

### **Carbon Baking Facility**

After many years of aggressive operation, a major client requested Project Associates provide the engineering and design services to upgrade, modify, and repair three (3) carbon baking furnace facilities that bake carbon anodes for use in the smelting process. Project Associates provided services that consisted of foundation and structural design, flue wall and head wall design incorporating detailed refractory buildup drawings, pre-cast refractory design for crossover blocks, tub walls, flues and headwall caps. Project Associates also provided services for the design of ancillary equipment, and for implementing improvements to firing frames, waste gas manifolds, cooling manifolds, pit coolers, pit cleaners, and draft probes.

Working in cooperation with the client's engineers, production and maintenance personnel, equipment manufacturers, and refractory suppliers, Project Associates successfully developed the facility layout for the new installation. Improvements included modifications and repairs to the existing facility and equipment. Project Associates involvement from conception through final design resulted in a complete, expedient, cost controlled project. Combined construction cost for these three (3) facilities was approximately \$7.5 million.

Project Associates continues to provide engineering and design services for the ongoing operation and maintenance requirement for all three (3) facilities.