



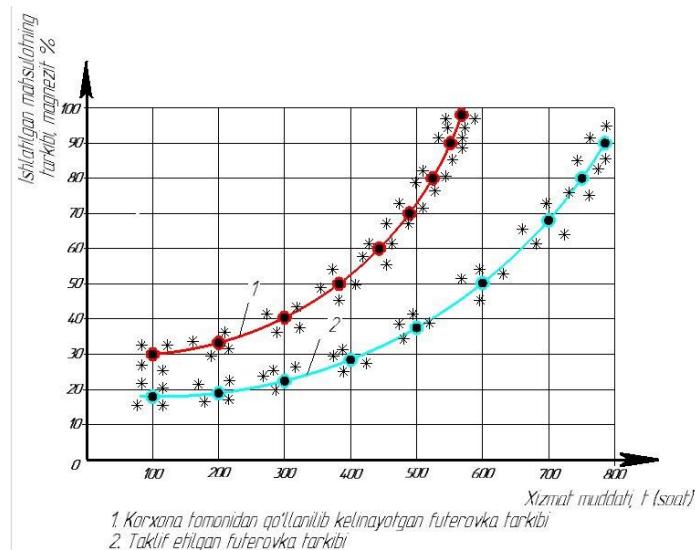
ELEKTR YOY PECHINI ASOSLI FUTEROVKASINI QAYTA ISHLASH JARAYONINI MATEMATIK MODELLASHTIRISH

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O‘zbekiston



1-grafik. Olovbardosh material sifatida magnezit kukunidan foydalanib, futerovkaning xizmat muddatini oshirish grafigi,

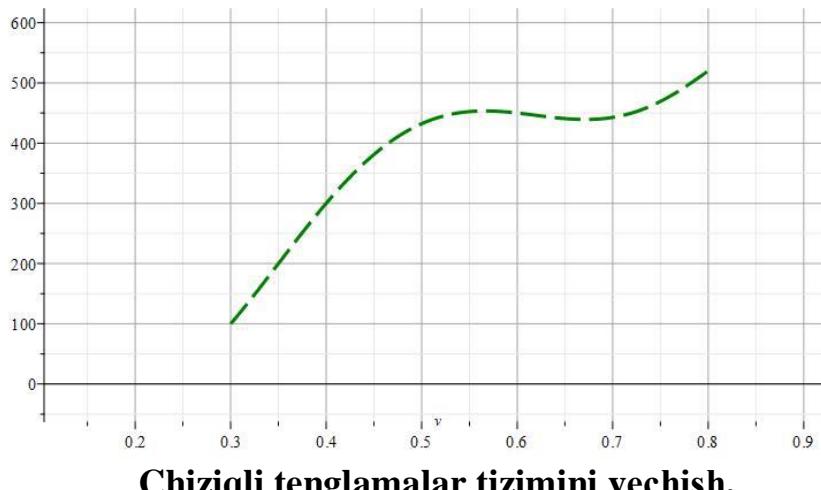
1-grafikda ko‘ringanidek, olovbardosh materiallar sifatida magnezit g‘ishtidan foydalanildi va uning yemirilgan joylarini ta’mirlash orqali magnezit kukuni hamda shlakdan foydalanib, xizmat muddati oshirildi. 1 – grafikda aks etganidek, korxona tomonidan qo‘llanilib kelinayotgan hamda Toshkent davlat texnika universitetining tadqiqotchilari tomonidan taklif etilgan futerovka tarkibi bir necha tajribalar asosida taqqoslandi[1 – 2]. Korxona tomonidan 30 – 100 % gacha qayta ishlangan olovbardosh material futerovkani yemirilgan joyiga suyuq metallni pechdan chiqarib bo‘lgandan so‘ng qizigan holatda yemirilgan yuzasiga sepish orqali futerovkani ish muddatini o‘zgarishi o‘rganildi. Agarda 30% qayta ishlatilgan olovbardosh material foydalanilganda ishlash muddati 100 soatga, 35% da 200 soatga, 40% da 300 soatga, 50% da 380 soatga, 60% da 450 soatga, 70% da 480 soatga, 80% da 520 soatga, 90% da 550 soatga, 100% da esa 580 soatga futerovkaning xizmat muddatini oshirildi[3].

Y=f(x) 1

$$\begin{cases} 0,3^6x_1 + 0,3^5x_2 + 0,3^4x_3 + 0,3^3x_4 + 0,3^2x_5 + 0,3x_6 = 100 \\ 0,35^6x_1 + \\ 0,4^6x_1 + \\ 0,6^6x_1 + \\ 0,8^6x_1 + \\ 0,9^6x_1 + \end{cases}$$

$$\begin{aligned} &+0,35x_6 = 200 \\ &+0,4x_6 = 300 \\ &+0,6x_6 = 450 \\ &+0,8x_6 = 520 \\ &+0,9x_6 = 550 \end{aligned}$$

$$\begin{aligned}
 x_1 &= -201026,262 & x_4 &= +282394,537 \\
 x_2 &= 566349,898 & x_5 &= -56714,145 \\
 x_3 &= -595152,464 & x_6 &= 3902,241 \\
 [y=f(x) = & -201026,262x^6 + 566349,898x^5 - 595152,464x^4 + 282394,537 \cdot \\
 & x^3 - 56714,145 \cdot x^2 + 3902,241x]
 \end{aligned}$$



Chiziqli tenglamalar tizimini yechish. Xulosa

1. Olovbardosh materiallar sifatida magnezit g'ishtidan foydalanilgan holda uning yemirilgan joylarini ta'mirlash orqali magnezit kukuni hamda shlakdan foydalanib, xizmat muddati oshirilishi o'rzanildi.

2. Shibba tarkibidagi suyuq shlak miqdoridan foydalangan holda futerovkaning yejilishi o'rzanildi.

3. Tajriba asosida olingan ma'lumatlardan foydalanib, Kramer yordamida tajriba o'tkazmasdan aniqlash keyingi natijalarni aniqlash mumkin.

4. Sifatlari quyma mahsulotini olishda va nometall qo'shimchalarni kamaytirish maqsadida suyuq metallga inert, ya'ni argon gazi yuborilish koeffitsiyenti hisoblab chiqildi.

Foydalanilgan adabiyot

1. Bekchanova Valida. Investigation of the Effect of Liquid Metal on the Furnace Lining During the Liquidation of Steel Alloys in an Electric ARC Furnace//AMERICAN Journal of Engineering, Mechanics and Architecture *Volume 2, Issue 1, 2024 ISSN (E): 2993-2637.2024*.

2. V. B. Bekchanova, Improving the Technology of Increasing the Erosion Resistance of the Furnace Lining by Changing the Composition of Liquid Slag//BEST JOURNAL OF INNOVATION IN SCIENCE, RESEARCH AND DEVELOPMENT ISSN: 2835-3579 Volume: 3 Issue: 4|2024

3. Valida, Turakhodjaev Nodir, Chorshanbiyeva Lobar, Gulyamov Saidsulton, Urinboyev Umidjon, Eshimov Doston. TECHNOLOGY OF INCREASING THE SERVICE PERIOD OF LIQUIDATION FURNACES BASED LIQUID SHIBBA //Eurasian Journal of Engineering and Technology. ISSN: 2795-7640. www.geniusjournals.org. – 2023 - .C.85 –89.