

AUTOMATIC SPECIALTIES, INC.

CUSTOM WIRE FORM ORDER GUIDE

This guide will walk you through technical advice on ordering a custom wire form product. We'll advise how to determine the proper dimensions for your wire form order, the radius of the wire to be used, and the range of wire diameter to be used.

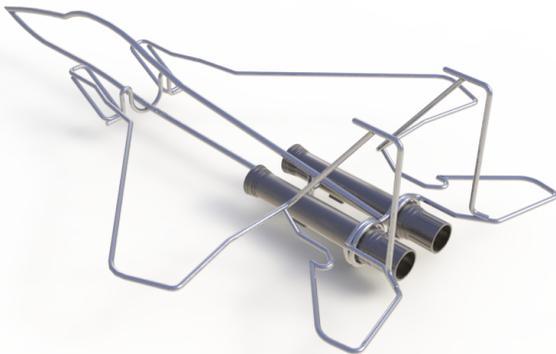
CUSTOM WIRE FORMS

Automatic Specialties has been manufacturing custom wire forms for OEMs for more than 40 years.

Call 1-800-445-2370 today to learn how we can design and produce wire forms for your next project.

Learn more about our custom wire form design and manufacturing Services.

<http://automaticspecialties.com/wire-forming>



WIRE DIAMETER/MATERIAL

We have a wide range of CNC wire forming machines that can handle custom wire forming request with diameters from .012 up to .312 and any wire size in between.

MATERIAL TYPE

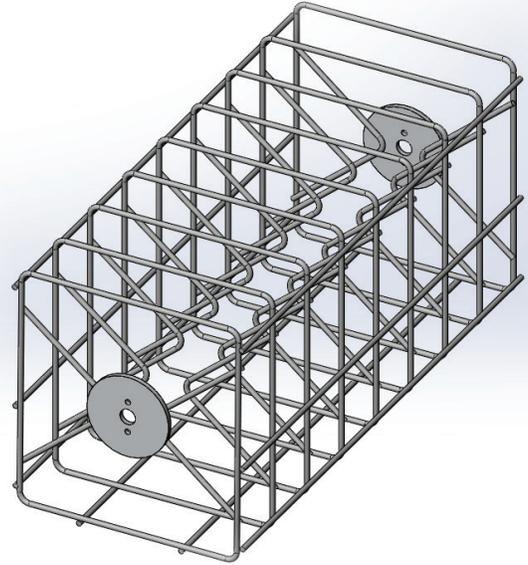
We can manufacture custom wire forms from all types of material. The most common material types for wire forms are cold rolled steel (C1008 TO C1018 basic wire), stainless steel (type 302, 304 and 316 or 17-7PH) music wire, hard drawn and oil tempered.



WIRE DIAMETER/MATERIAL

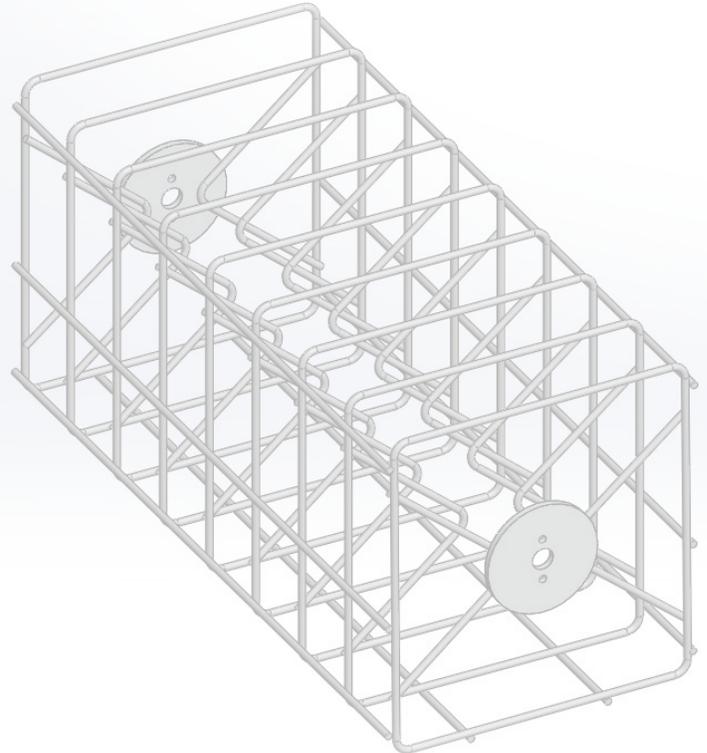
Our wire forming machines can accommodate a wide range of wire sizes – from .012" up to .312" in diameter – and almost limitless wire types Including:

- ▶ Stainless steel
- ▶ Galvanized wire
- ▶ Music Wire
- ▶ Hard Drawn MB Wire
- ▶ Phosphor Bronze
- ▶ Copper
- ▶ Inconel 600
- ▶ Carbon Wire
- ▶ Beryllium Copper



We provide an extensive array of coatings and finishes including:

- ▶ Anodizing
- ▶ Zinc
- ▶ Chrome
- ▶ Nickel
- ▶ Bead blasting
- ▶ Citric and nitric passivation
- ▶ Cleaning – conventional and ultrasonic
- ▶ Color coding
- ▶ Deburr – vibratory and tumble
- ▶ Electropolish
- ▶ Laser etching
- ▶ Powder-coating
- ▶ Rust preventative
- ▶ Shot peening
- ▶ Stress relieving
- ▶ Heat treating



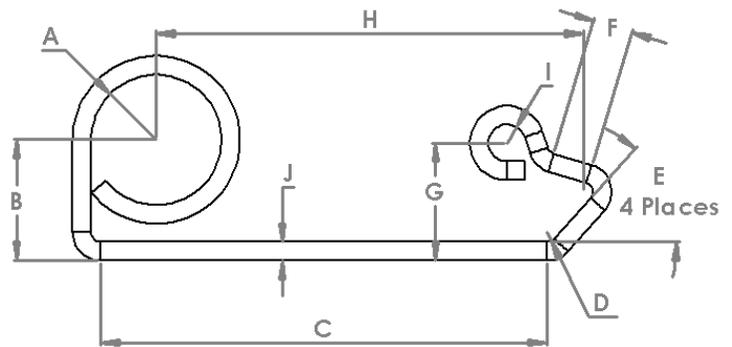
WIRE FORMS DIMENSIONS

The diagram and notes describe how to specify dimensions for wire forms. We have shown our preferred ways to specify dimensions to make it easier to produce and inspect your part.

- A. I. What is the radius or diameter of the circle?
- B. G. What is the height of the part?
- C. F. What is the length of the straights?
- D. What is the radius of the bend?
- E. What are all the angles?
- J. What is the diameter of the wire?
- K. What is the material?

Custom Wire Form Dimensions

Refer to the legend below as you consult the diagram to determine the language and measurements to use when putting your order/quote together:



Wire Form Tolerance Note on H

The accumulated variation of the overall length (H) will be larger than the variation of any one dimension that makes up the overall length. So therefore, it should be a referenced dimension. If a tolerance on the overall dimension is required, it will have to be determined after the first piece is run.

General Rules of Thumb

1. For low carbon (low tensile steel) we can use a bending pin with a diameter that equals the wire diameter (there are some exceptions).

So the inside radius of the bend can potentially be .5X the wire diameter.

2. For harder spring tempered steel, we will use a bending pin with a diameter 2X the wire diameter. So the inside radius of the bend will be 1X the wire diameter.