

| 01 Specs<br>01Title    | Cascade 130 T   |   |                                     | 05.09.16 AO<br>VS.02 | Project<br>No. |  |  |  |            |           |          |          |          |          |   |          |                                   |                                   |                                     |               |                                |   |                                |                        |                                |                               |                                 |          |       |       |                         |                   |                              |                              |                               |             |                          |                          |                            |  |  |
|------------------------|---|---|-------------------------------------|----------------------|----------------|--|--|--|------------|-----------|----------|----------|----------|----------|---|----------|-----------------------------------|-----------------------------------|-------------------------------------|---------------|--------------------------------|---|--------------------------------|------------------------|--------------------------------|-------------------------------|---------------------------------|----------|-------|-------|-------------------------|-------------------|------------------------------|------------------------------|-------------------------------|-------------|--------------------------|--------------------------|----------------------------|--|--|
| Item /<br>No.          | Description / Quantity / Unit   |   |                                     | Unit price           | total price    |  |  |  |            |           |          |          |          |          |   |          |                                   |                                   |                                     |               |                                |   |                                |                        |                                |                               |                                 |          |       |       |                         |                   |                              |                              |                               |             |                          |                          |                            |  |  |
| 01.1<br>Position       | <p><b>Description:</b><br/>Adjustable (direction) tombac injection nozzle to create a homogenous and stable foamy water jet. Form and height vary with height position with respect to water surface and are influenced by waves.</p> <p>Installation and operation in freshwater.*</p> <p><b>Technical data:</b><br/>Dimension (Ø x H): 176x410 [mm]<br/>Material: tombac<br/>Weight: 11,0 kg<br/>Connecting thread (Inner thread): G3<br/>Effect height: 1,0-18,0 [m]<br/>Adjustable flange: yes<br/>Water-level independent: no</p> <p>*</p> <table border="1" data-bbox="288 891 1227 1391"> <thead> <tr> <th colspan="4" data-bbox="288 891 1227 920">water-quality-matrix</th> </tr> <tr> <th data-bbox="288 920 456 949"></th> <th data-bbox="456 920 722 949">Freshwater</th> <th data-bbox="722 920 983 949">Poolwater</th> <th data-bbox="983 920 1227 949">Seawater</th> </tr> </thead> <tbody> <tr> <td data-bbox="288 949 456 1021">PH.Value</td> <td data-bbox="456 949 722 1021">7,2 -7,6</td> <td data-bbox="722 949 983 1021">7,2 -7,6</td> <td data-bbox="983 949 1227 1021">8</td> </tr> <tr> <td data-bbox="288 1021 456 1084">Hardness</td> <td data-bbox="456 1021 722 1084">8 -15 ° DH;<br/>142 -267 ppm CaCo3</td> <td data-bbox="722 1021 983 1084">8 -15 ° DH;<br/>142 -267 ppm CaCo3</td> <td data-bbox="983 1021 1227 1084">20 -30 ° DH;<br/>356 - 534 ppm CaCo3</td> </tr> <tr> <td data-bbox="288 1084 456 1146">Free Chlorine</td> <td data-bbox="456 1084 722 1146">&lt; 0,3 mg/l;<br/>&lt; 0,036 moz/gal</td> <td data-bbox="722 1084 983 1146">0,3 -0,6 mg/l;<br/>0,036 - 0,072 moz/gal</td> <td data-bbox="983 1084 1227 1146">&lt; 0,3 mg/l;<br/>&lt; 0,036 moz/gal</td> </tr> <tr> <td data-bbox="288 1146 456 1209">Chlorine concentration</td> <td data-bbox="456 1146 722 1209">&lt; 250 mg/l;<br/>&lt; 30,28 moz/gal</td> <td data-bbox="722 1146 983 1209">&lt; 200 mg/l;<br/>&lt; 24,2 moz/gal</td> <td data-bbox="983 1146 1227 1209">&lt;=22000 mg/l;<br/>&lt;=2664 moz/gal</td> </tr> <tr> <td data-bbox="288 1209 456 1272">Salinity</td> <td data-bbox="456 1209 722 1272">n. d.</td> <td data-bbox="722 1209 983 1272">n. d.</td> <td data-bbox="983 1209 1227 1272">&lt;= 4%;<br/>&lt;= 40.000 ppm</td> </tr> <tr> <td data-bbox="288 1272 456 1335">Total Dry Residue</td> <td data-bbox="456 1272 722 1335">&lt; 50 mg/l;<br/>&lt; 6,06 moz/gal</td> <td data-bbox="722 1272 983 1335">&lt; 50 mg/l;<br/>&lt; 6,06 moz/gal</td> <td data-bbox="983 1272 1227 1335">&lt; 250mg/l;<br/>&lt; 30,28 moz/gal</td> </tr> <tr> <td data-bbox="288 1335 456 1391">Temperature</td> <td data-bbox="456 1335 722 1391">4 -35° C;<br/>39 - 95 ° F</td> <td data-bbox="722 1335 983 1391">4 -30° C;<br/>39 - 86 ° F</td> <td data-bbox="983 1335 1227 1391">4 - 20 ° C;<br/>39 - 68 ° F</td> </tr> </tbody> </table> <p>Supply and delivery according to manufacturer specifications.</p> <p>Product / proof of delivery:<br/><b>Cascade 130 T</b><br/><b>Art. 50917</b></p> <p>OASE GmbH<br/>Tecklenburger Str. 161<br/>48477 Hörstel / Germany<br/>Phone: +49 5454 800</p> <p>(or equivalent)<br/>.....<br/>Entered by the bidder</p> |   |                                     | water-quality-matrix |                |  |  |  | Freshwater | Poolwater | Seawater | PH.Value | 7,2 -7,6 | 7,2 -7,6 | 8 | Hardness | 8 -15 ° DH;<br>142 -267 ppm CaCo3 | 8 -15 ° DH;<br>142 -267 ppm CaCo3 | 20 -30 ° DH;<br>356 - 534 ppm CaCo3 | Free Chlorine | < 0,3 mg/l;<br>< 0,036 moz/gal | 0,3 -0,6 mg/l;<br>0,036 - 0,072 moz/gal | < 0,3 mg/l;<br>< 0,036 moz/gal | Chlorine concentration | < 250 mg/l;<br>< 30,28 moz/gal | < 200 mg/l;<br>< 24,2 moz/gal | <=22000 mg/l;<br><=2664 moz/gal | Salinity | n. d. | n. d. | <= 4%;<br><= 40.000 ppm | Total Dry Residue | < 50 mg/l;<br>< 6,06 moz/gal | < 50 mg/l;<br>< 6,06 moz/gal | < 250mg/l;<br>< 30,28 moz/gal | Temperature | 4 -35° C;<br>39 - 95 ° F | 4 -30° C;<br>39 - 86 ° F | 4 - 20 ° C;<br>39 - 68 ° F |  |  |
| water-quality-matrix   |   |   |                                     |                      |                |  |  |  |            |           |          |          |          |          |   |          |                                   |                                   |                                     |               |                                |   |                                |                        |                                |                               |                                 |          |       |       |                         |                   |                              |                              |                               |             |                          |                          |                            |  |  |
|                        | Freshwater  | Poolwater                               | Seawater                            |                      |                |  |  |  |            |           |          |          |          |          |   |          |                                   |                                   |                                     |               |                                |   |                                |                        |                                |                               |                                 |          |       |       |                         |                   |                              |                              |                               |             |                          |                          |                            |  |  |
| PH.Value               | 7,2 -7,6  | 7,2 -7,6                                | 8                                   |                      |                |  |  |  |            |           |          |          |          |          |   |          |                                   |                                   |                                     |               |                                |   |                                |                        |                                |                               |                                 |          |       |       |                         |                   |                              |                              |                               |             |                          |                          |                            |  |  |
| Hardness               | 8 -15 ° DH;<br>142 -267 ppm CaCo3   | 8 -15 ° DH;<br>142 -267 ppm CaCo3       | 20 -30 ° DH;<br>356 - 534 ppm CaCo3 |                      |                |  |  |  |            |           |          |          |          |          |   |          |                                   |                                   |                                     |               |                                |   |                                |                        |                                |                               |                                 |          |       |       |                         |                   |                              |                              |                               |             |                          |                          |                            |  |  |
| Free Chlorine          | < 0,3 mg/l;<br>< 0,036 moz/gal  | 0,3 -0,6 mg/l;<br>0,036 - 0,072 moz/gal | < 0,3 mg/l;<br>< 0,036 moz/gal      |                      |                |  |  |  |            |           |          |          |          |          |   |          |                                   |                                   |                                     |               |                                |   |                                |                        |                                |                               |                                 |          |       |       |                         |                   |                              |                              |                               |             |                          |                          |                            |  |  |
| Chlorine concentration | < 250 mg/l;<br>< 30,28 moz/gal  | < 200 mg/l;<br>< 24,2 moz/gal           | <=22000 mg/l;<br><=2664 moz/gal     |                      |                |  |  |  |            |           |          |          |          |          |   |          |                                   |                                   |                                     |               |                                |   |                                |                        |                                |                               |                                 |          |       |       |                         |                   |                              |                              |                               |             |                          |                          |                            |  |  |
| Salinity               | n. d.   | n. d.                                   | <= 4%;<br><= 40.000 ppm             |                      |                |  |  |  |            |           |          |          |          |          |   |          |                                   |                                   |                                     |               |                                |   |                                |                        |                                |                               |                                 |          |       |       |                         |                   |                              |                              |                               |             |                          |                          |                            |  |  |
| Total Dry Residue      | < 50 mg/l;<br>< 6,06 moz/gal  | < 50 mg/l;<br>< 6,06 moz/gal            | < 250mg/l;<br>< 30,28 moz/gal       |                      |                |  |  |  |            |           |          |          |          |          |   |          |                                   |                                   |                                     |               |                                |   |                                |                        |                                |                               |                                 |          |       |       |                         |                   |                              |                              |                               |             |                          |                          |                            |  |  |
| Temperature            | 4 -35° C;<br>39 - 95 ° F  | 4 -30° C;<br>39 - 86 ° F                | 4 - 20 ° C;<br>39 - 68 ° F          |                      |                |  |  |  |            |           |          |          |          |          |   |          |                                   |                                   |                                     |               |                                |   |                                |                        |                                |                               |                                 |          |       |       |                         |                   |                              |                              |                               |             |                          |                          |                            |  |  |