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Mokrá 359
664 04 Mokrá-Horákov

# Statistické hodnocení kvality cementu

dle EN 197-1

**Cement: CEM II/A-LL 52,5 R** Období: Od: **01.12.2023**

Závod: **Mokrá** Do: **31.12.2023**

## Mechanické a fyzikální vlastnosti

| Datum | Měrný povrch | Normání konzistence | Počátek tuhnutí | Konec tuhnutí | Objemová stálost | Pevnost v tlaku | | Pevnost v ohybu | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | 2 dny | 28 dní | 2 dny | 28 dní |
| Jednotka | [ m²/kg ] | [ % ] | [ min ] | [ min ] | [ mm ] | [ MPa ] | [ MPa ] | [ MPa ] | [ MPa ] |
| 04.12.2023 | 582 | 32,0 | 161 | 252 | 0,0 | 36,4 | 60,3 | 7,3 | 7,9 |
| 05.12.2023 | 555 | 31,2 | 186 | 252 | 1,0 | 38,2 | 61,2 | 7,5 | 8,4 |
| 11.12.2023 | 549 | 32,0 | 192 | 273 | 1,5 | 38,0 | 64,8 | 7,4 | 8,3 |
| 12.12.2023 | 584 | 31,8 | 185 | 253 | 1,0 | 38,9 | 64,6 | 7,7 | 8,6 |
| 18.12.2023 | 573 | 31,8 | 157 | 252 | 0,5 | 36,5 | 61,3 | 7,0 | 8,1 |
| 20.12.2023 | 566 | 31,8 | 159 | 232 | 0,0 | 36,9 | 64,7 | 7,1 | 8,9 |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Průměr** | **568** | **31,8** | **173** | **252** | **0,7** | **37,5** | **62,8** | **7,3** | **8,4** |
| Max | 584 | 32,0 | 192 | 273 | 1,5 | 38,9 | 64,8 | 7,7 | 8,9 |
| Min | 549 | 31,2 | 157 | 232 | 0,0 | 36,4 | 60,3 | 7,0 | 7,9 |
| Std | 13 | 0,3 | 15 | 12 | 0,6 | 0,9 | 1,9 | 0,2 | 0,3 |
| Četnost | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 |
| Norma-min | | | 45 | | | 30,0 | 52,5 | | |
| Norma-max | | | | | 10 | | - | | |

## Chemické vlastnosti

| Datum | $SiO_2$ | $Al_2O_3$ | $Fe_2O_3$ | CaO | MgO | $K_2O$ | $Na_2O$ | Obsah síranů (jako $SO_3$) | $Na_2O$ ekv. | Obsah Cl | Ztráta žíháním | Nerozpustný zbytek | Vodorozpustný chrom ($Cr^{6+}$) | $C_3A$ ve slínku |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Jednotka | [ % ] | [ % ] | [ % ] | [ % ] | [ % ] | [ % ] | [ % ] | [ % ] | [ % ] | [ % ] | [ % ] | [ % ] | [ ppm ] | [ % ] |
| 04.12.2023 | 18,65 | 4,69 | 3,16 | 62,73 | 1,48 | 0,77 | 0,14 | 2,94 | 0,65 | 0,039 | --- | --- | --- | 6,69 |
| 05.12.2023 | 18,73 | 4,71 | 3,12 | 62,52 | 1,50 | 0,78 | 0,14 | 2,88 | 0,65 | 0,041 | --- | --- | --- | 6,69 |
| 11.12.2023 | 18,84 | 4,70 | 3,20 | 63,51 | 1,35 | 0,78 | 0,13 | 2,98 | 0,64 | 0,032 | --- | --- | --- | 6,69 |
| 12.12.2023 | 18,34 | 4,65 | 3,16 | 62,68 | 1,49 | 0,77 | 0,14 | 2,94 | 0,65 | 0,030 | --- | --- | --- | 6,69 |
| 18.12.2023 | 18,45 | 4,65 | 3,12 | 62,78 | 1,38 | 0,76 | 0,13 | 3,07 | 0,63 | 0,032 | --- | --- | --- | 6,69 |
| 20.12.2023 | 18,60 | 4,66 | 3,11 | 62,97 | 1,37 | 0,76 | 0,13 | 3,06 | 0,63 | 0,033 | --- | --- | --- | 6,69 |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Průměr** | **18,60** | **4,68** | **3,15** | **62,87** | **1,43** | **0,77** | **0,14** | **2,98** | **0,64** | **0,035** | **---** | **---** | **---** | **6,69** |
| Max | 18,84 | 4,71 | 3,20 | 63,51 | 1,50 | 0,78 | 0,14 | 3,07 | 0,65 | 0,041 | --- | --- | --- | 6,69 |
| Min | 18,34 | 4,65 | 3,11 | 62,52 | 1,35 | 0,76 | 0,13 | 2,88 | 0,63 | 0,030 | --- | --- | --- | 6,69 |
| Std | 0,17 | 0,02 | 0,03 | 0,32 | 0,06 | 0,01 | 0,00 | 0,07 | 0,01 | 0,004 | --- | --- | --- | 0,00 |
| Četnost | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 0 | 0 | 0 | 6 |
| Norma-min | | | | | | | | | | | | | | |
| Norma-max | | | | | | | | 4,0 | | 0,10 | | | | |

V Mokré dne : 12.02.2024

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