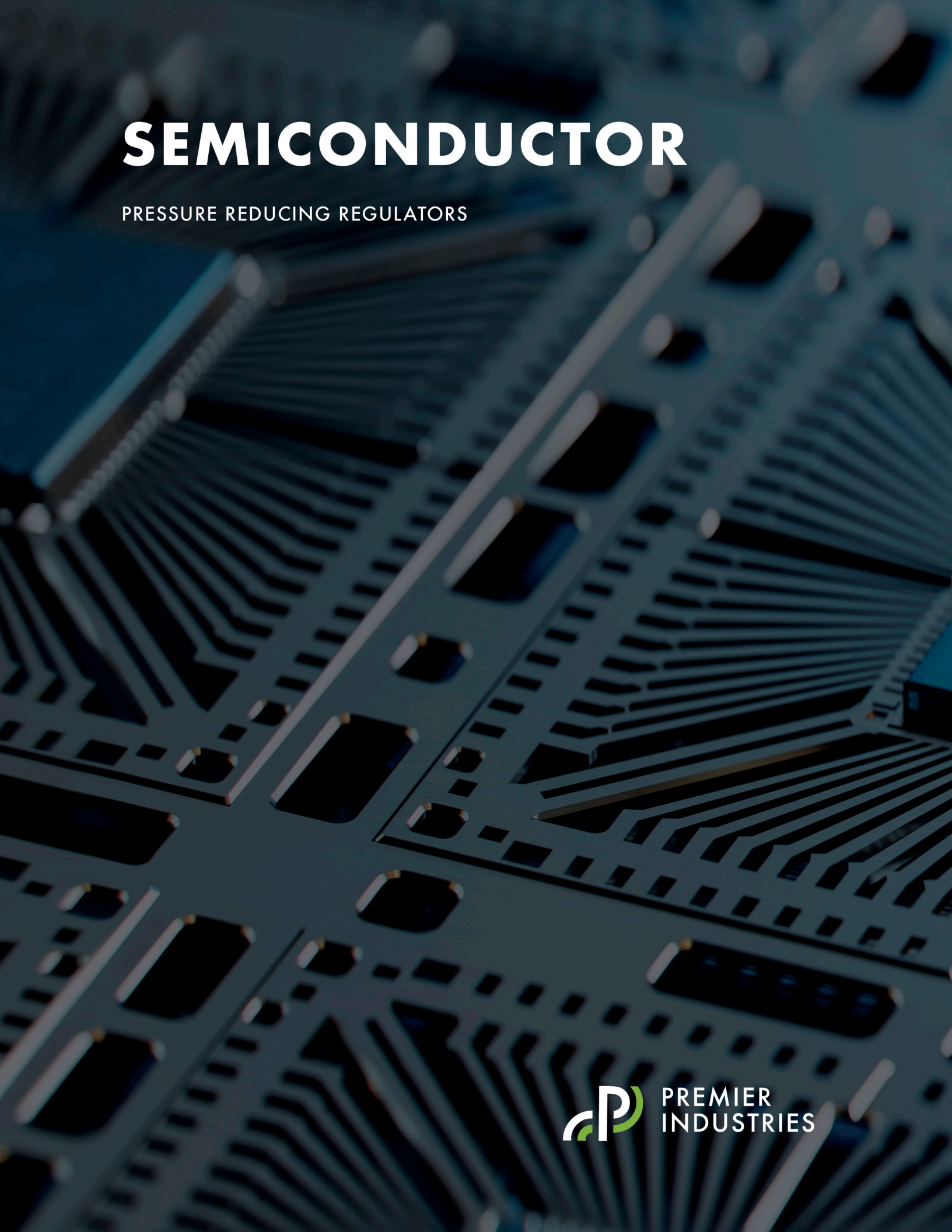


SEMICONDUCTOR

PRESSURE REDUCING REGULATORS

PREMIER INDUSTRIES

AMERICAN MADE.
INNOVATIVE.
RELIABLE.
ECONOMICAL.
PREMIER.

A PREMIER INDUSTRIES PUBLICATION

Printed in the USA

PREMIER INDUSTRIES

PREMIER REGULATORS, VALVES, & GAS DELIVERY SYSTEMS
FOR THE SEMICONDUCTOR INDUSTRY

ENGINEERED FOR PRECISION

In semiconductor environments where purity, control, and reliability are non-negotiable, our pressure reducing regulators deliver consistent performance across critical gas delivery systems. Designed for ultra-clean applications, they feature low internal volume, minimal particle generation, and exceptional pressure stability—ensuring process integrity and helping manufacturers meet stringent quality standards. With compact designs and contamination-resistant materials, these regulators support high-throughput operations while protecting sensitive equipment and maximizing yield in advanced fabrication facilities.

WE'RE EXPERIENCED *AND* RESPONSIVE.

Our customers know that if they have a question, they can pick up the phone and give us a call. No automated messaging systems here. We have a team of engineers with over 100 years of regulator design experience ready to assist you. We are always pushing for more sophisticated processes, working on leading-edge designs, while striving to remain personable and responsive.

TAILORED SOLUTIONS

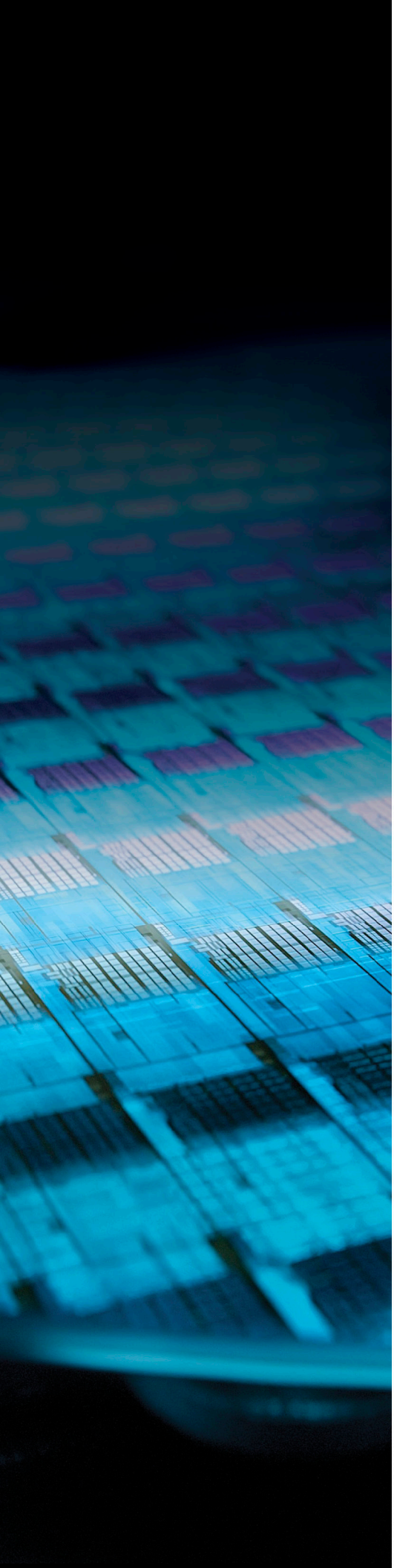
Every semiconductor facility has unique requirements—and we're built to meet them. Our pressure reducing regulators not only deliver exceptional performance and purity, but can also be customized to fit your exact specifications. Whether you need modified flow paths, specialized materials, or unique connection types, our engineering team collaborates closely with you to develop solutions that integrate seamlessly into your process. With flexible design capabilities and a commitment to precision, we help you optimize performance, reduce downtime, and stay ahead in a rapidly evolving industry.

VERTICALLY INTEGRATED LOW-OVERHEAD MANUFACTURING

From engineering to programming and testing, we are proud to be a vertically integrated company that has the ability and means to produce high quality, American made products from concept to completion. All under one roof.

PREMIER INDUSTRIES


TAILORED TOOLS
AND PROCESSES.
DESIGNED TO MEET
THE NEEDS OF THE
SEMICONDUCTOR
INDUSTRY.



Custom Engineering & Design

- Experienced engineering team with proven semiconductor expertise
- Precise, application-specific regulator solutions
- Support for unique connection types, mounting configurations, and compact footprints
- Custom regulator configurations

High-Purity Manufacturing

- Class 100 cleanroom assembly
- Electropolished and passivated wetted surfaces
- Orbital welding

Material Expertise

- Use of corrosion-resistant and ultra-clean materials (e.g., 316L stainless steel, 316L VAR Stainless Steel, Hastelloy, PTFE)
- Compatibility with high-purity and reactive gases

Precision Performance

- Precise pressure control and repeatability
- Low internal volume and minimal dead space
- High-resolution pressure adjustment and stability

Quality Assurance & Testing

- Inboard Helium leak testing (down to 1x10^-9 atm-cc/sec)
- Certificate of conformance and optional traceability documentation

Flexible Production & Scalability

- Low-volume custom builds and high-volume production capabilities
- Short lead times and agile manufacturing processes

Technical Support & Collaboration

- Documentation and CAD models (STEP files, datasheets)

PREMIER INDUSTRIES

PRESSURE REDUCING REGULATORS
FOR THE SEMICONDUCTOR INDUSTRY

SEM 2550 SERIES	FEATURES	MAX INLET PRESSURE	FLOW CAPACITY	BODY MATERIAL
	• 15 Ra microinch (standard) 10 Ra microinch (optional) • Inboard leak rate: <1x10^-9 ATM SCCS, He • Hastelloy diaphragm • Outlet pressures up to 150 psig.	3500 PSIG / 241.3 BAR	Cv: 0.08 Cv: 0.20	316L Stainless Steel Electropolished (15 Ra max) 316L VAR Stainless Steel Electropolished (10Ra max)

PRECISION PRESSURE CONTROL
FOR THE SEMICONDUCTOR INDUSTRY

– SCAN TO VISIT OUR WEBSITE

Disclaimer: Information in this brochure is for reference only and subject to change. Premier Industries makes no warranties regarding accuracy or suitability. Users are responsible for ensuring product compatibility, proper installation, and compliance with regulations. Premier Industries is not liable for damages resulting from use or reliance on this information. For updated specifications, visit our website at www.premierind.us or contact us at sales@premierind.us.

PREMIER INDUSTRIES

sales@premierind.us

763.786.4020

WWW.PREMIERIND.US

PREMIER INDUSTRIES