



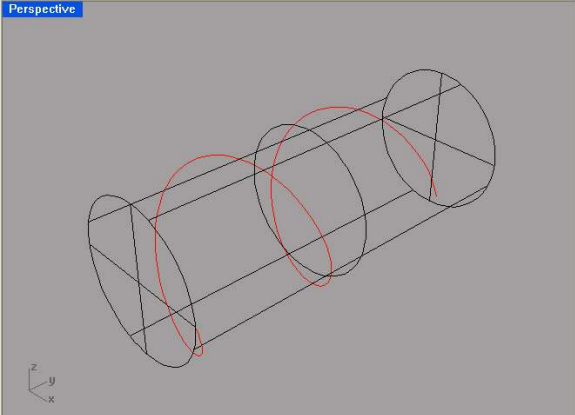
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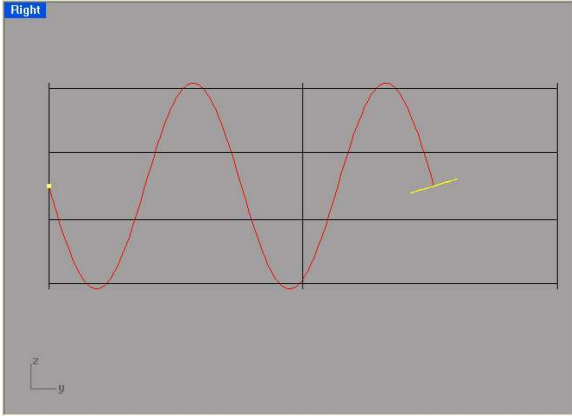
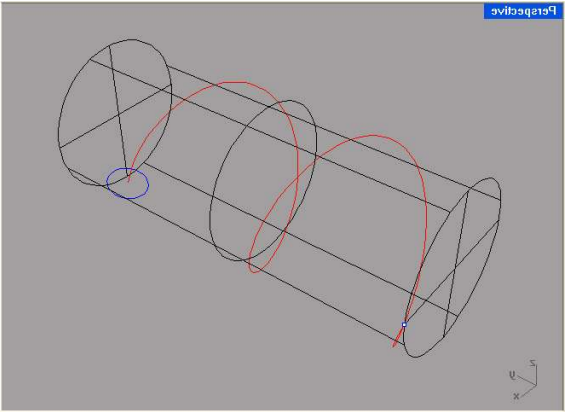
MODELING A SNAKE BRACELET



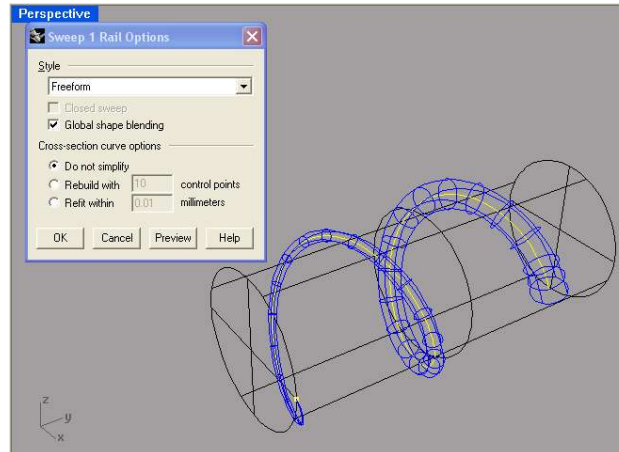
Begin by drawing a cylinder and then a curve-helix shorter than the cylinder but with the same radius and Turns 2



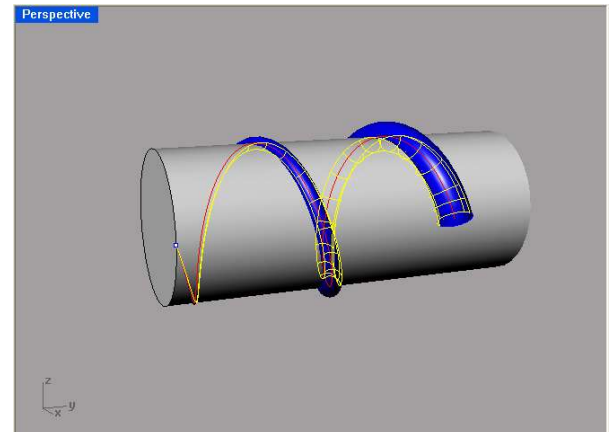
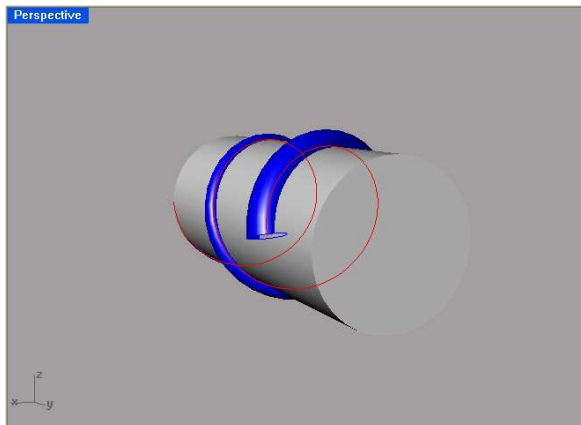
Go on with CIRCLE: AROUND CURVE and put the circle (blue) at the end of the helix so that it is perpendicular to it, then draw a dot at the opposite end.



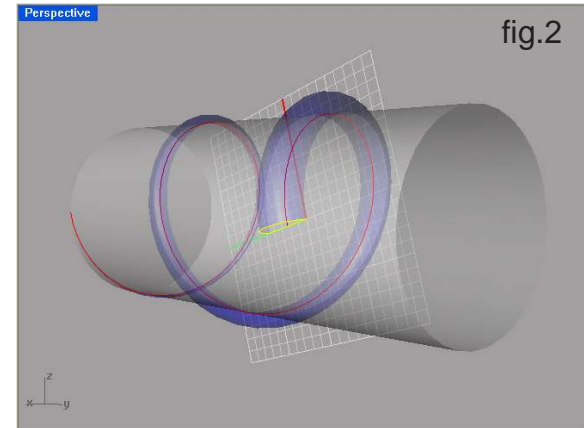
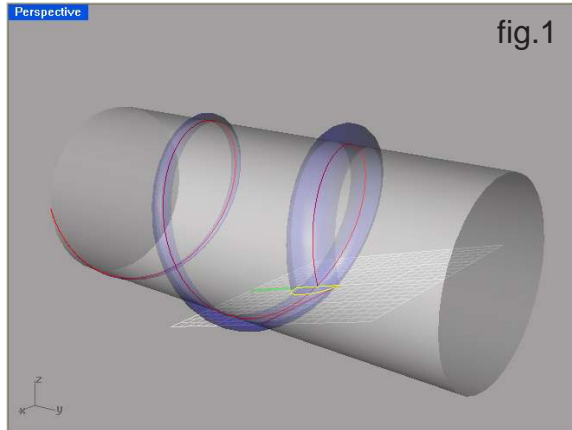
SURFACE-SWEEP 1 RAIL use the helix as rail an the dot as section



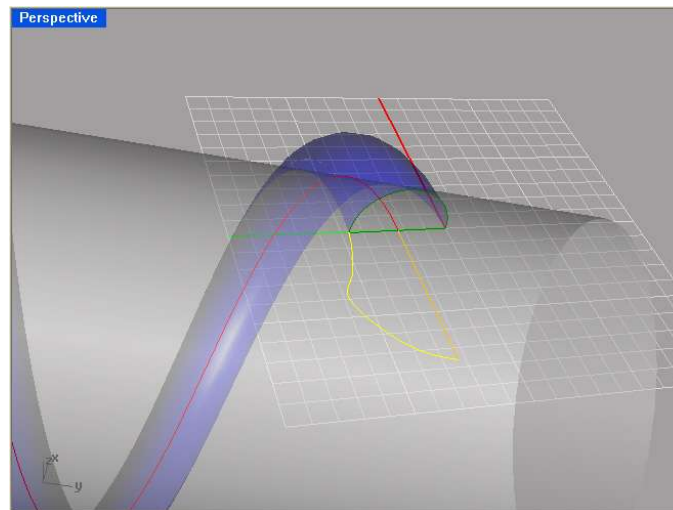
Now split the result of SWEEP (Blue) with the cylinder and erase the inner part (yellow)



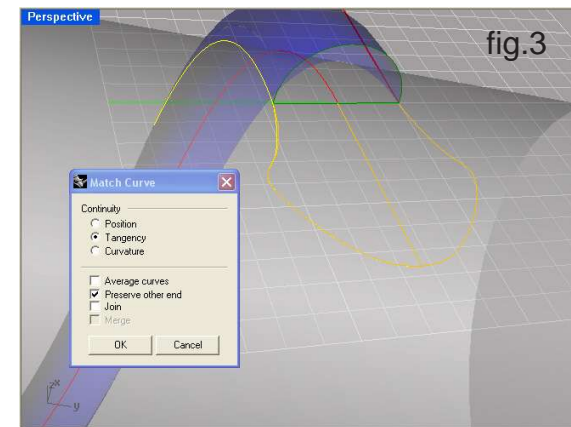
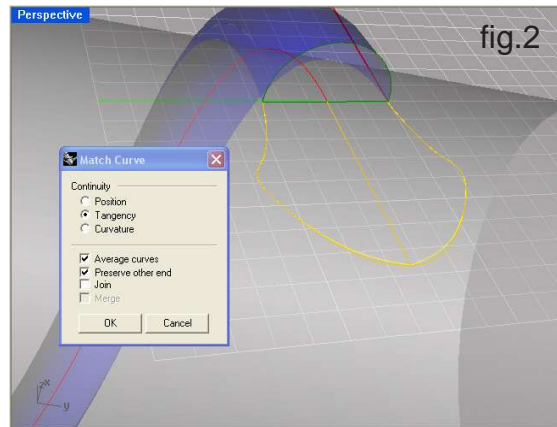
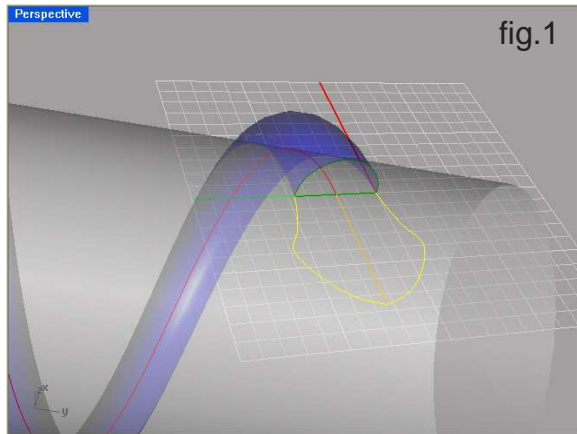
Draw a line which joins the circle quadrant then with SET CPLANE TO OBJECT put the work plane on geometric (picture 1 yellow) Then with SET CPLANE: ROTATE turn of 90° respect the Y axis.



Draw a line (orange) perpendicular to the medium point of the green line then with CURVE: INTERPOLATE POINTS begin to draw the head (yellow), starting from the arc quadrant till the end of the orange line.

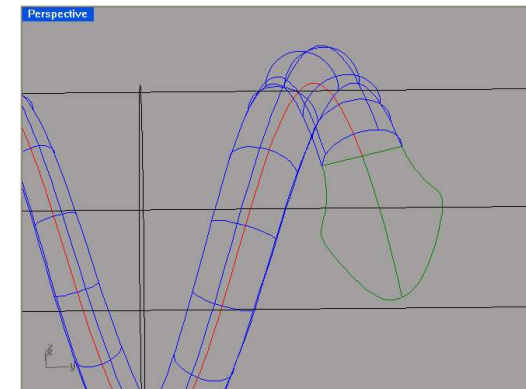
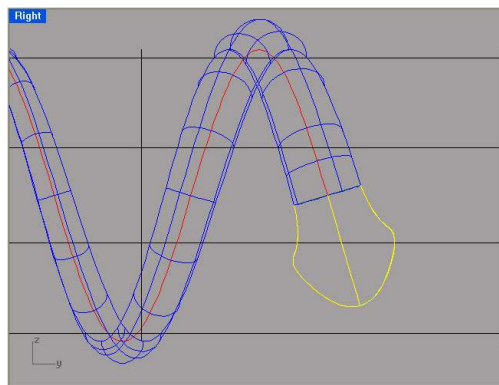


Execute MIRROR of the head with active F8 (ORTHO) from MID of the line (green), see picture 1.
 Execute active option so that both the curves change and with TANGENCY Option put in G1 the curve and erase possible edges Go (picture 2)
 Then execute MATCH twice between the head curve and the edge of the body (picture 3)

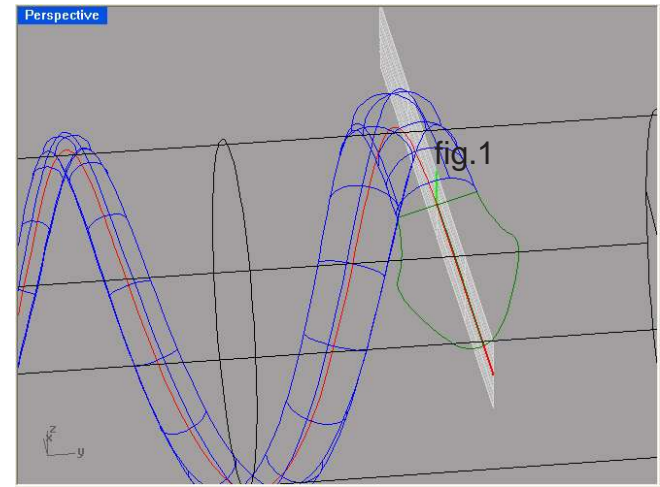
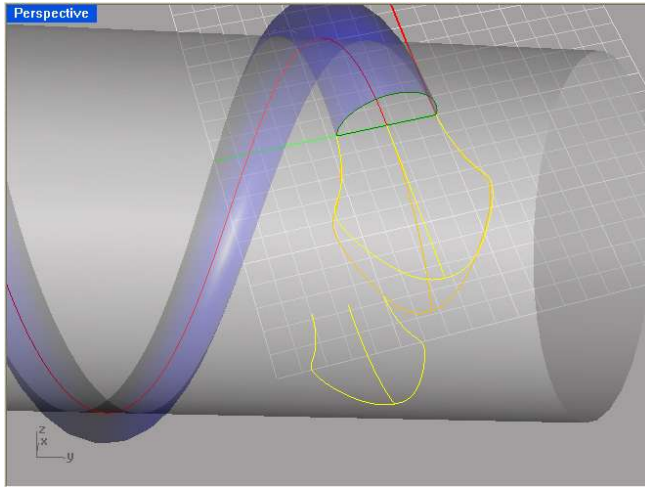


OPTIONS: it is also possible to work in another way, by drawing a perpendicular line at the end of the orange line and draw CURVE: INTERPOLATE POINTE by activating START TANGENT and END TANGENT Options.

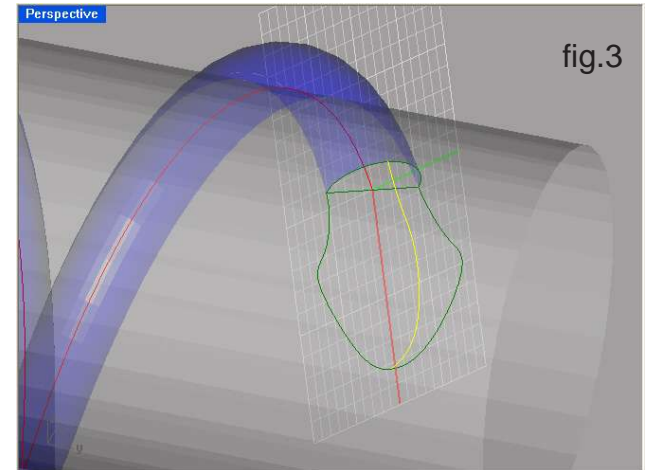
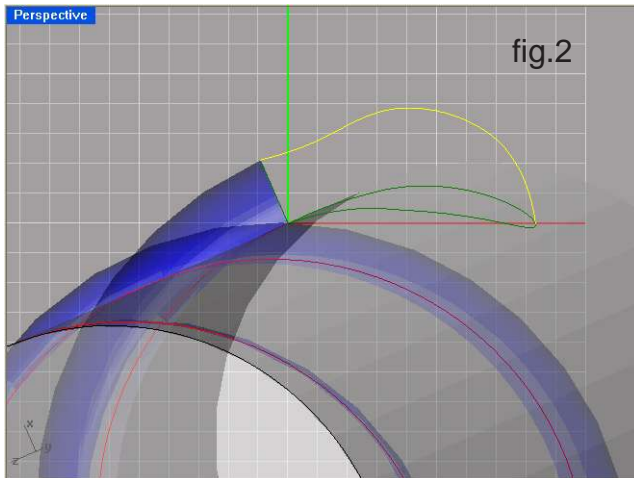
Now with CURVE FROM OBJECTS-PROJECT project the three curves on the cylinder as in the picture



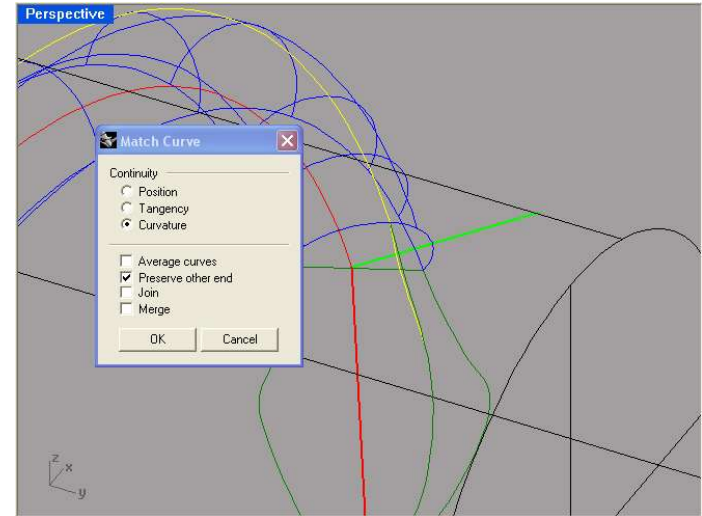
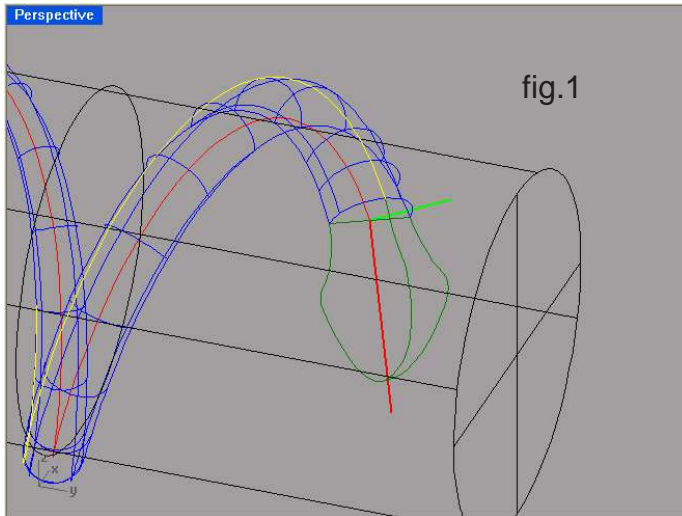
Erase the original three curves and the underlying projections (yellow). Put the CPLANE with SET CPLANE BY 3 POINTS as in picture 1



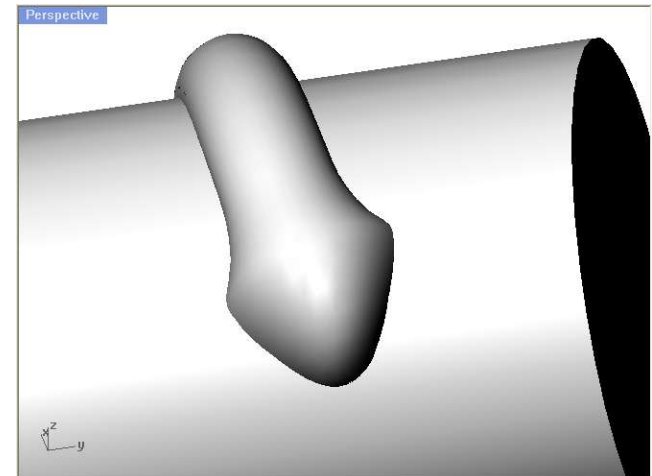
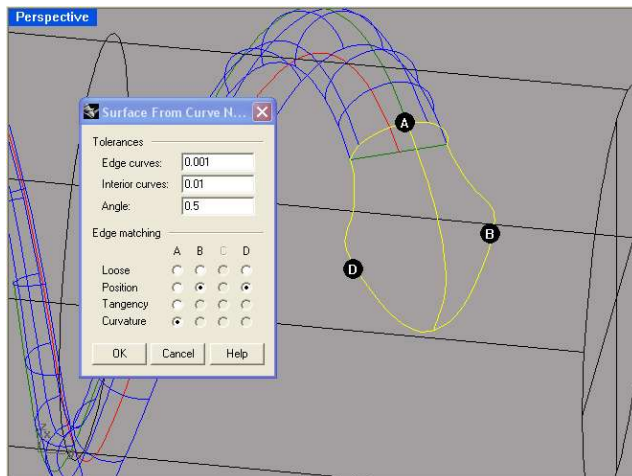
Right key in PERSPECTIVE on the name then SET VIEW-PLANE: in this way we out the perspective view perpendicular to the CPLANE (picture 2); now draw the othe head profile (yellow) starting from the arc quadrant till the end of the line, then redo the former options but instead of PLANE, reactivate PERSPECTIVE (picture 3)



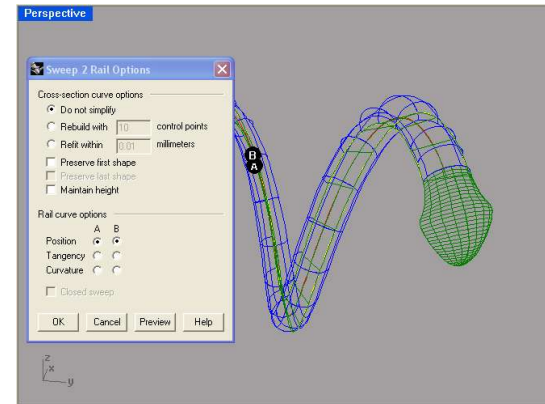
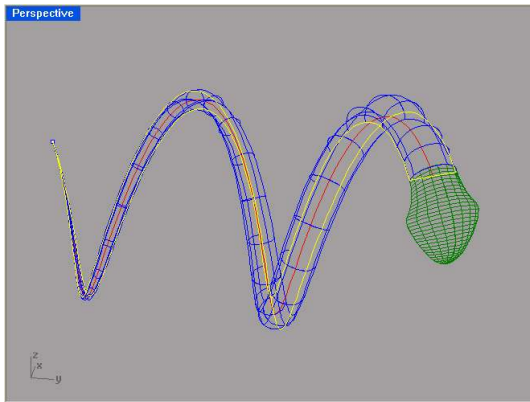
Now CURVE-CURVE FROM OBJECT-EXTRACT ISOCURVE with DIRECTION U option extract the isocurve starting at the end of the head (picture 1). Execute MATCH between the head curve and the isocurve, this time without activating AVERAGE CURVES Option because we want the changing of the head curve respect to the isocurve.



Go on with SURFACE CURVE NETWORK selecting first the three curves B, C and the middle one, then the A curve (notice that the parameters values have been lowered to be sure to be able to connect the surfaces then)



Execute SURFACE-SWEEP 2 RAIL again using the A and B edges as Rail and the line which joins the arc end ad section; JOIN of the surfaces and we have finished.



If we don't want the end of the bracelet to be point, we must operate for the tail as we have done for the head.

