KOLOSNIK MATRITSA MODELINI NX1.2 DASTURI YORDAMIDA TAYYORLASH

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Annotatsiya. Kolosnik matritsa modelini NX1.2 dasturi yordamida tayyorlash amalga oshirish. NX1.2 dasturida kolosnik matritsa modelini tayyorlash orqali ishlab chiqarish korxonalaridagi stanok va dasgohlarimizni o‘qiydigan holatini yaratishish.

Kalit so‘zlar. Kolosnik, matritsa modeli, puanson modeli, NX1.2 dasturi, post prosses, fanuc, Cad Cam dasturi, 1D50R5, Operation Navigator-Geometry va pobeditli frezlar.

ПОДГОТОВКА МАТРИЧНОЙ МОДЕЛИ КОЛОССА С ПОМОЩЬЮ ПРОГРАММЫ NX1.2

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Аннотация. Подготовка матричной модели Колосника с помощью программы NX1.2. Подготовив колоссальную матричную модель в программе NX1.2, создав читаемое состояние наших станков и станков на производственных предприятиях.

Ключевые слова. Колосник, матрица модель, модель пойнсона, программа NX1.2, постпроцессы, fanuc, программа Cad Cam, 1D50R5, Operation Navigator-Geometry и победит фрезерные станки.

PREPARATION OF THE COLOSSIAN MATRIX MODEL USING THE NX1.2 PROGRAM

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Abstract. Preparation of the Kolosnik matrix model using the NX1.2 program. By preparing the colossal matrix model in the NX1.2 program, creating a readable state of our machine tools and machines in production enterprises.

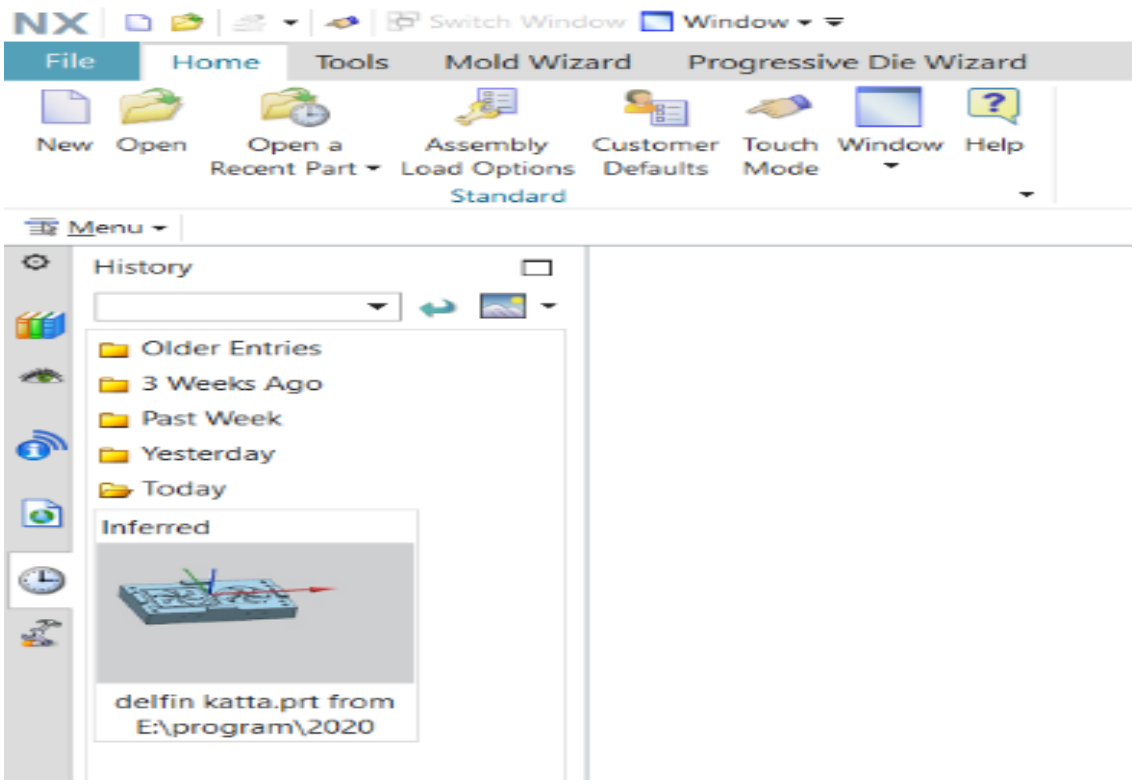
Keywords. Kolosnik, matrix model, poinson model, NX1.2 software, post processes, fanuc, Cad Cam software, 1D50R5, Operation Navigator-Geometry and pobedit milling machines.

Kirish. Xozirgi kunda paxta tozalash korxonalarida ishlab chiqarilayotgan paxta tolasining sifati bevosita texnologik jarayonda ishlayotgan mashinalarning samarali ishlashiga boglik[1-2]. Xar bir texnologik jarayon sifatli tola ishlab chikarish uchun u yoki bu darajada muxim axamiyat kasb etadi. Korxonada tola ishlab chikarishga asosiy boglik jarayon - bu jinlash (toladan chigitni ajratish) jarayonidir. Tozalash tsexlarida mayda va yirik iflosliklardan tozalangan paxtani jinlash tsexining asosiy mashinasi bo‘lgan arrali jinga uzatiladi. Jinning ishchi kamerasiga kelib tushgan chigitli paxtaning chigit tarogi yonida aylanayotgan arra tishlari bilan ilib olib, kolosnikli panjaraga olib keladi[3-4]. Ishchi kamerada arra tishlariga ilashgan paxta bo‘lakchalari boshqa paxta bo‘lakchalariga ilashib, ularni xam tortadi va xomashyo valigini xosil kiladi. Bu xomashyo valigi arrali tsilindrni aylanishiga karshi tomonga aylanadi va u arra tishlarini paxta tolasi bilan uzluksiz ta’minlab turadi[5]. Maqola mualliflari tomonidan jin mashinasi ishchi elementlarini takomillashtirgan xolda bir kancha tadqiqotlar o‘tkazildi. Tadqiqotlardan maqsad, kolosnik matritsa modelini NX1.2 dasturi yordamida tayyorlash.

Raqamliga aylantirish orqali ishlab chiqarish korxonalaridagi stanok va dasgohlarimizni o‘qiydigan imkoniyatini yaratib berish va shu jarayonni amalga oshiradigan kurilma tayyorlab, uning samarali ishlaydigan texnologik o‘lchamlarini aniqlash xamda ishlab chiqarishga joriy etishdan iborat[6-7].

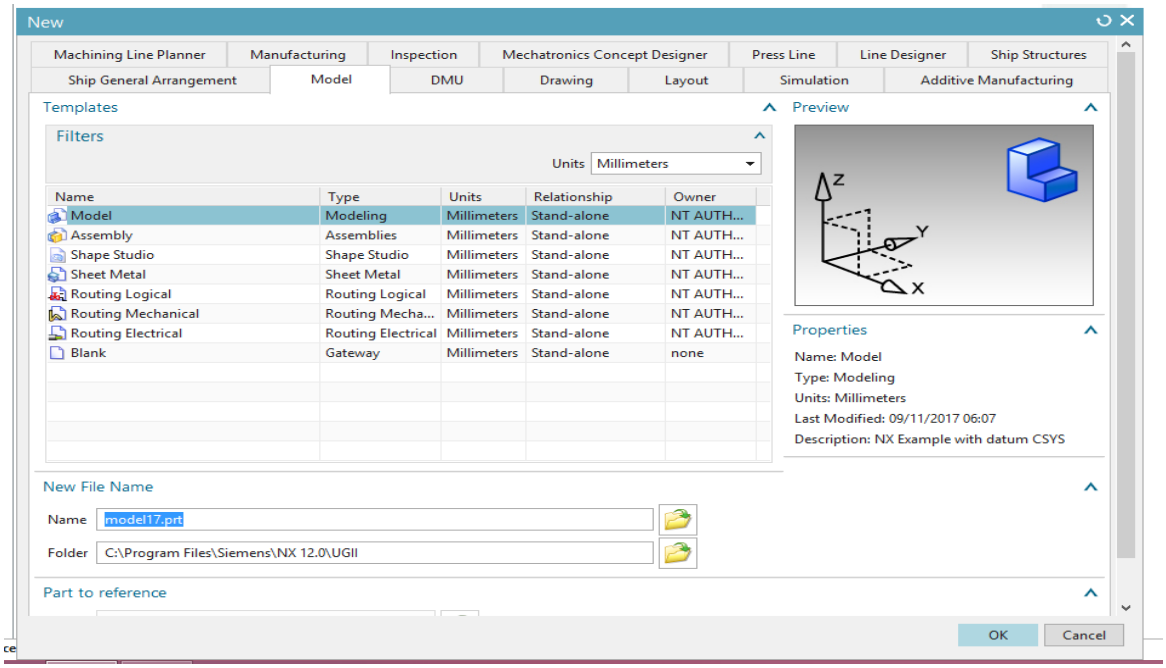
Optimallashda asosiy masala jin mashinasi ish unumdorligiga ta’sir qiluvchi axamiyatli omillarni aniqlab olishdir, bunda jin mashinasining asosiy ishchi qismlaridan biri bo‘lgan “kolosnik” ga ishlov berish orqali toladan ajralgan chigitlarni ishchi kameradan chikib ketish vaqtini tezlatish imkonini beruvchi parametrlar tanlab olinadi[8-9]. Har qanday buyum narsa, extiyot qismlar va hokazo barchasini ishlabchiqarish uchun birinchi uni qayerga ishlatilishiga qarab yaratish kerak. Buning uchun uni modelini tayyorlash kerak. Songra uni turli maqasadlarda qollash uchun seriyalab ishlab chiqarish mumkin. Kolosnik matritsa modelini NX1.2 dasturi yordamida tayyorlash uchun, avvalo kolosnikni 3d modelini tayyorlash kerak buning uchun biz NX1.2 dasturisidan foydalanamiz. Kompyuterimizning ish oynasidan NX1.2 dasturiga kiramiz(rasm-1). NX1.2 dasturiga Windows ishchi stolidan kiriladi[10-11].

Shundan so‘ng NX1.2 dasturi ish oynasi ochiladi(2-rasm).



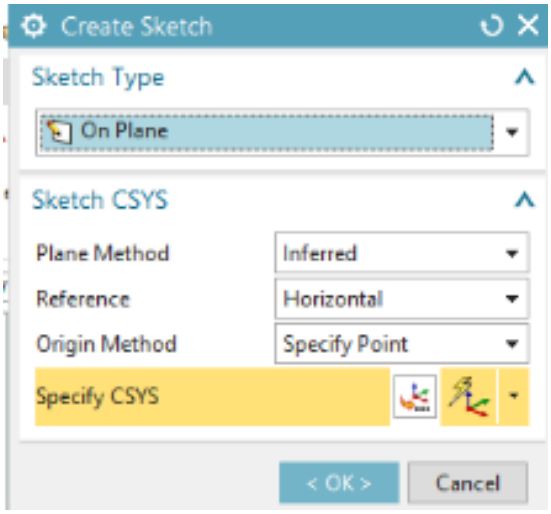
Rasm-2: NX1.2 dasturi oynasi. Inferred bo‘limi.

Bu oynadan New bo‘limiga kirib yangi modelni yaratib olamiz(3-rasm). So‘ng ishni boshlashdan oldin faylga nom berib *.prt fayl kengaytmasi bilan saqlab olamiz[12-13].

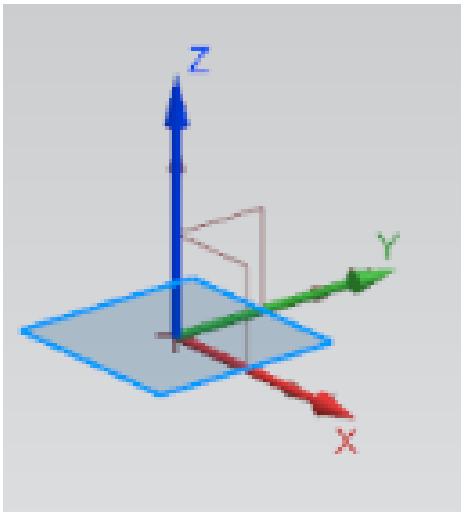


Rasm-3: New bo‘limi(Ctrl+N).

Create Scetch nostroykasidan tipini tanlaymiz, yani On Plane bo‘limini(4-rasm). Sketch yordamida X,Y va Z tekisliklardan keraklisini tanlab olamiz(5-rasm).

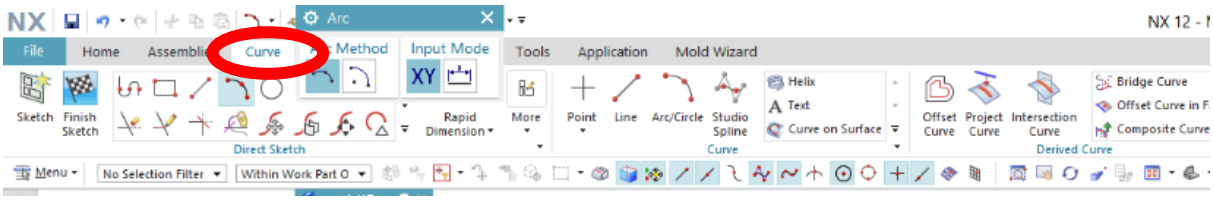


Rasm-4: On Plane bo‘limi.



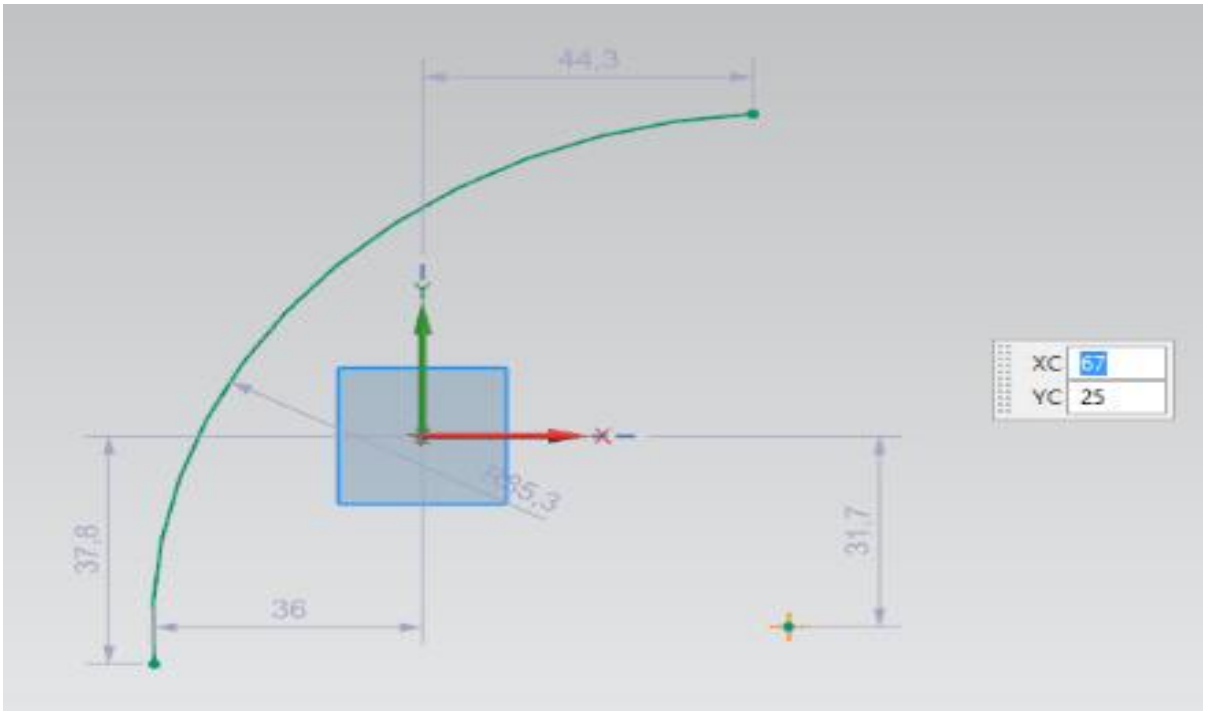
Rasm-5: X,Y va Z tekisliklar.

“Curve” ni bosib 2 o‘lchamli kolosnik modelini chizib olamiz(6-rasm).



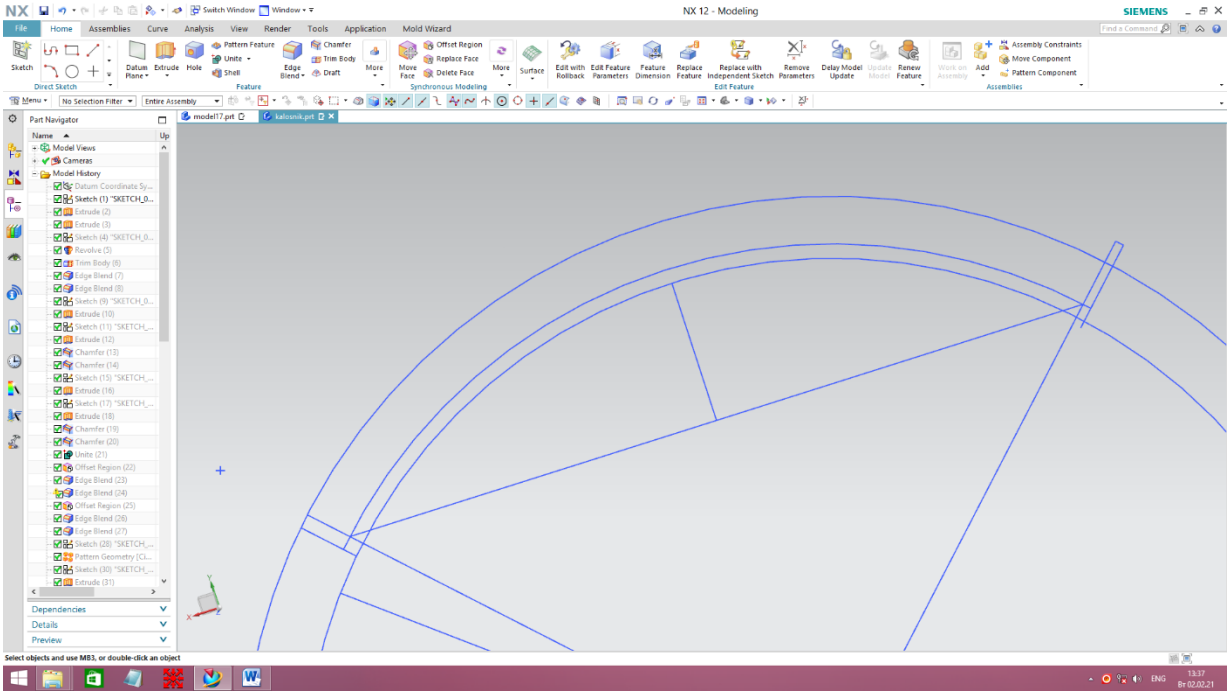
Rasm-6: “Curve” menyusi

“Curve” menyusidan foydalanib 2 o‘lchamli kolosnik modeli yaratish(7-rasm).



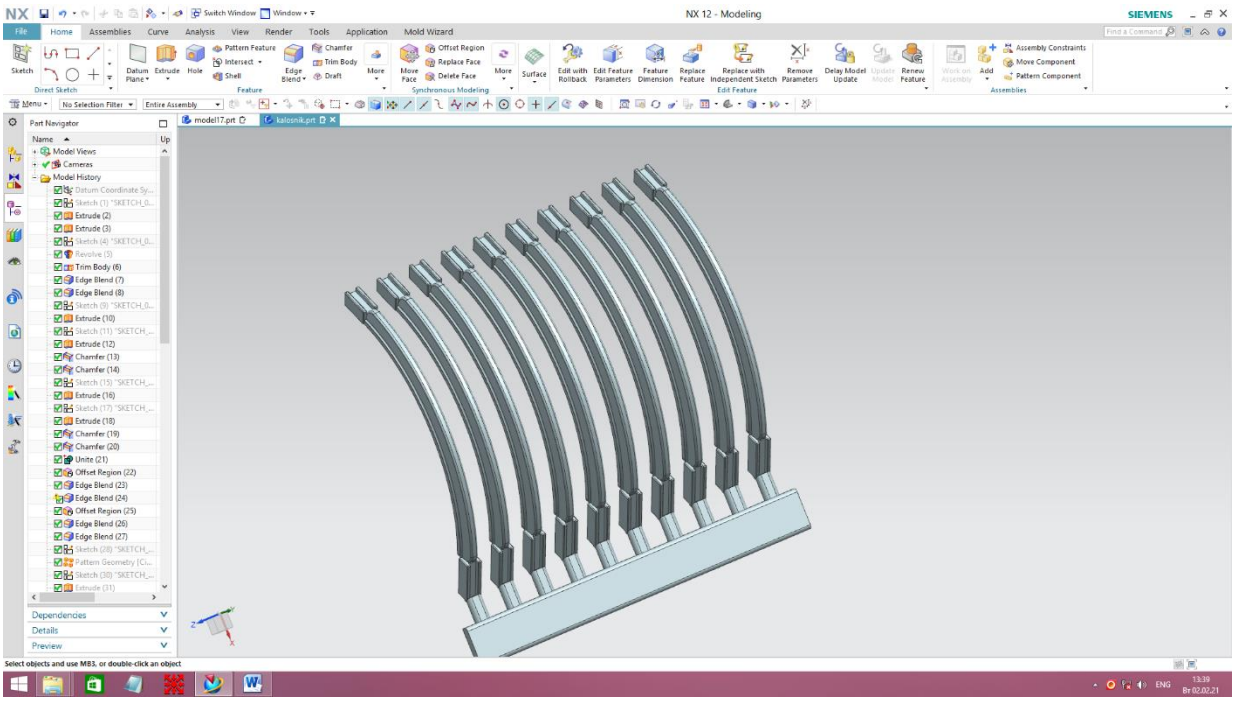
Rasm-7: “Curve” 2 o‘lchamli kolosnik modeli.

Undan so‘ng “extrude” yordamida uni 3 o‘lchamli holatga o‘tkazamiz va qirralriga “faska” qilamiz. “patten geometriy” yordamida uni ko‘paytiramiz(8-rasm).



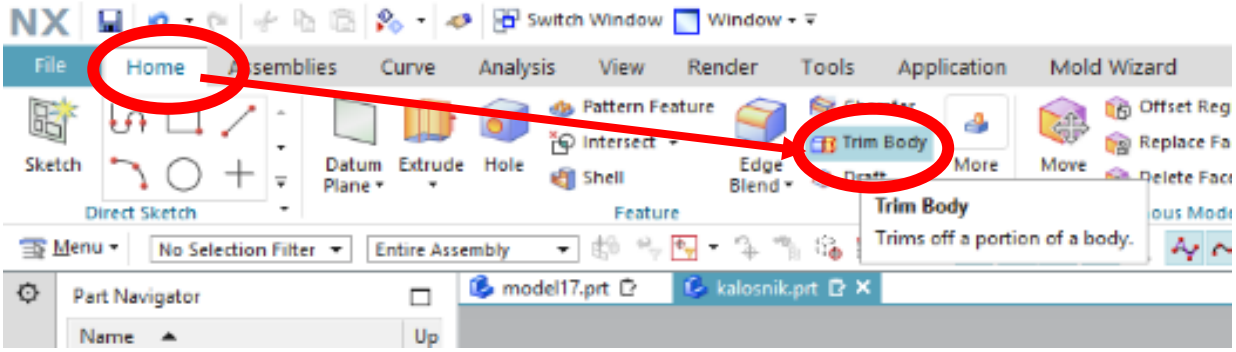
Rasm-8: “patten geometriy” yordamida chizmani ko‘paytirish.

So‘ngra uni ishlab chiqarishga moslashtirish uchun matritsa va punasonga ajratamiz. Chunki matritsa va puanson birlashganda bizga kerakli bo‘lgan model hosil bo‘lishi kerak(9-rasm).



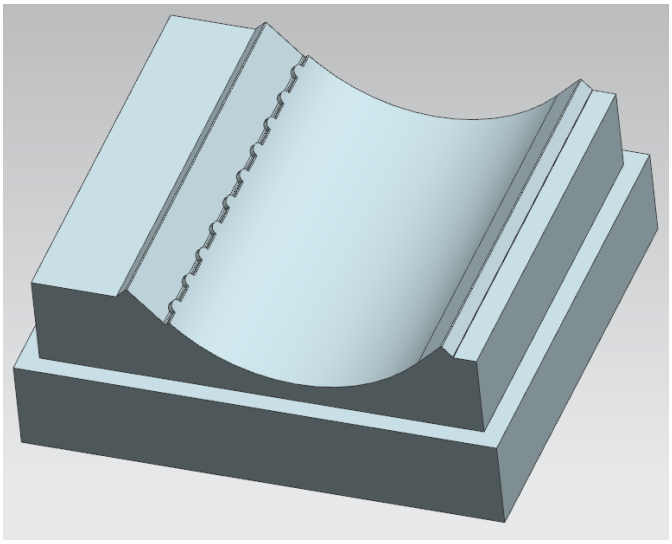
Rasm-9: Kolosnik modeli.

Matritsa va puansonga ajratish uchun biz “Trim Body” dan foydalanamiz(10-rasm).



Rasm-10: Trim Body.

Natijada NX1.2 dasturida kolosnik matritsa modelini tayyorlanadi(11-rasm).



Rasm-11: *Kolosnik matritsa modeli.*

Biz kolosnikni quyma usulda olishni rejalashtirganimiz uchun model yani panson va matritsa shunga moslanadi. Yuqoridagi 11 rasmda matritsa modeli hosil qilingan 3d holati.

Xulosa:

Kolosnik matritsa modelini NX1.2 dasturi yordamida tayyorlab uni ishlab chiqarish korhonalarida amalda qo‘llash. Korhonadagi insonlarning qo‘l mexnatini yengillashtirish.

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