



KY-RO is a profile and plate rolling service provider that has been serving the industry on a national level for over 15 years. We have earned a great reputation for accuracy, quick turn-around times, and competitive pricing. Over the years, we have provided forming services for all major local steel suppliers, fabrication and machine shops, and many other businesses involved in the industry. Our responses to quote requests are typically within minutes or hours, and rarely exceed one business day. Our well-established relationships with other related businesses allow us to supply a better product, with quicker lead times than the competition.

The following pages include detailed information about our abilities and capacities. You can check out our website at www.ky-ro.com to get a better idea of what we do. Additionally, please get a hold of Ben or Steve directly with the contact information below, if there is anything you feel we can do for you. We look forward to working with you.

KY-RO INC

Ph: (503) 443-2400

Fx: (503) 443-2202

email for Benjamin Hovey: Ben@ky-ro.com

email for Steve Kyle: Steve@ky-ro.com

Plate Rolling Capacities:

We have several different plate rolls ranging in size and design to accommodate different projects. Our largest plate roll is 10' wide and rated for 3/4" A36 steel at full width. Our smallest is 4' wide and rated for 10 GA and thinner. Plate rolls are not limited by their full width capacity rating. Therefore we can, and regularly do roll plate as thick as 3". Rolling thicker plates with narrower widths can be accomplished depending on material type and desired radius.

Profile Rolling Terminologies and Capacities

The following pages contain useful diagrams that display what we can do with different profile materials.

Mailing Address: P.O. Box 2478 • Tualatin, OR 97062

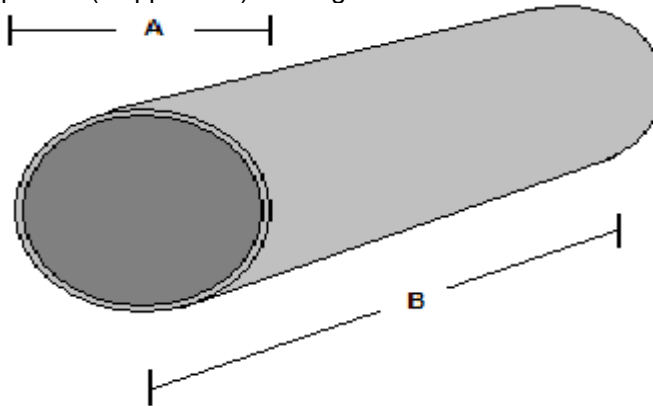
Physical Address: 18209 SW. Boones Ferry Rd. • Portland, OR 97224 • Office (503) 443-2400 • Fax (503) 443-2202

www.ky-ro.com

Plate Rolling

Standard Cylinders

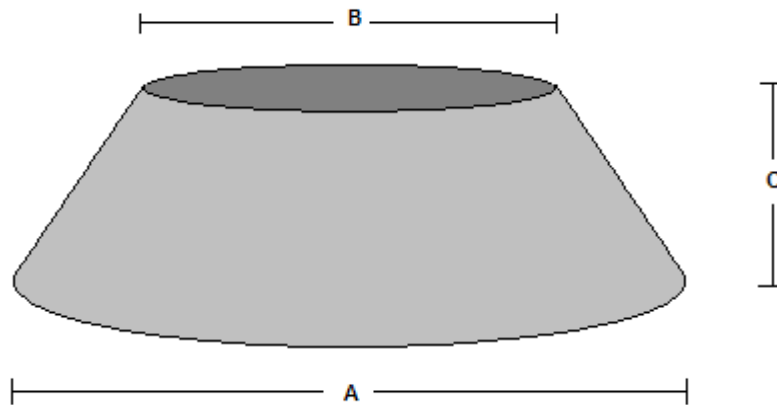
Determining exact capacities for what size and type of materials can be rolled into what radii is nearly impossible. However, the diagram and corresponding information below provides a general idea of the scope of our abilities, as well as a reference for ordering products. When requesting price quotes or placing orders, specify dimensions for the factors listed below, along with material type and (if applicable) welding instructions.



A= DIAMETER (SPECIFY INSIDE OR OUTSIDE)
B= LENGTH OF CYLINDER

Cones/Reducers

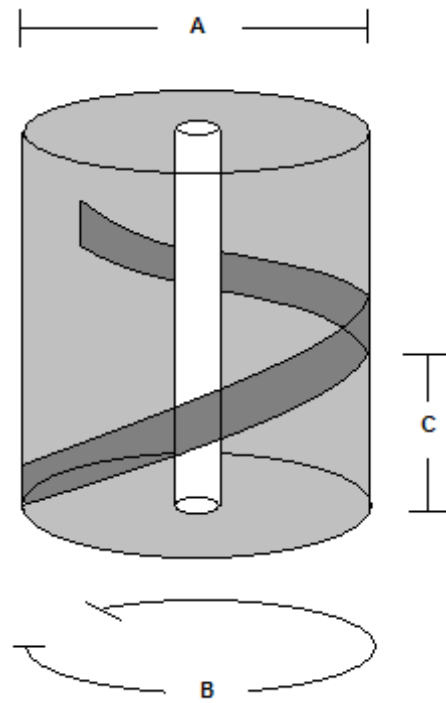
Rolling cones as opposed to press forming isn't always an option. Capacities for cones and reducers may be limited by thickness and extremity of their taper. Many cones may be done in one section, some must be done in two or more. When requesting a quote, provide information based on the factors included in the diagram below to determine if, and how it can be produced.



A= L.O.D. (large outside diameter)
B= S.O.D. (small outside diameter)
C= V.H. (vertical height)

Spiral Stringers

Rolling plates and channel into helix formations for spiral staircases and components is difficult, but accurately achieved with key information. The three factors in the diagram, or the means to calculate them, are necessary for forming these. Please specify these factors when requesting a price quote, or placing an order.



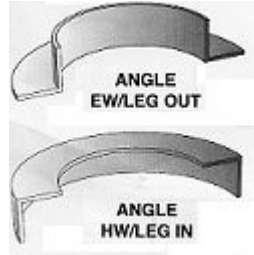
A= PLAN VIEW DIAMETER
B= REQUIRED DEGREES
C= VERTICAL HEIGHT AT 180 DEGREES

Plate Flattening

Plates received from mills aren't always as flat as required for some applications. Materials may also become warped due to the nature of their uses. From tweaking small plates and bars into machinable tolerances, to straightening and repairing road construction plates for re-use, we have the tools and knowledge to make repairing a great alternative to replacement.

Angles – Leg In & Leg Out, Heel In, Heel Out

From $\frac{1}{2} \times \frac{1}{2} \times \frac{1}{8}$ up to $5 \times 5 \times \frac{1}{2}$



Channels – Legs In or Legs Out

From $\frac{3}{4}$ " up to 18" - Leg length can not exceed 5"



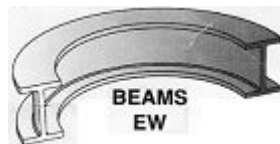
Channels – Hardway of Web

From $\frac{3}{4}$ " up to 4" depending on required radius



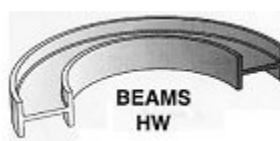
Wide Flange Beams – EZ Way

Up to 12" - Flange width may not exceed 5"



Standard Beams (I Beams) EZ Way

Up to 10"



T's – Stem In, Stem Out, Stem Up or Down

Up to 4 x 4 x 1/2"



F.B. EZ Way

Up to 2" x 12"



F.B. Hardway

Up to 2" x 4"



Solid Round

Up to 2"



Solid Square

Up to 3"



Pipe

From 1/2" thru 4"



Round Tubing

1 1/4", 1 1/2", 2", 4"



Square Tubing

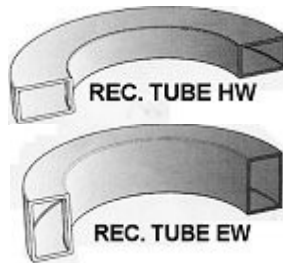
Up to 4"



Rectangular Tubing

EZ Way – Up to 4" x 6"

Hardway – Up to 3" x 4"



Note:

All capacities may vary depending on metal type and desired radius.