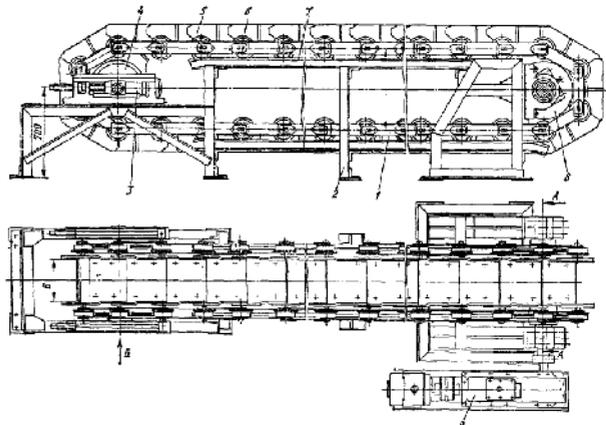




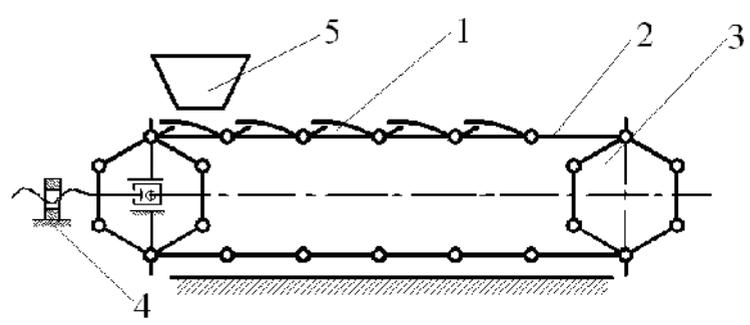


" - " (32 ).



.2 :  
 1 - , 2 - , 3 - , 4 - , 5 - ,  
 6 - , 7 - , 8 - , 9 -

1 ( . 2),  
 8 4,  
 6 7, 2.  
 ( ) 9  
 , — —  
 3. 5,  
 ,  
 (1 ... 2  
 ),



.3 :  
 1 - ; 2 - ; 3 -  
 ; 4 - ; 5 - ( .3)  
 5 ,



" - " (32 ).

.  
,  
. 4-10 . ,

h.  
: 400, 500, 650, 800, 1000, 1200, 1400, 1600 ;  
: 80, 100, 125, 160, 200, 250, 315, 355, 400, 450 500 .

— , ( , ) .  
,  
.  
( ) -  
(  
0,25 / ).  
1,6-2 , = 320-2000 .

, - 4-6 .

( ) ;

- ;
- ;
- ;
- ;
- .

22281-92

— < 1 / 3;

— = 1-2 / 3;

— > 2 / 3.

h  
( ), h = 100-160 .

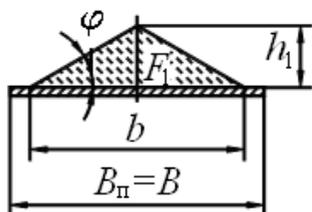
" - " (32 ).

( . 1),  
2 - (7-10°), 2 -

2

	(°)
	'-9
	'-5
	35
	'-6
	'-3
	35

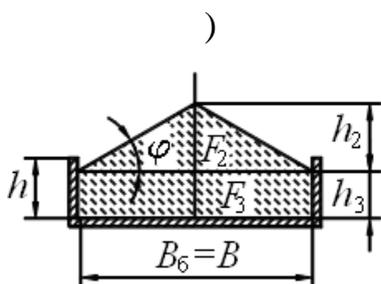
' -



( . 4) ,

; - , b = 0,85 ,

1 -

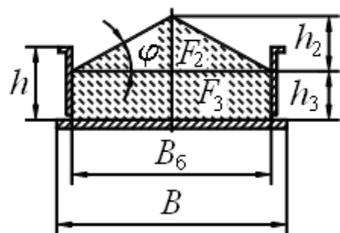


$$F_1 = \frac{bh_1c_2}{2} = \frac{c_2b^2tg\phi_2}{4}$$

h1 - ;

2 - ,

( . 2).



$$Q = 3600F_1\rho v = 648B^2c_2v\rho tg\phi_1$$

- , /<sup>3</sup>;

v - , /;

-

$$= \sqrt{\frac{Q}{648c_2vtg\phi_1}}$$

4

) , )

, )

$$Q = 3600Fv\rho$$

" - " (32 ).

2

10	1,00	1,00
10-20	0,90	0,95
20	0,85	0,90

$$F = F_2 + F_3 = 0,25B^2k \operatorname{tg}\phi_2 + B h ,$$

$$= 0,65 - 0,8 - , ;$$

$$2,7; \quad +200 , \quad 2 - \quad 2 = 1,7.$$

2 =

100-300 .

500

$$( S_{\min} = 1-3 ) [1].$$

$q_0$  ( / )

$$q_0 = 600 B + A,$$

( / )

$$q = \frac{gQ}{3,6v} = \frac{2,73Q}{v}$$

$$S_{\max} = 1,05 \{ S_{\min} + [(q + q_0)L + q_0L ] \pm (q + q_0)H \},$$

" - " (32 ).

$L - L -$   
; ;  
- , .  
«+» - , «-» - .

$$S_{\max} = S + S ,$$

$S - S -$  , ;  
; .  
,

=1,6-

1,8.

$$S = S_{\max}, \quad S = (1,5S_{\max}) / 2.$$

$$= W = S - S_0 ,$$

$S - S_0 -$  , , ; , .

$$N = QL / 367,$$

$L - Q -$  , / ; , ;  
 $0 -$  .

[5].

; ;  
; .

(

:

" - " (32 ) .

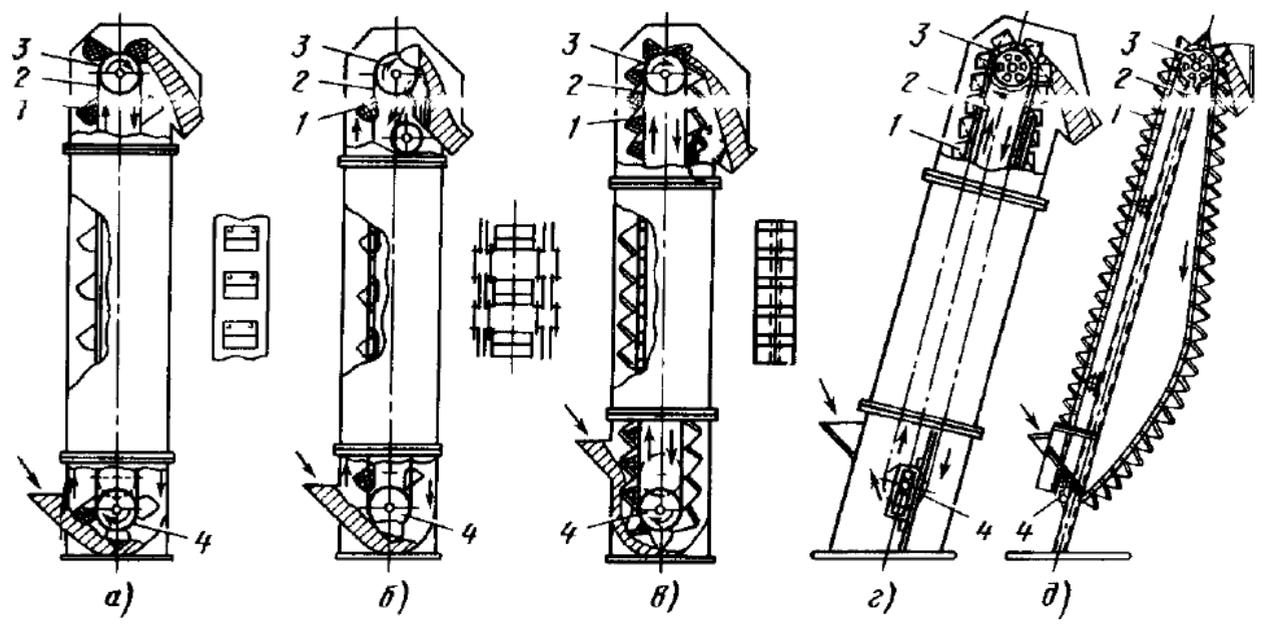
);

; (5-500 <sup>3/</sup> ); (60-75 );

;

500 <sup>3/</sup> .

100



.5  
 )  
 ) )  
 ; )  
 ; )

" - " (32 ).

Q; 100–1000 ; 160–800 ; 0,4–2,5 / ;  
; ( ).

), 2 ( .5,  
1.  
( .5, ) ( .5, , ).  
3 4 ,

, ( .5, )  
( .5, ).

, ( .5, ).

2,5 / 0,4 ... 1 / . 1,25 ...

; — ( ) ( )

( ) ( .5, , ), —  
( .5, , , ).

( .5, ), ( )



" - " (32 ).

,  
 ( ).  
 100 ... 630 . 250  
 , — .  
 6 ... 20.  
 ( 1,0 ... 1,5 ) ; 0,2 ... 0,5  
 0,01 ... 0,02

$$Q_M = \frac{3,6vi\varepsilon\rho}{t},$$

i -  
 e = 0,6 ... 0,9 -

t -

),

(

—

, .

,

.

,

" - " (32) ).

$$l = \xi \cdot a_{max}$$

( $\xi = 2$  ... 50%,  $\xi = 4,5$  ... 80 %),  $\xi = 2,5$  < 10 %;  $\xi = 2,5$  = 11 ... 25 %;  $\xi = 3,25$  = 26 ... 50 %).

$$N = 0,0027 \cdot Q_M \cdot H \left[ 1 + \omega_c \cdot ctg\beta + \frac{q_t \cdot (7,4 \cdot \omega \cdot ctg\beta + A) \cdot v}{Q_M} + \frac{c \cdot v^2}{H} \right]$$

$\omega_c = 0,07$ ,  $\omega_c = 0,11$ .  
 1,1, 0,65, 1,5, 0,85, 0,25

$$q_t = k_K \cdot Q_M, \quad k_K \approx 0,45, \quad k_K \approx 0,6, \quad k_K \approx 0,9$$

$$N_{дв} = \frac{1,25 \cdot N}{\eta_{мех}}$$

— 30 , 60 , 100 / .

" - " (32 ).

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,

:

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,

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:

20° ( );

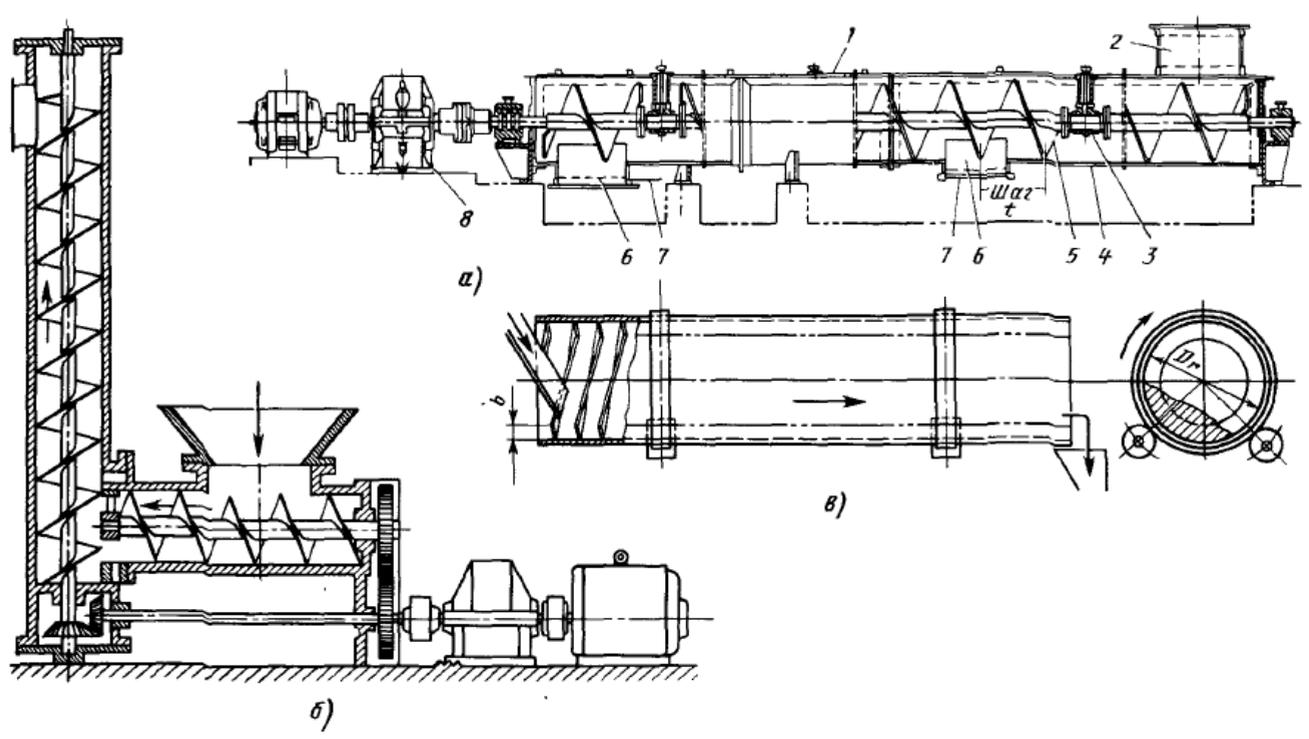
•

•

•

8.

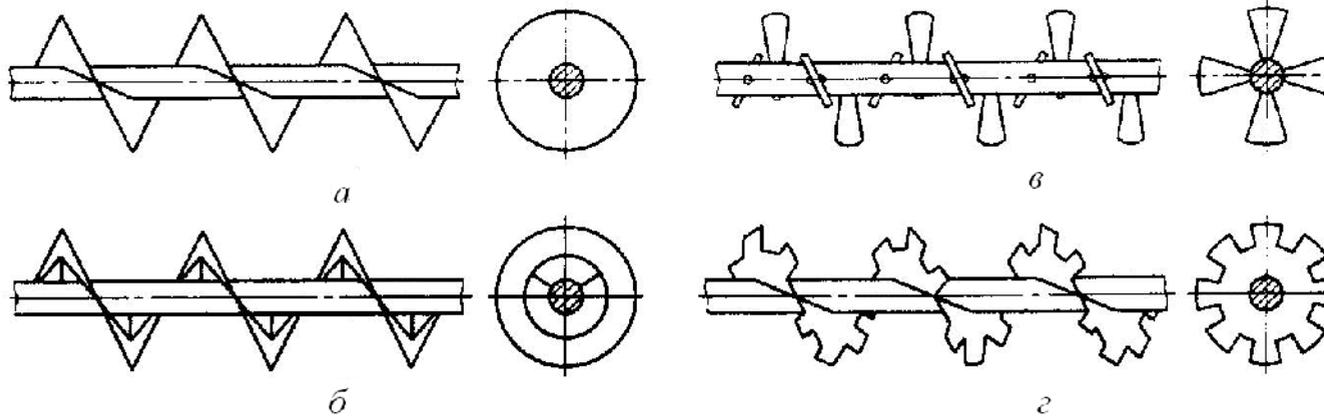
6 7 5, 4 ( . 7, ) 3 2, 1, —



.7

) ; ) ; ),

" - " (32 ).



.8 ; ) ; ) ; ) ; )

- . , . , .

20 .. 40 3/ , 100 3/ .

200; 250; 320; 400; 500; 630; 800 . D S = 0,8 D S = D . : 100; 125; 160;

( ) ,

( . 8).

( , , , , ) = 0,3 ... 0,45 50 ... 120

/ . ) = 0,25 ... 0,4 40 ...

100 / . , ( ) ^ 1 , .. ^ = 0 15 .. 0,3 / ^ ! - - ^ 80 ... / .

( . 2.55).

" - " (32 ).

( . . 2.52, ),  
(

.

,

,

.

.

= (0,2 ... 0,6) \* ( — ).

-

= 0,2 ... 0,3.