

## Measurement request from test house for CCC certification From 28/09/2014 to next revision

|              |                  |                             |                |
|--------------|------------------|-----------------------------|----------------|
| <b>Brand</b> | Gin Gliders Inc. | <b>Test house name</b>      | DHV            |
| <b>Model</b> | GTO 2 X-Alps     | <b>CCC certification n°</b> | DHV CCC-004-15 |
| <b>Size</b>  | XS               | <b>Certification date</b>   | 20.05.2015     |

### Canopy dimensions

| Position          | Rib n° from center | Distance [mm] | Tension [kg] | Manual tolerances | Aspect ratio<br>4*span / (chord A+2.5*Chord B) |
|-------------------|--------------------|---------------|--------------|-------------------|--|
| Full Span         | x                  | 12108         | 3            | 2%                | 7,0319   |
| 1/2 Trailing Edge | x                  | 6094          | 3            | 1%                |  |
| Chord A           | 1                  | 2180          | 3            | 1%                |  |
| Chord B           | 15                 | 1883          | 3            | 1%                |  |

### Chord length, inlet position, tabs position measured from trailing edge.

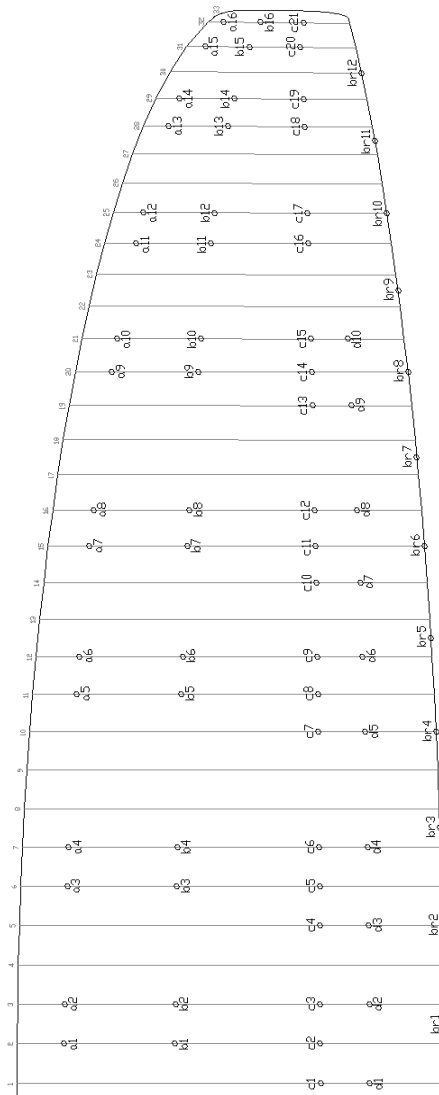
(The tab A & B & C can be on different rib, take care to specify it)

| On first lined rib (from center) | Rib n° from center | Distance [mm] | Tension [kg] | Manual tolerances |
|----------------------------------|--------------------|---------------|--------------|-------------------|
| Chord                            | 1                  | 2180          | 3            | +/-10mm           |
| Top of inlet                     | 1                  | 2105          | 3            | +/-10mm           |
| Bottom of inlet                  | 1                  | 2080          | 3            | +/-10mm           |
| Tab A*                           | 2                  | 1962          | 3            | +/-10mm           |
| Tab B*                           | 2                  | 1356          | 3            | +/-10mm           |
| Tab C*                           | 1                  | 661           | 3            | +/-10mm           |
| Tab D*                           | 1                  | 388           | 3            | +/-10mm           |

| On last lined rib of Group 2 (from center) | Rib n° from center | Distance [mm] | Tension [kg] | Manual tolerances |
|--|--------------------|---------------|--------------|-------------------|
| Chord                                      | 16                 | 1837          | 3            | +/-10mm           |
| Top of inlet                               | 16                 | 1777          | 3            | +/-10mm           |
| Bottom of inlet                            | 16                 | 1756          | 3            | +/-10mm           |
| Tab A*                                     | 16                 | 1657          | 3            | +/-10mm           |
| Tab B*                                     | 16                 | 1147          | 3            | +/-10mm           |
| Tab C*                                     | 16                 | 558           | 3            | +/-10mm           |
| Tab D*                                     | 16                 | 328           | 3            | +/-10mm           |

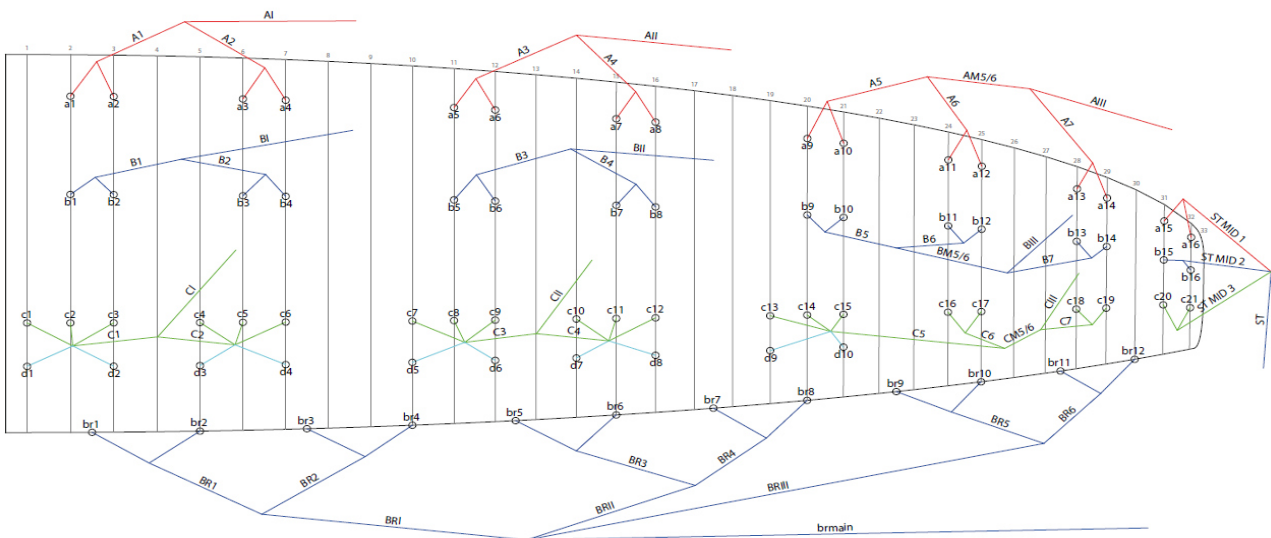
| On last lined rib (stabilo) (from center) | Rib n° from center | Distance [mm] | Tension [kg] | Manual tolerances |
|---|--------------------|---------------|--------------|-------------------|
| Chord                                     | 32                 | 699           | 3            | +/-10mm           |
| Tab A*                                    | 32                 | 623           | 3            | +/-10mm           |
| Tab B*                                    | 32                 | 443           | 3            | +/-10mm           |
| Tab C*                                    | 32                 | 236           | 3            | +/-10mm           |

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



## Absolute line length from bottom riser to canopy

| Lined Rib n° | A     | B     | C     | D     | Brakes | Tension [kg] | Manual tolerances |
|--------------|-------|-------|-------|-------|--------|--------------|-------------------|
| 1            | 7.316 | 7.272 | 7.410 | 7.476 | 7.948  | 5            | +/-10mm           |
| 2            | 7.276 | 7.232 | 7.333 | 7.400 | 7.699  | 5            | +/-10mm           |
| 3            | 7.243 | 7.199 | 7.329 | 7.376 | 7.514  | 5            | +/-10mm           |
| 4            | 7.263 | 7.219 | 7.306 | 7.410 | 7.500  | 5            | +/-10mm           |
| 5            | 7.188 | 7.144 | 7.292 | 7.335 | 7.340  | 5            | +/-10mm           |
| 6            | 7.145 | 7.102 | 7.348 | 7.245 | 7.198  | 5            | +/-10mm           |
| 7            | 7.091 | 7.048 | 7.275 | 7.200 | 7.157  | 5            | +/-10mm           |
| 8            | 7.103 | 7.060 | 7.197 | 7.207 | 7.243  | 5            | +/-10mm           |
| 9            | 7.003 | 6976  | 7.186 | 7.070 | 7.184  | 5            | +/-10mm           |
| 10           | 6.941 | 6908  | 7.144 | 7121  | 7.105  | 5            | +/-10mm           |
| 11           | 6.820 | 6796  | 7.123 |       | 7.099  | 5            | +/-10mm           |
| 12           | 6.807 | 6795  | 7.165 |       | 7.174  | 5            | +/-10mm           |
| 13           | 6.693 | 6674  | 7.034 |       |        | 5            | +/-10mm           |
| 14           | 6.676 | 6661  | 6.967 |       |        | 5            | +/-10mm           |
| 15           | 6.484 | 6450  | 6.958 |       |        | 5            | +/-10mm           |
| 16           | 6.417 | 6402  | 6.870 |       |        | 5            | +/-10mm           |
| 17           |       |       | 6.869 |       |        | 5            | +/-10mm           |
| 18           |       |       | 6.719 |       |        | 5            | +/-10mm           |
| 19           |       |       | 6.698 |       |        | 5            | +/-10mm           |
| 20           |       |       | 6.494 |       |        | 5            | +/-10mm           |
| 21           |       |       | 6.450 |       |        | 5            | +/-10mm           |
| 22           |       |       |       |       |        | 5            | +/-10mm           |
| 23           |       |       |       |       |        | 5            | +/-10mm           |
| 24           |       |       |       |       |        | 5            | +/-10mm           |

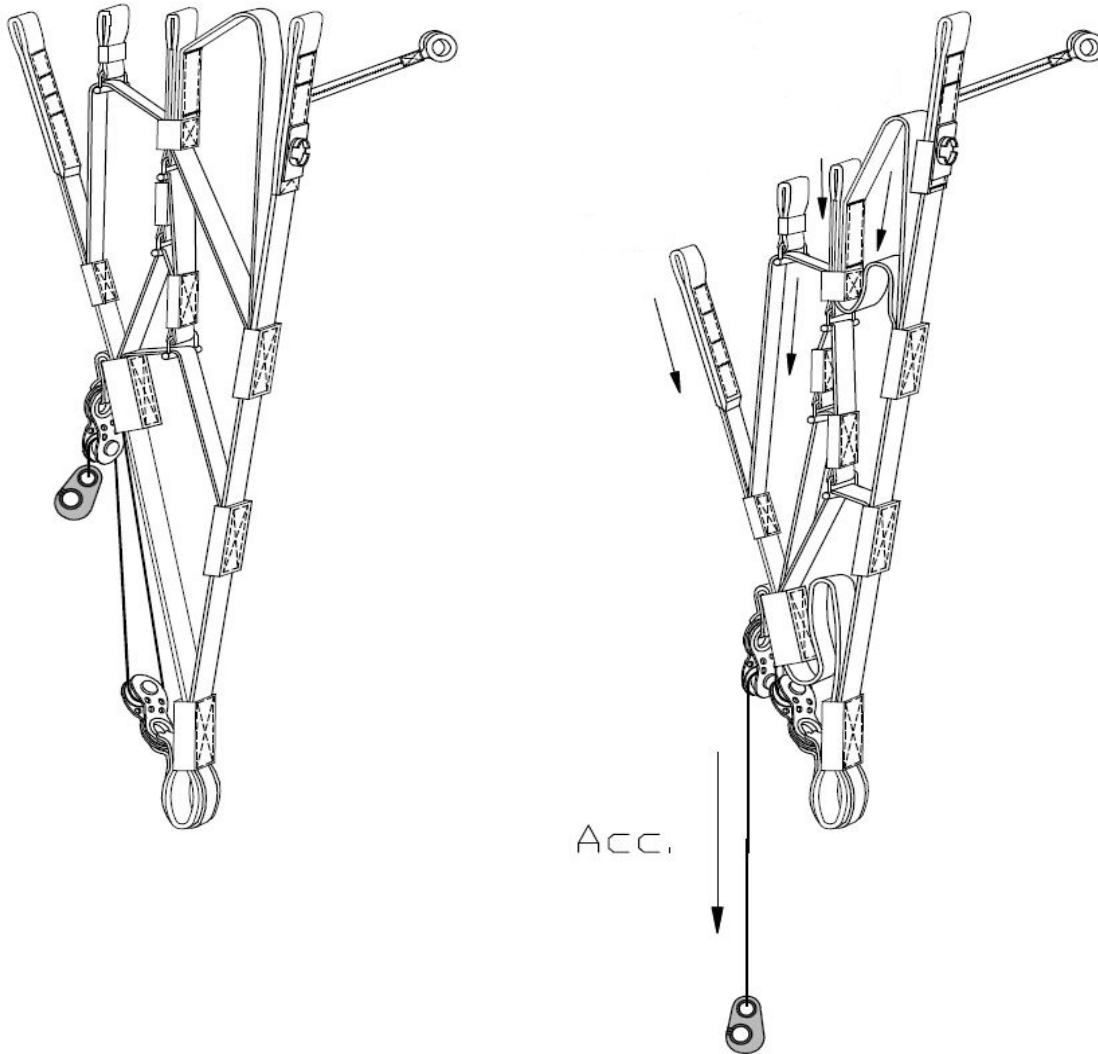


## Riser length

From bottom riser to top maillon on each branche [mm]

| A1  | A2  | B1  | B2  | C   | $\Delta t$<br>(= A1-C) | Tension<br>[kg] | Manual<br>tolerances | Attachment<br>rod diameter<br>[mm] |
|-----|-----|-----|-----|-----|------------------------|-----------------|----------------------|------------------------------------|
| 510 | 510 | 510 | 510 | 510 | 0                      | 5               | +/-5mm               | 10                                 |

| Full speed setting     |    | Manual<br>tolerances | Full speed setting |     | Manual<br>tolerances | Total speed<br>Range<br>( $\Delta a + \Delta t$ ) | Manual<br>tolerances |
|------------------------|----|----------------------|--------------------|-----|----------------------|---|----------------------|
| $\Delta a (= B1 - A1)$ | 45 | +/-5mm               | B2-B1              | 65  | +/-5mm               | 175   | +/-5mm               |
| B1-A2                  | 23 | +/-5mm               | C-B1               | 130 | +/-5mm               |   |                      |



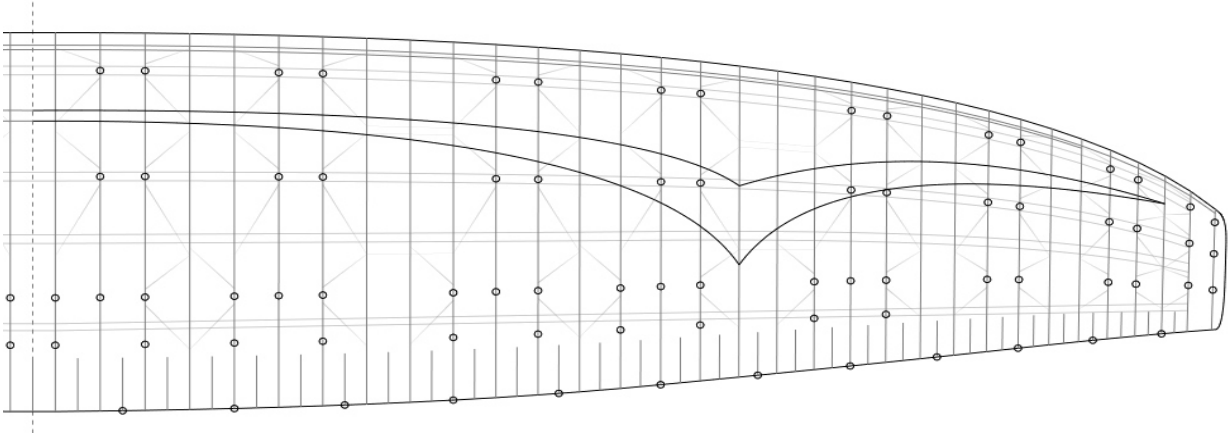
**Table of lines quality**

| <b>Upper</b>    |          |            |          |            |          |            |                  |            |           |                    |         |            |         |  |
|-----------------|----------|------------|----------|------------|----------|------------|------------------|------------|-----------|--------------------|---------|------------|---------|--|
|                 | <b>A</b> |            | <b>B</b> |            | <b>C</b> |            | <b>D</b>         |            | <b>BR</b> |                    |         |            |         |  |
| 1               | Liros    | DC60       | Liros    | DC60       | Edlerid  | 9200-030   | Edlerid          | 9200-030   | Edlerid   | 9200-030           |         |            |         |  |
| 2               | Liros    |            | Liros    |            | Edlerid  |            | Edlerid          |            |           |                    |         |            |         |  |
| 3               | Liros    |            | Liros    |            | Edlerid  |            | Edlerid          |            |           |                    |         |            |         |  |
| 4               | Liros    |            | Liros    |            | Edlerid  |            | Edlerid          |            |           |                    |         |            |         |  |
| 5               | Liros    |            | Liros    |            | Edlerid  |            | Edlerid          |            |           |                    |         |            |         |  |
| 6               | Liros    |            | Liros    |            | Edlerid  |            | Edlerid          |            |           |                    |         |            |         |  |
| 7               | Liros    |            | Liros    |            | Edlerid  |            | Edlerid          |            |           |                    |         |            |         |  |
| 8               | Liros    |            | Liros    |            | Edlerid  |            | Edlerid          |            |           |                    |         |            |         |  |
| 9               | Liros    |            | Liros    |            | Edlerid  |            | Edlerid          |            |           |                    |         |            |         |  |
| 10              | Liros    |            | Liros    |            | Edlerid  |            | Edlerid          |            |           |                    |         |            |         |  |
| 11              | Liros    |            | Liros    |            | Edlerid  |            | Edlerid          |            |           |                    |         |            |         |  |
| 12              | Liros    |            | Liros    |            | Edlerid  |            | Edlerid          |            |           |                    |         |            |         |  |
| 13              | Liros    |            | Liros    |            | Edlerid  |            | Edlerid          |            |           |                    |         |            |         |  |
| 14              | Liros    |            | Liros    |            | Edlerid  |            | Edlerid          |            |           |                    |         |            |         |  |
| 15              | Edlerid  | 9200-030   | Edlerid  | 9200-030   | Edlerid  | 9200-030   |                  |            |           |                    |         |            |         |  |
| 16              | Edlerid  |            | Edlerid  |            | Edlerid  |            |                  |            |           |                    |         |            |         |  |
| 17              |          |            |          | Edlerid    |          |            |                  |            |           |                    |         |            |         |  |
| 18              |          |            |          | Edlerid    |          |            |                  |            |           |                    |         |            |         |  |
| 19              |          |            |          | Edlerid    |          |            |                  |            |           |                    |         |            |         |  |
| 20              |          |            |          | Edlerid    |          |            |                  |            |           |                    |         |            |         |  |
| 21              |          |            |          | Edlerid    |          |            |                  |            |           |                    |         |            |         |  |
| 22              |          |            |          | Edlerid    |          |            |                  |            |           |                    |         |            |         |  |
| 23              |          |            |          | Edlerid    |          |            |                  |            |           |                    |         |            |         |  |
| 24              |          |            |          | Edlerid    |          |            |                  |            |           |                    |         |            |         |  |
| <b>Middle</b>   |          |            |          |            |          |            |                  |            |           |                    |         |            |         |  |
|                 | <b>A</b> |            | <b>B</b> |            | <b>C</b> |            |                  |            |           | <b>BR H/Middle</b> |         |            |         |  |
| 1               | Edlerid  | 8000/U-120 | Edlerid  | 8000/U-120 | Edlerid  |            |                  |            |           | 8000/U-090         | Edlerid | 8000/U-050 | Edlerid |  |
| 2               | Edlerid  | 8000/U-120 | Edlerid  | 8000/U-120 | Edlerid  |            |                  |            |           | 8000/U-090         | Edlerid |            |         |  |
| 3               | Edlerid  | 8000/U-120 | Edlerid  | 8000/U-120 | Edlerid  |            |                  |            |           | 8000/U-090         | Edlerid |            |         |  |
| 4               | Edlerid  | 8000/U-120 | Edlerid  | 8000/U-120 | Edlerid  |            |                  |            |           | 8000/U-090         | Edlerid |            |         |  |
| 5               | Edlerid  | 8000/U-070 | Edlerid  | 8000/U-070 | Edlerid  |            |                  |            |           | 8000/U-050         | Edlerid |            |         |  |
| 6               | Edlerid  | 8000/U-070 | Edlerid  | 8000/U-070 | Edlerid  |            |                  |            |           | 8000/U-050         | Edlerid |            |         |  |
| 7               | Edlerid  | 8000/U-070 | Edlerid  | 8000/U-070 | Edlerid  |            |                  |            |           | 8000/U-050         |         |            |         |  |
| 8               |          |            |          |            |          |            |                  |            |           |                    |         |            |         |  |
| 9               |          |            |          |            |          |            |                  |            |           |                    |         |            |         |  |
| 10              |          |            |          |            |          |            |                  |            |           |                    |         |            |         |  |
| <b>L/Middle</b> |          |            |          |            |          |            |                  |            |           |                    |         |            |         |  |
|                 | <b>A</b> |            | <b>B</b> |            | <b>C</b> |            |                  |            |           | <b>BR L/Middle</b> |         |            |         |  |
| 1               | Edlerid  | 8000/U-090 | Edlerid  | 8000/U-090 | Edlerid  | 8000/U-050 | Edlerid          | 8000/U-070 | Edlerid   |                    |         |            |         |  |
| 2               |          |            |          |            |          |            | Edlerid          |            |           |                    |         |            |         |  |
| 3               |          |            |          |            |          |            | Edlerid          |            |           |                    |         |            |         |  |
| 4               |          |            |          |            |          |            |                  |            |           |                    |         |            |         |  |
| 5               |          |            |          |            |          |            |                  |            |           |                    |         |            |         |  |
| 6               |          |            |          |            |          |            |                  |            |           |                    |         |            |         |  |
| <b>Main</b>     |          |            |          |            |          |            |                  |            |           |                    |         |            |         |  |
|                 | <b>A</b> |            | <b>B</b> |            | <b>C</b> |            | <b>BR H/Main</b> |            |           |                    |         |            |         |  |
| 1               | Edlerid  | 8000/U-230 | Edlerid  | 8000/U-190 | Edlerid  | 8000/U-130 | Edlerid          | 8000/U-090 | Edlerid   | 8000/U-090         |         |            |         |  |
| 2               | Edlerid  | 8000/U-190 | Edlerid  | 8000/U-190 | Edlerid  | 8000/U-130 |                  |            |           |                    |         |            |         |  |
| 3               | Edlerid  | 8000/U-120 | Edlerid  | 8000/U-090 | Edlerid  | 8000/U-090 |                  |            |           |                    |         |            |         |  |
| STB H/Main      | Edlerid  | 8000/U-050 |          |            |          |            |                  |            |           |                    |         |            |         |  |
| STB L/Main      | Liros    | DSL70      |          |            |          |            |                  |            |           |                    |         |            |         |  |

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

Other pictures & drawings requested from test House

Diagonals, Hstraps and Mini Ribs (top view)



Vent (Inlet) shape

