

## Statistické hodnocení kvality cementu dle EN 197-1

**Cement: CEM II/B-S 32,5 R**

Období: Od: **01.01.2025**

Závod: **Mokrá**

Do: **31.01.2025**

### Mechanické a fyzikální vlastnosti

| Datum         | Měrný povrch<br>[m <sup>2</sup> /kg] | Normální<br>konzistence<br>[%] | Počátek tuhnutí<br>[min] | Konec tuhnutí<br>[min] | Objemová<br>stálost<br>[mm] | Pevnost v tlaku |             | Pevnost v ohybu |            |
|---------------|--------------------------------------|--------------------------------|--------------------------|------------------------|-----------------------------|-----------------|-------------|-----------------|------------|
|               |                                      |                                |                          |                        |                             | 2 dny           | 28 dní      | 2 dny           | 28 dní     |
| Jednotka      | [m <sup>2</sup> /kg]                 | [%]                            | [min]                    | [min]                  | [mm]                        | [MPa]           | [MPa]       | [MPa]           | [MPa]      |
| 01.01.2025    | 407                                  | 28,2                           | 230                      | 334                    | 1,0                         | 17,1            | 51,8        | 4,2             | 9,6        |
| 06.01.2025    | 397                                  | 28,4                           | 222                      | 331                    | 1,0                         | 17,0            | 50,8        | 3,8             | 9,3        |
| 08.01.2025    | 403                                  | 28,6                           | 214                      | 348                    | 0,5                         | 16,4            | 51,3        | 3,7             | 9,7        |
| 13.01.2025    | 415                                  | 28,4                           | 218                      | 302                    | 1,0                         | 15,8            | 51,1        | 3,5             | 9,3        |
| 15.01.2025    | 403                                  | 28,2                           | 222                      | 308                    | 0,5                         | 17,7            | 51,5        | 4,1             | 9,4        |
| 20.01.2025    | 385                                  | 28,4                           | 204                      | 317                    | 1,0                         | 17,7            | 50,9        | 4,0             | 9,7        |
| 21.01.2025    | 381                                  | 28,4                           | 208                      | 272                    | 1,0                         | 17,4            | 52,2        | 4,4             | 9,4        |
| 27.01.2025    | 395                                  | 28,4                           | 206                      | 269                    | 1,0                         | 17,7            | 51,8        | 3,7             | 9,6        |
| 30.01.2025    | 392                                  | 28,2                           | 203                      | 261                    | 1,0                         | 17,7            | 51,7        | 3,8             | 9,4        |
| ---           | ---                                  | ---                            | ---                      | ---                    | ---                         | ---             | ---         | ---             | ---        |
| <b>Průměr</b> | <b>398</b>                           | <b>28,4</b>                    | <b>214</b>               | <b>305</b>             | <b>0,9</b>                  | <b>17,2</b>     | <b>51,5</b> | <b>3,9</b>      | <b>9,5</b> |
| Max           | 415                                  | 28,6                           | 230                      | 348                    | 1,0                         | 17,7            | 52,2        | 4,4             | 9,7        |
| Min           | 381                                  | 28,2                           | 203                      | 261                    | 0,5                         | 15,8            | 50,8        | 3,5             | 9,3        |
| Std           | 10                                   | 0,1                            | 9                        | 30                     | 0,2                         | 0,6             | 0,5         | 0,3             | 0,2        |
| Četnost       | 9                                    | 9                              | 9                        | 9                      | 9                           | 9               | 9           | 9               | 9          |
| Norma-min     |                                      |                                | 75                       |                        |                             | 10,0            | 32,5        |                 |            |
| Norma-max     |                                      |                                |                          |                        | 10                          |                 | 52,5        |                 |            |

### Chemické vlastnosti

| Datum         | SiO <sub>2</sub> | Al <sub>2</sub> O <sub>3</sub> | Fe <sub>2</sub> O <sub>3</sub> | CaO          | MgO         | K <sub>2</sub> O | Na <sub>2</sub> O | Obsah síranů<br>(jako SO <sub>3</sub> ) | Na <sub>2</sub> O ekv. | Obsah Cl     | Ztráta žháním | Nerozpuštěný<br>zbytek | Vodorozpuštěný<br>chrom (Cr <sup>6+</sup> ) | C <sub>3</sub> A ve slínku |
|---------------|------------------|--------------------------------|--------------------------------|--------------|-------------|------------------|-------------------|---|------------------------|--------------|---------------|------------------------|---|----------------------------|
| Jednotka      | [%]              | [%]                            | [%]                            | [%]          | [%]         | [%]              | [%]               | [%]                                     | [%]                    | [%]          | [%]           | [%]                    | [ppm]                                       | [%]                        |
| 01.01.2025    | 23,69            | 5,49                           | 2,29                           | 55,55        | 3,00        | 0,70             | 0,21              | 2,53                                    | 0,67                   | 0,052        | ---           | ---                    | ---   | 7,53                       |
| 06.01.2025    | 24,07            | 5,60                           | 2,27                           | 55,54        | 3,14        | 0,70             | 0,22              | 2,54                                    | 0,68                   | 0,053        | ---           | ---                    | ---   | 7,53                       |
| 08.01.2025    | 24,08            | 5,63                           | 2,28                           | 55,79        | 3,20        | 0,71             | 0,22              | 2,56                                    | 0,69                   | 0,059        | ---           | ---                    | ---   | 7,53                       |
| 13.01.2025    | 23,76            | 5,53                           | 2,30                           | 55,64        | 3,09        | 0,72             | 0,21              | 2,56                                    | 0,68                   | 0,064        | ---           | ---                    | ---   | 7,53                       |
| 15.01.2025    | 24,20            | 5,64                           | 2,27                           | 55,67        | 3,26        | 0,72             | 0,22              | 2,55                                    | 0,69                   | 0,062        | ---           | ---                    | ---   | 7,53                       |
| 20.01.2025    | 23,96            | 5,50                           | 2,29                           | 55,39        | 3,33        | 0,65             | 0,21              | 2,50                                    | 0,64                   | 0,032        | ---           | ---                    | ---   | 7,53                       |
| 21.01.2025    | 23,73            | 5,53                           | 2,33                           | 55,87        | 3,34        | 0,67             | 0,21              | 2,60                                    | 0,65                   | 0,032        | ---           | ---                    | ---   | 7,53                       |
| 27.01.2025    | 23,73            | 5,52                           | 2,34                           | 55,82        | 3,30        | 0,67             | 0,21              | 2,53                                    | 0,65                   | 0,039        | ---           | ---                    | ---   | 7,53                       |
| 30.01.2025    | 23,76            | 5,53                           | 2,34                           | 56,07        | 3,30        | 0,67             | 0,21              | 2,59                                    | 0,65                   | 0,034        | ---           | ---                    | ---   | 7,53                       |
| ---           | ---              | ---                            | ---                            | ---          | ---         | ---              | ---               | ---                                     | ---                    | ---          | ---           | ---                    | ---   | ---                        |
| <b>Průměr</b> | <b>23,89</b>     | <b>5,55</b>                    | <b>2,30</b>                    | <b>55,70</b> | <b>3,22</b> | <b>0,69</b>      | <b>0,21</b>       | <b>2,55</b>                             | <b>0,67</b>            | <b>0,047</b> | <b>---</b>    | <b>---</b>             | <b>---</b>                                  | <b>7,53</b>                |
| Max           | 24,20            | 5,64                           | 2,34                           | 56,07        | 3,34        | 0,72             | 0,22              | 2,60                                    | 0,69                   | 0,064        | ---           | ---                    | ---   | 7,53                       |
| Min           | 23,69            | 5,49                           | 2,27                           | 55,39        | 3,00        | 0,65             | 0,21              | 2,50                                    | 0,64                   | 0,032        | ---           | ---                    | ---   | 7,53                       |
| Std           | 0,18             | 0,05                           | 0,03                           | 0,19         | 0,11        | 0,02             | 0,00              | 0,03                                    | 0,02                   | 0,012        | ---           | ---                    | ---   | 0,00                       |
| Četnost       | 9                | 9                              | 9                              | 9            | 9           | 9                | 9                 | 9                                       | 9                      | 9            | 0             | 0                      | 0   | 9                          |
| Norma-min     |                  |                                |                                |              |             |                  |                   |   |                        |              |               |                        |   |                            |
| Norma-max     |                  |                                |                                |              |             |                  |                   | 3,5                                     |                        | 0,10         |               |                        |   |                            |

V Mokré dne : 07.03.2025

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