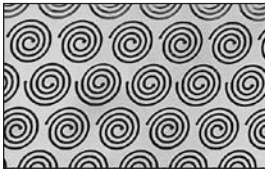


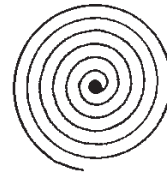
# ION PUMPS

## NEW Galaxy Elements



A New Generation of Ion Pump Technology...

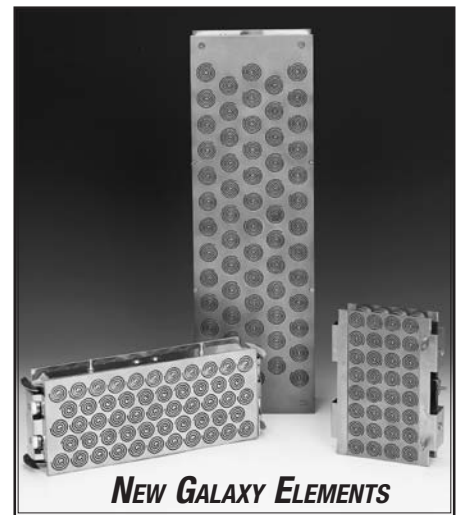
# GALAXY™ TECHNOLOGY



Sputter-Ion pump element design has just entered a new era, with the introduction of **Galaxy™ Technology** cathode design by Duniway Stockroom Corporation. By putting getter-cathode material where it really needs to be, we have succeeded in providing stable pumping speed for air without sacrificing overall pumping speed.

**Galaxy Technology** is new and unique. It is covered by US Patent #6004104. Sputter-ion pumps and elements with this design offer:

- ❑ The **pumping speed** of a standard diode for active gases.
- ❑ The **structural stability, long life and better low pressure operation** of standard diode elements.
- ❑ The air/argon **pumping stability** of triode, Starcell® and differential/noble diode elements.
- ❑ **Higher capacity** for hydrogen/water vapor than the triode or Starcell® elements.
- ❑ **Lower price** than the differential/noble diode, since Galaxy does not require expensive tantalum.



ION PUMPS

**Galaxy Technology** elements are available for delivery in selected new ion pumps, new ion pump elements and for rebuilding selected ion pumps and elements. The photograph above shows (from left to right):

1. Replacement element for Starcell pumps (**EL-ST-GX**): This element will give stable air/argon pumping and higher long-term capacity for water/hydrogen. It can be used for rebuilding Starcell pumps for better performance and a lower price.
2. Replacement diode element for Vaclon-style pumps (**EL-LG-GX**): This element and the pumps using this element have better pumping speed performance at pressures below  $10^{-8}$  torr than any other ion pump. Combined with its initial reasonable price, this can result in much higher (up to 10 times!) pumping speed per dollar at low pressures than other designs.
3. Replacement element for PE-style pumps (**NEW-GXY-2000**): This element gives stable air/argon pumping speed at lower cost than the DI (differential ion) designs, since it does not use expensive tantalum cathode material.
4. Replacement element for PE Captorr-style ion pumps. (**PE38-GXY**): This element gives stable air/argon pumping speed at lower cost than the DI (differential ion) designs, since it does not use expensive, scarce tantalum cathode material.

See the following pages for additional models, part numbers and prices. Also, visit our website, [WWW.DUNIWAY.COM](http://WWW.DUNIWAY.COM) for more information on ion pump design and low pressure operation.