

622.74

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10-16 .

Selection and arrangement of crushing and grinding circuits , use of equipment and operation schedules are to be directed at the main object – the most complete selectivity in liberation of minerals.

These objects may be achieved by the following means:

- Advanced methods of blast mining providing for generation of embryonic fractures in rock boulders;
- Use of electric pulse disintegration on ore streams fed to the mills;
- Use of impact (centrifugal) crushing at pre-grinding stages;
- Use of efficient break-up operations at upflow stages to produce crushed product of 10-16mm size.

Principal methods for intensification of ball grinding operation are discussed below.

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2 5 . / , - 20  
 40 . / . ( 40 )  
 100 - 150 . / .

6-10 , 20-30 ,

-2200- 5( 6).

20-25

14-16 ( )  
- 2200

8-10 .

70 « - »  
12 .

1. :

40-45 %  
28-35 %

( : )

2. , , . , .

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- ;
- . .

3. [2, 3].

4. , , , . , , , . 15 – 20 % [4].

5. 55 – 75% . , 80 – 85% . [5] 59% 69 – 80% 30 – 50% . ,

6.

(45 – 47% )

38 – 43%

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( , )

( 70 )

( , )

5 15 ,

( ),

5 ( 15 ) .

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( ) ( 5 15 )

15 – 40 ,

(40 – 70 ).

7.

:  $Q = kL$ .

[6],

$Q = k L^n$ , ,  $n = 0,87$  (L) -  
 (D) 0,5;  $n = 0,85$   $L/D = 1 - 2$ ;  $n = 0,84$   $L/D = 5$ . -  
 $n = 0,85$ . -

$$Q_2 / Q_1 = (L_2 / L_1)^{0,85}.$$

8.

50 %.

50 %

(7 – 10%),

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II

30-40%

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