

On-Board[®] IS Cryopump Systems

*Intelligent, Next-Generation
Productivity Systems
For Your Critical
Production Applications*



On-Board[®] IS Cryopump Systems

When our CTI-Cryogenics On-Board cryopumps were introduced more than 10 years ago, semiconductor manufacturers around the world hailed them as “productivity machines.” Boasting faster regeneration, better-quality vacuum processing, and predictive maintenance capabilities, first-generation On-Board cryopumps delivered productivity that was significantly better than traditional cryopumps.



Intelligent, Next-Generation Productivity Systems For Your Critical Production Applications

Today, Brooks introduces the Next Generation in vacuum productivity systems, On-Board[®] IS.

As always, the twin bottom lines are productivity and quality.

Each On-Board IS cryopump system delivers:

- Superior quality vacuum for higher yields.
- Fastest regenerations plus significantly longer run-time between regenerations for unparalleled productivity.
- Built-in intelligent system management / enhanced predictive maintenance features for unequalled dependability.
- Intelligent adaptive system performance for optimal results regardless of process.
- Energy efficiency with no compromise in performance for lower operating costs.

On-Board IS cryopumps, compressors, and accessories operate as a fully integrated system to deliver previously unattainable levels of process performance. The system features many advances including innovative cryogenic refrigerator technology, breakthrough “system-level” intelligence, increased pumping capacity, and much more.

Taken together, these performance advantages deliver one crystal-clear end-user benefit: a significantly richer bottom line.

On-Board[®] IS Cryopump Systems

Brooks obsesses about improving both process vacuum quality and bottom-line fab productivity. The result: our newest, most reliable, most productive high-vacuum systems ever . . . the On-Board *IS* system.

All-new On-Board *IS* cryopump systems from Brooks offer major advantages over traditional cryopump technology:

- Superior Vacuum Quality
- Fastest-yet Regeneration Speed
- Longer Run-Times [More Product] Between Regenerations
- Intelligent “Self-Adjusting” Technology
- IntelliPurge Pump Management
- Energy Savings With No Compromise in Productivity
- Leverage the “True” Power of On-Board *IS* with TrueBluesm Service Agreements



Superior Quality Vacuum, Superior Quality Results

By applying proprietary algorithms to system functionality, Brooks achieves higher process quality and vastly improved vacuum consistency. At the same time, On-Board[®] IS cryopump systems' variable-speed motors enable more cooling power to be shifted to individual pumps that require it.

The result:

On-Board IS cryopump systems deliver superior overall heat-handling capabilities; improved inter-wafer recovery times; and an ability to withstand the accumulation of process-related coatings.

The effect of the Brooks system approach to vacuum processing is measurably superior vacuum quality, end-product quality, and overall yield. In every way possible, Brooks seeks to make production vacuum processing fast and flawless – improving bottom-line performance every step of the way.

Regenerations Measured In Minutes, Not Hours

On-Board IS cryopump systems shatter the notion that “regeneration” and “fast” are mutually exclusive.

On-Board IS regenerations can often be measured in minutes, not hours. You can now comfortably regenerate many On-Board IS systems while performing other short maintenance items.

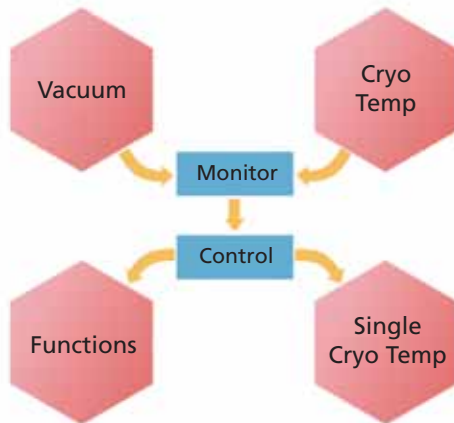
How fast is “fast”? “Fast” regens are completed in half the time compared to first-generation On-Board pumps; full regenerations average 33% faster.

On-Board IS cryopump systems always regenerate significantly faster than traditional cryopumps.

Regeneration times vary by type and pump size, plus environmental and application variations. In all cases, however, users of On-Board IS systems make major productivity gains over users of traditional technology.

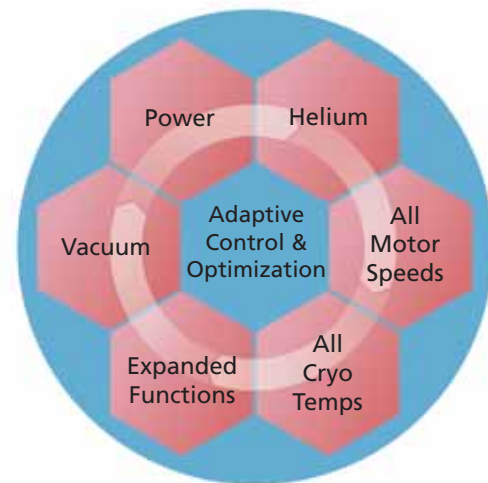
Those gains translate directly to your bottom line.

Other Cryopump Systems



- Functions:
- Regeneration
 - Power Failure Recovery

On-Board[®] IS Integrated Cryopump System



Longer Run–Time Between Regenerations

Fast regenerations alone are no panacea. Combine them with superior quality vacuum and sharply increased run-time between regenerations (thanks to higher pump capacity), and you have a powerful formula for boosting up-time, productivity, and profits.

It is precisely that combination of benefits that On-Board[®] IS cryopump systems deliver.

Nearly every On-Board IS cryopump's capacity has been increased significantly – to the point where run-time is measurably better in most applications.

To learn more about pump capacities, see the specifications available from your Brooks representative.

Expanded Functions:

- Continuous Vacuum Optimization
- Auto Start-up
- Auto Shut-down
- IntelliPurge Pump Management
- Higher Speed Regeneration
- Power Failure Recovery
- Helium Distribution
- Compressor Diagnostics



Energy Savings Without Loss of Performance

In an increasing number of jurisdictions worldwide, controlling your fab's thirst for power isn't merely desirable, it's required by law.

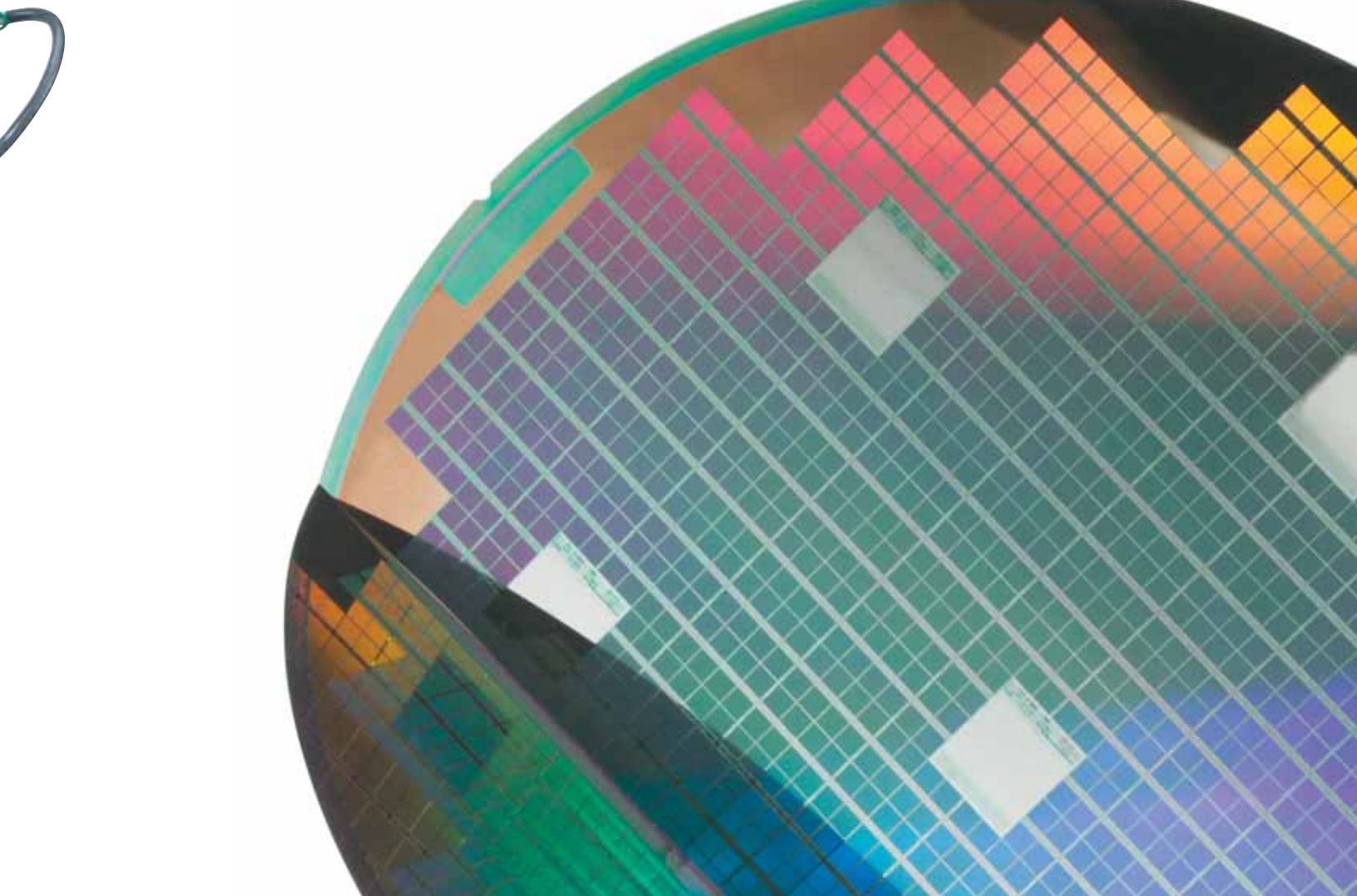
Because On-Board® IS cryopump systems consume up to 40% less power than traditional cryopumps, power consumption drops considerably when you upgrade.

As you upgrade existing systems or add new systems utilizing On-Board IS technology, power use continues to decline, reducing operating costs significantly while helping meet local energy requirements.

TrueBluesm Service Agreements

Regardless of where you operate worldwide, your On-Board IS cryopump systems can be remotely monitored by one of Brooks' exclusive TrueBlue product support programs.

Through TrueBlue support, our seasoned vacuum experts closely monitor your systems via a secure Internet connection, 24/7. You needn't obsess about every infinitesimal aspect of performance because TrueBlue Support does that for you. Our experts watch for any variations or combinations of performance variations that may affect overall system performance and dependability – then proactively solve issues that could affect your productivity.



Brooks: *Delivering The Power of Blue*

Why is it that Brooks vacuum systems deliver more dependable production hours worldwide every day than all our competitors combined? Perhaps it's our innovative, extraordinarily productive technology—whether it's a CTI-Cryogenics system or Granville-Phillips product.

But we think it's *The Power of Blue*: our total corporate commitment to deliver not only superior technology, but also unmatched performance, world-class global support, products and infrastructure and an expectation of “no surprises” — ever.

Our commitment to excellence begins the first time we speak with you and *that commitment never changes*. When you buy ‘the blue label’ you get a powerful global infrastructure of competent, committed support to ensure that all Brooks products deliver the performance and reliability you expect — always. Let our Brooks cryogenic vacuum pumping and measurement experts show you first-hand what total customer satisfaction is all about.

At Brooks Automation Global Customer Support, meeting your expectations is never enough. Our mission is to exceed expectations in all areas of customer responsiveness. From the industry standard of GUTS® to the pioneering e-Diagnostic implementation of GOLDLink® Support, Brooks is committed to serving you with the most advanced, innovative, highly productive tools available.

On-Board®/S: next-generation technology . . . for next-generation productivity.



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