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### 539.3

- • , . . , ( . ) ,
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The dimensional-time evolution of the ultrasonic impulses at the powder like materials as dispersive fractal media is discussed.

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...), [1].

( -, - ).

( ) [2].

[3],  
[4, 5].

( . . )

[6].

( )

( ) ( ).

( / ( . . )

( ))

... ( , )

( 280-  
35 m<sup>2</sup>/kg ) s 3

630 s > 100 m<sup>2</sup>/kg.

( )

[7].

N<sub>L</sub>

:

$$N_L = u^{-D_L}, \tag{1}$$

$D_L$  — ,  $u$  — .

$\ln N_L$   $\ln u$  ) ( . -  
 ) . -

$D_L$  1,23  $s = 200 \text{ m}^2/\text{kg}$  1,16  $s = 35 \text{ m}^2/\text{kg}$ .

$D_S$

( )  $N_S$ ,  
 $u$   
 .  
 ( ) -

$D_S$  1,582  $s = 200 \text{ m}^2/\text{kg}$  1,784  $s = 35 \text{ m}^2/\text{kg}$ .  
 ( ) . -

( ) ,  
 , , ,  
 ( ),

65...70 kHz -

( ) 20...30 mm. ,  
 ,

$\ln V$  ( - )  
 $\ln d$  ( -

) :

$$\ln V = 0,1 \cdot \ln d + 6,65 \tag{2}$$

( )

( - )

$x$

$\tilde{V}$

$u$

:

$$\int \dots \frac{\partial^2 u}{\partial t^2} d\tilde{V} = k \cdot \int \frac{\partial^{2D} u}{\partial x^{2D}} dS. \quad (2)$$

... -

,  $k -$

( )

( ).

,

[5].

(2)

,

:

$$\frac{\partial^2 u}{\partial t^2} = c^2 \cdot \frac{\partial^{2D} u}{\partial x^{2D}}, \quad (3)$$

$c^2 = k / \dots, 1 < D < 2.$

[8].

[9]

(3)

:

$$u = M(z; S), \quad z = |x| / (c \cdot t^S), \quad S = 2 - D,$$

$$M(z; S) = \sum_{n=0}^{\infty} \frac{(-1)^n \cdot z^n}{[-Sn + (1 - S)]}. \quad (4)$$

(2)

( ):



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In article, results of bench and industrial researches of technical characteristics and work capacity the vibrating roller classifier when the mountain weight has high humidity are stated and there are its difficulties screening.