

666.762.16

• • , • • , • • , , ,  
• • , • • , • • , ,  
• • , - , « »

-

-

-

-

Findings of investigations thermal-mechanical characteristics of experimental unshaped refractories for steel teeming ladle are presented. Principal physical-mechanical properties of the developed concretes are offered.

[1].

( )

-

-

-

• ,

,

•

,

-

,

-

•

,

-

[2, 3].

[4, 5]

-

60 – 70 %

-

,

,

,

,

[6].

[7],

[8 – 11].

$Al_2O_3$ .  $CaO \cdot Al_2O_3 - CaO \cdot 2Al_2O_3 - MgO \cdot Al_2O_3$   $1000^\circ$   $CaO - MgO -$   
( ) 20 ( 10  
[9]  
( 0,25 g) 28  
25 -  
80 %  
4071.1-94.  
1 : 1 : 2.  
[12].

[13].

4 12 . %

12 . %  
1350° ( 4 )

– .2.

. 1.,

1

	, . %
	76,0 – 82,5
	11,0 – 6,0
	1,3 – 0,5

( W = 8 %)

0,3 g)

28

( 4 4 4) · 10<sup>-2</sup> ,

(

–4

).

(  
 ( . 1))  
 . 3

2

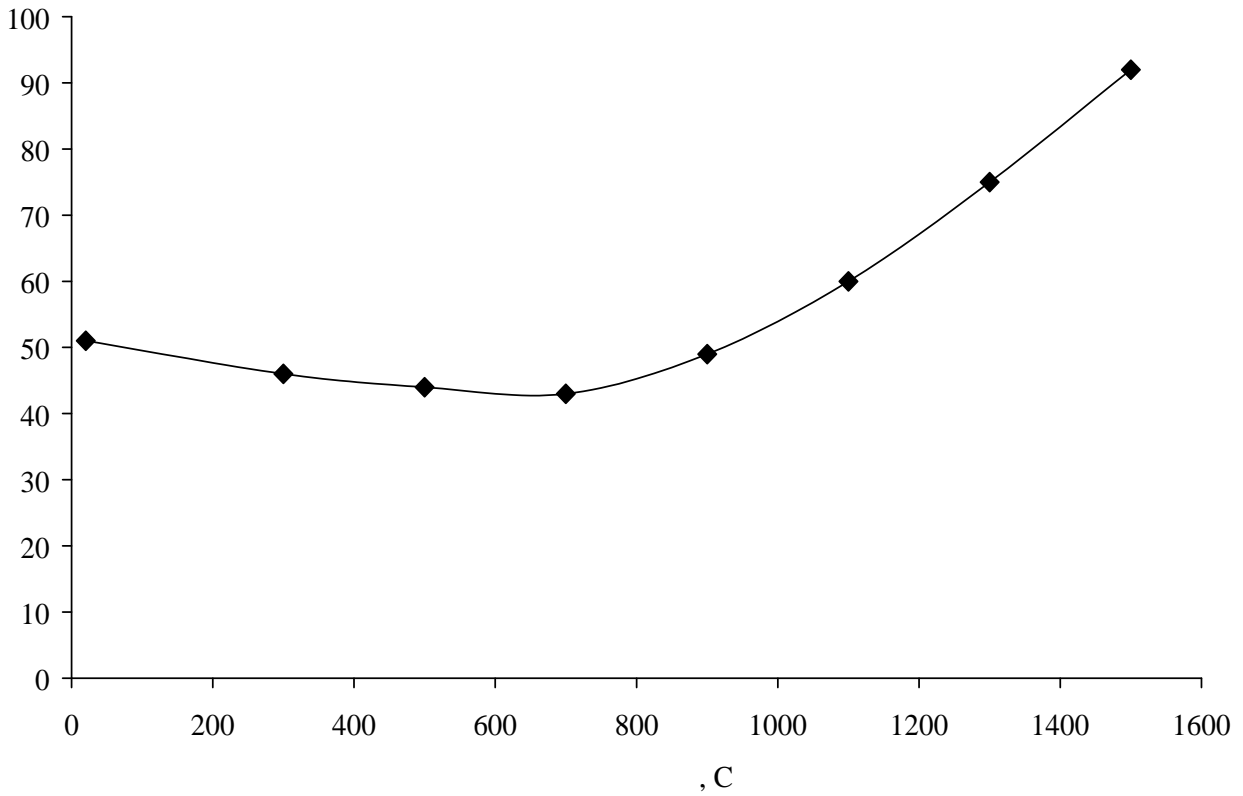
3	18,0 – 20,0
7	33,0 – 35, 0
28	49,0 – 52,0
(4 .) 1350° ,	83,0 – 87,0
, %	7,2 – 8,0
,	> 25
,°	≥ 1600
° 0,2	≥ 1450

3

, °C	,	, %
20	51	–
300	46	9,8
500	44	13,7
700	43	15,7
900	49	3,9
1100	60	–
1300	75	–
1500	92	–

15,7 %  
 .  
 300 800° . 700°  
 .  
 900°  
 ,

1500 ° 80 %



—

, -

( 83 87 ),

80 %

( 16 %)

-

: 1.

2002. — . 102. — . 77 — 81. 2.

— 69. 3.

. — 2004. — 4. — . 11 — 12. 4.

— 54. 5.

. – 2003. – 7. – . 31 – 37. **6.** . . . . .  
 : . . . . . : 05.23.05 : 05.17.11 / . . . . .  
 - . - , 2004. – 18 . **7.** . . . . .  
 // . – 1999. – 8. – . 35 – 42.  
**8.** . . . . . // . . . . .  
 . - . . . . « - . . . . .  
 ».- : , 2006. – . 94. **9.** . . . . . -  
 . . . . . // . . . . .  
 « . . . . . ».- : , 2006. – .  
 106. – . 71 – 77. **10.** . . . . . -  
 // i « I». i -  
 . . . . . « i i , i i i i ».- i : « I». – 2005, 14. –  
 . 121 – 126. **11.** . . . . . -  
 // i  
 « I». i . . . . . « i i , i i i i ».- i :  
 « I». – 2006, 13. – . 16 – 24. **12.** . . . . . -  
 // -  
 . – 2007. – 7. – . 35 – 39. **13.** . 80369 , 04  
 35/66, 04 35/18. : . 80369 , 04 35/66, 04 35/18 -  
 . . . . .  
 ( ) ; « ».- 2006 05903; . 29.05.06; . 10.09.07, . 14. – 6 .

15.10.07

621.357.7

. . . . . , . . . . . , . . . . . ,  
 . . . . . , « »

3 – 4,5

The estimation of an opportunity of the weaved electrodes surface development is resulted. Dependences of surface development factor on a step of the weaving scheme and amount of semitoruses are received at the use of a wire of different diameter. It is displayed, that the weaved electrode surface can be explicated in 3 – 4,5 time after a ratio to the flat electrode surface area.