

# Bending

## Bending

Standard single-pass tubular elements may be bent in an infinite variety of configurations. Utilizing the most up-to-date computer numerical control (CNC) bending equipment and techniques, INDEECO is able to produce an element to fit virtually any application.

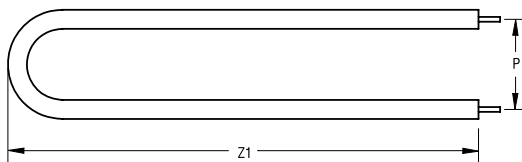
Bends that are less than 2" center-to-center are normally repressed on unfinned elements to recompact the magnesium oxide insulation, eliminating hairline cracks that may develop during bending.

Figures A through T show some of the configurations frequently specified. For configurations not shown, submit a drawing or sketch of your requirements. Any of these are available either finned or unfinned.

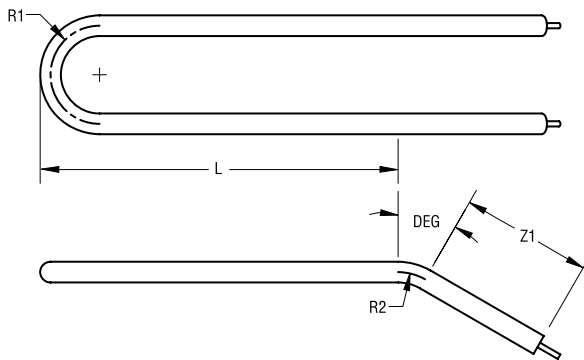
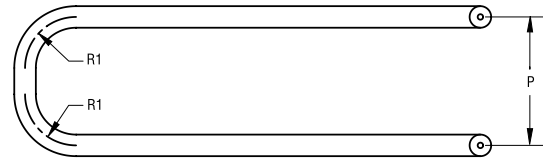
**Table V**

Sheath Diameter (Inches)	Sheath Materials	Minimum Bending <sup>(1)</sup> (Inches)		Center-To-Center Dimensions Available For Repressing Dies For 180° Bends
		Inside Radius	Center-To-Center Dimensions	
.312	Copper & Incoloy 800 304 SS	3/8	7/8	5/8, 11/16, 3/4, 1, 1-1/2, 2, 2-3/8, 2-1/2
		1/4	1	
.475 Unfinned	Copper, Steel & Incoloy 800 304 & 316 SS Inconel 600 & Monel 400	1/2	1-1/4	1, 1-1/16, 1-1/8, 1-1/4, 1-3/8, 1-1/2, 1-5/8, 1-3/4, 1-7/8, 2, 2-1/4, 2-1/2
		1/4	1	
		3/8	1-1/2	
.475 Finned	Steel 304 SS Monel 400		2	Not repressed. Bending dies are available in 1/8 increments from 2 through 3-1/2.
			2	
			2	

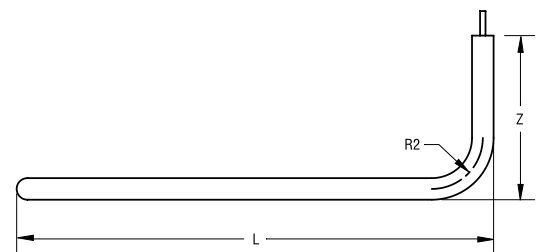
(1) Contact factory for requirements below minimum bending dimensions shown.



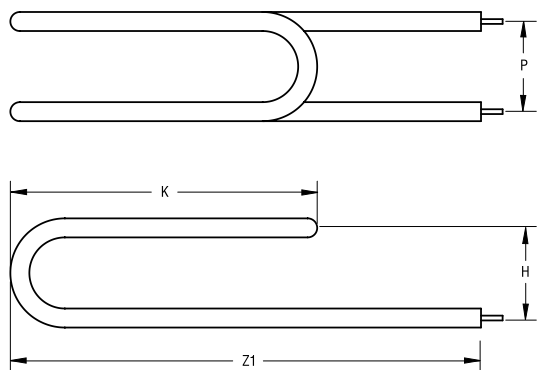
**Figure A**



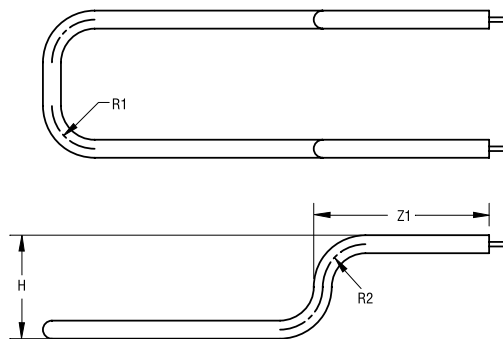
**Figure B**



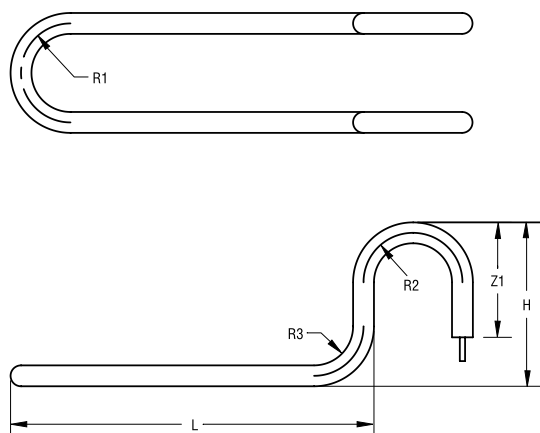
**Figure C**



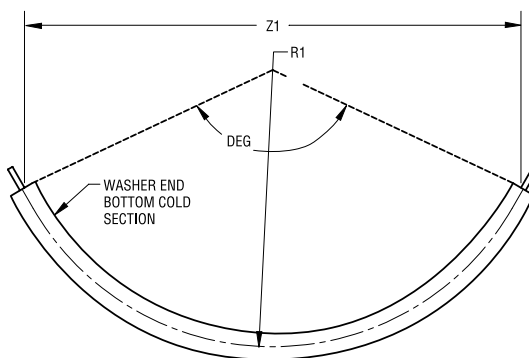
**Figure D**



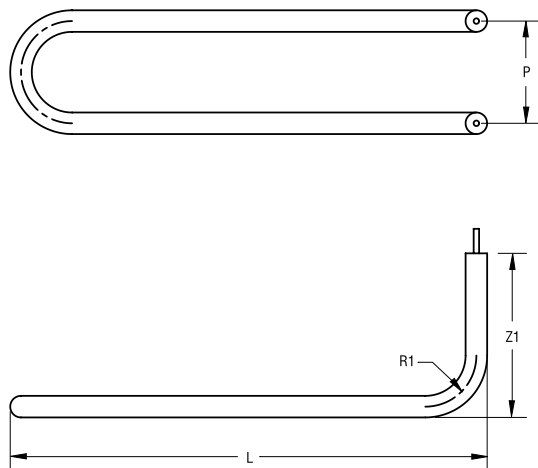
**Figure G**



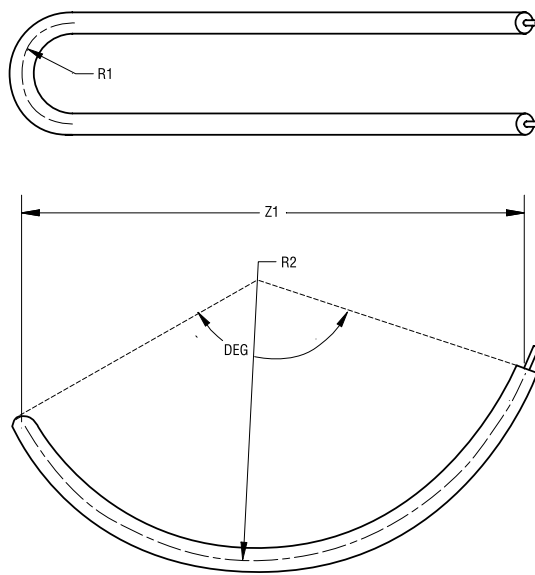
**Figure E**



**Figure H**



**Figure F**



**Figure I**

# Bending

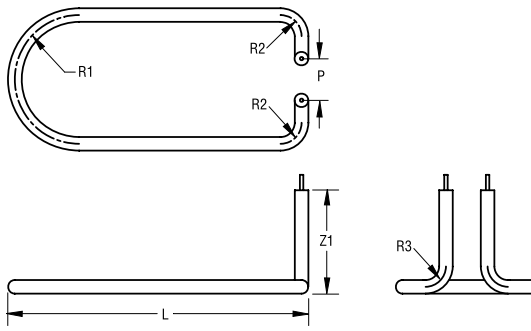


Figure J

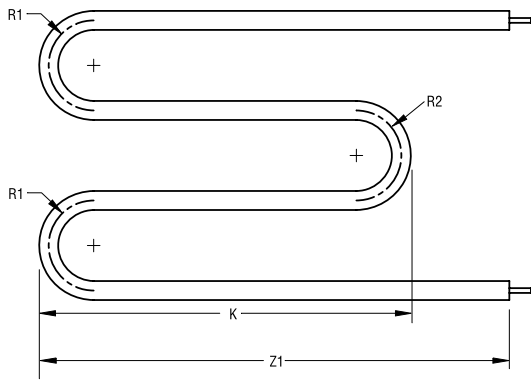


Figure K

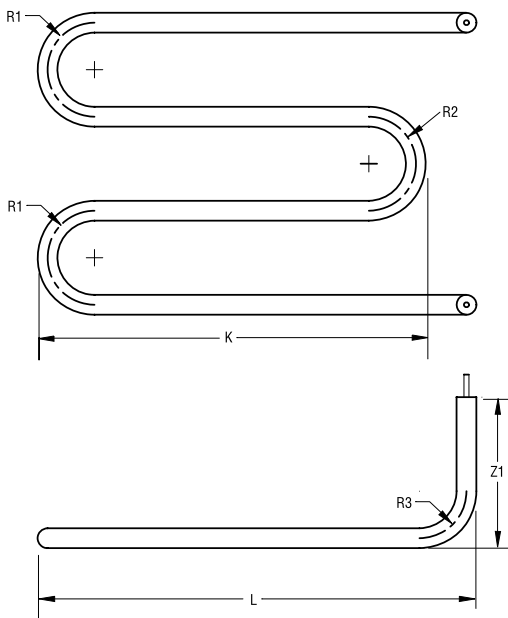


Figure L

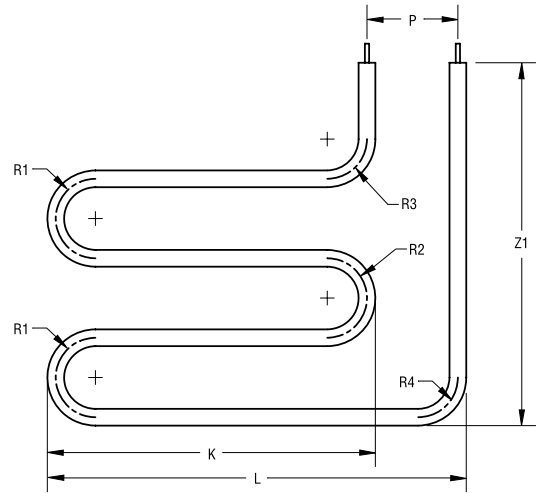


Figure M

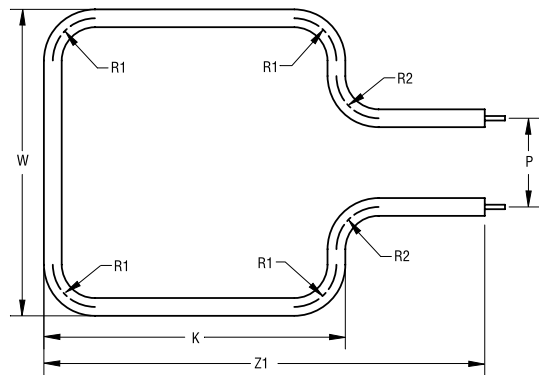


Figure N

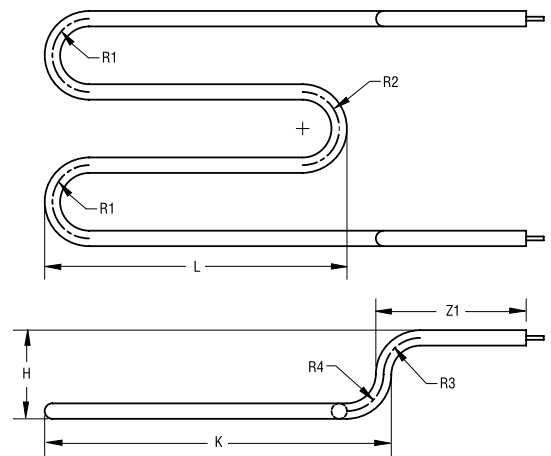
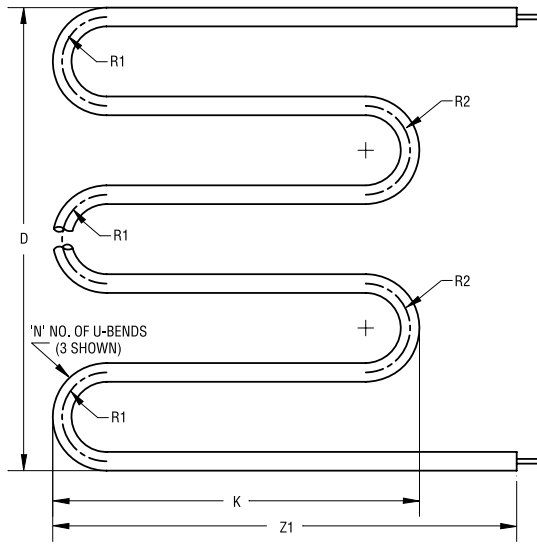
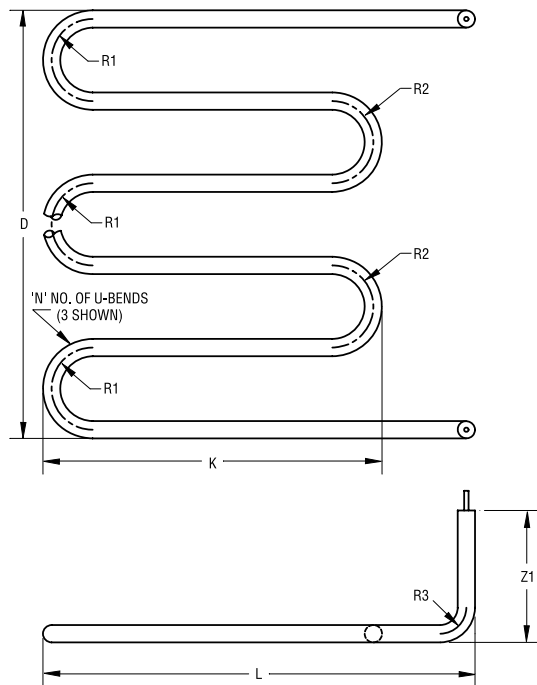


Figure O

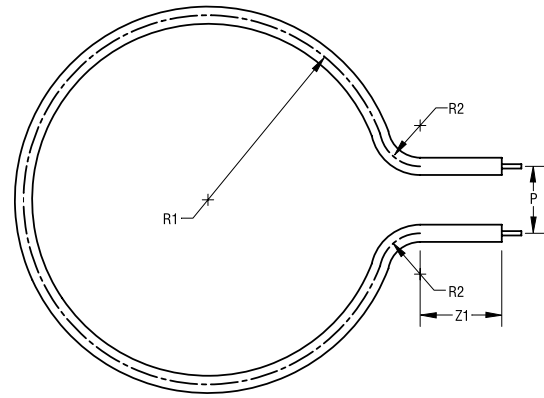


**Figure P**

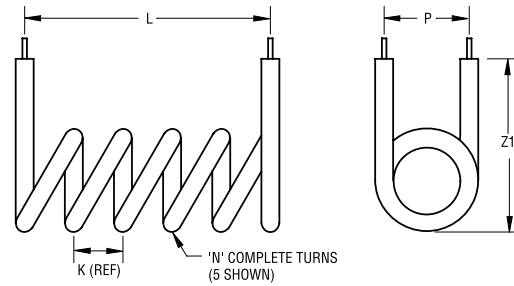


**Figure Q**

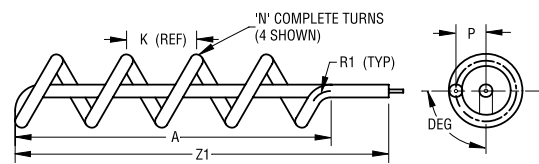
Note: Unheated section must not end in bend.



**Figure R**



**Figure S**



**Figure T**