



International Advanced Materials

## Crucible Liners

### Balzers –

#### Crucible Liner Part Numbers:

Gun Volume	7cc	20cc	25cc	25cc	55cc	90cc
FireRite™	14C-501-FR	14C-420-FR	14C-425-FR	14C-430-FR	14C-455-FR	14C-504-FR
<b>Molybdenum</b>	<b>14C-501-1</b>	<b>14C-420-1</b>	<b>14C-425-1</b>	<b>14C-430-1</b>	<b>14C-455-1</b>	<b>14C-504-1</b>
Intermetallic	14C-501-2	14C-420-2	14C-425-2	14C-430-2	14C-455-2	14C-504-2
<b>Graphite</b>	<b>14C-501-3</b>	<b>14C-420-3</b>	<b>14C-425-3</b>	<b>14C-430-3</b>	<b>14C-455-3</b>	<b>14C-504-3</b>
Copper	14C-501-4	14C-420-4	14C-425-4	14C-430-4	14C-455-4	14C-504-4
Boron Nitride	14C-501-5	14C-420-5	14C-425-5	14C-430-5	14C-455-5	14C-504-5
<b>Tungsten</b>	<b>14C-501-6</b>	<b>14C-420-6</b>	<b>14C-425-6</b>	<b>14C-430-6</b>	<b>14C-455-6</b>	<b>14C-504-6</b>
Tantalum	14C-501-7	14C-420-7	14C-425-7	14C-430-7	14C-455-7	14C-504-7
Aluminum Oxide	14C-501-8	14C-420-8	14C-425-8	14C-430-8	14C-455-8	14C-504-8
Vitreous Carbon	14C-501-9	14C-420-9	14C-425-9	14C-430-9	14C-455-9	14C-504-9
Nickel	14C-501-10	14C-420-10	14C-425-10	14C-430-10	14C-455-10	14C-504-10
Carbon	14C-501-11	14C-420-11	14C-425-11	14C-430-11	14C-455-11	14C-504-11
Titanium Carbide	14C-501-12	14C-420-12	14C-425-12	14C-430-12	14C-455-12	14C-504-12

Crucible Liners simplify the process of exchanging evaporation materials, reduce handling contamination, and keep your electron beam gun's hearth cleaner. Crucibles can extend the life of your hearth reducing maintenance and costly hearth replacements. Many of IAM's crucibles are specifically designed to increase the evaporation rate, and prevent wetting or alloying. By keeping your evaporation material away from the water-cooled hearth, you can achieve greater evaporation with lower power requirements.

#### Crucible Handling

Crucible handling can greatly affect the lifespan of a crucible. Crucibles should never be handled with bare hands, always use gloves.

#### Avoiding Thermal Shock

By overfilling the crucible, the evaporation material will expand and overflow. This in turn will increase the thermal stress on the crucible. To reduce the chance of overflow, crucibles should be filled to at least 25% of capacity and at most to 80%. This will minimize the chance of crucible thermal shock breakage.