

## Foundry Green Moulding Process

### Bentocol®

**Bentocol®** is a complete range of bentonite used as binders in moulding sand process. bentocol range is suitable for all kind of applications, both on horizontal than vertical equipments, for casts of any size and weight, and for any kind of shake-out process.

|   |                      | Bentocol 150 | Bentocol 200 | Bentocol 300 | Bentocol 400 |
|---|----------------------|--------------|--------------|--------------|--------------|
| Moisture<br>Umidità<br>Humidité   | [%]                  | 10-13        | 10-13        | 10-13        | 10-13        |
| Liquid limit<br>Limite di liquidità<br>Limite de liquidité  | [%]                  | 140 min      | 230 min      | 300 min      | 400 min      |
| Swelling<br>Rigonfiamento<br>Gonflement   | [ml/2g]              | 10 min       | 20 min       | 20 min       | 25 min       |
| Carbonates<br>Carbonati<br>Carbonates   | [%]                  | 5 max        | 4 max        | 7 max        | 7max         |
| Montmorillonite<br>Montmorillonite<br>Montmorillonite   | [%]                  | 95 min       | 98 min       | 95 min       | 95 min       |
| Green Compr. Strenght<br>Resistenza Compr. a Verde<br>Resestence Compression                                    | [N/cm <sup>2</sup> ] | 9 min.       | 9 min.       | 8 min.       | 9,5 min      |
| Wet Tensile Strenght<br>Resistenza allo Strato Umido<br>Resistence à Haute Humidité                             | [N/cm <sup>2</sup> ] | 0,10 min     | 0,16 min     | 0,23 min     | 0,26 min     |
| Aging (1/2 hrs 550°C) <b>GCS</b><br>Rigenero (1/2 h a 550°C) <b>RCV</b><br>Viellissement(1/2 h 550°C) <b>RC</b> | [N/cm <sup>2</sup> ] | 6 min        | 5 min        | 5,5 min      | 7,0 min      |
| Aging (1/2 hrs 550°C) <b>WTS</b><br>Rigenero (1/2 h a 550°C) <b>RCV</b><br>Viellissement(1/2 h550°C) <b>RHH</b> | [N/cm <sup>2</sup> ] | 0,10min      | 0,10min      | 0,13min      | 0,15 min     |

|  |                      | Bentocol 410 | Bentocol 500 | Bentocol 550 | Bentocol 600 |
|--|----------------------|--------------|--------------|--------------|--------------|
| Moisture<br>Umidità<br>Humidité  | [%]                  | 10 -13       | 10 -13       | 10 -13       | 10 -13       |
| Liquid limit<br>Limite di liquidità<br>Limite de liquidité                                 | [%]                  | 400 min      | 490 min      | 500 min      | 600 min      |
| Swelling<br>Rigonfiamento<br>Gonflement  | [ml/2g]              | 25 min       | 28 min       | 25 min       | 30 min       |
| Carbonates<br>Carbonati<br>Carbonates  | [%]                  | 4 max        | 8 max        | 4 max        | 4 max        |
| Montmorillonite<br>Montmorillonite<br>Montmorillonite                                      | [%]                  | 98 min       | 98 min       | 98 min       | 98 min       |
| Green Compr. Strenght<br>Resistenza Compr. a Verde<br>Resestence Compression               | [N/cm <sup>2</sup> ] | 8 min        | 9 min.       | 9 min.       | 9 min        |
| Wet Tensile Strenght<br>Resistenza allo Strato Umido<br>Resistence à Haute Humidité        | [N/cm <sup>2</sup> ] | 0,24 min     | 0,26 min     | 0,28 min     | 0,28 min     |
| Aging (1/2 hrs 550°C) GCS<br>Rigenero (1/2 h a 550°C) RCV<br>Viellissement(1/2 h 550°C) RC | [N/cm <sup>2</sup> ] | 5,0 min      | 6,0 min      | 7,0 min      | 6,0 min      |
| Aging (1/2 hrs 550°C) WTS<br>Rigenero (1/2 h a 550°C) RCV<br>Viellissement(1/2 h550°C) RHH | [N/cm <sup>2</sup> ] | 0,13min      | 0,14 min     | 0,16 min     | 0,15 min     |