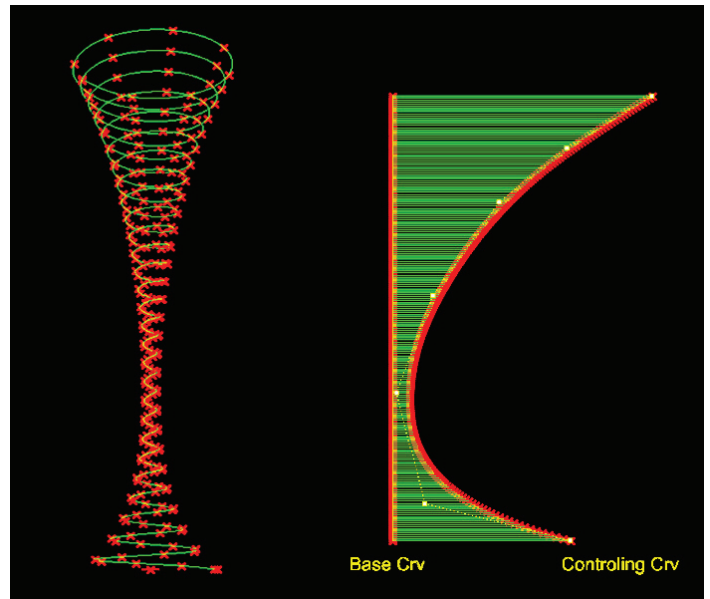
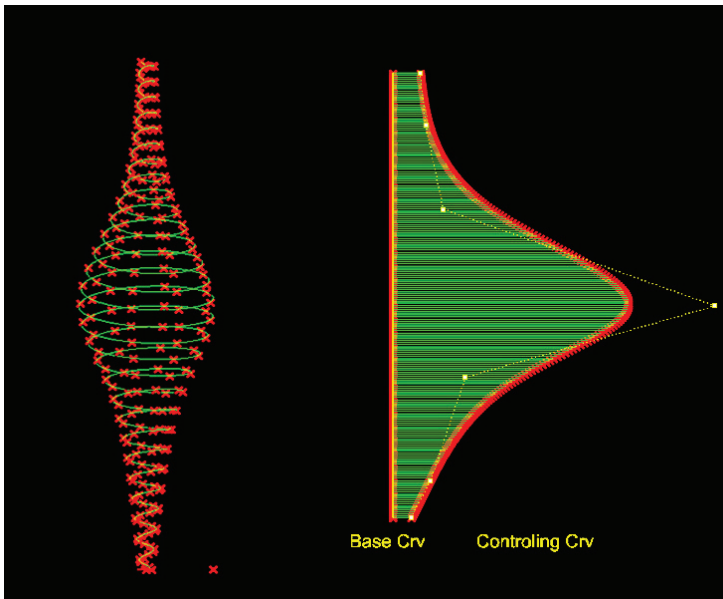
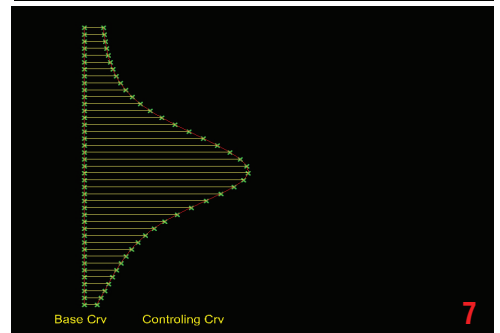
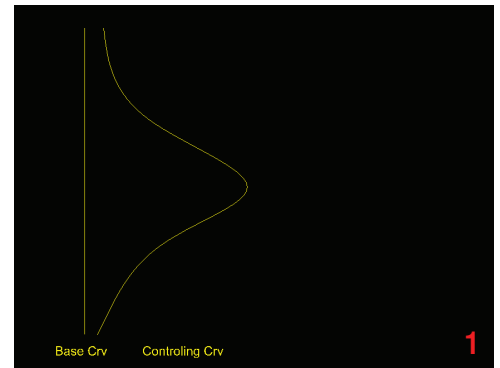


5\_3 DEFORMING SPIRAL

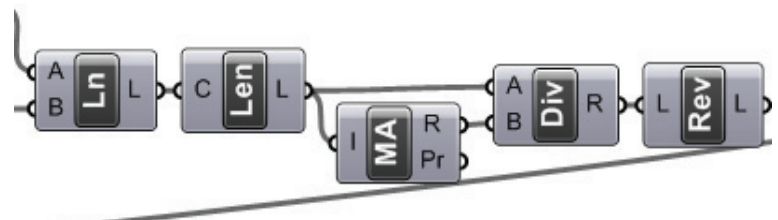


Step1 : Geometry Controlling Geometry

1. **Curve** (Params/Geometry/Curve)
  - Draw a Line on XZ plane(front view) in Rhino Scene
  - "Base Crv" : Right click and Set one curve
2. **Curve** (Params/Geometry/Curve)
  - Draw a Curve on XZ plane(front view) in Rhino Scene
  - "Controler Crv" : Right click and Set one curve
3. **Slider** (Params/Special/Number Slider)
  - "Number of Points" : Integers, Lower limit=0, Upper limit=500, Value=226
4. **Divide**(Curve/Division/Divide Curve)
  - C : Curve("Controler Crv")
  - N : Slider ("Number of Points")
5. **PI** (Vector/Plane/Plane Normal)
  - O : Divide(P)
  - Z : XY plane (P)
6. **PCX** (Intersect/Mathematical/Curve | Plane)
  - C : Curve ("Base Crv")
  - P : PI (P)
7. **Ln**(Curve/Primitive/Line)
  - A : PCX(P)
  - B : Divide(P)
8. **Len**(Curve/Anaysis/Length)
  - C : Ln(L)
9. **MA**(Scalar/Util/Mass Addition)
  - I : Len(L)
10. **Div**(Scalar/Operator/Division)
  - A : Len(L)
  - B : MA(R)
11. **Rev**(Logic/List/Reverse List)
  - L : Div(R)



Geometric Data for controlling another Geometry

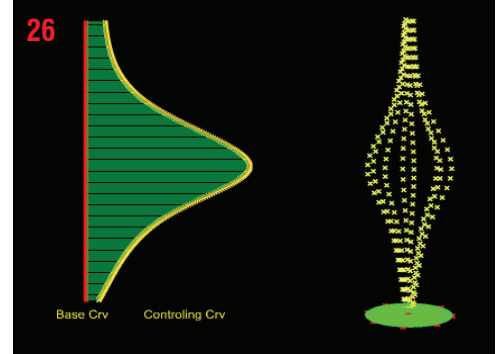
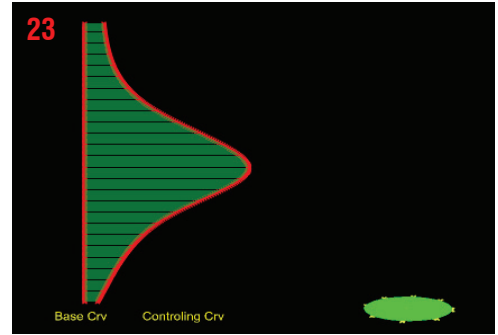


**Step2 : Deforming Spiral**

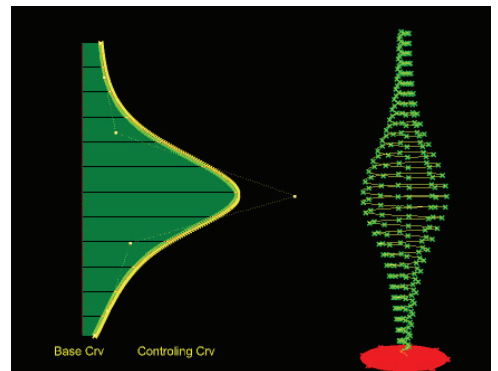
- 12. **Data** (Params/Primitive/Data)
  - "Data from Geometry Controller" : *Rev(L)*
- 13. **Slider** x 3 (Params/Special/Number Slider)
  - "Base Circle Radius" : Floating point, Lower limit=0, Upper limit=20, Value=12
  - "Height" : Floating point, Lower limit=0, Upper limit=200, Value=85.0
  - "Spiral Fineness" : Floating point, Lower limit=0, Upper limit=1.0, Value=1.0
- 14. **Mult**(Scalar/Operator/Multiplication)
  - A : *Data*("Data from Geometry Controller")
  - B : *Integer* = 100
- 15. **Mult**(Scalar/Operator/Multiplication)
  - A : *Mult*(R)
  - B : *Slider* ("Base Circle Radius")
- 16. **Cir**(Curve/Primitive/Circle)
  - P : default
  - R : *Mult*(R)
- 17. **Eval** (Curve/Analysis/Evaluate Length)
  - C : *Cir* (C)
- 18. **Lng**(Log/List/List Length)
  - L : *Data*("Data from Geometry Controller")
- 19. **Range**(Logic/Sets/RAnge)
  - D : *Lng*(L)
  - N : *Lng*(L)
- 20. **Div**(Scalar/Operator/Division)
  - A : *Pi*
  - B : *Number* = 4
- 21. **Mult**(Scalar/Operator/Multiplication)
  - A : *Slider*("Spiral Fineness")
  - B : *Div*(R)
- 22. **Mult**(Scalar/Operator/Multiplication)
  - A : *Range*(R)
  - B : *Mult*(R)
- 23. **Rotate**(XForm/Euclidian/Rotate)
  - G : *Eval*(P)
  - A : *Mult*(R)

**Step3 : Move to z-direction and Connection**

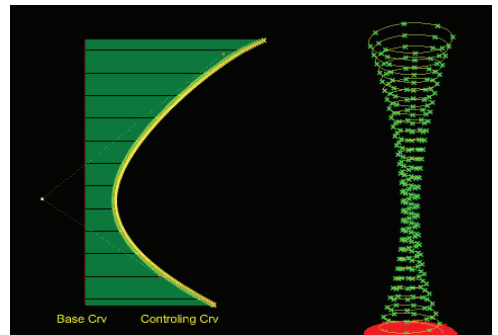
- 24. **Div**(Scalar/Operator/Division)
  - A : *Range*(R)
  - B : *Lng*(L)
- 25. **Mult**(Scalar/Operator/Multiplication)
  - A : *Div*(R)
  - B : *Slider*("Height")
- 26. **Move**(XForm/Euclidian/Move)
  - G : *Rotate*(G)
  - T : *Unit Z* from *Mult*(R)
- 27. **IntCrv**(Curve/Spline/Interpolate)
  - V : *Move*(G)



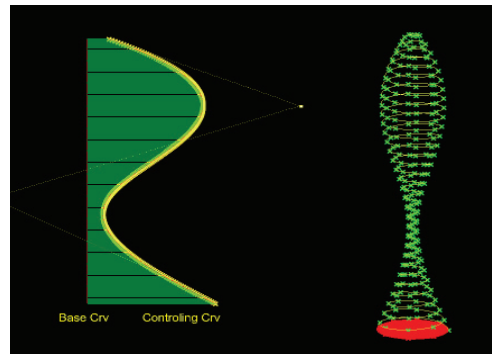
Control Crv 1



Control Crv 2



Control Crv 3



Appendix  
- Definition map

