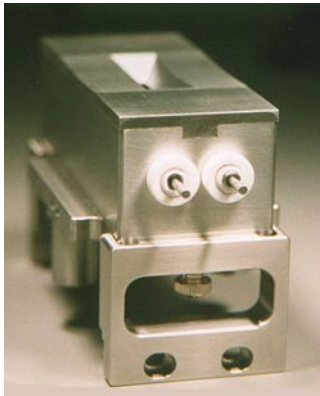




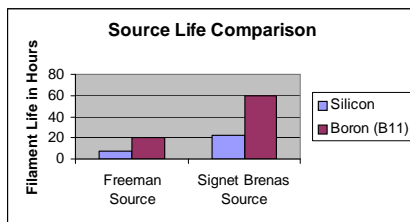
*Quality and Value
Through Engineering*

- ◆ Improved Beam Current
- ◆ Lower Magnetic Flux



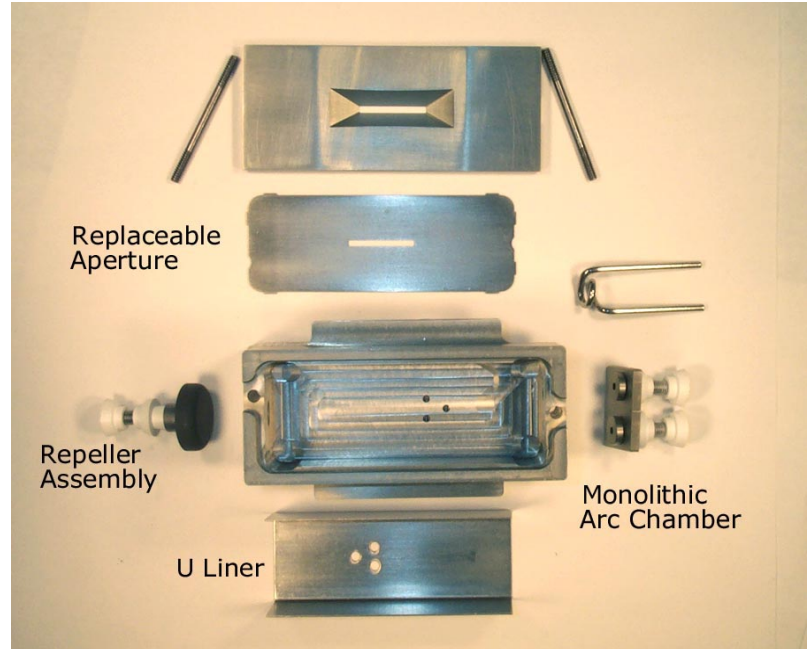
Assembled Bernas Arc Chamber

The table below summarizes one Signet customer's conversion from a Freeman source to a Signet Products Bernas source. Prior to this conversion their average filament life using Boron was only 20 hours. Their filament life with the Signet Products Bernas source is now 60 hours using Boron. The Signet Bernas source design allowed for a "Plug and Play" replacement of the Freeman source without modifying any of their recipes. They estimate saving over \$50,000 per year.



For more on the Repeller Assembly see our Data Sheet PDS1110.

VSEA – ION SOURCE Model E500 & E220 Signet 7000 Series One Piece Bernas Arc Chamber Kit



Signet Kit Part Number 1042-1

| Signet P/N | OEM Part # | Description | Qty |
|------------|---------------------------|-------------------------------------|-----|
| 03-6TN0 | 2835011 Ref. | Knurled Thumb Nut 6-32 | 2 |
| 30-36910-1 | E17036910 Ref. | Silver Fil. Spring, Right | 1 |
| 30-36911-1 | E17036911 Ref. | Silver Fil. Spring, Left | 1 |
| 30-6315 | E170633140/50 Ref. | A/C Support, Fil. or Rep. Side | 2 |
| 30-7005-2 | N/A | Main Body, Dual Vap, Extended Liner | 1 |
| 30-7009 | N/A | Front Plate for Aperture | 1 |
| 30-7010A | N/A | Aperture for a front plate | 1 |
| 30-7011-1 | N/A | Extended U Liner | 1 |
| 31-14832 | E17014832 | Gas Feed Tube, Ta Dual Vap. | 1 |
| 37-1200 | 101200001 | Retaining Stud | 2 |
| 40-0868 | E17011320 or 1708680 Ref. | Repeller Insulator Spacer | 1 |
| 40-2760 | E17036980/1 or E1706630 | Repeller Disc, Graphite | 1 |
| 40-2765 | N/A | Filament Shield | 1 |
| 40-3430 | E1712160 Ref. | Retainer, Alumina | 2 |
| 40-8984 | E17036980/1 or E1706630 | Repeller Stud 10-32 x 1 3/32 | 1 |
| 40-8993 | 1200321 Ref. | Fil. Mounting Screw | 2 |
| 40-9042-1 | 1790420 Ref. | Repeller Cup Shield, Moly | 1 |
| 44-0868 | 1708680 | Insulating Bushing, A/C | 1 |
| 44-3410 | E17011320 Ref. | Insulator Short | 1 |
| 44-3420 | E17168272 Ref. | Insulator Long | 1 |
| 37-3699 | F17036990 | Filament, Bernas | 1 |

Ref. = Design Alteration of OEM Part