

DISKSIMON ISHCHI ORGANLAR KONSTRUKSIYALARI TAHLILI

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Respublikasi

Annotasiya: Disksimon ishchi organlarning bir necha xil turlari ma'lum bo'lib, ular tuproqqa ishlov berish mashinalarida keng qo'llaniladi. diskimmon ishchi organi uzlukli ariqlar va o'rkachlar hosil qilish uchun qo'llab bo'lmaydi, chunki u o'tgandan so'ng har xil balandlikdagi o'rkachlar yuzaga keladi.

Kalit so'zlar: nishabli, disk, o'rkachlar, uzlukli ariqlar, sferik disk, balandlik.

JUSTIFICATION OF THE OPTIMAL PARAMETERS OF THE RIPPER

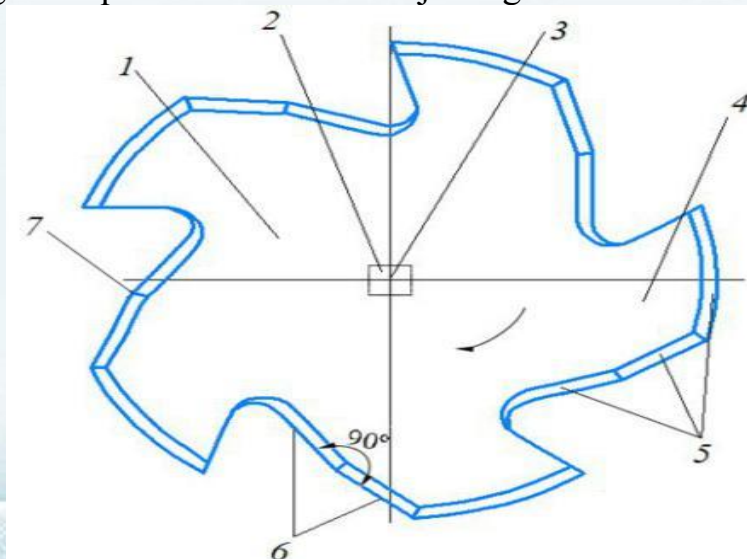
Abstract: There are several different types of disc working tools that are widely used in tillage machines. the disk-shaped working body cannot be used to create continuous ditches and sickles, since after its passage, sickles of different heights are formed.

Keywords: sloping, disc, ducks, continuous ditches, spherical disk, height.

Kirish. Mamlakatimizda hozirgi kungacha nishabli dalalarga ag'dargichli asosiy ishlov berish bilan birga dala yuzasida o'rkachlar va uzlukli ariqlar hamda ariqlarda to'siqlar hosil qilish texnologiyasi va uni amalga oshiradigan pluglarni ishlab chiqish, ular tomonidan bajariladigan texnologik jarayonlarni o'rganish, ishchi qismlarni asoslash bo'yicha yetarli darajada tadqiqotlar o'tkazilmagan.

Tahlil va natijalar: Disksimon ishchi organlarning bir necha xil turlari ma'lum bo'lib, ular tuproqqa ishlov berish mashinalarida keng qo'llaniladi.

Rossiya Federatsiyasida G.P.Balbichev va boshqalar tomonidan [71] aylanish tekisligiga parallel tekislikda periferiya qismi lopast shaklida qilingan diskimmon ishchi organ taklif qilingan. Uning har bir lopastining oldingi qirrasi radius yo'nalishidan uning aylanish tomoniga qiya qilingan. Lopastning oldingi qirrasi siniq chiziq ko'rinishida bo'lib, yuqori qismi 90° ni tashkil qiladi. Jan-Sharl Javerlyak [72] tomonidan (1-rasm) beshta qabariq lopastga ega bo'lgan va egri qirg'ich bilan jihozlangan sferik disk taklif qilingan. Ushbu disk diskimmon pluglarda qo'llanish uchun mo'ljallangan.



1-rasm. RU105108 patent bo'yicha disksimon ishchi organ

2-rasmda keltirilgan disk logarifm spirali shaklida qilingan tishlardan iborat, uning formulasi [72]

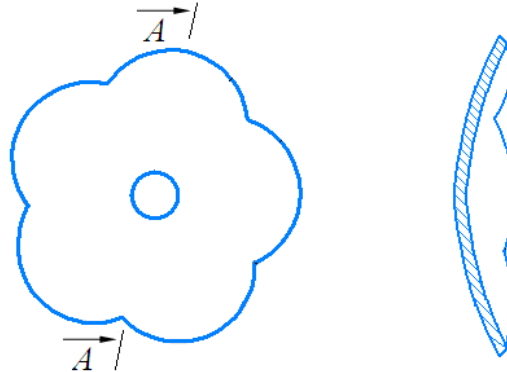
$$\rho = \rho_0 q^{\varphi / 2\pi}, \quad (1)$$

bunda ρ – logarifmik spiralning egrilik radiusi, sm;

ρ_0 – boshlang'ich radius, sm;

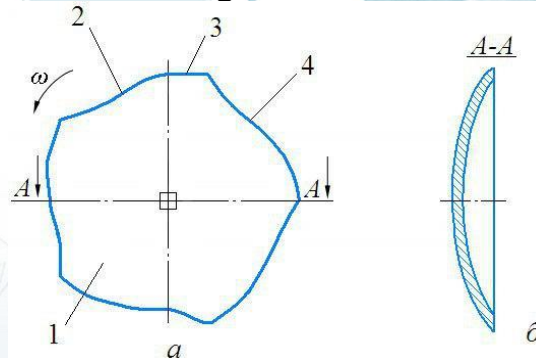
q – logarifmik spiralning o'sish koeffitsiyenti;

φ – radius vektorni buralish koeffitsiyenti.



2-rasm. Tishli sferik disk sxemasi

Oldingi va keyingi kesish qirralarining boshlang'ich radiusi va logarifmik spiralning o'sish koeffitsiyenti bir xil. Ushbu diskning kamchiligi shundan iboratki, diskning murakkab shaklini yasash texnologiyasi uni narxini oshirib yuboradi, uning tig'i nostandart bo'lgani uchun charxlash o'ta murakkab.

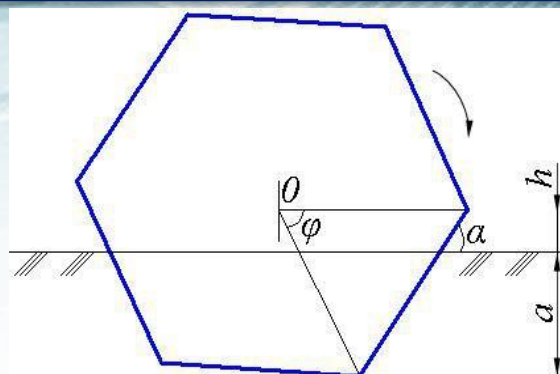


3-rasm. Disksimon ishchi organ

a – kesik sferik diskning umumiy ko'rinishi; b – A-A – diskning kesimi;

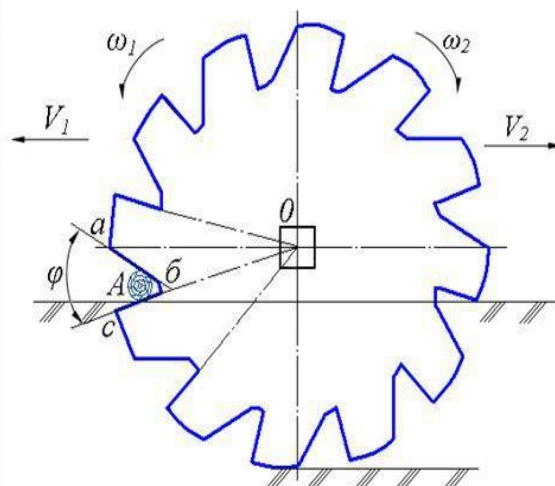
1 – disk; 2 – tishlar; 3 – oldingi kesish qirrasi; 4 – orqa kesish qirrasi

I.D.Kobyakov tomonidan plug va lushchilnikka o'rnatish uchun oltiburchakli disk ishlab chiqilgan va uning parametrlari asoslangan [73].



4-rasm. Oltiburchakli disk sxemasi

Asosan boronalarda foydalanish uchun G'-simon "avs" kesikli ishchi organ (4-rasm) taklif qilingan [73]. Kesiklar disk periferiyasida teng intervallarda joylashgan. Kesik "yev" ning kesadigan qirrasi radial bo'yicha joylashgan va diskning markazi O dan kesikning chuquri "v" orqali o'tgan to'g'ri chiziq "os" ga tushadi. Ikkinchi kesish qirrasi "av" radius "os" kichik burchak $< \text{ostida}$, mos holda kesish qirrasi "yeye".



5-rasm. Disksimon boronaning ishchi organi

Ushbu disksimon ishchi organni uzlukli ariqlar va o'rkachlar hosil qilish uchun qo'llab bo'lmaydi, chunki u o'tgandan so'ng har xil balandlikdagi o'rkachlar yuzaga keladi.

XULOSA

O'tkazilgan adabiyotlar tahlili shuni ko'rsatadiki, O'zbekiston sharoitida tuproqqa asosiy ishlov berishning mavjud texnologiyalari va texnik vositalari nishabli dalalarga sifatli ishlov berishni to'liq ta'minlamaydi, suv eroziyasi jarayonlarini oldini olmaydi, natijada o'simliklarning hosildorligi va ish unumining pasayishiga olib keladi.

O'tkazilgan adabiyotlar tahliliga ko'ra, nishabli dalalarda suv eroziyasini oldini olishning samarali texnologiyalaridan biri tuproqqa ishlov berish bilan birga shudgor yuzasida o'rkachlar va uzlukli ariqlar hosil qilish hisoblanadi.

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