PROJETO E MANUFATURA ASSISTIDOS POR COMPUTADOR 27260 A

AULA 12 – LAB. 16 DIE-CAVITY

Departamento de Computação
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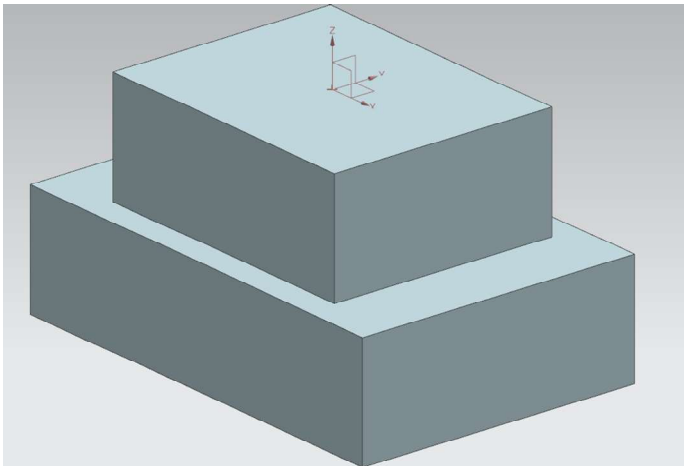
Aula 12

1. Create a new file Die_cavity.prt with units in mm.
2. Create a rectangular Block of 150, 100, 40 along X, Y and Z, respectively with the point construction value of (-75,-50,-80) about XC, YC and ZC.
3. Create and Unite another block over the first one with 100, 80 and 40 along X, Y and Z and centrally located to the previous block.



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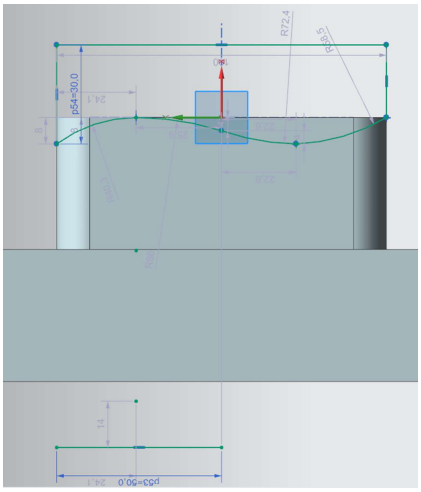
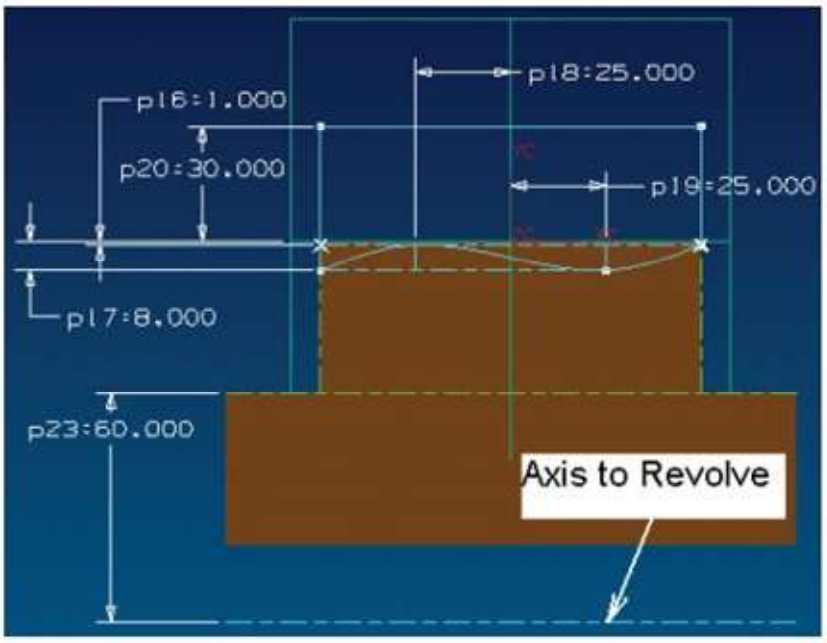
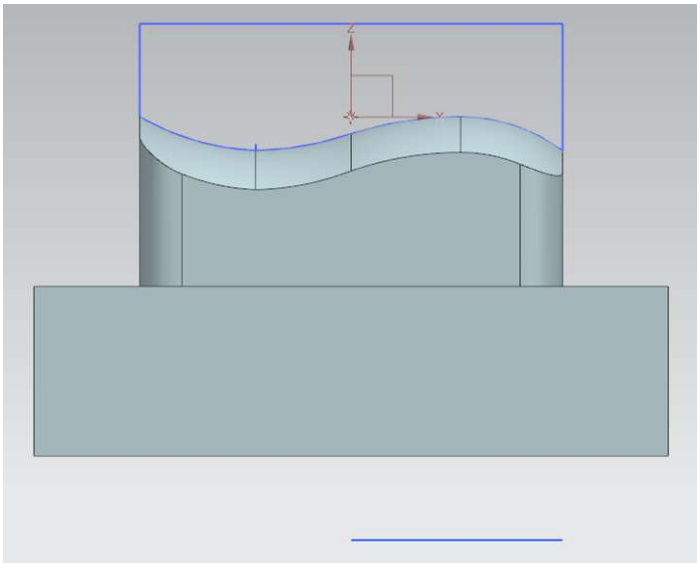
4. Create a sketch as shown below including the spline curve and add an Axis line. Dotted lines are reference lines. While sketching, create them as normal curves.

Then right click on the curves and click convert to reference. constraints and dimensions as shown in the figure.

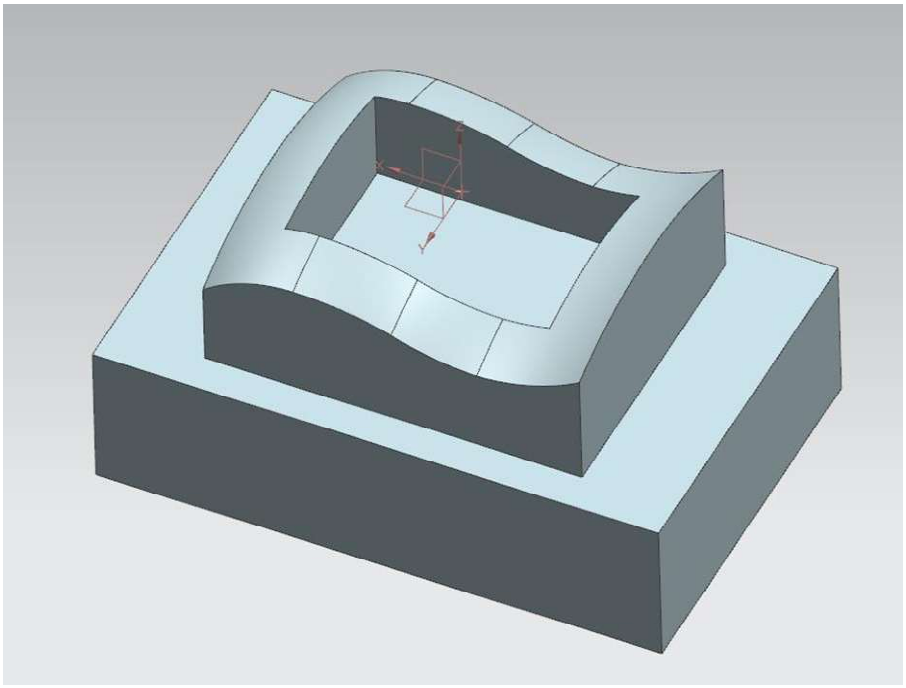




5. Revolve the curves about the dashed axis as shown above, and subtract the cut with start angle and end angle as -45 and 45.



6. Subtract a block of 70, 50, and 30 to create a huge cavity at the center.



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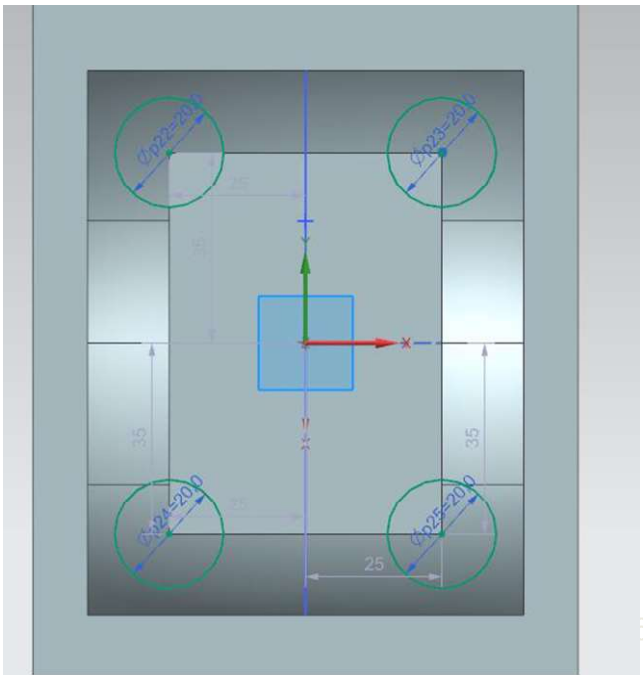
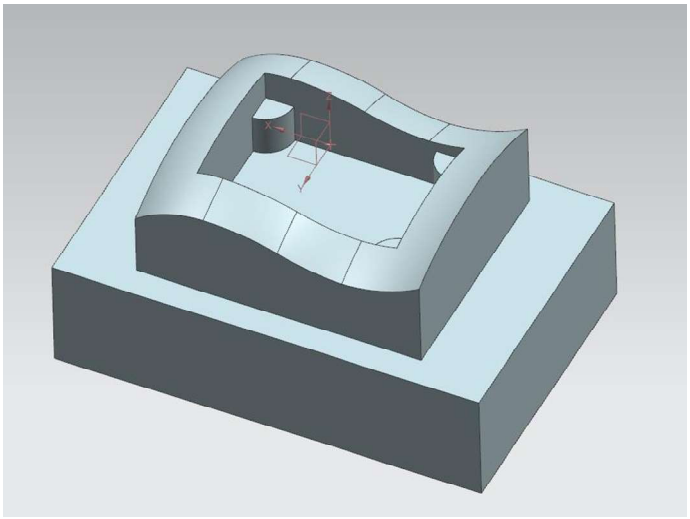
7. Create and Unite 4 cylinders at the inner corners of the cavity with 20 mm diameter and 15 mm height.





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8. Add edge blends at the corners as shown in the final Model below. Keep the value of blend as 10 radius for outer edges and 5mm radius for the inner edges.