

MassCare Ltd

11 Waterside Way, Middlewich, Cheshire, CW10 9HP, UK

Tel/Fax: +44 (0) 1606 834954

Mobile +44 (0) 7779 607976

Email: pete@masscare.co.uk

Technical Information

Pin Cell Insulators



Recently MassCare has received comments from a customer that the insulator that fits between the anode and cathode in the normal or "Mega" cell for pin samples is too loose a fit. The conceived problem is that this loose fit allows the plasma to "attack" the cathode leading to degradation of the tantalum.

Looking back through the history of the cell the dimensions of the insulator and cathode have never changed. The "step" on the cathode has always been 14.90mm while the hole in the insulator has been 15.50mm, a difference of 0.6mm on the diameter, 0.3mm on the radius. This obviously leads to a "slack fit", but in fact the alignment is tied in to a tight tolerance by the screws that hold the anode, cathode and insulator together.

However, MassCare has reacted to this feedback, accepting that cathode degradation is possible, and now has two versions of the insulator available. Part number MC-04012C is the original diameter hole, while part number MC-06376C has a maximum diameter of 14.90mm. Thus a tight fit on the cathode is guaranteed, although you should note that you might need to open out the hole slightly using Scotchbrite or a similar material.

Both parts are made from the same material and both are the same price. Should you require any further information the please don't hesitate to contact us.