

... , ... , ... ,
 ... , ... ,
 ... , ... ,
 ... , ... , («
 ... »)

. 1.

1

1700 °

1550-1650 °

The influence of firing temperature and alumina type on calcium hexaluminate synthesis in lightweight refractories is investigated. It is established that at 1700 ° synthesis ends irrespective of dispersity and phase composition of alumina in the initial mix. It is efficient to use alumina of G grade and to fire products at temperature range of 1550-1650 ° for production of calcium hexaluminate lightweight refractories.

	-00					Al ₂ O ₃ ()	() ³
	-		-				
0	-	-	-	-	-	+	+
1	+	-	+	-	+	-	-
2	-	-	+	+	+	-	-
3	+	+	-	-	+	-	-

-Al₂O₃

5

1850 ° [1, 2].

(6),

[3]

1600 °

[4],

6

1200 °

(2)

2-

[5, 6]

[7]:

1400 °

1600 °

7,5 %

3

Al₂O₃ ()

CaCO₃ ()

1550, 1650 1700 °

1200, 1400,

2

1

1,754 1,767.

-8.
N = 1,730,

-1,5

(Ni-)
2 = 4 - 120 .

1200 °

Al₂O₃

4-12

[4],

1400 °

35 %

1550, 1650 1700 °

6

1700 °

14-16 %

Al₂O₃

1 -

2 -

4

1700 °

«1», «2», «3»

«0»,

1200 °

«1» «3»,

-Al₂O₃.

2

	, °	, / 3	, %		
			A ₆	-Al ₂ O ₃	A ₂
0	1400	1,43		65-70	30-35*
1		0,98	45-50	25-30	20-25
2		0,94	75-80	10-15	8-10
3		1,15	50-55	30-35	8-12
0	1550	1,62	50-55	30-35	12-15
1		1,26	86-88	10-13	1-2
2		1,01	84-87	10-14	2-3
3		1,22	88-92	7-10	1
0	1650	1,80	68-72	22-28	5-7
1		1,30	88-92	7-10	1
2		1,13	84-87	10-14	2-3
3		1,26	90-93	7-10	
0	1700	2,43	84-86	14-16	
1		1,54	90-93	7-10	
2		1,46	90-93	7-10	
3		1,34	90-93	7-10	

* - A₂

1400 ° (1,)

«1», «2» «3»

«1» «3»

Al₂O₃

-00,

«2»,

Al₂O₃

-Al₂O₃

Al₂O₃

A₂ (

(. 2)

Al₂O₃).

«2» «3»,

A₂

8-10

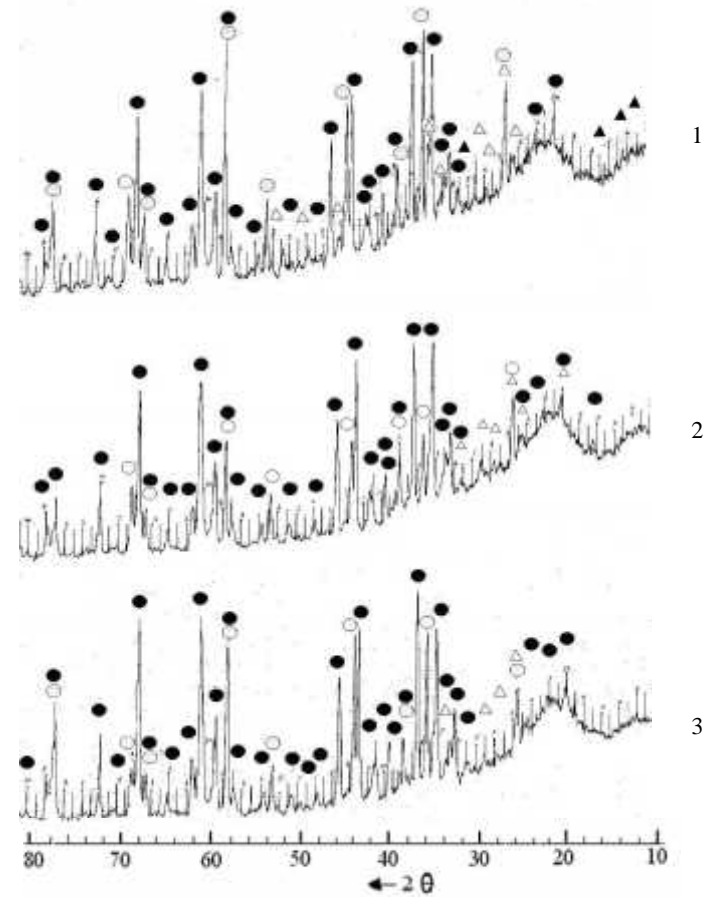
(12) %

«1»

5

(«1»)

A₂.



1.

1,2,3,

1400 :

1, 2, 3 - CA₆, - I₂O₃

1400 °

1550 °

-Al₂O₃

1650 °

1550-1650

«3»,

6

6

1700 °
: 90-93 % 6 7-10 % -Al₂O₃.

1700 °

4

1550-1650 °
«3»³,

6 (~ 90 %),

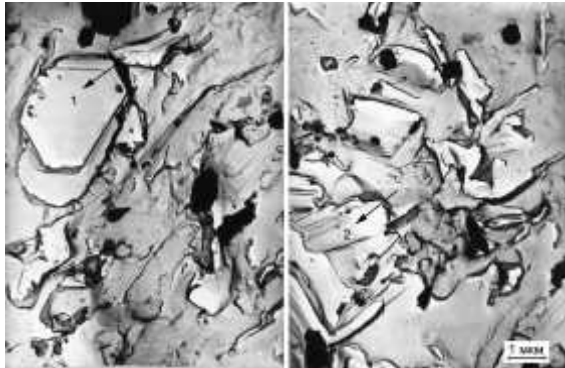
(. 2):

(2).
6

(1),

6 - 1-3

0,8 3-5



.2.
1 -

«3»,

6; 2 -

6

[1-3].

1550-1650 °

.].

.1

[5, 6

3 -

: 1.
, 1970. - 544 . 2.
/ , 1992. - 172 .
3. -Al₂O₃ // - 1949. - . 64,
4. - . 529-532. 4. // - .
, 1963. — . 7. - . 318-329. 5. *Cinibulk M.K.* Effect of precursors and dopants on the
synthesis and grain growth of calcium hexaluminate // *J. Amer. Ceram. Soc.* - 1998. - Vol. 81, No 12. -
P. 3157-3168. 6. Low-temperature synthesis of calcium hexaaluminate / *Vipin Kant Singh, Krishna
Kumar Sharma* // *J. Amer. Ceram. Soc.* - 2002. - Vol. 84, No 4. - P. 769-772. 7.
, 1961. - . 242-252. 8.
1,1 / ³ /
», - : , 2004. - 104. - . 3-9. «

16.09.06.

621.928+622.74

The analysis of job process and modeling of mathematical for vibrating screen with hydraulic drive for transport and classification of various a mountain material are given, on the basis analyse of which the studying of quality and quantity dependants of technical characteristics of equipment from constructive, power and energy parameters is taken place.