

Českomoravský cement, a.s.  
Mokrá 359  
664 04 Mokrá-Horákov

## Statistické hodnocení kvality cementu

dle EN 197-1

**Cement: CEM II/B-M (V-LL) 32,5 R**

Období: Od: **01/11/2023**

Závod: **Mokrá**

Do: **30/11/2023**

### Mechanické a fyzikální vlastnosti

Datum	Měrný povrch	Normální konzistence	Počátek tuhnutí	Konec tuhnutí	Objemová stálost	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 ]
01/11/2023	510	31.8	255	393	1.0	18.5	42.1	4.1	7.9
06/11/2023	507	31.2	234	376	1.0	20.4	46.7	4.6	8.7
15/11/2023	513	32.2	240	336	0.5	19.9	46.3	4.4	8.5
16/11/2023	519	32.0	250	380	1.0	19.6	43.9	4.2	7.9
19/11/2023	507	32.0	249	377	0.5	19.2	43.8	4.2	8.1
21/11/2023	509	32.2	258	373	0.5	21.7	47.7	4.8	8.5
23/11/2023	530	30.4	224	335	0.5	20.7	43.9	4.8	8.5
29/11/2023	539	31.6	231	329	1.0	18.9	43.2	4.7	8.1
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<b>Průměr</b>	<b>517</b>	<b>31.7</b>	<b>243</b>	<b>362</b>	<b>0.8</b>	<b>19.9</b>	<b>44.7</b>	<b>4.5</b>	<b>8.3</b>
Max	539	32.2	258	393	1.0	21.7	47.7	4.8	8.7
Min	507	30.4	224	329	0.5	18.5	42.1	4.1	7.9
Std	11	0.6	11	23	0.3	1.0	1.8	0.3	0.3
Četnost	8	8	8	8	8	8	8	8	8
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 (jako SO <sub>3</sub> )	Na <sub>2</sub> O ekv.	Obsah Cl	Ztráta žháním	Nerozpuštěný zbytek	Vodorozpuštěný chrom (Cr <sup>6+</sup> )	C <sub>3</sub> A ve slínku
Jednotka	[ % ]	[ % ]	[ % ]	[ % ]	[ % ]	[ % ]	[ % ]	[ % ]	[ % ]	[ % ]	[ % ]	[ % ]	[ ppm ]	[ % ]
01/11/2023	21.47	7.37	3.42	51.43	1.15	0.80	0.13	2.61	0.66	0.052	---	---	---	6.76
06/11/2023	21.89	7.58	3.46	51.83	1.26	0.81	0.14	2.67	0.67	0.055	---	---	0.05	6.98
15/11/2023	21.91	7.51	3.49	51.95	1.29	0.80	0.13	2.67	0.66	0.060	---	---	---	6.98
16/11/2023	21.84	7.42	3.50	52.03	1.33	0.81	0.13	2.68	0.66	0.062	---	---	---	6.98
19/11/2023	21.49	7.27	3.63	52.24	1.32	0.83	0.14	2.67	0.69	0.057	---	---	---	6.69
21/11/2023	21.87	7.51	3.50	51.88	1.28	0.80	0.13	2.67	0.66	0.062	---	---	0.00	6.69
23/11/2023	21.65	7.59	3.75	51.73	1.26	0.87	0.14	2.65	0.71	0.065	---	---	---	6.69
29/11/2023	21.94	7.49	3.44	51.98	1.29	0.80	0.13	2.67	0.66	0.059	---	---	---	6.69
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<b>Průměr</b>	<b>21.76</b>	<b>7.47</b>	<b>3.52</b>	<b>51.88</b>	<b>1.27</b>	<b>0.82</b>	<b>0.13</b>	<b>2.66</b>	<b>0.67</b>	<b>0.059</b>	<b>---</b>	<b>---</b>	<b>0.025</b>	<b>6.81</b>
Max	21.94	7.59	3.75	52.24	1.33	0.87	0.14	2.68	0.71	0.065	---	---	0.050	6.98
Min	21.47	7.27	3.42	51.43	1.15	0.80	0.13	2.61	0.66	0.052	---	---	0.000	6.69
Std	0.18	0.10	0.10	0.22	0.05	0.02	0.00	0.02	0.02	0.004	---	---	0.025	0.13
Četnost	8	8	8	8	8	8	8	8	8	8	0	0	2	8
Norma-min														
Norma-max								3.5		0.10				

V Mokrém dne : 31/12/2023

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