

7. Sweep Representations

Sweep representations are based on the notion of moving a point, curve, or surface along some path.

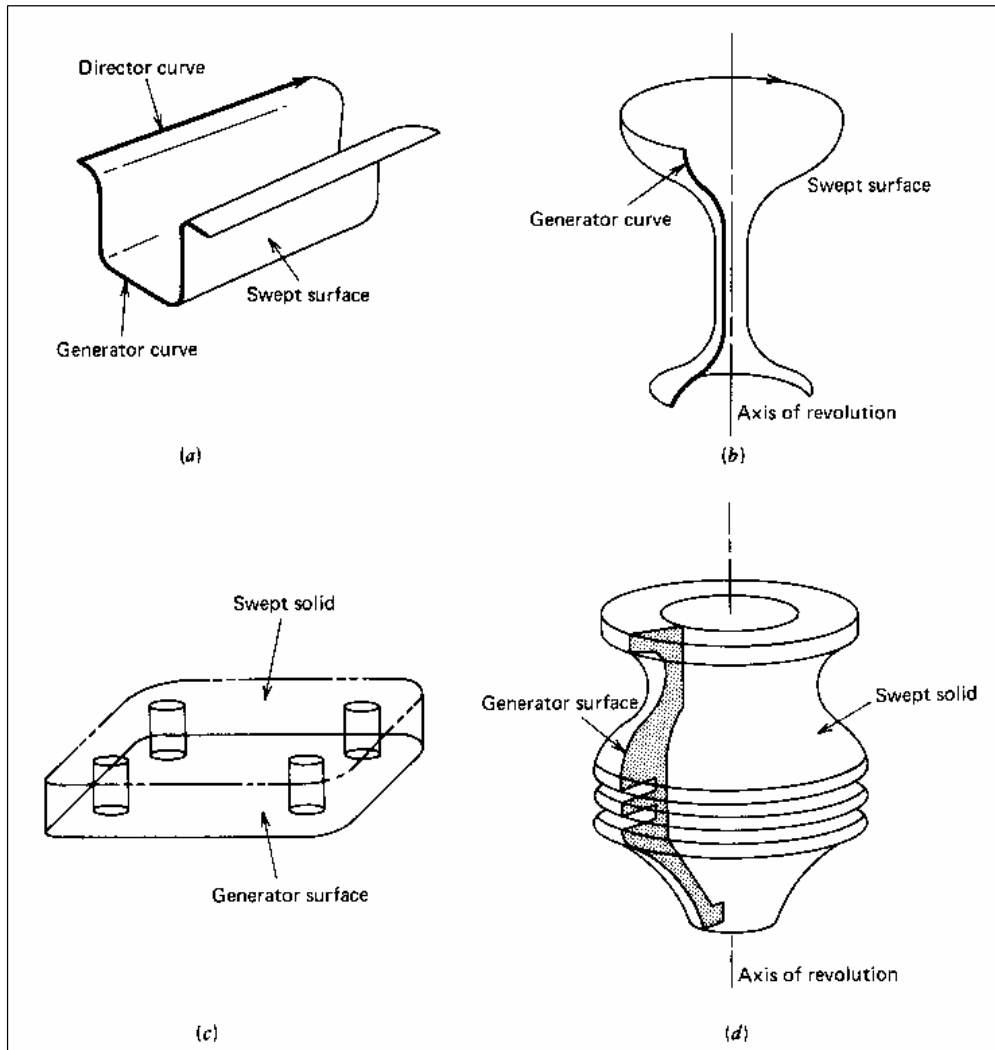
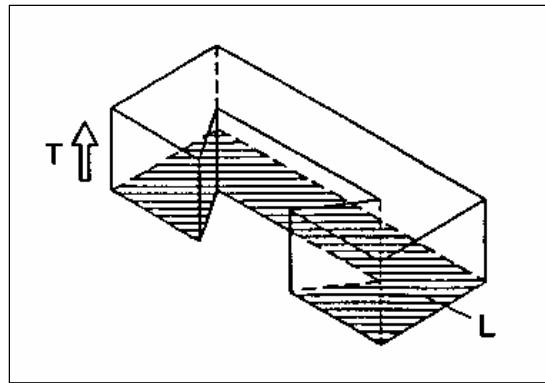


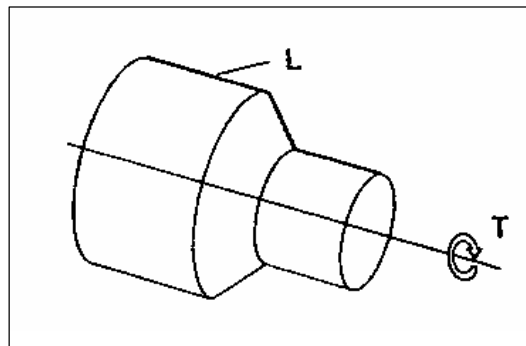
Figure 1. Examples of sweep representations

a), c) izvlačenje (extrude), kada se 3D model dobija izvlačenjem površinskog modela (ravninskog ili prostornog) duž definisane pravocrtne putanje

b) rotiranje (revolve), za kreiranje osnosimetričnih tijela, pri čemu kao osnova za izvođenje ovakvog modela (uz osu simetrije) može poslužiti polupresjek modela, ili njegova kontura



Sl. 2. Izvlačenje (extrude) 3D modela



Sl. 3. Kreiranje modela rotiranjem konturne linije (revolve)

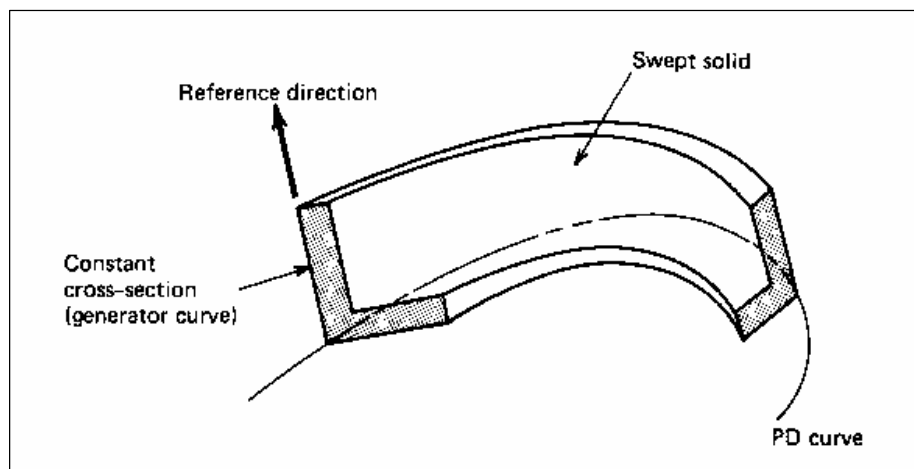
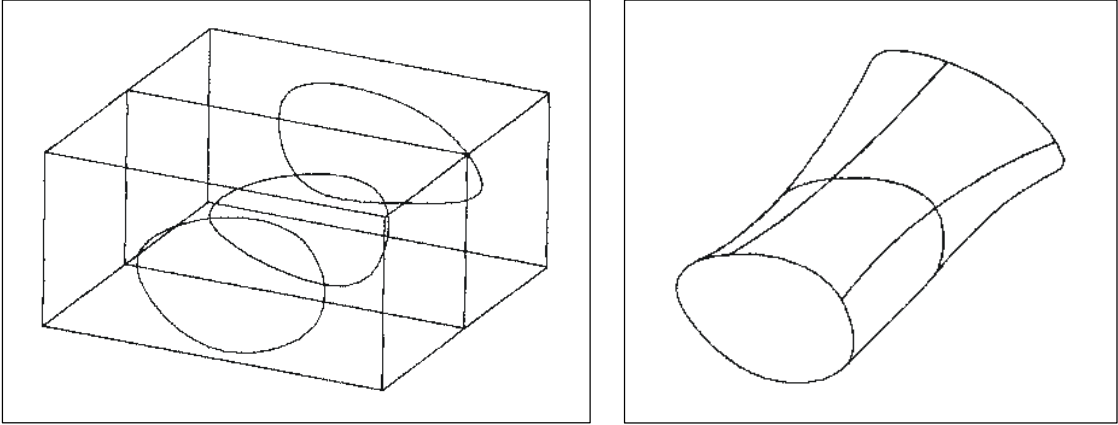
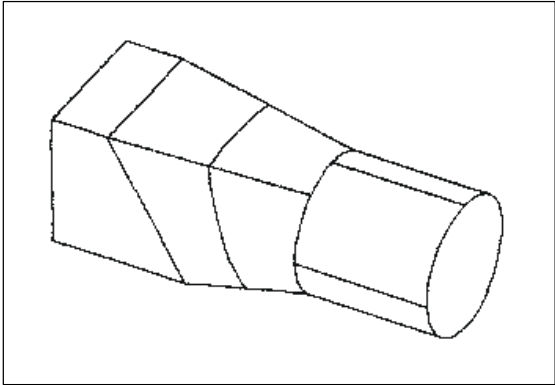


Figure 4. A constant-cross-section part

Loft Representation, kada se model dobija "provlačenjem" kroz prethodno definisane presjeke modela. Tipičan primjer je izvlačenje katodne cijevi TV prijemnika.

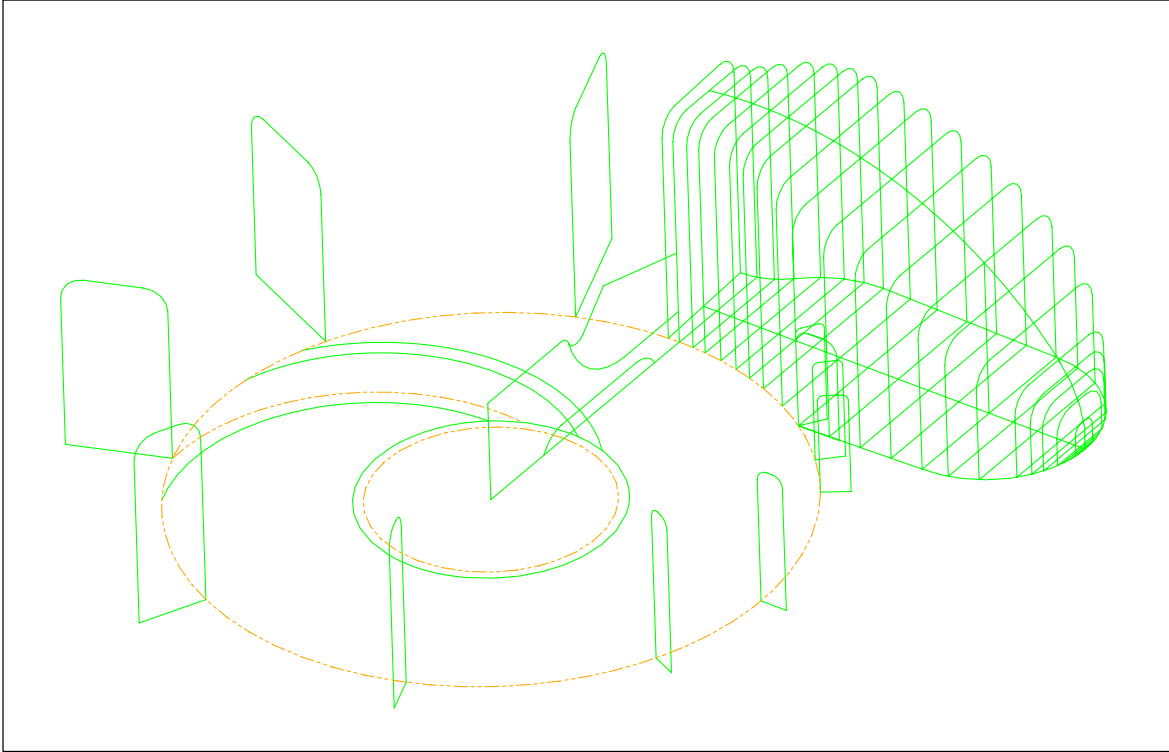


Sl. 5. Create a lofted part or feature and loft using part partitions



Sl. 6. Loft between part faces

Variational Sweep Representation



Sl. 7. Variational Sweep