

Republic Solid Round Lead Anodes

Solid round anodes are the prevailing choice of Republic's customers and represent the "top of the line" in quality and service. Many plating operations have converted from rectangular ribbed or flat anodes to solid round anodes. There are several reasons for the switch.

The first is that the flat ribbed anode has an inactive back side and throws current only from the edges and face of the anode. The round anode, however, has an electrically active surface around its entire circumference. Thus, less voltage is required to carry a given current and higher amperage can be carried without excessive heating. One chromium plater in Detroit, for example, has actualized nearly 20% in voltage reductions by switching from rectangular anodes to Republic solid round anodes.

In addition to saving on energy output, round anodes eliminate "dead spots" of no electrical current. The lack of these "dead spots" prevents the build up of lead chromate which destroys the life span of the anodes. Fewer "dead spots" also means less downtime for cleaning. Finally, round anodes are available in standard 1.5" and 2" diameters. They can be extruded from any of Republic's quality alloy materials and combined with a large variety of hooks. Specialty sizes and alloys are available on request.

Republic Hollow Round Lead Anodes

Some customers desire the features of the solid anode but due to weight or price considerations choose a highly efficient alternative in hollow round anodes. As plating installations grow larger the average size of anodes increases and any savings in anode weight becomes increasingly important. A 1.5" diameter hollow round anode weighs 25% less than a 1.5" diameter solid round anode. In the case of a 2" diameter solid round anode, the saving in weight rises to 40%. Hollow round anodes are also provided with the important venting holes for gases and fumes in plating processes.

With hollow round anodes, handling is facilitated, shipping costs reduced and savings up to 25% and more in purchase price are actualized. Republic hollow round anodes are available in all alloys in standard sizes from 3/4" to 4" OD with wall thickness ranging from 1/8" through 1". Other sizes are available upon request.

The Ultimate in Hollow Anodes - Republic Core Anodes

Due to the extraordinary length of anodes required in special plating operations, Republic offers cored anode in either copper or steel. The copper core anodes greatly increase conductivity over the entire length of the anode. Steel as well as copper cores add rigidity to the anode to eliminate warping or curling. The hook and core are bonded and the balance of the anode can be bonded at various points throughout the length of the anode, assuring a more even distribution of current and allowing the anode to remain cooler during use. This factor virtually eliminates so called "hot spots".