

Raccordi in acciaio per impianti ad alta pressione  
Steel fittings for high pressure plants

|                                         |                                                             |                 |
|-----------------------------------------|-------------------------------------------------------------|-----------------|
| CLIENTE / Purchaser<br><b>SAMIC SRL</b> | CERTIFICATO DI COLLAUDO<br>Works certificate EN 10204 3.1.B | Foglio<br>Sheet |
| ORDINE / Order<br><b>VARI</b>           | N. <b>2562</b> DEL 10/10/2001                               | <b>1</b>        |

| ITEM<br>Item  | QUANTITÀ<br>Quantity | DESCRIZIONE / Description                   | ORD. N.                  | COLATA<br>Heat    | MATERIALE<br>Material     | CERTIF. ORG.<br>Mater. certif. | ACCIAIERIA<br>Steel plant |
|---------------|----------------------|---------------------------------------------|--------------------------|-------------------|---------------------------|--------------------------------|---------------------------|
| <del>1</del>  | <del>12</del>        | <del>BCCCH. 1/2 1 3000 NPT F304L</del>      | <del>010190RD1190R</del> | <del>763047</del> | <del>A102 F304L/304</del> | <del>955/2719</del>            | <del>CLARRA</del>         |
| <del>1</del>  | <del>30</del>        | <del>ELDON 30" 3/4 3000 3H F316L</del>      | <del>010200RD1150R</del> | <del>407434</del> | <del>A102 F316L/316</del> | <del>955/2719</del>            | <del>ACC. VALORUNA</del>  |
| <del>2</del>  | <del>2</del>         | <del>CHARGE 3/4x1/2 0.40 PE/PE HP316L</del> |                          | <del>9840</del>   | <del>A102 F316L/316</del> | <del>955/2719</del>            | <del>ACC. VALORUNA</del>  |
| <del>7</del>  | <del>6</del>         | <del>TEE 2.1/2 3000 NPT A105GAL.</del>      |                          | <del>FC3</del>    | <del>A105</del>           | <del>955/2719</del>            | <del>RIVA</del>           |
| <del>10</del> | <del>30</del>        | <del>UNION 3/4 3000 CM A105</del>           |                          | <del>1507</del>   | <del>A105</del>           | <del>955/2719</del>            | <del>STOKER</del>         |
| <del>2</del>  | <del>2</del>         | <del>CHARGE 3/4x1/2 0.40 PE/PE HP316L</del> |                          | <del>2027</del>   | <del>A102 F316L/316</del> | <del>955/2719</del>            | <del>BOONE</del>          |
| <del>1</del>  | <del>2</del>         | <del>UNION 1/2 2 3000 NPT A105GAL.</del>    | <del>010200RD1190R</del> | <del>73337</del>  | <del>A105</del>           | <del>955/2719</del>            | <del>RIVA</del>           |
| <del>2</del>  | <del>2</del>         | <del>HEX BUSHING 2x1/2 NPT A105GAL.</del>   |                          | <del>75960</del>  | <del>A105</del>           | <del>955/2719</del>            | <del>A.F. TAMARO</del>    |
| <del>3</del>  | <del>4</del>         | <del>UNION 1/2 2 3000 NPT A105GAL.</del>    |                          | <del>74303</del>  | <del>A105</del>           | <del>955/2719</del>            | <del>RIVA</del>           |

ANALISI CHIMICA - Chemical Analysis

| COLATA<br>Heat    | C<br>%           | Mn<br>%         | Si<br>%         | P<br>%           | S<br>%           | Ni<br>%          | Cr<br>%          | Mo<br>%          | Ti<br>% | V<br>%           | Cu<br>%          | Al<br>%          | Nb<br>%          | N<br>%           | % | % | C.E.<br>%       |
|-------------------|------------------|-----------------|-----------------|------------------|------------------|------------------|------------------|------------------|---------|------------------|------------------|------------------|------------------|------------------|---|---|-----------------|
| <del>763047</del> | <del>0,024</del> | <del>1,76</del> | <del>0,77</del> | <del>0,027</del> | <del>0,025</del> | <del>0,10</del>  | <del>10,35</del> |                  |         |                  |                  |                  |                  | <del>0,078</del> |   |   |                 |
| <del>407434</del> | <del>0,027</del> | <del>1,32</del> | <del>0,67</del> | <del>0,027</del> | <del>0,026</del> | <del>11,10</del> | <del>17,35</del> | <del>0,010</del> |         |                  |                  |                  |                  | <del>0,070</del> |   |   |                 |
| <del>9840</del>   | <del>0,013</del> | <del>1,41</del> | <del>0,40</del> | <del>0,030</del> | <del>0,027</del> | <del>10,17</del> | <del>16,70</del> | <del>0,010</del> |         |                  |                  |                  |                  | <del>0,060</del> |   |   |                 |
| <del>FC3</del>    | <del>0,195</del> | <del>0,96</del> | <del>0,25</del> | <del>0,008</del> | <del>0,010</del> | <del>0,06</del>  | <del>0,15</del>  | <del>0,010</del> |         | <del>0,003</del> | <del>0,180</del> | <del>0,005</del> | <del>0,001</del> |                  |   |   | <del>0,40</del> |
| <del>1507</del>   | <del>0,190</del> | <del>0,98</del> | <del>0,27</del> | <del>0,012</del> | <del>0,029</del> | <del>0,11</del>  | <del>0,23</del>  | <del>0,025</del> |         | <del>0,003</del> | <del>0,180</del> | <del>0,021</del> | <del>0,002</del> |                  |   |   | <del>0,42</del> |
| <del>2027</del>   | <del>0,024</del> | <del>1,51</del> | <del>0,40</del> | <del>0,028</del> | <del>0,024</del> | <del>11,14</del> | <del>16,70</del> | <del>0,020</del> |         |                  |                  |                  |                  | <del>0,042</del> |   |   |                 |
| <del>73337</del>  | <del>0,200</del> | <del>1,01</del> | <del>0,21</del> | <del>0,016</del> | <del>0,020</del> | <del>0,04</del>  | <del>0,11</del>  | <del>0,010</del> |         | <del>0,002</del> | <del>0,120</del> | <del>0,005</del> | <del>0,001</del> |                  |   |   | <del>0,40</del> |
| <del>75960</del>  | <del>0,200</del> | <del>1,02</del> | <del>0,17</del> | <del>0,018</del> | <del>0,021</del> | <del>0,04</del>  | <del>0,24</del>  | <del>0,010</del> |         | <del>0,005</del> | <del>0,130</del> | <del>0,005</del> | <del>0,001</del> |                  |   |   | <del>0,43</del> |
| <del>74303</del>  | <del>0,180</del> | <del>0,96</del> | <del>0,27</del> | <del>0,016</del> | <del>0,009</del> | <del>0,05</del>  | <del>0,09</del>  | <del>0,010</del> |         | <del>0,002</del> | <del>0,130</del> | <del>0,007</del> | <del>0,001</del> |                  |   |   | <del>0,37</del> |

CARATTERISTICHE MECCANICHE - Mechanical Test

| COLATA<br>Heat    | R<br>Tensile<br>Strength<br>N/mm² | S<br>Yield Point<br>N/mm² | A: 2"<br>Elongation<br>% | C<br>Reduction<br>of area % | Bending<br>Test | Flattening<br>Test | Hydraulic<br>Test | HB<br>Hardness test | K<br>Impact test<br>J | Temp. °C | STATO DI FORNIT. (TRATT. TERM.)<br>Supply cond. (heat treatment) | TEMP.<br>°C     | NOTE<br>Remarks |
|-------------------|-----------------------------------|---------------------------|--------------------------|-----------------------------|-----------------|--------------------|-------------------|---------------------|-----------------------|----------|------------------------------------------------------------------|-----------------|-----------------|
| <del>763047</del> | <del>620</del>                    | <del>310</del>            | <del>33,0</del>          | <del>73,0</del>             |                 |                    |                   |                     |                       |          | <del>SOL. HEAT TREAT.</del>                                      | <del>1030</del> |                 |
| <del>407434</del> | <del>660</del>                    | <del>430</del>            | <del>43,0</del>          | <del>74,0</del>             |                 |                    |                   |                     |                       |          | <del>SOL. HEAT TREAT.</del>                                      | <del>1060</del> |                 |
| <del>9840</del>   | <del>670</del>                    | <del>400</del>            | <del>47,0</del>          | <del>60,0</del>             |                 |                    |                   |                     |                       |          | <del>SOL. HEAT TREAT.</del>                                      | <del>1030</del> |                 |
| <del>FC3</del>    | <del>511</del>                    | <del>332</del>            | <del>31,1</del>          | <del>57,1</del>             |                 |                    |                   | <del>155 155</del>  |                       |          |                                                                  |                 |                 |
| <del>1507</del>   | <del>516</del>                    | <del>364</del>            | <del>35,5</del>          | <del>67,3</del>             |                 |                    |                   | <del>149 152</del>  |                       |          |                                                                  |                 |                 |
| <del>2027</del>   | <del>363</del>                    | <del>200</del>            | <del>30,0</del>          | <del>73,0</del>             |                 |                    |                   |                     |                       |          | <del>SOL. HEAT TREAT.</del>                                      | <del>1030</del> |                 |
| <del>73337</del>  | <del>532</del>                    | <del>329</del>            | <del>31,3</del>          | <del>50,0</del>             |                 |                    |                   | <del>136 136</del>  |                       |          |                                                                  |                 |                 |
| <del>75960</del>  | <del>530</del>                    | <del>330</del>            | <del>20,0</del>          | <del>65,0</del>             |                 |                    |                   | <del>137 100</del>  |                       |          |                                                                  |                 |                 |
| <del>74303</del>  | <del>510</del>                    | <del>310</del>            | <del>32,0</del>          | <del>57,1</del>             |                 |                    |                   | <del>134 137</del>  |                       |          |                                                                  |                 |                 |

|                                                                                                                            |                |
|----------------------------------------------------------------------------------------------------------------------------|----------------|
| NATURA DEL MATERIALE / Kind of material<br><b>Acciaio elaborato al forno elettrico.<br/>Steel made by electric furnace</b> | NOTE / Remarks |
|----------------------------------------------------------------------------------------------------------------------------|----------------|

|                                                                                           |                                          |                                              |                  |
|-------------------------------------------------------------------------------------------|------------------------------------------|----------------------------------------------|------------------|
| COLLAUDI INTERNO / Visual inspection<br><b>Visivo/Dimensionale<br/>Visual/Dimensional</b> | RESULT<br>Result<br><b>O.K.<br/>O.K.</b> | COLLAUDI SUPPLEMENTARI / Supplementary tests | RESULT<br>Result |
|-------------------------------------------------------------------------------------------|------------------------------------------|----------------------------------------------|------------------|