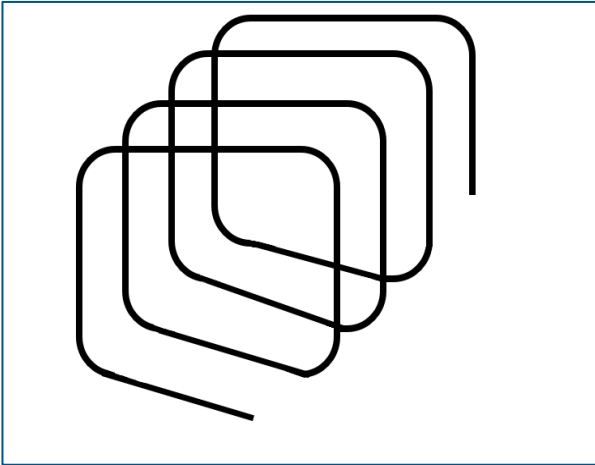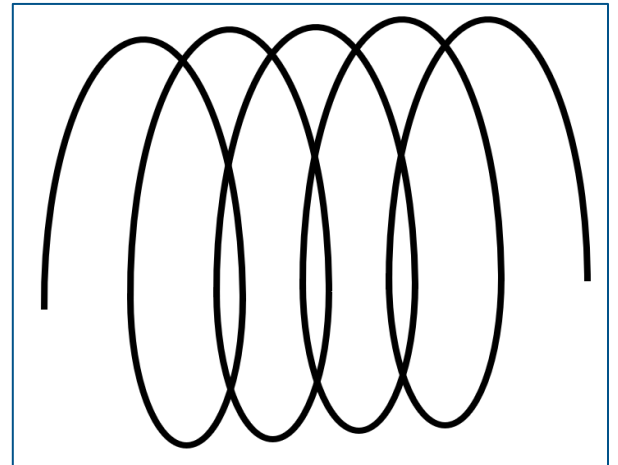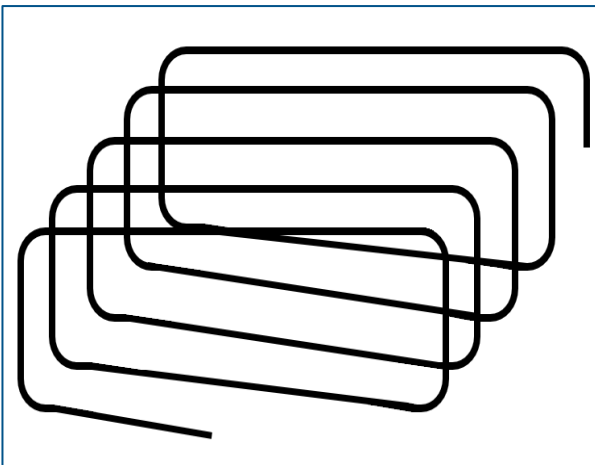# CONTINUOUS SPIRALS

for Concrete Reinforcing
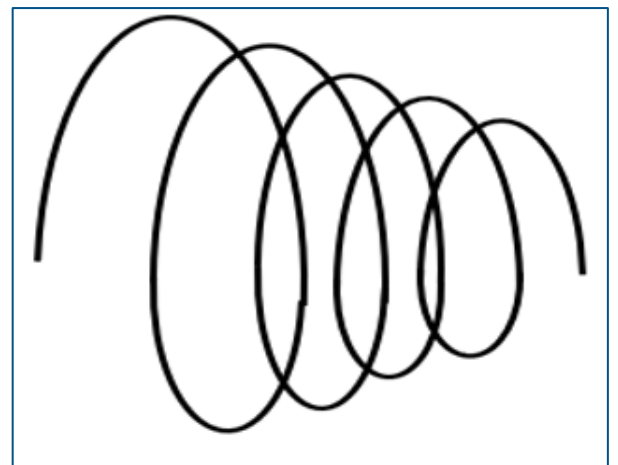
SQUARE

CIRCULAR

RECTANGULAR

TAPERED CIRCULAR

SAVE MATERIAL COSTS
SAVE TIME AND LABOR EXPENSES
ASSURE POSITIVE PLACEMENT

1373 Boggs Drive
Mt Airy, NC 27030
336-719-9000 - www.insteel.com - pcstrand@insteel.com

Advantages

1. Reinforcing spirals extend like an accordion.
2. They can be positively and quickly tied into place.
3. Spirals can be fabricated to meet exact shape and reinforcing specifications.

Typical Spiral Applications

- Bridge piling, beams, and caps
- Building columns and joists
- Highway sign footings
- Railroad ties
- Waterfront sheet piling
- Keystone joists
- Ornamental columns
- Transmission and light poles,
  ...and other precast / prestressed concrete members.

Capability

- Shapes: Circles, Rectangles, Squares, and Tapered Circles are all possible.
- Dimensions
  a. Circular spirals can be furnished with inside diameters from 5 to 58 inches.
  b. Square and rectangular spirals can be furnished with inside dimensions from 5 ½ to 30 inches.
  c. Standard length is 100 turns per bundle for any wire size. However, a greater number of turns can be furnished to special order.
- Wire Size – Spirals can be fabricated from bright (uncoated) steel wire from W1.2 (0.124-inch diameter) to W20 (0.505-inch diameter).

Certification

Spiral wire for concrete reinforcement produced by Insteel Wire Products Company complies with and is certified to ASTM A1064 (which includes plain wire for concrete reinforcement). Minimum yield strength is 65000 psi.

Ordering

When placing an order, please include:
1. Sketch of shape giving strand or other reinforcing out-to-out dimensions.
2. Spiral wire size and pitch desired (if applicable).
3. Required yield strength.

For tapered sections, such as utility poles or transmission towers, the exact taper of longitudinal reinforcing is necessary in addition to above ordering data.

Weight

To determine the approximate weight of a multi-turn spiral, proceed as follows:
1. Calculate mean length of one complete turn in feet
2. Multiply by the number of turns.
3. Multiply by the weight per foot.

Example 1: rectangular spiral, 100 turns, 0.208-inch diameter wire
with inside dimension of 12 x 24 inches.

100 turns x 0.116 lb./ft x {[2x (12.208 in. + 24.208 in.)]/12 in./ft} = 70.4 lb.

Example 2: circular spiral, 100 turns, 0.188-inch diameter wire with
 inside dimension of 14 inches

100 turns x 0.095 lb./ft x {[3.1415926 x 14.188 in.]/12 in./ft} = 35.3 lb.

Wire Size	Steel Area, square inches	Diameter, inches	Pounds per Foot	Wire Size	Steel Area, square inches	Diameter, inches	Pounds per Foot
W1.2	0.012	0.1236	0.041	W9.0	0.090	0.3385	0.306
W1.5	0.015	0.1382	0.051	W10.0	0.100	0.3568	0.340
W2.0	0.020	0.1596	0.068	W11.0	0.110	0.3742	0.374
W2.1	0.021	0.1635	0.072	W12.0	0.120	0.3909	0.408
W2.78	0.0278	0.1881	0.095	W13.0	0.130	0.4068	0.442
W2.9	0.029	0.1922	0.099	W14.0	0.140	0.4222	0.476
W3.0	0.030	0.1954	0.102	W15.0	0.150	0.4370	0.510
W3.4	0.034	0.2081	0.116	W16.0	0.160	0.4514	0.544
W4.0	0.040	0.2257	0.136	W17.0	0.170	0.4652	0.578
W4.5	0.045	0.2394	0.153	W18.0	0.180	0.4787	0.612
W5.0	0.050	0.2523	0.170	W19.0	0.190	0.4918	0.646
W6.0	0.060	0.2764	0.204	W19.6	0.196	0.4996	0.666
W7.0	0.070	0.2985	0.238	W20.0	0.200	0.5046	0.680
W8.0	0.080	0.3192	0.272				