886
	5	8305	8305	0	8285	8285	0	8284	8284	0	8398	8398	0	7517	7517	0	8173	8173	0	7774
	6	8131	8131	0	8109	8109	0	8279	8279	0	8206	8206	0				8043	8043	0	7598
	7	8049	8049	0	8030	8030	0	8340	8340	0	8125	8125	0				7973	7973	0	7516
	8	8089	8089	0	8073	8073	0	8386	8386	0	8134	8134	0				8127	8127	0	7537
	9	7863	7863	0				8305	8305	0							7987	7987	0	7317
	10	7806	7806	0				8236	8236	0							7959	7959	0	7148
	11	7699	7699	0				8114	8114	0							7934	7934	0	7028
	12	7694	7694	0				8107	8107	0							8120	8120	0	7045
	13	7629	7629	0				8050	8050	0							8388	8388	0	
	14	7629	7629	0				8032	8032	0										
	15							8073	8073	0										
	16							8113	8113	0										
	17							7891	7891	0										
	18							7836	7836	0										
	19							7730	7730	0										
	20				Risers :	**A'**		7730	7730	0										
	21							7630	7630	0										
Wing tip	22							7627	7627	0										

CL

n/a

RFL

688

Uncertainty k2 of measurement **3.00** [mm]

Total length measured from the underside of the wing to the inner edge of the risers and with a tension of 50 [N]

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Risers measurement REPORT

CCC 4

Riser length Manual with carabiner

Riser length Manual with carabiner in [mm] with 50 [N] of tension

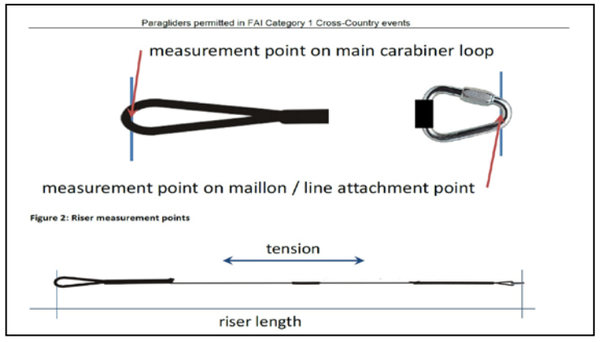
	A	A'	B			calculated Δt	Tension	Tolerances	Attachment rod diameter in mm
Neutral	533	530	530			3 mm	5 [kg]	+/-5mm	5

Full speed setting		
A-A'	67	+/-5mm
A-B	138	+/-5mm

Full speed setting		Tolerances
A'-B	71	+/-5mm

Total speed Range (Δa+Δt)	141	+/-5mm

04.01.2017



Riser draw

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Line quality

CCC 5

Test report ref. number: **CCC_017_2016**

Name: **CODEN PRO**
Size: **25**
Maximum load [kg]: **130**
Serial number: **P-132801**
Date of reception: **18.05.2016**

Place: **Villeneuve**
Date of measurement: **25.02.2016**
Inspector: **Gilles Berruex**
Results: **POSITIVE**

[C°] **22**
RH [%] **53**
[hPa] **1010**

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Table of lines quality

CodenPro-25

The tables / Tables / Tabele:

The individual lenghts and type of line
La longueur et le type de chaque ligne
Długości i rodzaj poszczególnych linek

	a	b	c	d	br
1	266	240	269	1729	799
2	267	240	195	1551	433
3	265	239	226	1534	554
4	265	241	215	1571	530
5	262	240	220	1010	551
6	263	240	214	822	420
7	262	238	192	764	346
8	259	238	242	745	500
9	239		244	328	471
10	177		174		442
11	184		218		444
12	179		210		628
13	175		218		889
14	174		204		
15	599		189		
16	530		231		
17			232		
18			173		
19			179		
20			176		
21			174		
22			174		
23			588		
24			220		

The total lenghts
Longueur des suspentes
Sumaryczna długość linek

	a	b	c	d	br
1	8507	8482	8509	8608	9002
2	8357	8332	8438	8429	8636
3	8318	8294	8327	8380	8405
4	8396	8373	8313	8413	8381
5	8305	8285	8284	8398	8173
6	8131	8109	8279	8206	8043
7	8049	8030	8340	8125	7973
8	8089	8073	8386	8134	8127
9	7863		8305	7517	7987
10	7806		8236		7959
11	7699		8114		7934
12	7694		8107		8120
13	7629		8050		8388
14	7629		8032		
15	7459		8073		
16	7391		8113		
17			7891		
18			7836		
19			7730		
20			7730		
21			7630		
22			7627		
23			7450		
24			7410		

	AT	BT	CT	CC	BRT
1	1287		1383	690	1645
2	1134		1245	527	1292
3	1119		1237	480	1112
4	1196		1320	509	1114
5	1200		409		744
6	1021		404		723
7	954		401		

Technora A 8000U-050 70mm loops: XXXX

Technora A 8000U-050: XXXX

Technora A 8000U-070 70mm loops: XXXX

8	997		430		
9	821		770		
10	708		659		
11			337		

	AD	BD	CD	DD	BRD
1	1077		972		2484
2	1055		941		2434
3	799		961		2691
4	778		943		
5	979		935		
6	1581		1484		
7	5545				

	AP	BP	CP	DP	BRP
1	5447		5431		1900
2	5617		5563		2151
3	5385		5479		
4	810				

Technora A 8000U-070:	XXXX
Technora A 8000U-090:	XXXX
Technora A 8000U-120:	XXXX
Technora A 8000U-130:	XXXX
Technora A 8000U-200:	XXXX
Technora A 8000U-230:	XXXX
Technora A 8000U-280:	XXXX
Technora A 8000U-360:	XXXX
TSL00-0090-086:	XXXX
TSL00-0190-059:	XXXX

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Drawings

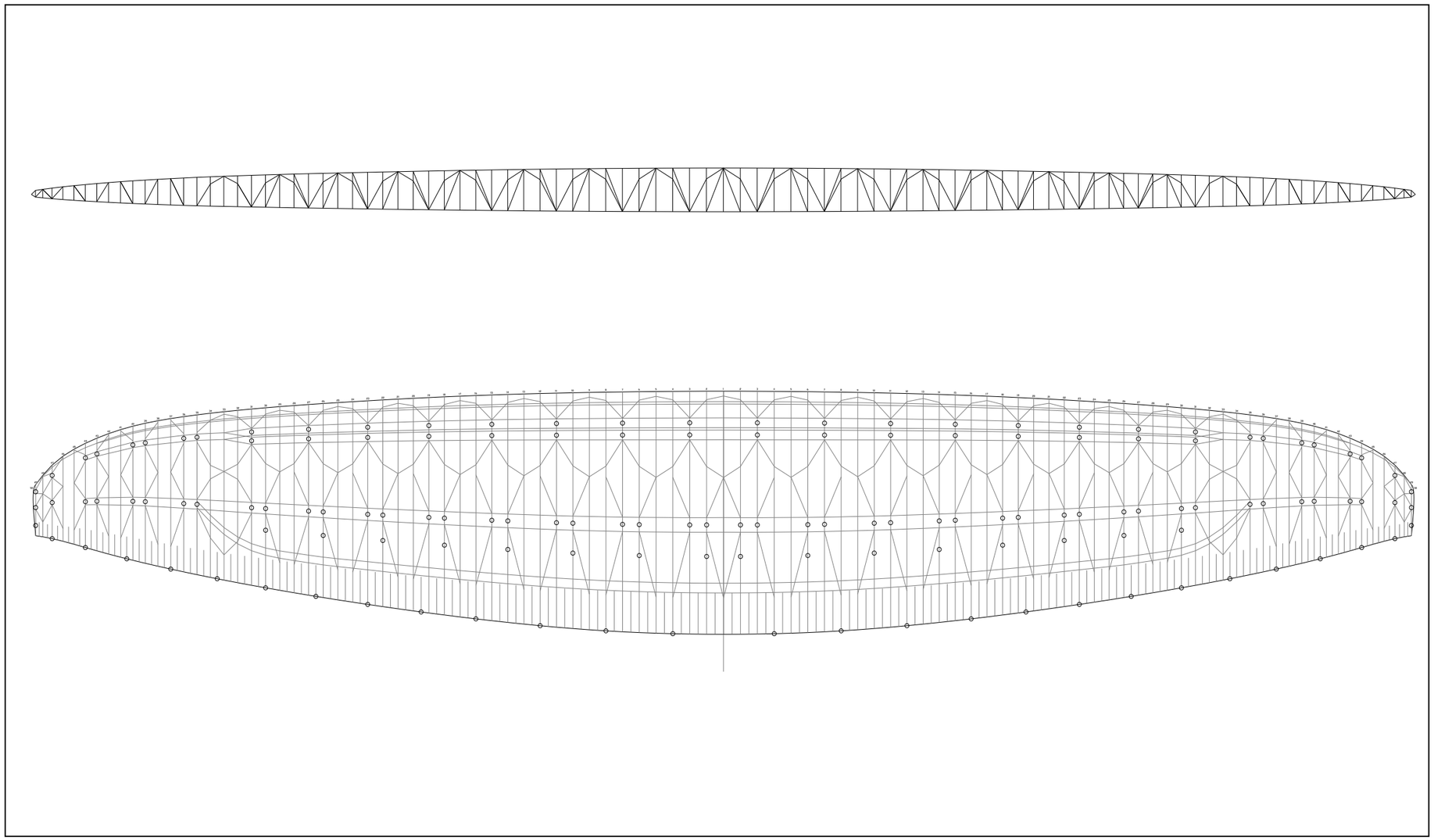
CCC 6

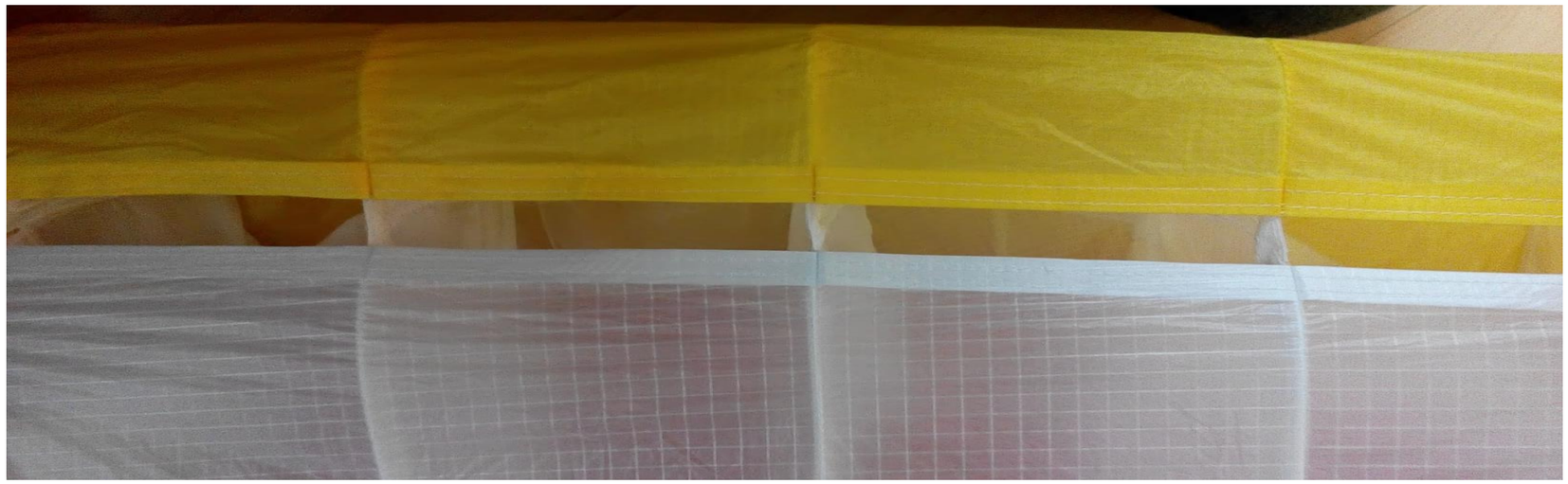
Test report ref. number: **CCC_017_2016**

Name:	**CODEN PRO**	Place:	**Villeneuve**	[C°]	**22**
Size:	**25**	Date of measurement:	**25.02.2016**	RH [%]	**53**
Maximum load [kg]:	**130**	Inspector:	**Gilles Berruex**	[hPa]	**1010**
Serial number:	**P-132801**				
Date of reception:	**18.05.2016**	Results:	**POSITIVE**		

CIVL COMPETITION CLASS | CCC / 2015 Edition / Revision 3.5 / CIVL 01 Sept 2014

Tension bands, Diagonals and internal structure, Mini rib position, Inlet shape





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