

SOURCE & INJECTOR PACKAGE

Introduction

The Eterna ELS7 Source and Injector Package delivers groundbreaking performance in source durability, beam repeatability and Preventative Maintance (PM) serviceability. The package consists of a newly designed ion source, electrode head, mounting system, and supporting electronics, which provide significant performance improvements. The Eterna ELS7's robust new design eliminates top failure mechanisms and also leverages Filament Boost technology, which can further extend the source life in situations where previous models would fail to generate a plasma. The Eterna ELS7 is currently available on the Purion H and Purion H200 systems.

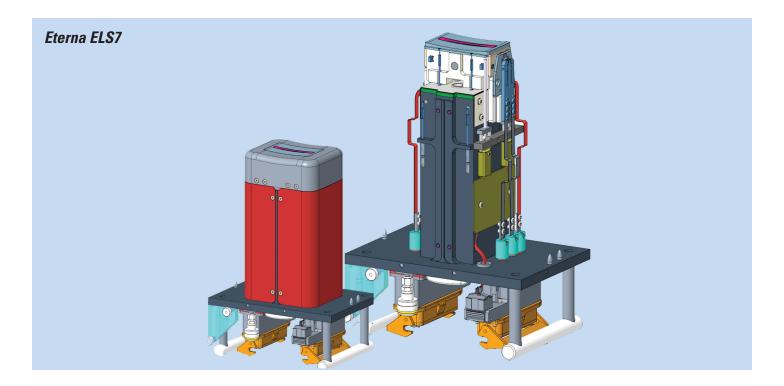
In addition to its extended lifetime, the Eterna ELS7 was designed with PMs in mind. It reduces the number of consumables by 50% and only requires a single hex wrench, providing a simple PM process and greatly reducing the risk of human error.

Lastly, the Eterna ELS7 dramatically reduces the positional variability of the arc slit, delivering a much more consistent beam trajectory throughout the entire implanter. A more consistent beam trajectory has far reaching implications in key performance metrics such as tool uptime, autotune performance, particles, and PM frequency.

Key Advantages

- Durability: Extended source lifetime averaging 20% increase over Eterna ELS4 for standard recipe mixes
- Serviceability: Major reduction in consumables, tools, and fixtures required for PMs, saving labor hours and reducing risk of human error
- Repeatability: Dramatically reduces positional variability of arc slit, resulting a more repeatable beam for improved uptime, autotune, particles, and PM frequency





Package Details

The Eterna ELS7 Ion Source is comprised of several new components throughout the injector system. This includes a new ion source, electrode head, source mounting system, and supporting electronics.

Installation

If purchased as a complete assembly, Axcelis' experienced local field service engineers will ensure the successful installation of the Eterna ELS7.

Shipment

Typical lead times are 90 days After Receipt of Order (ARO). Coordination of consumables purchasing is necessary to guarantee an uninterrupted supply of new parts.

Warranty

All Axcelis supplied upgrades are backed by a three-month parts (excluding consumables) and labor warranty from acceptance/qualification "sign-off", or production use, or six months from shipment, whichever occurs first. Please contact your local field service organization for additional upgrade kit and gas bottle information.

Disclaimer

All specifications in this document are based on Axcelis best methods and practices, and on specific test conditions. Conducting the tests using different procedures, different conditions, or special (non-standard) tool configurations may produce different results. Performance on customer-developed processes and tests should be reviewed at the time of system purchase. Axcelis makes its best effort to guarantee all specifications simultaneously. Given the large parameter space and possible interactions between machine components, it is difficult to guarantee simultaneity of all specifications. The information in this document is subject to change without notice and is not to be construed as a commitment by Axcelis Technologies, Inc.

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