# RK-4 RUSUMLI SILKITUVCHI MASHINALARNING TEHNIKAVIY TAVFSIFLARI

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**Annotatsiyasi**

Mashinaning ishlashi kichik o`lchamdagi aylana shakildagi sho`tkalar yordamida uncha katta bo`lmagan pillalarning ip chularini qidirishga asoslangan ,bunda sho`tkalar aylana shaklidagi kanalda harakatlanadi va pillaning uchlari sho`tkaning uzluksiz tasiri ostida iplarning uchlarini avtomatik qidirish, iplarning uchlari topilgan pillalarni ipsiz uchlari bo'lmagan pillalardan saralash. Pillani silkitish uchlari topilmagan pillalarni ajratish va ularni yana shotka kallagiga qaytarish uchun zo`na . Cho'tkasi kallagi,qo`zg`almas ustun atrofida aylanuvchi 8 ta cho`tkalar o`rnatilgan diskdan iborat.

**Kalit so'zlar**:silkituvchi mashina, Cho'tkasi kallagi,qo`zg`almas ustun, Ipsiz pillalar

**Annotation**

The operation of the machine is based on the search for thread Chus of small sized circular saw blades ,in which the shafts move in a circular channel, and the ends of the Saw are automatically searched for the ends of the threads under the continuous influence of the saw, sorting the saw blades found at the ends of the threads from non-threaded ends. The cocoon is zoned to separate the cocoons where the tip of the cocoon has not been found and return them back to the scotka Calla . The brush head consists of a disc with 8 brushes mounted that rotate around the fixed column.

**Keywords**: Shaker machine, Brush Head, non-slip column, Threadless cocoons

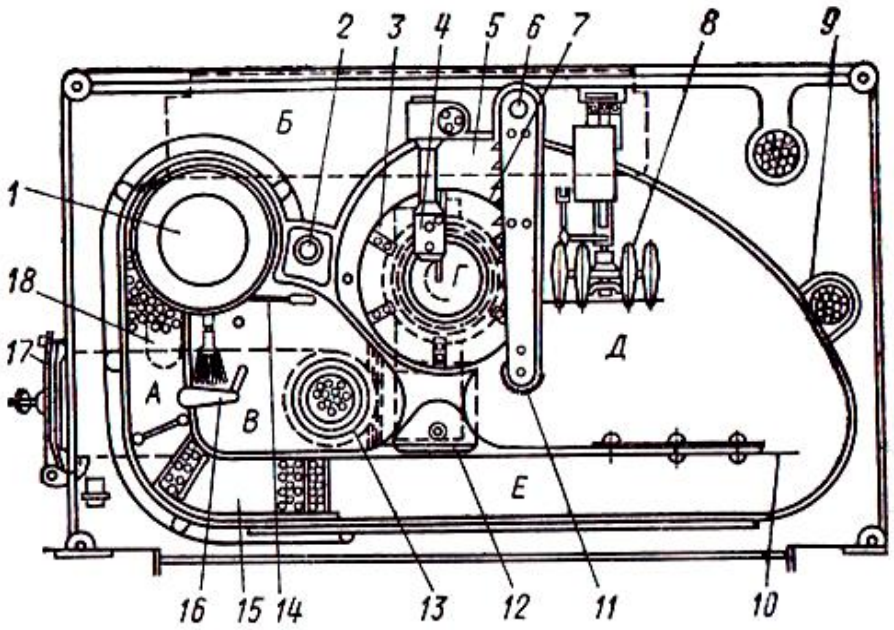
RK-4 silkituvchi mashina (1-rasm) iplarning uchlarini avtomatik qidirish, iplarning uchlari topilgan pillalarni ipsiz uchlari bo'lmagan pillalardan saralash va saralash uchun mo'ljallangan . Mashinaning ishlashi kichik o`lchamdagi aylana shakildagi sho`tkalar yordamida uncha katta bo`lmagan pillalarning ip chularini qidirishga asoslangan ,bunda sho`tkalar aylana shaklidagi kanalda harakatlanadi va pillaning uchlari sho`tkaning uzluksiz tasiri ostida iplarning uchlarini avtomatik

qidirish, iplarning uchlari topilgan pillalarni ipsiz uchlari bo'lmagan pillalardan saralash [1-5].

Havzada plastinka ochilgan – ikki yon ramkaga o'rnatilgan to'shak.mashinaning tog`orasi plitka uyani staninaga o`rnatilgan,stanina o`z navbatida yonlanma ikki yamaga ornatilgan/Tog`ora to`siqlar yordamida bir necha zo`naga ajratilgan;1.iplarning uchlarini qidirish uchun aylana shaklidagi zo`na2.Uchlari topilgan pillalarni yeg`ishtirish uchun trapetsiya shaklidagi zo`na3.

Pillani silkitish uchlari topilmagan pillalarni ajratish va ularni yana shotka kallagiga qaytarish uchun zo`na . Cho'tkasi kallagi,qo`zg`almas ustun atrofida aylanuvchi 8 ta cho`tkalar o`rnatilgan diskdan iborat [6-10].

**1.-rasm. RK-4 silkituvchi mashinasi:**




Bunda;1-cho'tka mexanizmi 2-cho'tka zonasining to'lib toshishi; 3 pichoqli disk; 4-chayqalishmexanizm; 5-chayqalish zonasining tomog'i; 6-ipli tutqich - silkinish zonasining fextavonie; 8-g'altak; 9 zonali toshqin artiblash; 10-damper; 11-ushlagich; 12-qo'l tormozi; 13 silindrli assimilyatsiya tarmog'i trubkasi; 14-sovuq dush; Odonets uchun 15-savat; 16 olinadigan taroq; 17-filtr;18 oval assimilyatsiya aloqasi

Tutqich kichik tishli rulmanga ulangan, katta markaziy vitesga ulangan, vertikal shaftdan o'zaro harakatni oladi. Cho'tkali disk chuvalchang tishli bilan aylantirilgan ichi bo'sh milga o'rnatiladi. Har bir cho'tka tishli uzish moslamasi bilan jihozlangan.

Bundan tashqari, cho'tka boshi taroq zonasidan o'tayotganda cho'tkalarni gorizontal holatga ko'tarish uchun boshqaruv dastagi va qurilmasi bilan jihozlangan. Shayker-bu profil baraban bilan o'zaro ta'sir qiladigan tebranuvchi ikki qo'lli tutqich.

Qurilma korpusga o'ralgan va ulagich bilan jihozlangan (qo'lni boshqarish bilan) va mashinaning umumiy haydovchisidan aylanadi. Tebranuvchi qo'lning ishchi uchi ilgak shakliga ega, u orqali yalang‘'och ip o'tadi.

O'rim-yig'im moslamasi - mashina haydovchisiga olinadigan va ishqalanish bilan bog'langan g'altak. Ip ushlagichi-gorizontal V-kamar, ushlagich bilan yopiladi, u iplarni kamardan olib tashlaydi va ularni igna atrofiga o'rab oladi.

Suv aylanma qurilmasi filtr va nasosdan iborat. Filtr-bu korpusga o'ralgan va cho'tka boshi, taroq va chayqalish joylari bilan naychalar bilan bog'langan to'rli baraban [11-13].

Nasos tarmoq trubkasi bilan pillani silkitish zonasiga ulangan korpus ichida aylanadi. Filial trubkasi oxirida pichoqli konus shaklidagi disk havzada aylanib, zonada radial suv oqimlarini hosil qiladi. Namlik assimilyatsiya qilish moslamasi - tashqi kontur bo'ylab havzani aylanib o'tadigan va tuynukning chiqindi tizimiga ulangan teshilgan korpus.

Sovuq suv quvuri - bu havzaning pastki qismida taroq va ip uchlari orasiga o'rnatilgan qo'l tormozi va dush trubkasi orqali havzaga suv etkazib beradigan qurilma. RK mashinasidagi suv cho'tka boshi sohasida jonli bug 'bilan isitiladi.

Mashina plastinkaning pastki qismidan osilgan alohida elektr motor bilan boshqariladi. Elektr dvigateli V-kamar bilan nasos milini harakatga keltiradi, harakatni mashinaning boshqa barcha mexanizmlariga uzatadi.

Mashinaning barcha ishchi qismlariga (nasosdan tashqari) tishli uzatma mil, mashinaning orqa tomoniga o'rnatilgan maxsus qutiga joylashtiriladi. Kinematik diagrammada cho'tka boshi uchun alohida haydovchi mavjud. Drayv sizga mashinaning ishchi organlari rejimlarini keng o'zgartirish imkonini beradi.

RK-4 mashinasining kamchiliklari quyidagilardan iborat: pillani qo'lda tushirish va yuklash tufayli yuqori mehnat zichligi; pillani qo'lda qo'shimcha tozalash bilan tushirish va pilla sdiriga ipak yigirish natijasida xom ipakning sezilarli darajada yo'qotilishi [14-18].

Bu kamchiliklarni bartaraf etish uchun RK-4 dastgohlari modernizatsiya qilinmoqda, unga simli oldingi va pilla tushirish mashinalari etkazib berilmoqda.

RK tipidagi mashinalarning texnik tavsiflari 1.1 -jadvalda keltirilgan.

1.1 –jadval

**Silkituvchi mashinalarining texnik xususiyatlari**

| Ko‘rsatkichlari | RK-3 | RK-4 | Gunze turiidagi RM |
|---|---|---|---|
| Elektr dvigatelning quvvati, kVt | 1,7 | 1,1 | 1,5 |
| Valning aylanish tezligi, ayl·min$^{-1}$ | 960 | 1420 | - |
| Aylanish tezligi, ayl·min$^{-1}$<br>cho‘tka diski<br>motovila<br>ushlagich | <br>1,0-3,0<br>3,0-8,3<br>40,0 | <br>1,35-0,85<br>0,8-1,23<br>- | <br>2,0<br>3,0<br>- |
| Cho‘tkaning minutdagi yurish soni | 29-101 | 353 | 28,0 |
| Ip ushlagichning xarakat tezligi, m·min$^{-1}$ | 10,0 | 10,0 | 10,0 |
| Yig‘ishtiruvchi qurilmaning o‘rash tezligi, m·min$^{-1}$ | 0,15-0,2 | - | - |
| Ilgakning minutdagi tebranishlarining chastotasi | 1950 | 353 | 400 |
| Cho‘tka kallagi xarakatini uzatish ko‘rinishi | tishli mufta | tishli mufta | konusimon shesternyalar |
| Unumdorlik, quruq pillalarni, kg·s | 10,0 | 15,0 | 10,0-12,5 |

RK-4M dastgohi pilla o'rash mashinasiga pillalarni to'g'ridan-to'g'ri mashina oldiga qo'yadigan saqlash moslamasi bilan ulangan. Ipsiz pillalarni cho'tka boshining uchiga qaytarish kanali mashinaning orqa tomonida joylashgan. Zonadan chiqqandan so'ng, cho'tka iplarning uchlarini oldingi ipga tashlaydi va keyin taroq bilan taraladi. Ipning oldingi ipidan ajratilgan ip qoqib qo'yiladigan ilgakka, u erdan esa g'altakka o'tadi.

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Iplarning ilgakli uchlari bo'lgan pilla, oldingi ipning zonasidan cho'tka boshi bilan sinxron ishlaydigan yuk tushirish moslamasi chayqalish zonasiga o'tkaziladi. Chayqalish zonasidan chiqib ketgach, pilla saralash zonasiga kiradi. Bunda iplarning uchlari topilgan pillalar konveyer tomonidan omborga olib ketiladi va ularning iplarining uchlari tutqich tomonidan ipga o'xshash yalang'och ipga biriktiriladi, ular doimiy tezlikda chiqariladi.

Mashina yuvilmagan pillalarni iplarning uchlari bo'lmagan holda cho'tka boshiga tashish uchun kanalga o'tkazish uchun asbob bilan jihozlangan. Saqlash moslamasi pillani o'rash mashinasining oldingi havzasiga o'tkazish uchun tushirish moslamasi bilan jihozlangan

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