



# Brooks On-Board<sup>®</sup> Upgrade for NV-10 Ion Implanters

## Turn-Key Upgrade Package:

Brooks offers a performance-enhancing, fully-integrated On-Board Cryopump upgrade solution for the NV-10 Ion Implanter:

- On-Board 8 Cryopumps replace the Cryo-Torr<sup>®</sup> 8 Cryopumps on the P2 Beamline and P3 End-station chambers.
- The P3 End-Station On-Board 8 Cryopump is specially-designed with a higher capacity for hydrogen.



## Value Proposition:

This upgrade is ideal for Customers who are trying to improve their tool availability and wafer throughput. This upgrade reduces regeneration-caused downtime and increases wafer throughput by enhanced hydrogen pumping during ion implants.



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## Features

- Automated regenerations designed for optimal photoresist removal
- The cryopumps are interlocked with an automatic temperature-initiated purge feature .
- GOLDLink® enabled
- Installed by experienced Brooks Engineers
- Analysis of historical On-Board performance
- Backed by 1-800-FOR-GUTS® : 7x24x365 Technical Support

## Benefits

- Reduced vacuum dose holds leading to an increase of up to 9% in wafer throughput.
- Reduced pumpdown time to base pressure during "wheel spin up".
- Fast Regenerations restore hydrogen pumping speed and capacity to 100%
- Improved hydrogen-pumping speed
- Extension and optimization of pump change-out cycles
- Faster and improved automated regenerations
  - Full Regeneration = 3 hours
  - Fast Regeneration < 1 hour



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By utilizing On-Board's **FastRegen<sup>®</sup>** capability, availability-increasing benefits are immediately realized via reduced regeneration downtime. In addition, the new On-Board Ion Implant module will optimize Full Regenerations to remove internal build-up of process by-products, effectively extending each pump's operational life.

## Monthly Regeneration Hours Total Monthly Regeneration Hours

