

# App. Note

## Applied Materials 9500 and xR Series Frontal Filament Bernas Ion Source Components

- Improved Source Performance
- Standard utilities and operation
- High purity materials
- Direct replacement for standard Applied Materials components
- Complete Configuration Support

The frontal filament source is designed to be a longer life source. Customers will generally experience about a 10-12% increase in source life compared to the standard Bernas configuration.

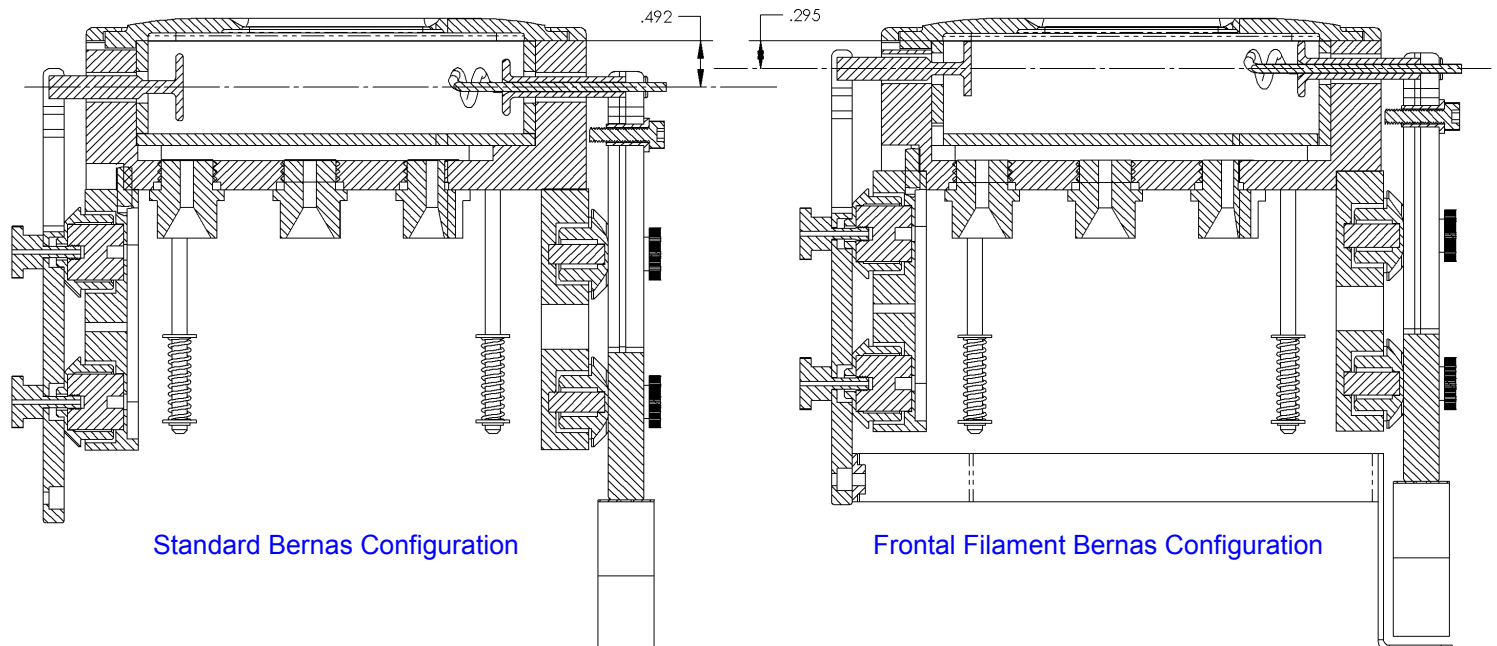
As you can see in these drawings, the filament in the frontal filament source is significantly closer to the arc slit. To convert to the frontal filament source, the arc chamber, end liners (filament and anti-cathode), anti-cathode, and arc chamber support plates (top and bottom) need to be changed. The materials used and the general assembly of the source are identical for both cases.

### Assemblies

- 1.02.110 Bernas Source Components
- 1.02.111 Frontal Filament Bernas Source Components

### Application Note

- 2.02.110 Bernas Liner Configurations



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