



# Sinter Furnace Rack

Capacitor Manufacturing—Tooling and Accessories

## General Information

**Customer:** Arcotronics, UK  
**Product:** Furnace Rack  
**Application:** Sintering Furnace  
**Install Date:** 2003

## Problem

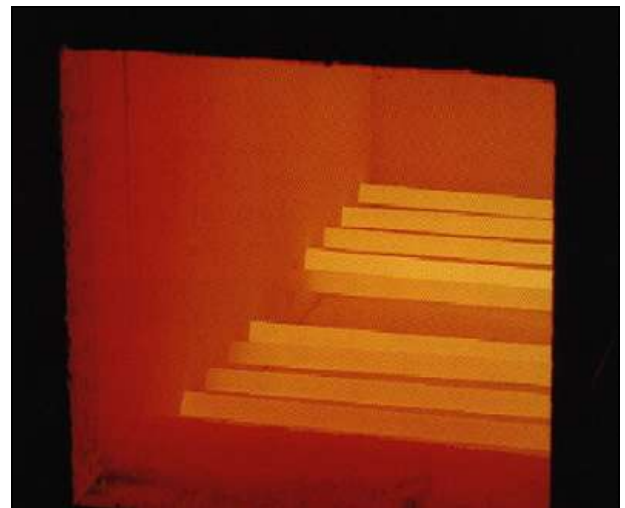
Arcotronics experienced limited life time of furnace parts made from tantalum due to the fact that tantalum becomes brittle due to oxygen reaction at high temperatures.

## Solution

A **Tantaline JobShop** solution was introduced consisting of a steel base core and a 100% tantalum treated surface.

## Result

The parts have been running since 2003 - 3 times more than normally seen for tantalum. The mechanical strength of a Tantaline solution comes from its steel core substrate. Because of this, a Tantaline solution is less susceptible to embrittlement. In addition a Tantaline solution offers lower unit cost and weight compared to a design in solid tantalum.



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