

|   |                            |  |
|---|----------------------------|--|
| <b>BOAT</b><br>Name <b>ROPIT IV</b><br>Sail Nr <b>ITA-14478</b>   | <b>GPH</b><br><b>610,0</b> | <b>HULL</b><br>Length Overall <b>12,016m</b><br>Maximum Beam <b>3,786m</b><br>Displacement <b>7.858kg</b><br>Draft <b>2,445m</b><br>IMS Reg. Division <b>Cruiser/Racer</b><br>Dynamic Allowance <b>0,222%</b><br>Fwd Accommodation <b>Yes</b><br>Hull Construction <b>Solid</b><br>Carbon Rudder <b>No</b><br>Crew Arm Extension |
| <b>GENERAL</b><br>Class <b>GRAND SOLEIL 40 C</b><br>Designer <b>PAPERINI</b><br>Builder <b>DEL PARDO</b><br>Series <b>12/2000</b><br>Age <b>05/2003</b><br>Age Allowance <b>0,487%</b><br>Offset File <b>GRS40CRO.OFF - 26/01/2015 18:00:34</b><br>Measurement by <b>BELTRAN - 18/10/2010</b> |                            | IMSL <b>11,113m</b> VCGD <b>0,313m</b> Sink <b>23,60kg/mm</b><br>RL <b>8,986m</b> VCGM <b>0,157m</b> WS <b>31,42m<sup>2</sup></b><br>LSMO <b>11,186m</b> Displacement/Length ratio <b>5,6142</b>   |



World Leader in Rating Technology

**2017**  
ORC International  
Certificate

**Rating Office**  
R.F.E.V.  
Luis de Salazar,9  
28002 Madrid  
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| SCORING OPTIONS  | COASTAL / LONG DISTANCE |               |               | WINDWARD / LEEWARD |               |               |
|------------------|-------------------------|---------------|---------------|--------------------|---------------|---------------|
|                  | Time On Distance        | <b>592,2</b>  |               |                    | <b>661,2</b>  |               |
| Time On Time     | <b>1,0133</b>           |               |               | <b>1,0208</b>      |               |               |
| Triple Number    | Low                     | Medium        | High          | Low                | Medium        | High          |
| Time on Distance | <b>708,0</b>            | <b>538,1</b>  | <b>474,9</b>  | <b>920,9</b>       | <b>667,7</b>  | <b>566,8</b>  |
| Time on Time     | <b>0,9534</b>           | <b>1,2543</b> | <b>1,4214</b> | <b>0,7330</b>      | <b>1,0109</b> | <b>1,1909</b> |

| TIME ALLOWANCES | Wind Velocity |              |              |              |              |              |              |
|-----------------|---------------|--------------|--------------|--------------|--------------|--------------|--------------|
|                 | 6 kt          | 8 kt         | 10 kt        | 12 kt        | 14 kt        | 16 kt        | 20 kt        |
| Beat VMG        | <b>1055,2</b> | <b>871,7</b> | <b>766,7</b> | <b>704,4</b> | <b>677,2</b> | <b>663,3</b> | <b>644,4</b> |
| 52°             | <b>686,4</b>  | <b>575,7</b> | <b>511,8</b> | <b>484,8</b> | <b>474,9</b> | <b>469,9</b> | <b>463,6</b> |
| 60°             | <b>644,7</b>  | <b>543,2</b> | <b>492,5</b> | <b>471,5</b> | <b>461,6</b> | <b>456,7</b> | <b>452,3</b> |
| 75°             | <b>610,6</b>  | <b>517,9</b> | <b>479,1</b> | <b>460,0</b> | <b>446,6</b> | <b>437,0</b> | <b>428,8</b> |
| 90°             | <b>611,1</b>  | <b>514,4</b> | <b>471,0</b> | <b>457,5</b> | <b>442,4</b> | <b>427,8</b> | <b>405,0</b> |
| 110°            | <b>622,0</b>  | <b>512,7</b> | <b>468,8</b> | <b>445,6</b> | <b>427,1</b> | <b>416,2</b> | <b>397,7</b> |
| 120°            | <b>643,0</b>  | <b>527,7</b> | <b>475,1</b> | <b>450,4</b> | <b>428,7</b> | <b>407,0</b> | <b>382,6</b> |
| 135°            | <b>711,6</b>  | <b>577,9</b> | <b>500,7</b> | <b>466,2</b> | <b>444,9</b> | <b>423,9</b> | <b>380,8</b> |
| 150°            | <b>849,4</b>  | <b>671,9</b> | <b>566,7</b> | <b>499,4</b> | <b>467,5</b> | <b>447,2</b> | <b>407,5</b> |
| Run VMG         | <b>980,8</b>  | <b>775,9</b> | <b>654,3</b> | <b>571,9</b> | <b>518,9</b> | <b>479,7</b> | <b>438,1</b> |

| Selected Courses | Windward / Leeward |               |              |              |              |              |              |              |
|------------------|--------------------|---------------|--------------|--------------|--------------|--------------|--------------|--------------|
|                  | Circular Random    | <b>847,4</b>  | <b>681,3</b> | <b>591,4</b> | <b>538,7</b> | <b>506,1</b> | <b>484,6</b> | <b>457,3</b> |
|                  | Ocean for PCS      | <b>1041,7</b> | <b>801,1</b> | <b>664,8</b> | <b>581,3</b> | <b>527,3</b> | <b>490,0</b> | <b>439,6</b> |
|                  | Non Spinnaker      | <b>902,8</b>  | <b>720,6</b> | <b>620,7</b> | <b>561,3</b> | <b>524,1</b> | <b>499,7</b> | <b>469,3</b> |

| 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                                       | <b>43,4°</b>  | <b>41,8°</b>  | <b>41,7°</b>  | <b>40,7°</b>  | <b>39,2°</b>  | <b>38,4°</b>  | <b>37,6°</b>  |
| Beat VMG  | <b>3,41</b>   | <b>4,13</b>   | <b>4,70</b>   | <b>5,11</b>   | <b>5,32</b>   | <b>5,43</b>   | <b>5,59</b>   |
| 52°   | <b>5,24</b>   | <b>6,25</b>   | <b>7,03</b>   | <b>7,43</b>   | <b>7,58</b>   | <b>7,66</b>   | <b>7,77</b>   |
| 60°   | <b>5,58</b>   | <b>6,63</b>   | <b>7,31</b>   | <b>7,64</b>   | <b>7,80</b>   | <b>7,88</b>   | <b>7,96</b>   |
| 75°   | <b>5,90</b>   | <b>6,95</b>   | <b>7,51</b>   | <b>7,83</b>   | <b>8,06</b>   | <b>8,24</b>   | <b>8,40</b>   |
| 90°   | <b>5,89</b>   | <b>7,00</b>   | <b>7,64</b>   | <b>7,87</b>   | <b>8,14</b>   | <b>8,42</b>   | <b>8,89</b>   |
| 110°  | <b>5,79</b>   | <b>7,02</b>   | <b>7,68</b>   | <b>8,08</b>   | <b>8,43</b>   | <b>8,65</b>   | <b>9,05</b>   |
| 120°  | <b>5,60</b>   | <b>6,82</b>   | <b>7,58</b>   | <b>7,99</b>   | <b>8,40</b>   | <b>8,85</b>   | <b>9,41</b>   |
| 135°  | <b>5,06</b>   | <b>6,23</b>   | <b>7,19</b>   | <b>7,72</b>   | <b>8,09</b>   | <b>8,49</b>   | <b>9,45</b>   |
| 150°  | <b>4,24</b>   | <b>5,36</b>   | <b>6,35</b>   | <b>7,21</b>   | <b>7,70</b>   | <b>8,05</b>   | <b>8,83</b>   |
| Run VMG   | <b>3,67</b>   | <b>4,64</b>   | <b>5,50</b>   | <b>6,29</b>   | <b>6,94</b>   | <b>7,50</b>   | <b>8,22</b>   |
| Gybe Angles                                       | <b>144,6°</b> | <b>149,3°</b> | <b>150,1°</b> | <b>155,1°</b> | <b>169,2°</b> | <b>180,0°</b> | <b>180,0°</b> |

**Certificate**  
Number **144781**  
ORC Ref **ESP00021025**  
Issued On **26/01/2017**  
VPP Ver. **2017 1.00**  
Valid until **31/12/2017**

**Crew Weight**  
Declared **700kg**  
Default\* **808kg**  
Non Manual Pwr **No**

**Special Scoring**

|              | ToD          | ToT           |
|--------------|--------------|---------------|
| Double H.GPH | <b>613,1</b> | <b>0,9786</b> |
| Double H.OSN | <b>596,4</b> | <b>1,0061</b> |
| Non Spin GPH | <b>640,9</b> | <b>0,9362</b> |
| Non Spin OSN | <b>621,5</b> | <b>0,9654</b> |

**Sails Limitations**

| Headsails | Spinnakers |
|-----------|------------|
| <b>6</b>  | <b>4</b>   |

**Class Division Length**  
CDL = **10,050**

**Storm Sails Areas**


|                      |              |
|----------------------|--------------|
| Heavy Weather Jib    | <b>32,52</b> |
| Storm Jib (JL=10,09) | <b>12,04</b> |
| Storm Trysail        | <b>13,72</b> |

**Owner**

|                      |                                 |
|----------------------|---------------------------------|
| <b>BOAT</b>          |                                 |
| Name <b>ROPIT IV</b> | Sail Nr <b>ITA-14478</b>        |
| File <b>ITA14478</b> | Data in <b>meters/kilograms</b> |

|  |                  |                       |  |
|--|------------------|-----------------------|--|
| <b>INCLINING TEST AND FREEBOARDS</b>     |                  |                       |  |
| Inclining Test <b>Current Inclining</b>  |                  |                       |  |
| Flotation date <b>18/10/2010</b>         |                  | SG <b>1,0260</b>      |  |
| FFM <b>1,426</b>                         | FF <b>1,430</b>  | SFFP <b>0,540</b>     |  |
| FAM <b>1,021</b>                         | FA <b>1,022</b>  | SAFP <b>11,255</b>    |  |
| W1 <b>93,8</b>                           | PD1 <b>511,4</b> | WD <b>11,956</b>      |  |
| W2 <b>93,8</b>                           | PD2 <b>512,0</b> | GSA <b>1,0</b>        |  |
| W3 <b>93,8</b>                           | PD3 <b>510,8</b> | RSA <b>1,0</b>        |  |
| W4 <b>93,8</b>                           | PD4 <b>511,2</b> | PLM <b>9000,0</b>     |  |
| LCF from stem on CL / on sheer           |                  | <b>6,777 / 7,025</b>  |  |
| Maximum beam station from stem           |                  | <b>8,051</b>          |  |
| RM Measured                              |                  | <b>172,7kg·m</b>      |  |
| RM Default                               |                  | <b>195,1kg·m</b>      |  |
| Limit of positive stability / Stab.Index |                  | <b>108,8° / 113,0</b> |  |
| Freeboard at mast at 4,600               |                  | <b>1,209</b>          |  |

|                                |                            |                   |                 |
|--------------------------------|----------------------------|-------------------|-----------------|
| <b>RIG</b>                     |                            |                   |                 |
| Forestay Tension <b>Aft</b>    | Spreaders <b>3</b>         |                   |                 |
| Inner Stay <b>None Fitted</b>  | Runners <b>0</b>           |                   |                 |
| Carbon Mast <b>No</b>          | Jumper Struts <b>None</b>  |                   |                 |
| Taper Hollows <b>No</b>        | Jib Furler <b>No</b>       |                   |                 |
| Fiber Rigging <b>No</b>        | Main Furler <b>No</b>      |                   |                 |
| Lenticular Rigging <b>No</b>   | Without Backstay <b>No</b> |                   |                 |
| Articulated Bowsprit <b>No</b> |                            |                   |                 |
| P <b>14,590</b>                | E <b>5,374</b>             | MDT1 <b>0,125</b> | MW <b>0,220</b> |
| IG <b>15,460</b>               | J <b>4,600</b>             | MDL1 <b>0,220</b> | GO <b>0,238</b> |
| ISP <b>15,550</b>              | SFJ                        | MDT2 <b>0,125</b> | BD <b>0,125</b> |
| BAS <b>1,680</b>               | SPL <b>4,470</b>           | MDL2 <b>0,220</b> | MWT             |
| FSP <b>0,073</b>               | TPS                        | TL                | MCG             |



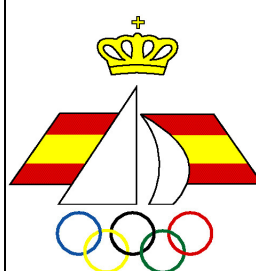
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**2017**

**IMS Measurement Certificate**

**Certificate**

Number **144781**  
 ORC Ref **ESP00021025**  
 Issued On **26/01/2017**  
 VPP Ver. **2017 1.00**  
 Valid until **31/12/2017**



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

|                              |                    |                  |
|------------------------------|--------------------|------------------|
| <b>PROPELLER</b>             |                    |                  |
| Installation <b>Strut</b>    | PRD <b>0,404</b>   |                  |
| Type <b>Folding 2 blades</b> | PBW <b>0,112</b>   |                  |
| Twin Screw <b>No</b>         | PIPA <b>0,0038</b> |                  |
| ST1 <b>0,049</b>             | ST3 <b>0,180</b>   | ST5 <b>0,340</b> |
| ST2 <b>0,180</b>             | ST4 <b>0,111</b>   | EDL <b>2,512</b> |

|                 |  |
|-----------------|--|
| <b>COMMENTS</b> |  |
|                 |  |

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

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

|                              |       |       |       |      |      |        |          |  |  |
|------------------------------|-------|-------|-------|------|------|--------|----------|--|--|
| <b>SAILS (Maximum Areas)</b> |       |       |       |      |      |        |          |  |  |
| Mainsail                     | MHB   | MUW   | MTW   | MHW  | MQW  | Area   | Area (r) | Formula  |  |
|                              | 0,135 | 1,16  | 2,16  | 3,53 | 4,56 | 47,46  | 48,65    | P/8 · (E + 2·MQW+ 2·MHW + 1.5·MTW + MUW + 0.5·MHB) |  |
| Symmetric                    | SLU   | SLE   | SL    | SHW  | SFL  |        |          | SL · (SFL + 4·SHW) / 6                             |  |
|                              | 16,13 | 16,13 | 16,13 | 8,46 | 7,94 | 112,32 |          |  |  |
| Asymmetric                   | SLU   | SLE   | SL    | SHW  | SFL  |        |          | AS · (SFL + 4·SHW) / 6                             |  |
|                              | 15,50 | 14,50 | 15,00 | 8,21 | 8,75 | 103,97 |          |  |  |

|   |            |            |            |            |            |            |             |            |            |                  |                 |                |
|---|------------|------------|------------|------------|------------|------------|-------------|------------|------------|------------------|-----------------|----------------|
| <b>HEADSAILS</b>  |            |            |            |            |            |            |             |            |            |                  |                 |                |
| Area = 0.1125·HLU · (1.445·HLP + 2·HQW + 2·HHW + 1.5·HTW + HUW + 0.5·HHB) |            |            |            |            |            |            |             |            |            |                  |                 |                |
| <b>HHB</b>  | <b>HUW</b> | <b>HTW</b> | <b>HHW</b> | <b>HQW</b> | <b>HLP</b> | <b>HLU</b> | <b>Area</b> | <b>Btn</b> | <b>Fly</b> | <b>Meas.Date</b> | <b>Material</b> | <b>Comment</b> |
| 0,08  | 0,67       | 1,35       | 2,61       | 3,76       | 4,74       | 15,34      | 38,53       | Y          |            | 13/04/2011       |                 |                |

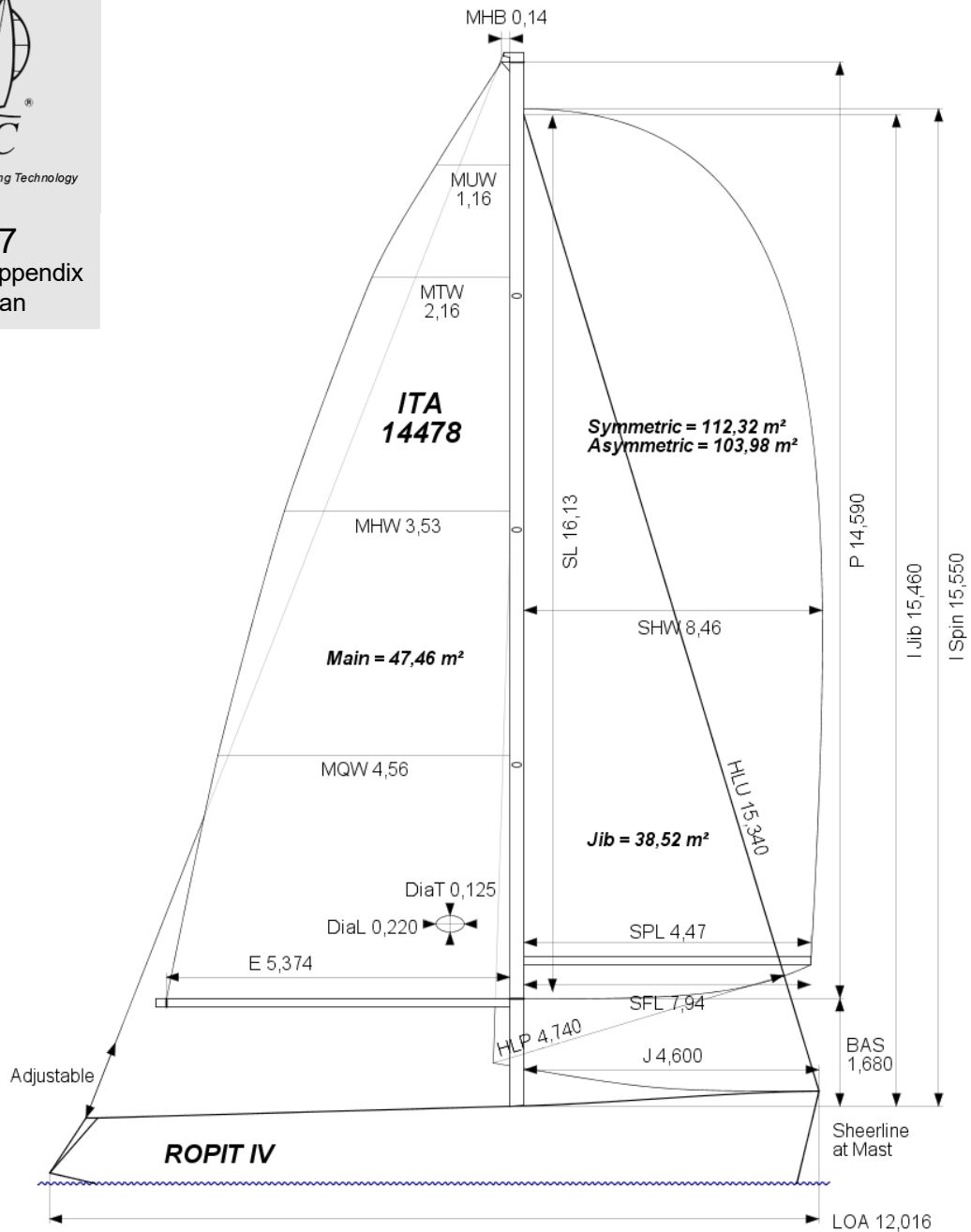
|                              |             |                           |                 |                        |
|------------------------------|-------------|---------------------------|-----------------|------------------------|
| <b>MEASUREMENT INVENTORY</b> |             |                           |                 |                        |
| Measurer <b>jj beltran</b>   |             |                           |                 |                        |
| Date <b>18/10/2010</b>       |             |                           |                 |                        |
| Comment                      |             |                           |                 |                        |
| <i>Id</i>                    | <i>Item</i> | <i>Weight</i>             | <i>Distance</i> | <i>VCG Description</i> |
| +                            | Anchor      | 18,0                      | 5,70            | ancla                  |
| +                            | Chain       | 40,0                      | 5,70            | cadena                 |
| +                            | Tools       | 8,0                       | 9,40            |                        |
| <i>Id</i>                    | <i>Item</i> | <i>Maker</i>              | <i>Model</i>    |                        |
| 1                            | Engine      | YANMAR                    | 40 cv           |                        |
| <i>Id</i>                    | <i>Item</i> | <i>Weight Description</i> |                 |                        |

|                              |             |                 |                  |                        |              |            |               |                     |
|------------------------------|-------------|-----------------|------------------|------------------------|--------------|------------|---------------|---------------------|
| <b>MEASUREMENT INVENTORY</b> |             |                 |                  |                        |              |            |               |                     |
| <i>Id</i>                    | <i>Item</i> | <i>Tank Use</i> | <i>Tank Type</i> | <i>Capcty</i>          | <i>Dist.</i> | <i>VCG</i> | <i>Condtn</i> | <i>Description</i>  |
| 1                            | Tank        | Gasoil          | INOX             | 180,0                  | 9,40         |            | 0-0           |                     |
| 2                            | Tank        | Agua            | PVC              | 160,0                  | 9,40         |            | 0-0           |                     |
| 3                            | Tank        | agua            | pvc              | 210,0                  | 6,70         |            | 0-0           |                     |
| 4                            | Tank        | tanque          |                  |                        | 9,20         |            |               | tanque aguas sucias |
| <i>Id</i>                    | <i>Item</i> | <i>Weight</i>   | <i>Distance</i>  | <i>VCG Description</i> |              |            |               |                     |
| 1                            | Battery     | 18,8            | 6,60             | bateria                |              |            |               |                     |
| 2                            | Battery     | 29,8            | 6,60             | bateria                |              |            |               |                     |
| 3                            | Battery     | 29,8            | 6,60             | bateria                |              |            |               |                     |
| 4                            | Battery     | 29,8            | 6,60             | bateria                |              |            |               |                     |



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Certificate Appendix  
Sail Plan



**SAILS INVENTORY**

**MAINSAIL (1)**

| Id | MHB   | MUW  | MTW  | MHW  | MQW  | Area  | Measurer  | Meas.Date  | Manufacture | Material | Comment |
|----|-------|------|------|------|------|-------|-----------|------------|-------------|----------|---------|
| 1  | 0,135 | 1,16 | 2,16 | 3,53 | 4,56 | 47,46 | JJBeltran | 20/10/2014 |             |          |         |

**HEADSAILS (1)**

| Id | HHB  | HUW  | HTW  | HHW  | HQW  | HLP  | HLU   | Ovrlp | Area  | Btn | Fly | Measurer  | Meas.Date  | Manufacture | Material | Comment |
|----|------|------|------|------|------|------|-------|-------|-------|-----|-----|-----------|------------|-------------|----------|---------|
| 1  | 0,08 | 0,67 | 1,35 | 2,61 | 3,76 | 4,74 | 15,34 | 103%  | 38,53 | Y   |     | JJBeltran | 13/04/2011 |             |          |         |

**SYMMETRIC SPINNAKERS (1)**

| Id | SLU   | SLE   | SL    | SHW  | SFL  | Area   | Measurer  | Meas.Date | Manufacture | Material | Comment |
|----|-------|-------|-------|------|------|--------|-----------|-----------|-------------|----------|---------|
| 3  | 16,13 | 16,13 | 16,13 | 8,46 | 7,94 | 112,32 | JJBeltran |           |             | Unknown  |         |

**ASYMMETRIC SPINNAKERS (1)**

| Id | SLU   | SLE   | SL    | SHW  | SFL  | Area   | Kind | Measurer  | Meas.Date | Manufacture | Material | Comment |
|----|-------|-------|-------|------|------|--------|------|-----------|-----------|-------------|----------|---------|
| 1  | 15,50 | 14,50 | 15,00 | 8,21 | 8,75 | 103,98 | asym | JJBeltran |           |             | Unknown  |         |