

|   |                            |   |
|---|----------------------------|---|
| <b>BOAT</b><br>Name DU SOLEIL<br>Sail Nr SWE 9  | <b>GPH</b><br><b>581.6</b> | <b>HULL</b><br>Length Overall 12.100m<br>Maximum Beam 3.780m<br>Displacement 6 552kg<br>Draft 2.410m<br>IMS Reg. Division Cruiser/Racer<br>Dynamic Allowance 0.000%<br>Fwd Yes<br>Hull Construction Cored<br>Carbon Rudder No<br>Crew Arm |
| <b>GENERAL</b><br>Class IMX 40<br>Designer NIELS JEPPESEN<br>Builder X-YACHTS<br>Series 05-2000<br>Age 04-2001<br>Age Allowance 0.487%<br>Offset File IMX40.OFF - 2001-05-11<br>Measurement MIKAEL LINDQVIST - 20-04- |                            | IMSL 10.688m VCGD 0.099m Sink 21.85kg/m<br>RL 10.041m VCGM 0.111m WS 29.18m <sup>2</sup><br>LSM0 10.614m Displacement/Length 5.4794   |



World Leader in Rating Technology

**2018**  
ORC International  
Certificate

**Rating Office**  
Svenska  
Seglarförbundet  
Swedish Sailing  
Federation  
Af Pontins gata 6  
115 21 Stockholm



| SCORING OPTIONS  |                |        |        |                    |        |        |
|------------------|----------------|--------|--------|--------------------|--------|--------|
|                  | COASTAL / LONG |        |        | WINDWARD / LEEWARD |        |        |
| Time on Distance | 566.2          |        |        | 631.7              |        |        |
| Time on Time     | 1.0597         |        |        | 1.0686             |        |        |
| Triple Number    | Low            | Medium | High   | Low                | Medium | High   |
| Time on Distance | 659.1          | 517.0  | 464.6  | 849.1              | 634.5  | 555.3  |
| Time on Time     | 1.0241         | 1.3056 | 1.4529 | 0.7950             | 1.0639 | 1.2156 |

| TIME ALLOWANCES |       |       |       |       |       |       |       |
|-----------------|-------|-------|-------|-------|-------|-------|-------|
| Wind Velocity   | 6 kt  | 8 kt  | 10 kt | 12 kt | 14 kt | 16 kt | 20 kt |
| Beat VMG        | 928.3 | 769.6 | 693.6 | 666.4 | 654.0 | 649.6 | 638.1 |
| 52°             | 614.4 | 518.6 | 484.2 | 473.7 | 468.8 | 466.2 | 461.1 |
| 60°             | 583.8 | 501.0 | 472.8 | 462.0 | 456.7 | 453.9 | 449.3 |
| 75°             | 561.9 | 490.4 | 463.8 | 448.2 | 438.8 | 433.3 | 428.3 |
| 90°             | 568.8 | 492.5 | 463.1 | 443.9 | 427.5 | 414.6 | 401.9 |
| 110°            | 606.0 | 501.5 | 461.2 | 436.9 | 415.2 | 402.0 | 383.3 |
| 120°            | 625.1 | 513.2 | 467.0 | 440.1 | 415.1 | 393.3 | 364.7 |
| 135°            | 691.5 | 560.4 | 490.5 | 458.7 | 434.0 | 409.1 | 361.5 |
| 150°            | 819.6 | 651.3 | 550.2 | 490.0 | 460.1 | 436.9 | 391.7 |
| Run VMG         | 946.4 | 752.1 | 635.1 | 559.3 | 508.6 | 472.3 | 426.5 |

**Certificate**  
Number 9IMX40  
ORC Ref SWE00180283  
Issued On 2018-05-29  
VPP Ver. 2018 1.00  
Valid until 2018-12-31

**Crew Weight**  
Default 749kg  
Maximum 805kg  
Minimum\* 604kg  
*\*when applied by the NoR and SI*  
Non Manual Pwr No

**Special Scoring**

|              |            |     |
|--------------|------------|-----|
|              | ToD        | ToT |
| Non Spin GPH | 604.0.9929 |     |
| Non Spin OSN | 588.1.0189 |     |

| Selected Courses        |       |       |       |       |       |       |       |
|-------------------------|-------|-------|-------|-------|-------|-------|-------|
| Windward / Leeward      | 937.3 | 760.8 | 664.3 | 612.8 | 581.3 | 560.9 | 532.3 |
| Circular Random         | 794.7 | 644.1 | 564.5 | 519.1 | 491.4 | 472.9 | 448.1 |
| Coastal / Long Distance | 938.2 | 716.5 | 601.1 | 537.0 | 502.1 | 474.3 | 429.5 |
| Non Spinnaker           | 834.7 | 672.8 | 586.1 | 535.8 | 504.9 | 484.3 | 456.6 |

**Sails Limitations**

|           |            |
|-----------|------------|
| Headsails | Spinnakers |
| 6         | 4          |

| Velocity Prediction in Knots for True Wind Speeds |        |        |        |        |        |        |        |
|---|--------|--------|--------|--------|--------|--------|--------|
| Wind Velocity                                     | 6 kt   | 8 kt   | 10 kt  | 12 kt  | 14 kt  | 16 kt  | 20 kt  |
| Beat Angles                                       | 42.0°  | 40.9°  | 39.5°  | 38.2°  | 37.9°  | 37.8°  | 37.4°  |
| Beat VMG  | 3.88   | 4.68   | 5.19   | 5.40   | 5.50   | 5.54   | 5.64   |
| 52°   | 5.86   | 6.94   | 7.43   | 7.60   | 7.68   | 7.72   | 7.81   |
| 60°   | 6.17   | 7.19   | 7.61   | 7.79   | 7.88   | 7.93   | 8.01   |
| 75°   | 6.41   | 7.34   | 7.76   | 8.03   | 8.20   | 8.31   | 8.40   |
| 90°   | 6.33   | 7.31   | 7.77   | 8.11   | 8.42   | 8.68   | 8.96   |
| 110°  | 5.94   | 7.18   | 7.81   | 8.24   | 8.67   | 8.96   | 9.39   |
| 120°  | 5.76   | 7.01   | 7.71   | 8.18   | 8.67   | 9.15   | 9.87   |
| 135°  | 5.21   | 6.42   | 7.34   | 7.85   | 8.29   | 8.80   | 9.96   |
| 150°  | 4.39   | 5.53   | 6.54   | 7.35   | 7.83   | 8.24   | 9.19   |
| Run VMG   | 3.80   | 4.79   | 5.67   | 6.44   | 7.08   | 7.62   | 8.44   |
| Gybe Angles                                       | 144.4° | 148.6° | 150.6° | 156.0° | 171.1° | 180.0° | 180.0° |

**Class Division**  
CDL = 10.365

**Storm Sails Areas**

|                      |      |
|----------------------|------|
| Heavy Weather Jib    | 34.7 |
| Storm Jib (JL=10.43) | 12.8 |
| Storm Trysail        | 14.4 |

**Owner**  
Fredrik Hertzman  
0705977330

I certify that I understand my responsibilities under ORC Rules and Regulations

Signature

|                                  |   |
|----------------------------------|---|
| <b>BOAT</b>                      |   |
| Name DU SOLEIL<br>File SWE91MX40 | Sail Nr SWE 9<br>Data in meters/kilograms |

|  |  |
|--|--|
| <b>RIG</b>   |  |
| Forestay Tension Aft<br>Inner Stay None Fitted<br>Carbon Mast Yes<br>Taper Hollows No<br>Fiber Rigging No<br>Lenticular Rigging No<br>Articulated No   | Spreaders 3<br>Runners 0<br>Jumper Struts None<br>Jib Furler No<br>Main Furler No<br>Without Backstay No |
| P 15.05 E 5.500 MDT1 0.117 MW 0.243<br>IG 16.00 J 4.500 MDL1 0.243 GO 0.256<br>ISP 16.04 SFJ 0.000 MDT2 0.099 BD 0.270<br>BAS 1.804 SPL 4.500 MDL2 0.184 MWT 180.0<br>FSP 0.076 TPS 0.000 TL 0.870 MCG 5.036 |  |

|                             |  |
|-----------------------------|--|
| <b>MIZZEN RIG AND SAILS</b> |  |
| N/A                         |  |

|                 |  |
|-----------------|--|
| <b>COMMENTS</b> |  |
| fd #5748        |  |

|   |  |                |
|---|--|----------------|
| <b>INCLINING TEST AND FREEBOARDS</b>  |  |                |
| Inclining Test Current Inclining  |  |                |
| Flotation date 05-07-2002   |  | SG 1.004       |
| FFM 1.369 FF 1.383 SFFP 0.405<br>FAM 1.125 FA 1.135 SAFP 11.42  |  |                |
| W1 23.0 PD1 75.0 WD 12.17<br>W2 46.0 PD2 150.0 GSA 0.8<br>W3 69.0 PD3 225.0 RSA 57.5<br>W4 92.0 PD4 300.0 PLM 2470. |  |                |
| LCF from stem on CL/ on sheer   |  | 6.668 / 6.909  |
| Maximum beam station from stem  |  | 7.990          |
| RM Measured   |  | 159.1kg-m      |
| RM Default  |  | 179.2kg-m      |
| Limit of positive stability/ Stab.Index   |  | 114.9° / 116.2 |
| Freeboard at mast at 4.500  |  | 1.259          |


|  |            |  |
|--|------------|--|
| <b>PROPELLER</b>   |            |  |
| Installation Strut   | PRD 0.430  |  |
| Type Folding 2 blades  | PBW 0.110  |  |
| Twin Screw No  | PIPA 0.003 |  |
| ST1 0.049 ST3 0.170 ST5 0.274<br>ST2 0.160 ST4 0.098 EDL 1.600 |            |  |

|                        |  |  |
|------------------------|--|--|
| <b>MOVABLE BALLAST</b> |  |  |
| N/A                    |  |  |

|                    |  |  |
|--------------------|--|--|
| <b>CENTERBOARD</b> |  |  |
| N/A                |  |  |


|                              |       |       |       |      |      |   |
|------------------------------|-------|-------|-------|------|------|---|
| <b>SAILS (Maximum Areas)</b> |       |       |       |      |      |   |
| Mainsail                     | MHB   | MUW   | MTW   | MHW  | MQW  | Area Area (r) Formula                                       |
|                              | 0.200 | 1.26  | 2.13  | 3.52 | 4.57 | 49.35 50.49 P/8 · (E + 2MQW + 2MHW + 1.5MTW + MUW + 0.5MHB) |
| Symmetric                    | SLU   | SLE   | SL    | SHW  | SFL  | 106.86 SL · (SFL + 4SHW) / 6                                |
|                              | 15.70 | 15.70 | 15.70 | 8.27 | 7.76 |   |
| Asymmetric                   | SLU   | SLE   | SL    | SHW  | SFL  | 93.37 AS · (SFL + 4SHW) / 6                                 |
|                              | 16.12 | 15.31 | 15.71 | 6.91 | 8.01 |   |

|  |      |      |      |      |      |       |       |     |     |       |     |        |                        |
|--|------|------|------|------|------|-------|-------|-----|-----|-------|-----|--------|------------------------|
| <b>HEADSAILS</b>   |      |      |      |      |      |       |       |     |     |       |     |        |                        |
| Area = 0.1125·HLU · (1.445HLP + 2HQW + 2HHW + 1.5HTW + HUW + 0.5HHB) |      |      |      |      |      |       |       |     |     |       |     |        |                        |
| HHB  | HU   | HTW  | HH   | HQ   | HLP  | HLU   | Area  | Btn | Fly | Meas. | Dat | Materi | Comment                |
| 0.08   | 0.85 | 1.63 | 3.23 | 4.84 | 6.48 | 16.00 | 51.90 |     |     |       |     |        | * Copied from legacy * |
| 0.09   | 0.83 | 1.59 | 3.16 | 4.80 | 6.49 | 15.98 | 51.33 |     |     |       |     | Unkno  |                        |
| 0.09   | 0.78 | 1.47 | 2.95 | 4.51 | 6.22 | 16.05 | 48.63 |     |     |       |     | Unkno  |                        |
| 0.06   | 0.62 | 1.19 | 2.34 | 3.47 | 4.55 | 16.10 | 37.36 | Y   |     |       |     | Unkno  |                        |
| 0.08   | 0.53 | 0.98 | 1.95 | 2.88 | 3.84 | 12.28 | 23.83 |     | Y   |       |     | Unkno  |                        |
| 0.00   | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00  | 0.00  | Y   |     |       |     | Unkno  |                        |



**2018**  
**IMS Measurement**  
**Certificate**

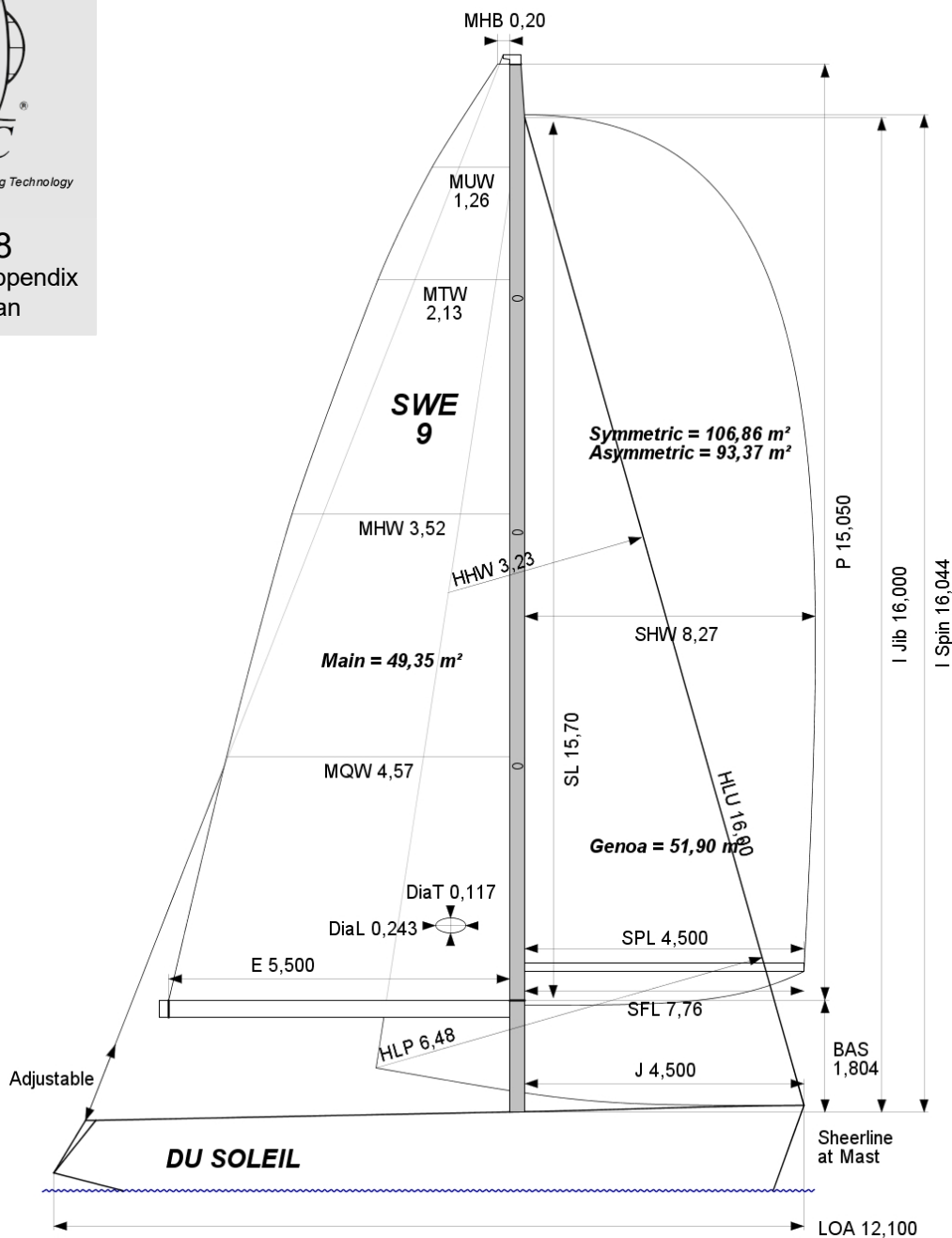
**Certificate**  
Number 91MX40  
ORC Ref SWE00180283  
Issued On 2018-05-29  
VPP Ver. 2018 1.00  
Valid until 2018-12-31





World Leader in Rating Technology

2018  
Certificate Appendix  
Sail Plan



**SAILS INVENTORY**

**MAINSAIL (1)**

| Id    | MHB   | MUW  | MTW  | MHW  | MQW  | Area  | Measurer | Meas.Dat | Manufactu | Material | Comment |
|-------|-------|------|------|------|------|-------|----------|----------|-----------|----------|---------|
| M 3DL | 0.200 | 1.26 | 2.13 | 3.52 | 4.57 | 49.35 |          |          |           | Unknown  |         |

| Id    | HHB  | HU   | HTW  | HH   | HQ   | HLP  | HLU   | Ovrl | Area  | Btn | Fly | Measur | Meas.Dat | Manufactu | Materi | Comment                |
|-------|------|------|------|------|------|------|-------|------|-------|-----|-----|--------|----------|-----------|--------|------------------------|
| 1L Q  | 0.08 | 0.85 | 1.63 | 3.23 | 4.84 | 6.48 | 16.00 | 144% | 51.90 |     |     |        |          |           |        | * Copied from legacy * |
| 1M NS | 0.09 | 0.83 | 1.59 | 3.16 | 4.80 | 6.49 | 15.98 | 144% | 51.33 |     |     |        |          |           | Unkno  |                        |
| 1H Q  | 0.09 | 0.78 | 1.47 | 2.95 | 4.51 | 6.22 | 16.05 | 138% | 48.63 |     |     |        |          |           | Unkno  |                        |
| 3 Q   | 0.06 | 0.62 | 1.19 | 2.34 | 3.47 | 4.55 | 16.10 | 101% | 37.36 | Y   |     |        |          |           | Unkno  |                        |
| SS Q  | 0.08 | 0.53 | 0.98 | 1.95 | 2.88 | 3.84 | 12.28 | 85%  | 23.83 |     | Y   |        |          |           | Unkno  |                        |
| 4 UK  | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00  | 0%   | 0.00  | Y   |     |        |          |           | Unkno  |                        |

**SYMMETRIC SPINNAKERS (3)**

| Id    | SLU   | SLE   | SL    | SHW  | SFL  | Area   | Measurer | Meas.Dat | Manufactu | Material | Comment |
|-------|-------|-------|-------|------|------|--------|----------|----------|-----------|----------|---------|
| S4 NS | 15.70 | 15.70 | 15.70 | 8.27 | 7.76 | 106.86 |          |          |           | Unknown  |         |
| S1 NS | 16.01 | 16.01 | 16.01 | 7.94 | 8.08 | 106.31 |          |          |           | Unknown  |         |
| O9 UK | 15.70 | 15.70 | 15.70 | 7.97 | 7.86 | 103.99 |          |          |           | Unknown  |         |

**ASYMMETRIC SPINNAKERS (1)**

| Id   | SLU   | SLE   | SL    | SHW  | SFL  | Area  | Kind | Measurer | Meas.Dat | Manufactu | Material | Comment |
|------|-------|-------|-------|------|------|-------|------|----------|----------|-----------|----------|---------|
| R5 Q | 16.12 | 15.31 | 15.71 | 6.91 | 8.01 | 93.37 | asym |          |          |           | Unknown  |         |