



*CATIA Version 5*

*Generative Shape Design*

***Boca***



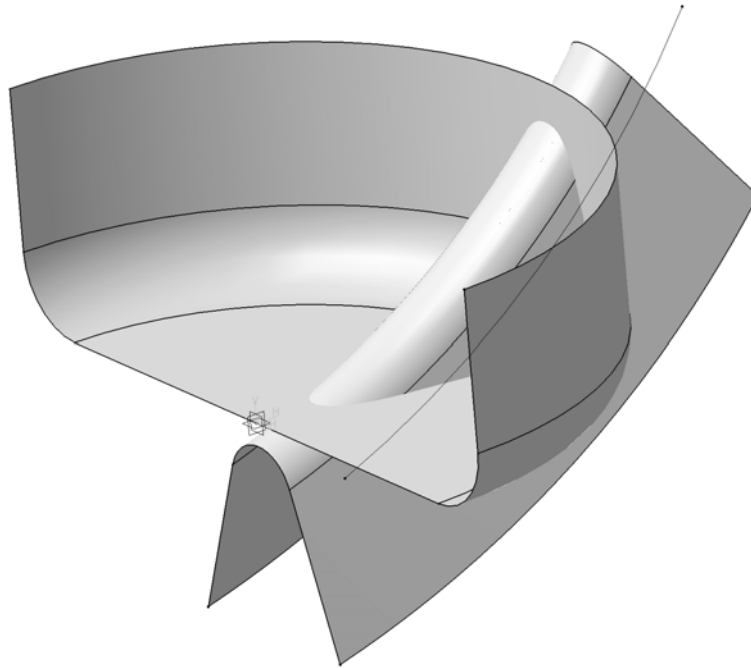
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Sva prava pridržana.

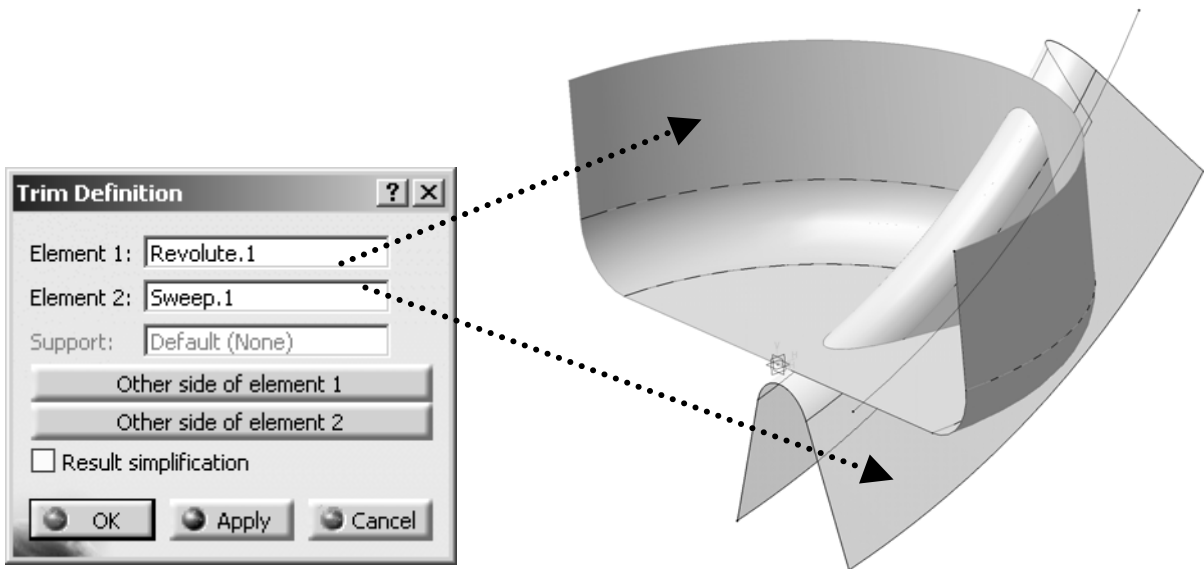
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Ovi materijali su isključivo namjenjeni za interne potrebe školovanja CATIA V5 korisnika i ne smiju se koristiti u druge svrhe niti davati trećim osobama.

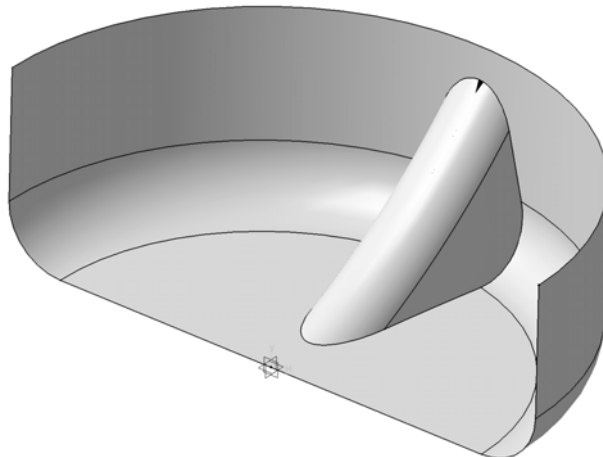
Otvaramo startni model: **BocaStart.CATPart**.



Funkcijom **Trim** definiramo presjek dviju površina.

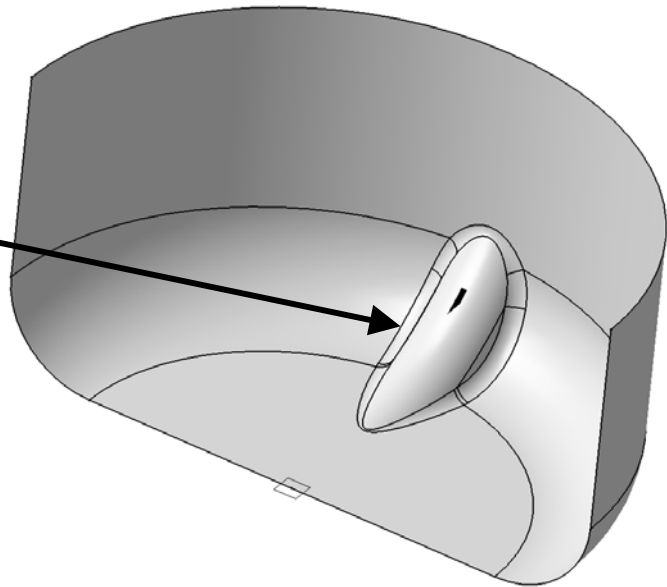
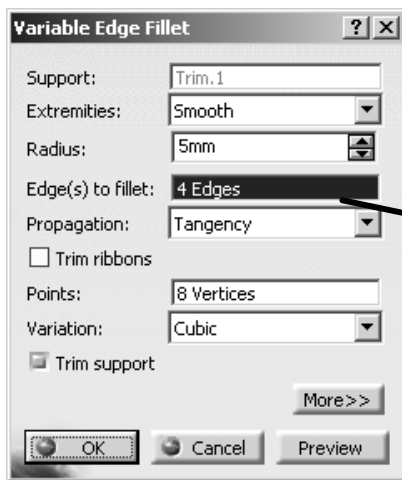


Sweep stavimo u Hide.

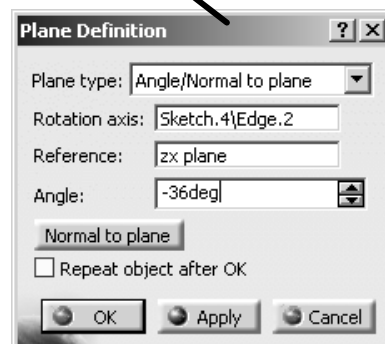
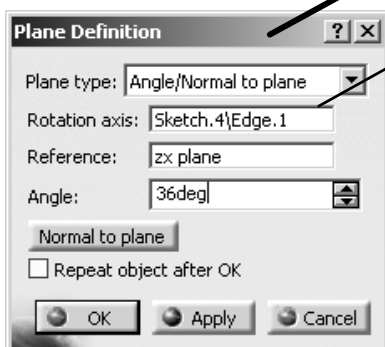
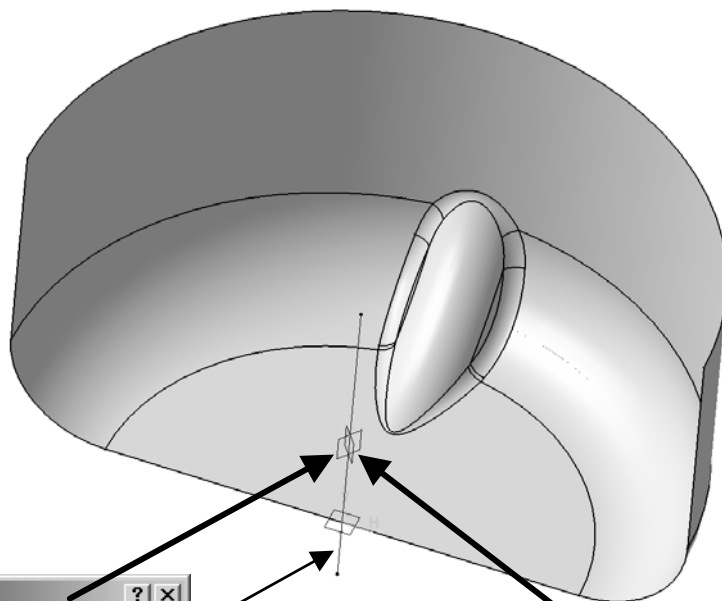


## Generative Shape Design

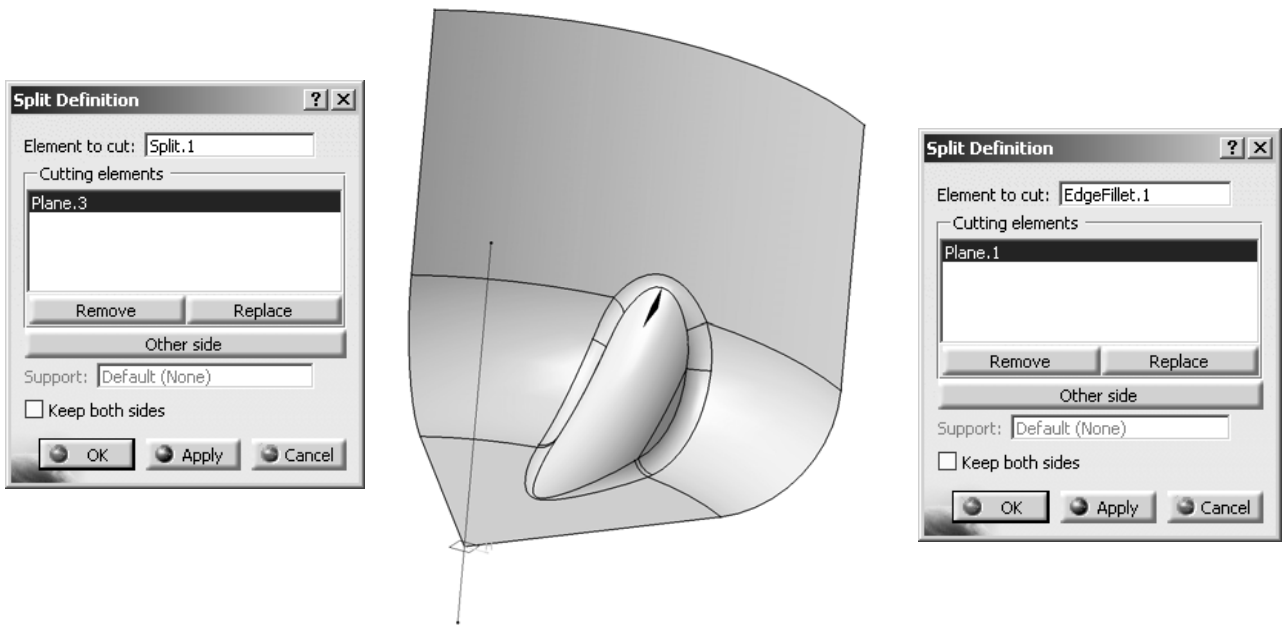
### Modeliramo Edge Fillet.



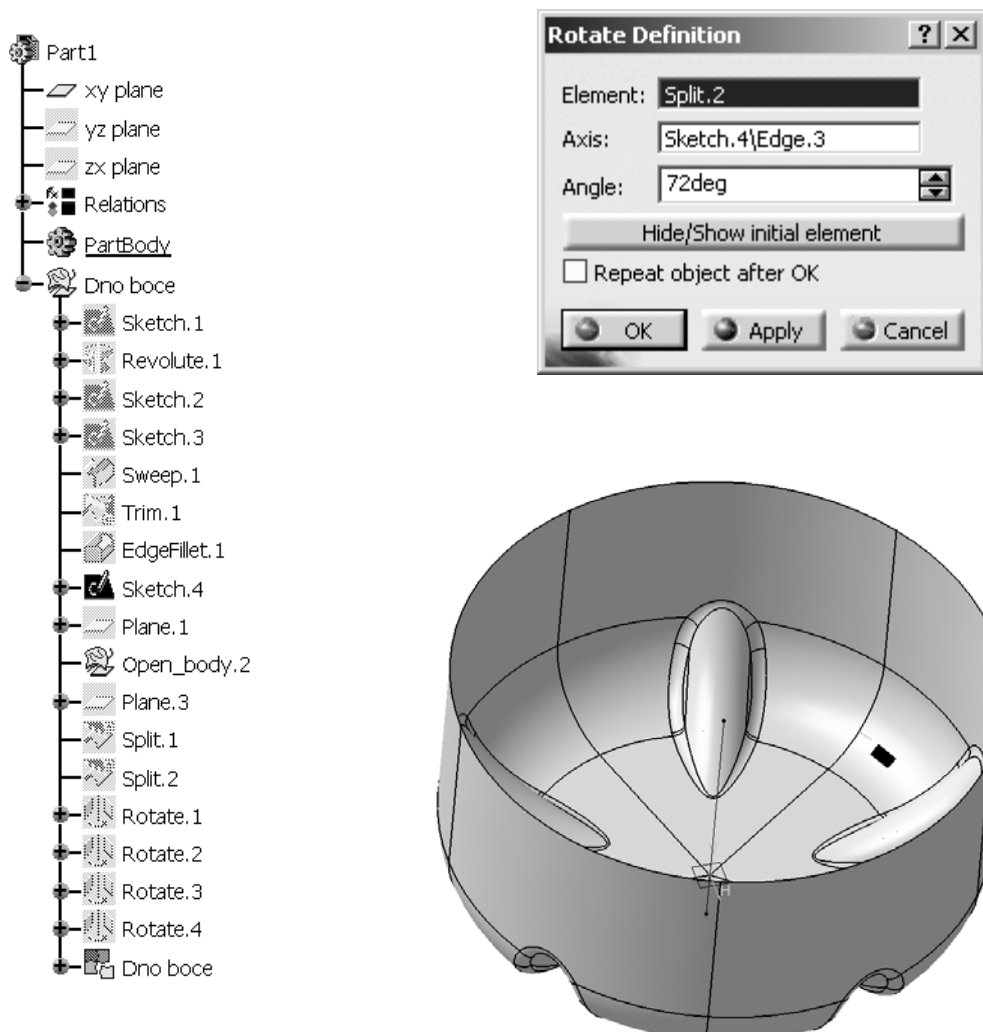
Definiramo dvije nove ravnine prema slici. Zakrenute su za 36°u odnosu na ZX ravninu.



Funkcijom **Split** režemo model s ravninama. Dobijemo stanje kao na slici.

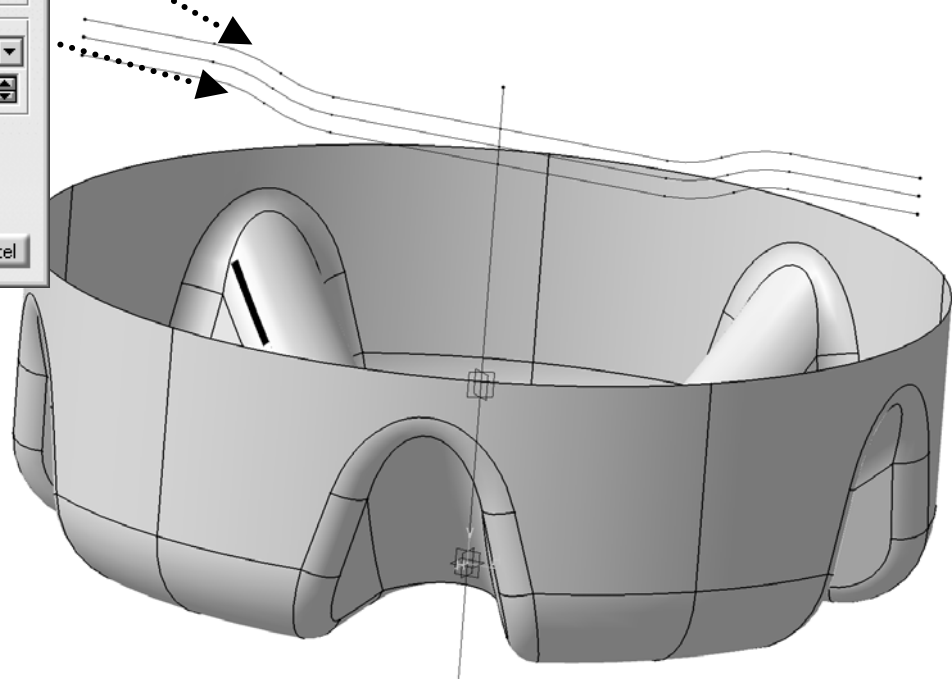
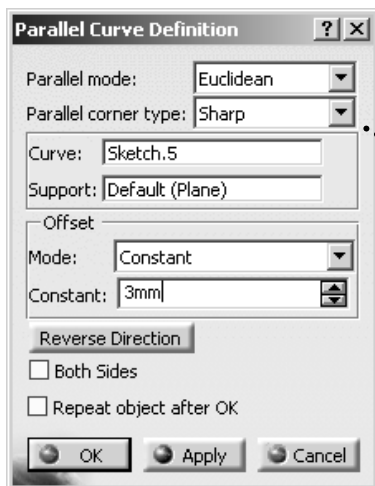
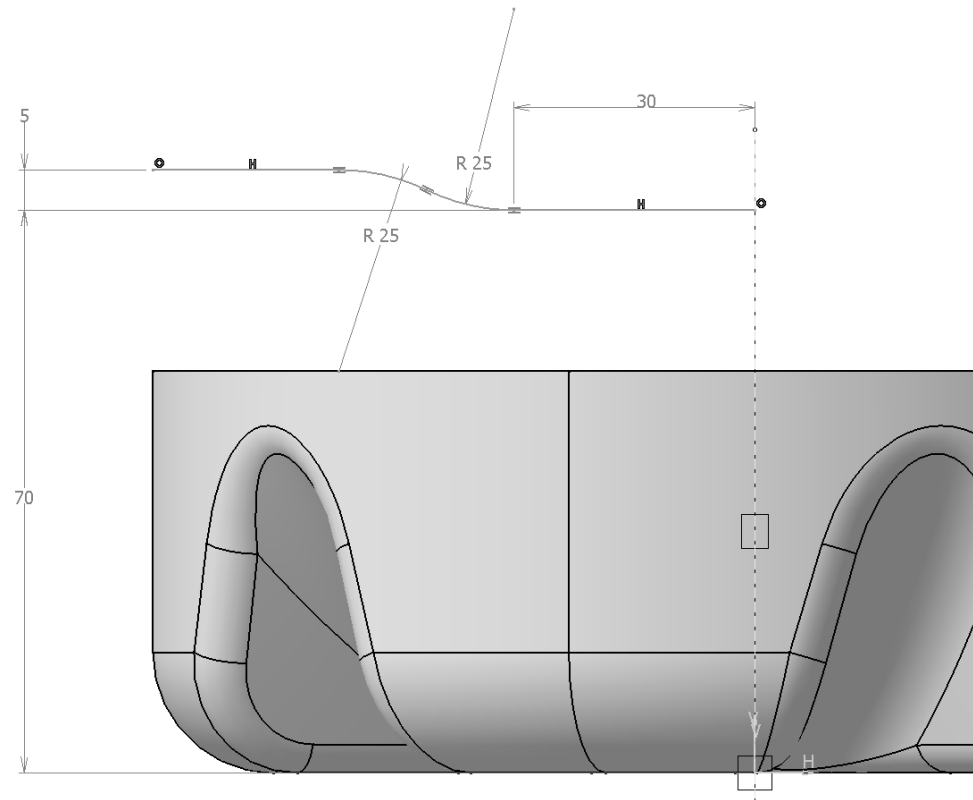


Tako dobiveni segment rotiramo za  $72^\circ$  pet puta. Na kraju napravimo **Join**.

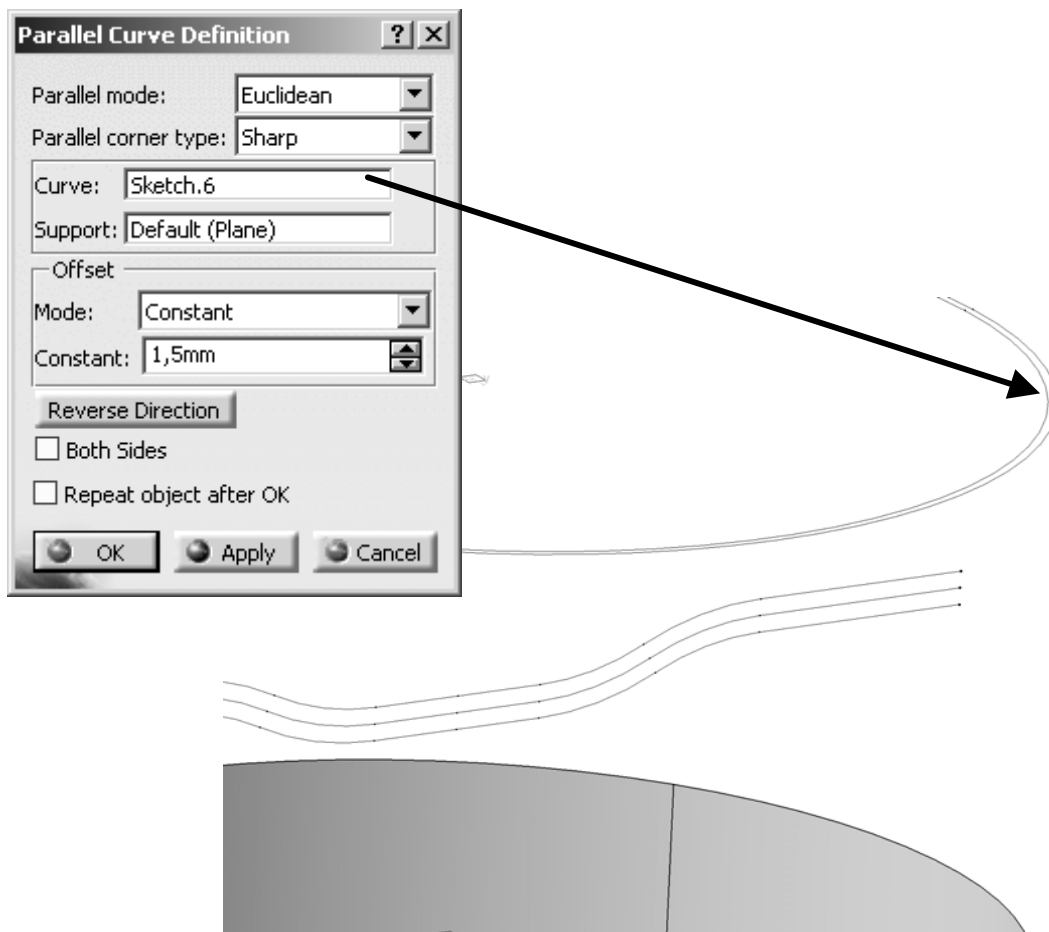


## Generative Shape Design

Dodajemo novi Open Body. (Tijelo\_Boce). U ravnini XZ definiramo novi sketch, te napravimo paralelne krivulje.



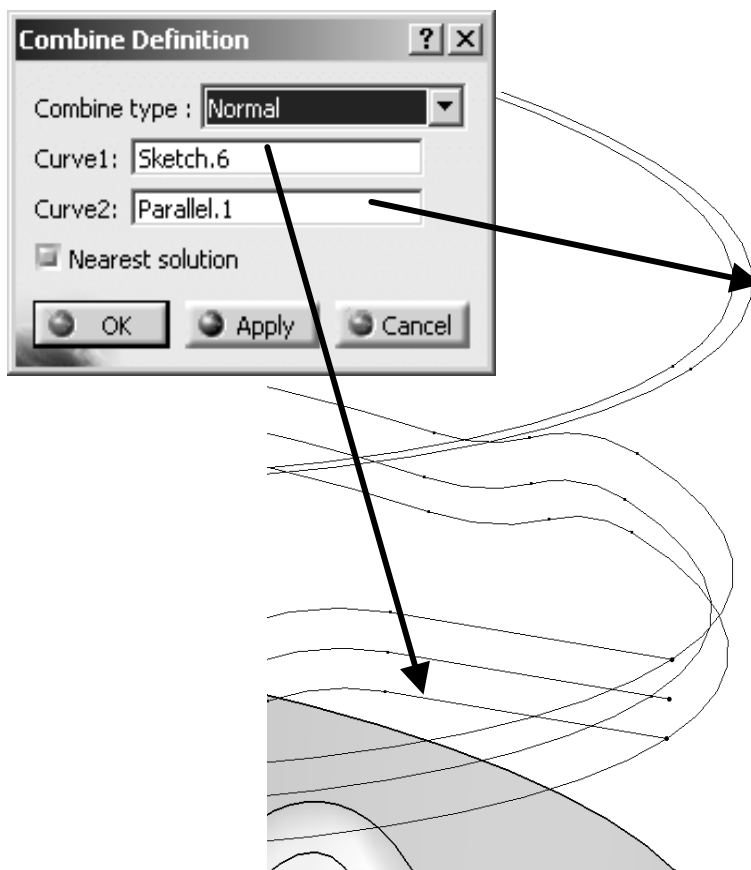
Definiramo ravninu udaljenu 100 mm od XY ravnine. U njoj napravimo kružnicu promjera 150 mm i još jednu paralelnu s njom udaljenu 1,5 mm (prema unutra).



## Generative Shape Design

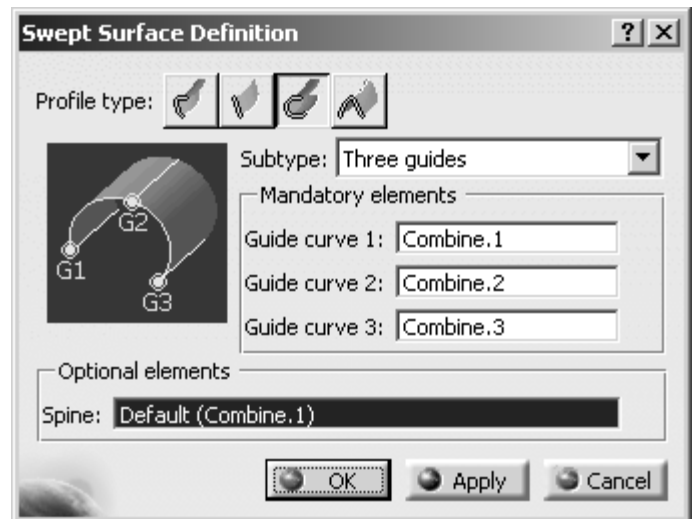
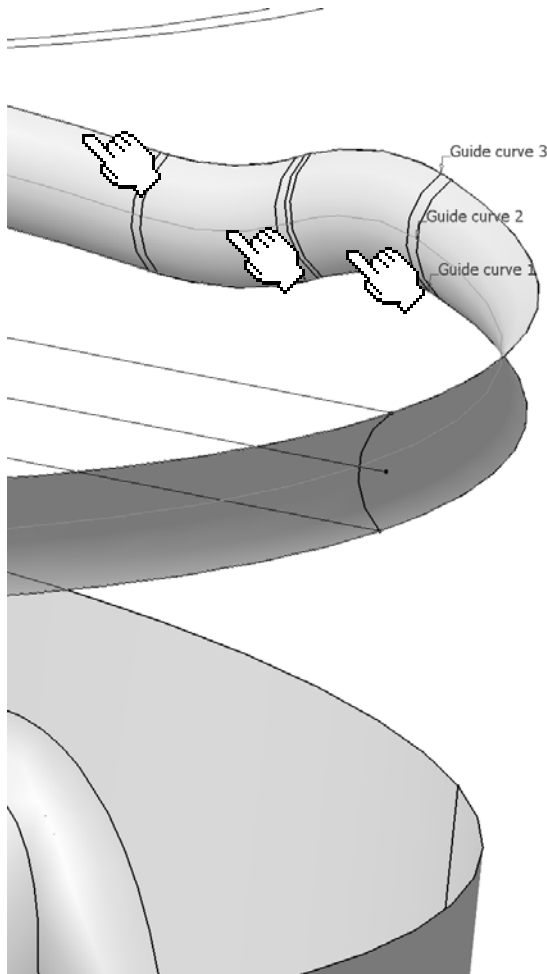
Radimo kombinaciju krivulja prema slici. Koristimo funkciju **Combine**.

To ponovimo za sve tri krivulje. Dobijamo stanje sa slike.



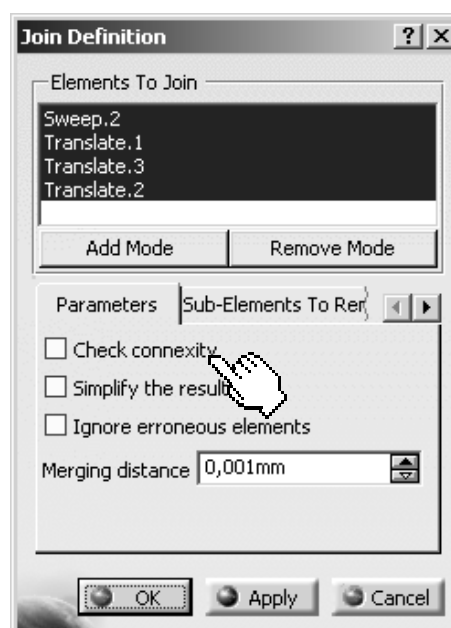
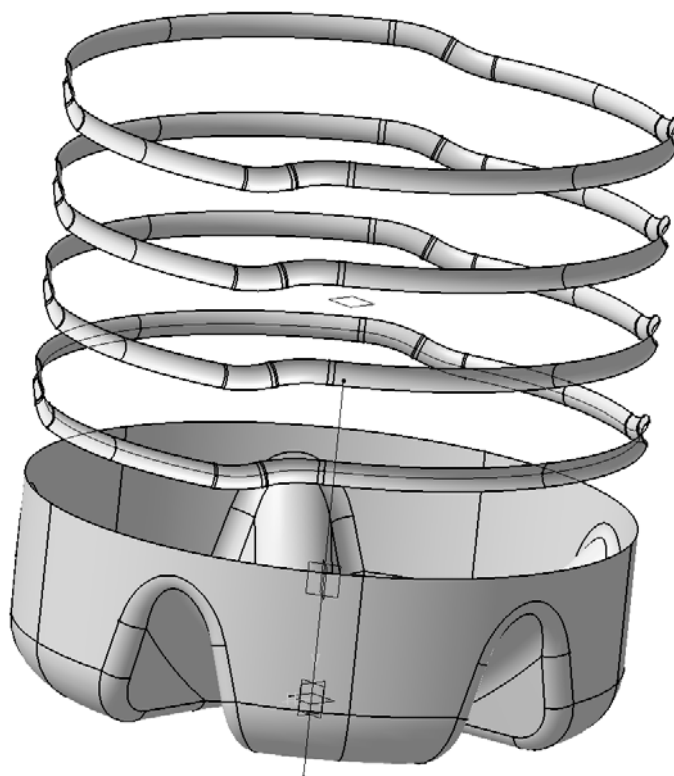


Radimo Sweep prema skici.

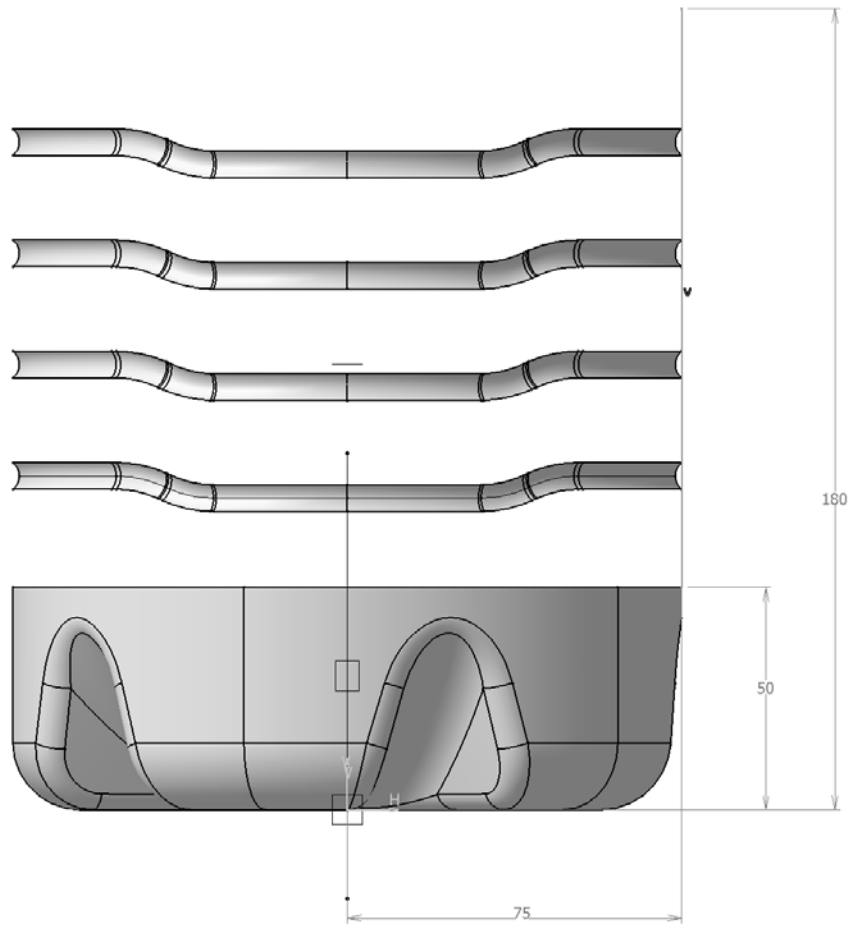


## Generative Shape Design

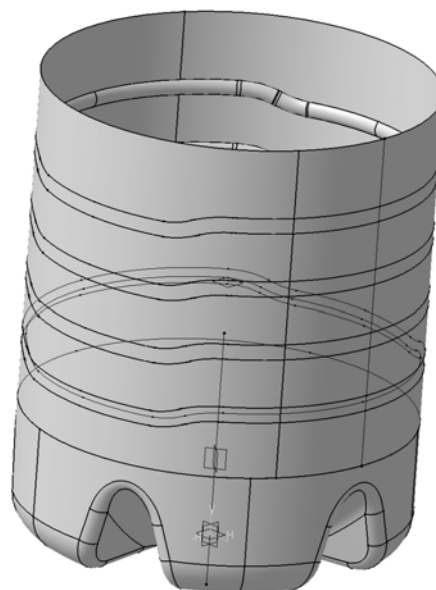
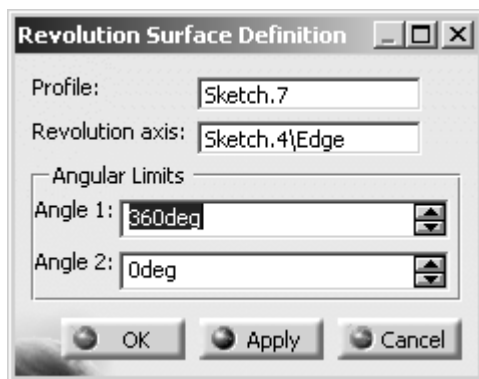
Napravimo 4 puta **Translate** od tako dobivene površine po 25 mm, te ih na kraju spojimo funkcijom **Join**. Pri tome je važno da bude isključena opcija **Check connexity**.



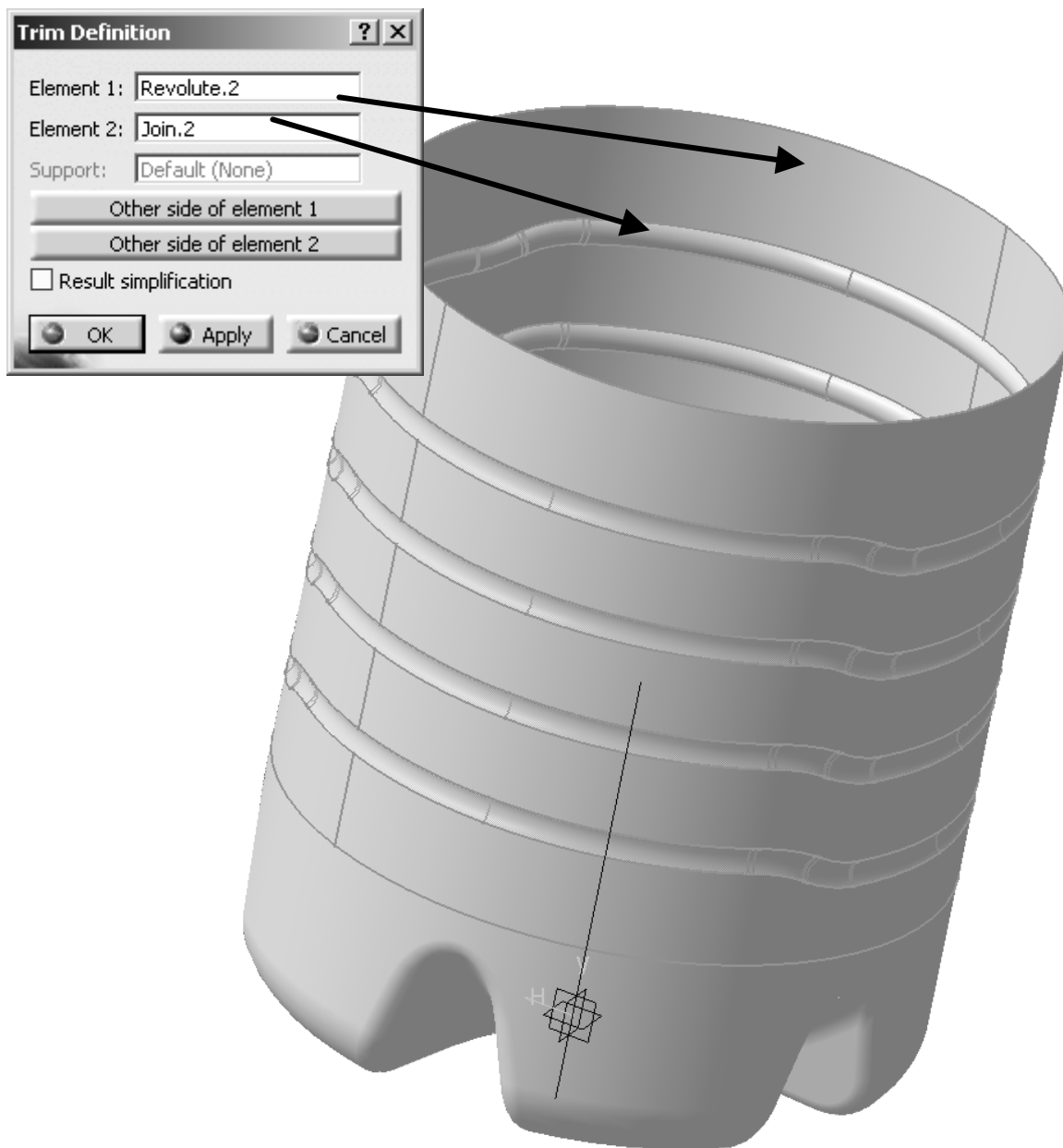
U ravnini ZX definiramo novi Sketch.



Taj pravac rotiramo oko Z osi. Koristimo funkciju **Revolve**.

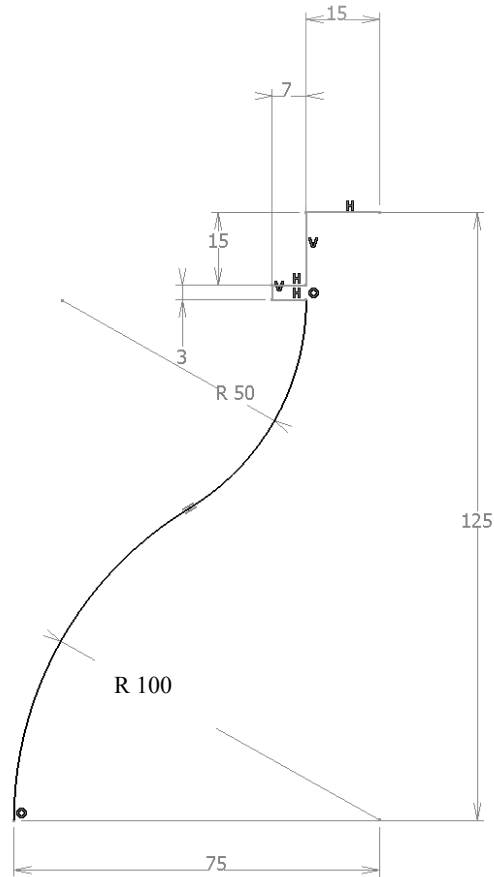


Trimamo površine kako je pokazano na slici.



Dodajemo novi Open Body - Grlo boce. Definiramo dvije nove ravnine na udaljenosti 180 i 270 mm od ravnine XY.

Zatim u ravnini ZX napravimo sketch.

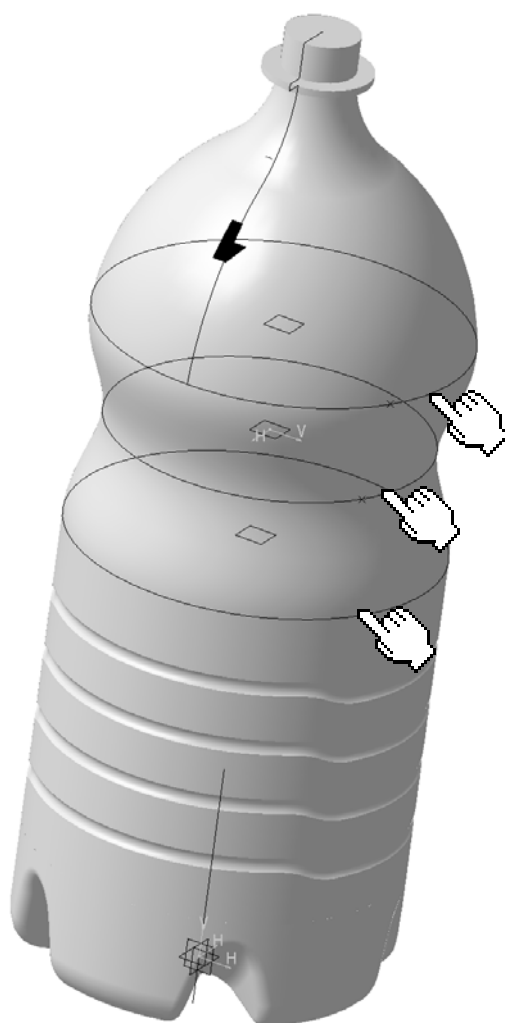


Rotiramo oko vertikalne osi.

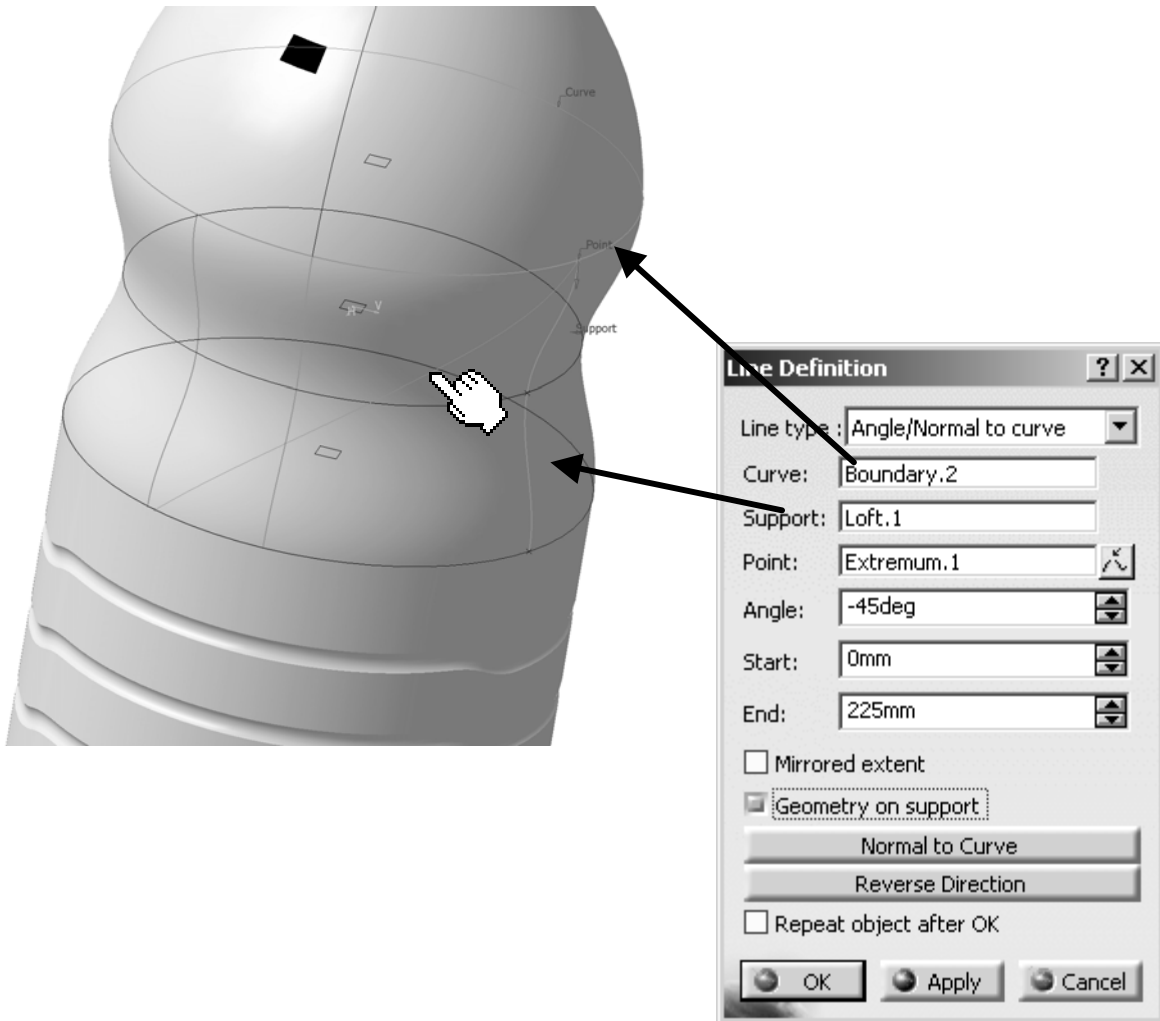


## Generative Shape Design

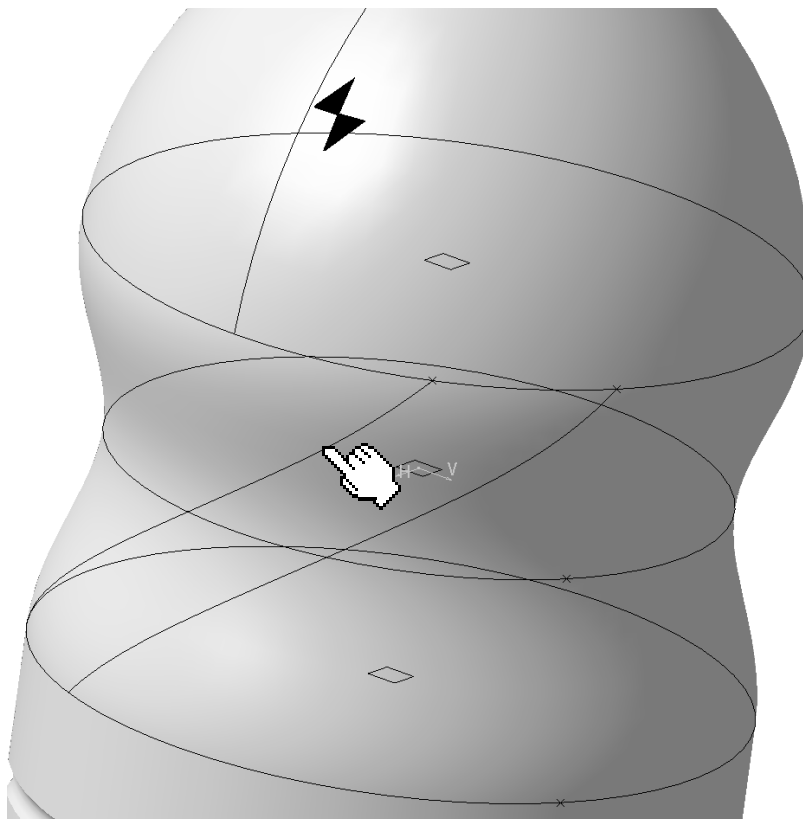
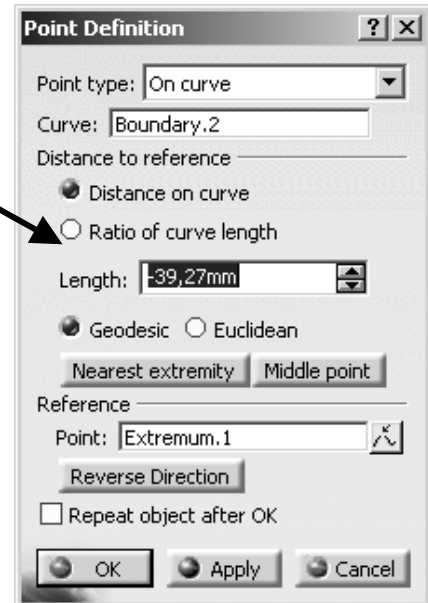
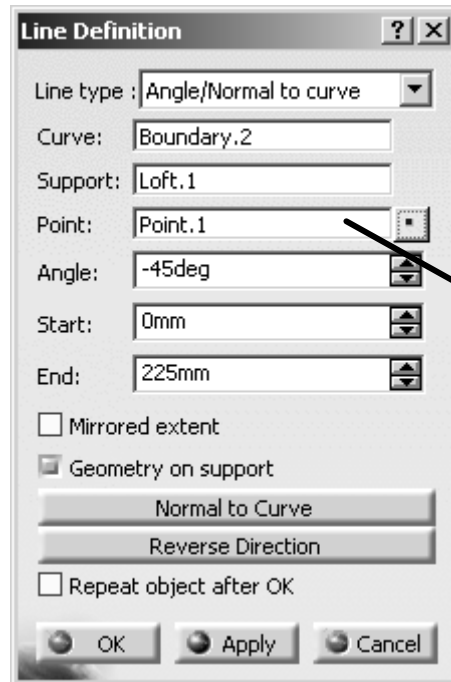
Izvučemo granice površina koristeći funkciju Boundary. U ravni udaljenoj 225 mm od XY napravimo kružnicu promjera 130 mm. Od te tri kružnice napravimo **Loft**. Dobivamo stanje kao na slici.



Definiramo linije na tako dobivenim Loft-u. Podaci su prikazani na slikama.

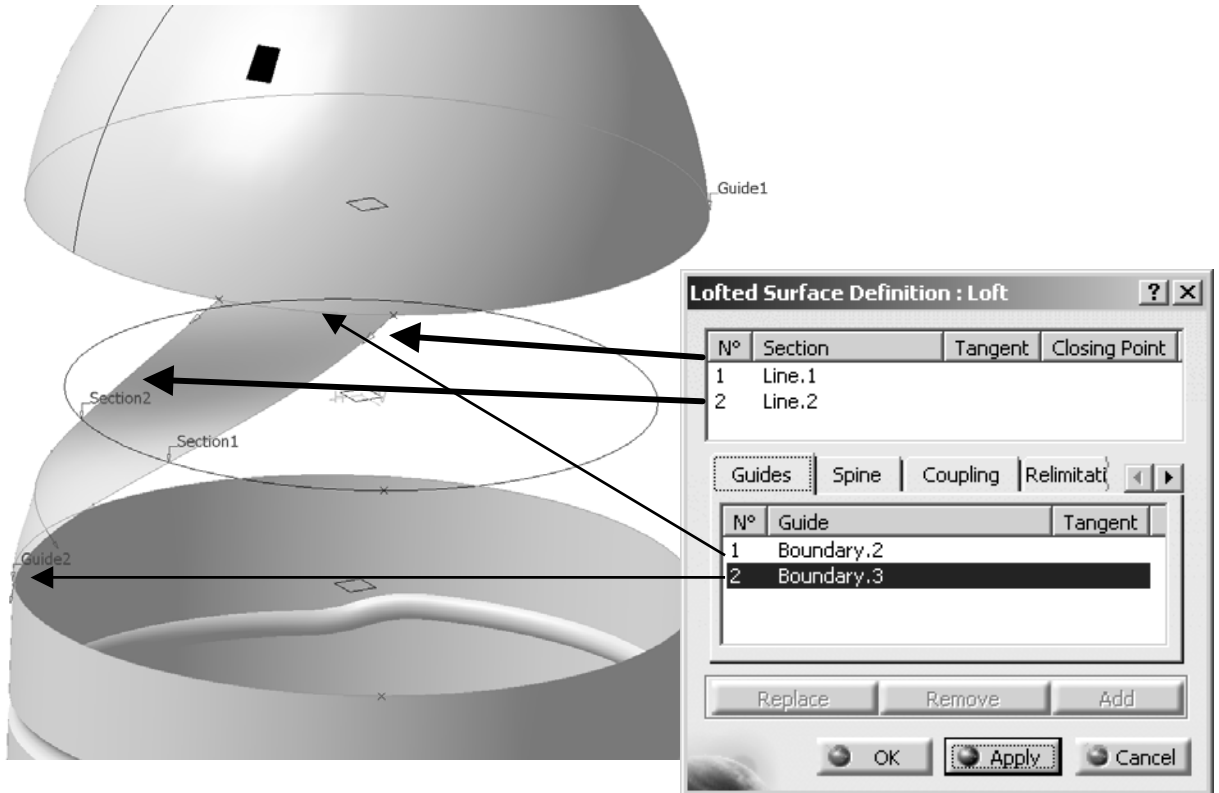


Definiramo i drugu liniju prema slikama.

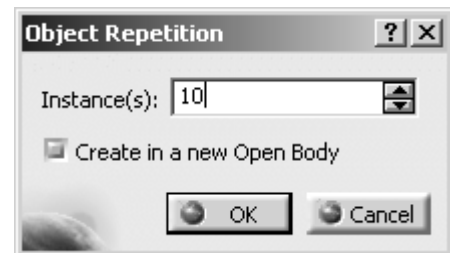
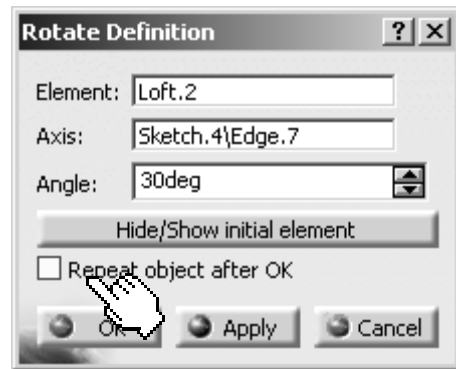




Stavimo loft u Hide. Zatim napravimo novi loft prema slici.



Tako dobiveni Loft rotiramo još 11 puta i dobijemo površine kao na slici.



Time smo završili vježbu.

