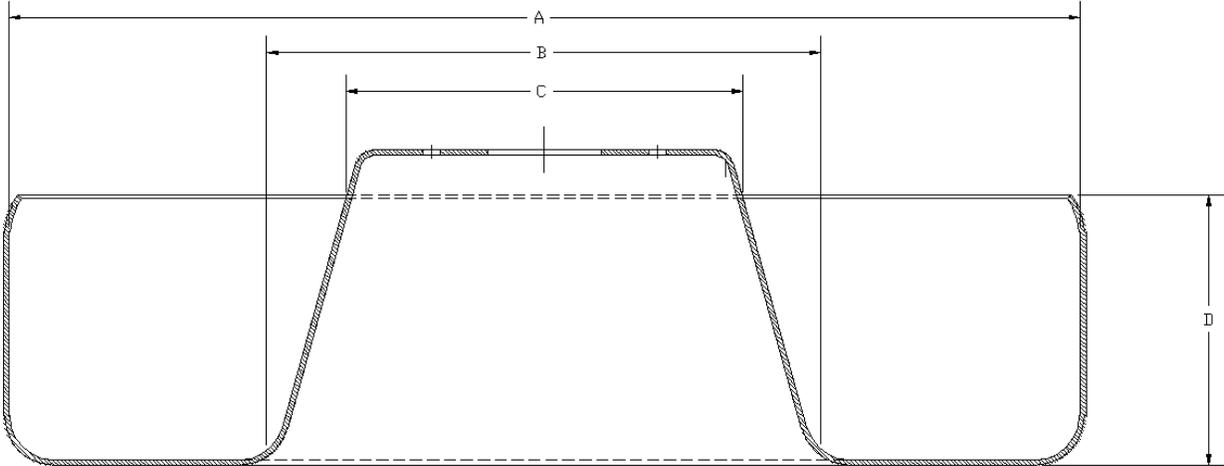# CD-17 Specifications

REV 0 11/15/2012

Bowl dimensions

For bowl 143691 30 inch 762mm diameter

    Outer dimension of coil

        A=29.8 inches 757mm

    Inner dimension of coil

        B=13.5 inches 343mm at bottom of bowl

        C=10.8 inches 274mm at top of bowl

    Height of coil

        D=5.8 inches 147mm

For bowl 143690 24 inch 610mm diameter

    Outer dimension of coil

        A=23.8 inches 605mm

Inner dimension of coil

B=11.6 inches 297mm at bottom of bowl

C=8.8 inches 224mm at top of bowl

Height of coil

D=5.8 inches 147mm

For bowl 143689 18 inch 457mm diameter

Outer dimension of coil

A=17.8 inches 452mm

Inner dimension of coil

B=10.4 inches 264mm at bottom of bowl

C=8.8 inches 224mm at top of bowl

Height of coil

D=3.8 inches 97mm

Guide tube size

The inside of the guide tube is 32mm. The maximum wire diameter is somewhat dependent on the how sticky the wire insulation is.   In general the maximum size wire you could run is 30mm

How much wire will fit in the bowl

The cross sectional area of the 30 inch bowl (143691) is 52.5 square inches.
The average diameter is 20 inches
The cross sectional area of the 24 inch bowl (143690) is 39.8 square inches.
The average diameter is 16.3 inches
The cross sectional area of the 18 inch bowl (143689) is 15.6 square inches.
The average diameter is 13.8 inches

The wire can pile up in one of two ways it could stack up squared off or it could nest into the cable below it. The worst case is that it will nest squared off. So we will use this to compute the area that the cable will use in the bowl (cable diameter^2)

Because we cannot actually coil to the top of the bowl, the cable may cross over itself and you need room to reach in your hand, we will have to assume that we can only fill the area to 50%.

For bowl 143691 30 inch 762mm diameter
 (52.5/(cable diameter^2)) * π * 20*0.5 = length of cable in bowl in inches
For bowl 143690 24 inch 610mm diameter
 (39.8/(cable diameter^2)) * π * 16.3*0.5 = length of cable in bowl in inches
For bowl 143689 18 inch 457mm diameter
 (15.6/(cable diameter^2)) * π * 13.8*0.5 = length of cable in bowl in inches