

# CTI-CRYOGENICS® ENHANCED ON-BOARD 8F CRYOPUMP

[edwardsvacuum.com](http://edwardsvacuum.com)

Today's sputtering processes demand the highest possible process tool availability. The new, enhanced On-Board 8F Cryopump improves tool availability – by cutting regeneration frequency significantly.

It delivers better vacuum recovery in processes such as aluminum, TiN, titanium, and other sputtering applications. So you can run more wafers between regenerations. And with regenerations being less frequent, it's easier for you to schedule them at the same time as shield or target changes.

Your results – more tool availability, and more product wafer output.

## Improved Vacuum Recovery Cuts Regeneration Frequency In Half

Many sputtering applications use a vacuum recovery step to maximize process performance. In this step, the process chamber must be pumped to a specified high vacuum level, within a specific time, after the feed gas is shut off. This step is a principal driver of cryopump regeneration frequency.

The enhanced On-Board 8F Cryopump maintains fast recovery performance longer, for fewer regenerations, in both argon- and nitrogen/argon-based sputtering. The figures illustrate its recovery performance for both process types, using a target recovery pressure of  $1 \times 10^{-7}$  Torr.

With recovery performance like this, you can cut your number of regenerations per month by 40% to 65%. And fewer regenerations mean that it's more likely you can regenerate only during times when you're doing a shield or target change.

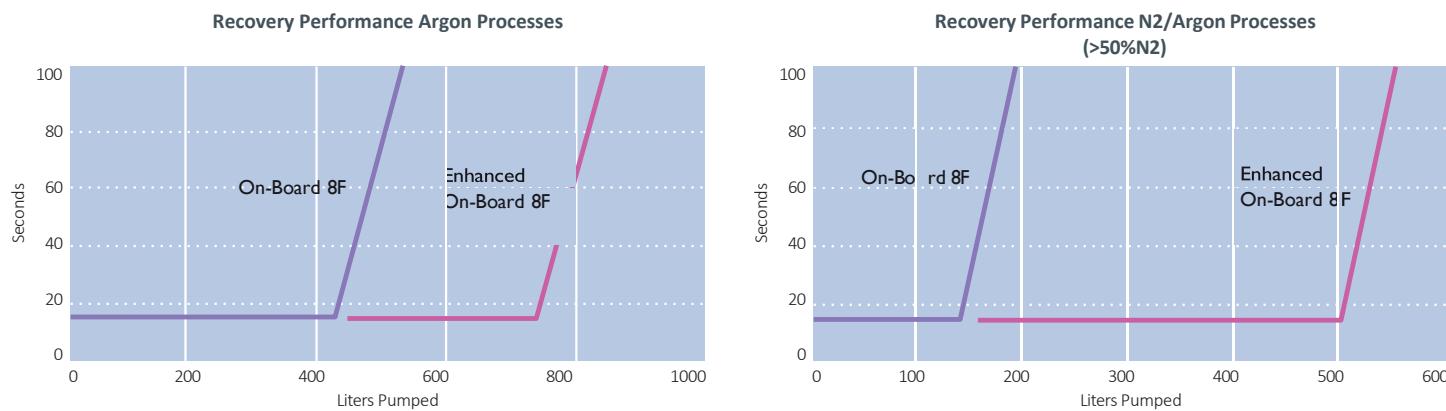
(Note: Because pumping speeds for all gases are the same as in the On-Board 8F and Cryo-Torr 8F, no process requalification is required.)



## Features and Benefits

- Cuts Regeneration Frequency In Half
- Improves Sputtering Tool Availability
- Delivers Better Vacuum Recovery
- Increases Product Output Between Regenerations
- Backed by GUTS®(Guaranteed Uptime Support)

## Recovery Performance Data



In any vacuum process, recovery performance depends upon process specifics, including target recovery pressure.

Contact CTI-Cryogenics to discuss your application.

## Cryopump Performance

Pumping Speeds	
Hydrogen	2200 l/s
Air	1500 l/s
Water Vapor	4000 l/s
Argon	1200 l/s
Argon Throughput	
Hydrogen Capacity	
Crossover	
Nominal Regeneration Time*	
First and Second Stage	2.5 Hour
Second Stage**	< 1 Hour

This cryopump is easily integrated into all process tools currently equipped with either On-Board 8F or Cryo-Torr 8F Cryopumps, either via factory installation (for new process equipment) or via in-fab retrofit to installed process equipment. Contact your CTI-Cryogenics representative for details.

\* cold to cold

\*\* Specify FastRegen Control Module for Sputtering

Edwards continually updates its products to match the evolving needs of the semiconductor industry and any specifications given here are subject to change without notice.

## Backed by GUTS®

All CTI-Cryogenics products are backed by the GUTS (Guaranteed Up-Time Support) rapid response network, our comprehensive customer support program. When you call the GUTS service center, you are guaranteed immediate, competent response and action by a vacuum expert from our worldwide technical support staff. We're at work for you 24 hours a day, 365 days a year.



**EZZI VISION**

**Vacuum and Thin Film Technology**

**CONTACT US**

T: 1800 GO EZZI  
E: sales@ezzivision.com.au  
W: ezzivision.com.au

**VIC:** 13/62 Ramset Drive, Chirnside Park,  
VIC 3116, Australia

**NSW:** Unit 1, 80 O'Riordan St, Alexandria,  
NSW 2015, Australia

**WA:** Unit 11, 24 Baile Road, Canning Vale,  
WA 6155 Australia

© Edwards Limited 2021. All rights reserved Edwards and the Edwards logo are trademarks of Edwards Limited.

Whilst we make every effort to ensure that we accurately describe our products and services, we give no guarantee as to the accuracy or completeness of any information provided in this datasheet.

Edwards Ltd, registered in England and Wales No. 6124750, registered office: Innovation Drive, Burgess Hill, West Sussex, RH15 9TW, UK.

**GLOBAL CONTACTS**

**EMEA**

UK	+44 (0) 1444 253 000 (local rate) 0845 921 2223
Belgium	+32 2 300 0730
France	+33 1 4121 1256
Germany	0800 000 1456
Italy	+ 39 02 48 4471
Israel	+ 972 8 681 0633

**ASIA PACIFIC**

China	+86 400 111 9618
India	+91 20 4075 2222
Japan	+81 47 458 8836
Korea	+82 31 716 7070
Singapore	+65 6546 8408
Taiwan	+886 3758 1000

**AMERICAS**

USA	+1 800 848 9800
Brazil	+55 11 3952 5000