



Sprintex Limited
ABN: 38 106 337 599

ASX: SIX

ASX RELEASE

11 July 2023

Product Roll-Out, Capital Raising, Change of Registered Office and Company Presentation

\$1.3 million raised to fund production equipment and parts inventory for 15,000 unit pa e-compressors and industrial blowers and Security Purchase Plan Seeking to Raise \$0.5 million

Highlights

- **\$1.3 million raised to accelerate roll-out of ~15,000 units pa of fuel cell electric compressor and industrial blower ranges;**
- **Roll-out follows high industry demand;**
- **Funding commitments of \$1.3 million from current shareholders and directors at \$0.045 per share;**
- **1 free attaching option for each 2 issued shares with an exercise price of \$0.10 on or before 30 June 2025, subject to shareholder approval; and**
- **Proposed Security Purchase Plan (SPP) targeting to raise a further \$0.5 million.**

Sprintex Limited (SIX) (**Sprintex** or **Company**) confirms that it has received additional new capital funding commitments from current shareholders and the directors, **totalling \$1.3 million**, to fund purchase of volume production equipment and parts inventory for its recently completed range of exceptionally efficient e-compressors and industrial blowers.

Under the capital raising, certain current shareholders and directors will subscribe for 28,888,888 shares at \$0.045 each (an 11% premium to the Company's 20-day VWAP). For every 2 shares subscribed, investors will receive 1 option with an exercise price of \$0.10 and expiry date of 30 June 2025.

The issue of shares to directors and options to all participants is subject to shareholder approval with a shareholder meeting targeted to be held in August 2023. The remaining shares to be issued under the placement will be issued on or about 17 July 2023.

Further, the Company will be offering shareholders the opportunity to participate via a Security Purchase Plan targeting raising a further \$500,000 from the issue of 12,500,000 shares at an issue price of \$0.04 per share, with a free attaching option with an exercise price of \$0.10 on or before 30 June 2025 for each 2 participating shares. As with the placement, the issue of shares to directors and options to all participants is subject to shareholder approval. The Company intends to release the offer documentation in the next week.

Suite 6, Level 1, 251 Adelaide Terrace, Perth WA 6000
Phone: +61 8 9262 7277
Email: admin@sprintex.com.au
URL: www.sprintex.com.au

Subject to the options meeting ASX quotation requirements, the Company intends to apply for the options to be listed.

The indicative timetable is:

- Issue of SPP documents 17 July 2023
- Opening date 17 July 2023
- Closing date 31 July 2023
- Issue of SPP shares 7 August 2023
- Shareholder approval to issue of options 24 August 2023
- Issue of placement and SPP options 24 August 2023

Initial production levels of more the 15,000 units per year are expected to boost annual revenues.

Sprintex MD Jay Upton commented:

“We are delighted to move forward to volume production of our exciting new product ranges and particularly the wastewater aeration units, which we expect to carry the company to profitability in FY2024.

“Since recapitalising the Company some three years ago significant R&D, engineering, prototyping and testing has been undertaken to develop a suite of compressor platforms which the Company believes are the most efficient in the world, in addition to being the lightest and most durable.

“The Company is now ready to transition to high production volume to meet expected global demand for its range of e-compressors, fuel cell compressors and industrial blowers.

“Interest is growing rapidly in our products for the developing clean energy sector, but we see faster and more reliable revenue growth for Sprintex in the more mature industrial sector.”

Attached is the current Company Presentation presented to investors.

Marketing for the new E-compressor range has already commenced, with the Company exhibiting at various Hydrogen Technology and other renewable energy and sustainability events internationally, including in the USA, Europe mainland China and the Middle East, resulting in multiple new projects for the clean energy technology sector.

Sprintex expects to receive a major and increasing revenue stream from the more mature markets for wastewater treatment and general-purpose industrial compressors and blowers and will focus its initial production capabilities on this industry sector.

The S15 water treatment Fuel Cell Compressors include ‘Smart Pulse Aeration’ (SPA) technology unique to Sprintex, which in addition to the initial energy savings from its high efficiency direct drive technology, saves around 30% energy over traditional compressors and improves the oxygenation efficiency of the same volume air delivery to the body of water, further reducing energy consumption.

Sprintex units are also able to provide efficient water oxygenation in 50% deeper ponds than conventional industrial blowers and offer up to 4 times the service life of conventional industrial blowers commonly utilised in water treatment plants.

Smart Pulse Aeration (SPA™) mode allows the integral PLC to vary the air output based on the oxygen content of the water reducing energy wastage and ensuring high efficiency of the process. The Company has also lodged a worldwide PCT (patent) application relating to this technology.



Durability of the G15 Turbo Blower is expected to exceed 4 times the lifespan of conventional side channel blowers and has the additional benefits of being 50% lighter, 30% smaller and 10dB quieter than conventional units in the same application.

Change of registered office and closure of Perth research and development facility:

As part of the development of the Company's business, the Company has closed its Perth based research and development facility and its registered office is now located at Suite 6, Level 1, 251 Adelaide Terrace, Perth WA 6000. This is consistent with the ongoing product development activities being undertaken at the Company's production facilities in China and Malaysia and reduces costs. There is no change to the Perth office telephone number.

This ASX announcement was authorised for release by the Board of Sprintex Limited.

For further information

Sprintex Limited

Jay Upton, Managing Director

P: +61 8 9262 7277

E: jay.upton@sprintex.com.au

W: <https://invest.sprintex.com.au>

MMR Corporate Services Pty Ltd

Level 5, 52 Phillip Street

Sydney, NSW 2000 Australia

P: +61 2 9251 7177

E: Sprintex@mmrcorporate.com

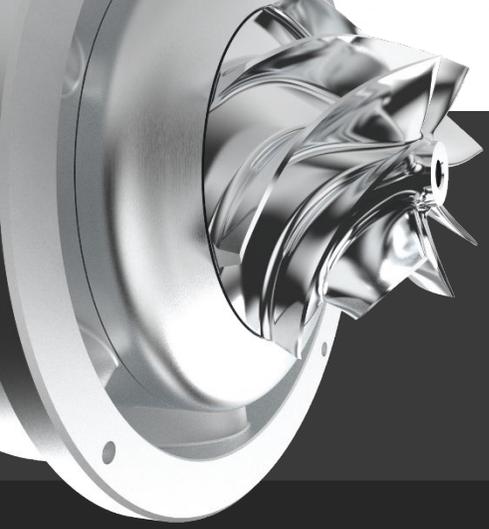
About Sprintex

Sprintex is a clean air compressor engineering, research, product development and manufacturing company, incorporated in Australia in 2003. Sprintex designs and manufactures electric and mechanically driven clean air compressors for use in a wide variety of applications, including:

- combustion engines where Sprintex sells Sprintex® twin screw superchargers, and supercharger systems incorporating the Sprintex® twin screw supercharger, in the automotive aftermarket and original equipment manufacturer (OEM) market in Australia, Asia, Africa, the Middle East and the United States of America;
- hydrogen fuel cells, which require a constant flow of oxygen rich air; and
- industrial oil-free clean air applications, including wastewater treatment.

Forward Looking Statements

Statements regarding plans with respect to the Sprintex projects and products are forward looking statements. There can be no assurance that the Sprintex plans for its projects or products will proceed as expected and there can be no assurance of future sales.



Company Presentation

July 2023



Sprintex Limited

Copyright © Sprintex Ltd



- The information in this presentation has been prepared by Sprintex Limited for the purposes of providing an overview of the company and its products.
- This presentation does not constitute investment advice. Neither does this presentation nor the information contained in it constitute an offer, invitation, solicitation or recommendation in relation to the purchase or sale of shares in any jurisdiction. This presentation does not take into account any person's particular investment objectives, financial resources or other relevant circumstances and the opinions and recommendations in this presentation are not intended to represent recommendations of particular investments to particular persons. Sprintex does not make any representation or warranty, express or implied, as to the accuracy or completeness of any information, statements, opinions, estimates, forecasts or other representations contained in this presentation. No responsibility for any errors or omissions from this presentation arising out of negligence or otherwise is accepted.
- This presentation may include forward-looking statements. Forward-looking statements are only predictions and are subject to risks, uncertainties and assumptions, which are outside the control of Sprintex. Given these uncertainties, readers are cautioned not to place reliance on forward looking statements.
- Any forward looking statements in this presentation speak only at the date of issue of this presentation subject to any continuing obligations under applicable law, Sprintex does not undertake any obligation to update or revise any information or any of the forward looking statements in this presentation only changes in events, conditions or circumstances on which any such forward looking statement is based.
- This document is provided for information purposes only. It is not an offer of sale nor a solicitation of any kind. It is recommended that anybody reviewing the statements here with a view for investment obtain independent professional advice.

Corporate Summary

Management and Facilities



Management

	<p>Jay Upton – Managing Director and CEO</p>	<ul style="list-style-type: none"> ▪ >30year period working in the international automotive industry. ▪ Experience in engineering management in the heavy mobile equipment sector and in both industrial and automotive high-performance engine engineering.
	<p>Steve Apediale – Non-executive Director and Chairman</p>	<ul style="list-style-type: none"> ▪ Chartered Accountant. ▪ >30 years experience gained from working with major accounting firms & public companies.
	<p>Li Chen – Non-executive Director</p>	<ul style="list-style-type: none"> ▪ 8 years' experience from an engineer to a managing director in mechatronics. ▪ Degree in Mechanical Engineering from University College London ▪ Qualified as a Senior New-energy Engineer (Ministry of Industry and information Technology, China).
	<p>Michael Van Uffelen- CFO & Company Secretary</p>	<ul style="list-style-type: none"> ▪ Mr van Uffelen is an experienced director, CFO and company secretary. ▪ He holds a Bachelor of Commerce degree from the University of Western Australia ▪ Chartered Accountant with 30 years' experience gained with major accounting firms, investment banks and public companies.

Facilities



US Distribution Centre

Mechanical superchargers and systems
Sales and after sales service



**Sprintex Energy Technology (Suzhou)
China R&D Centre and MFG Base**

Rotors, stators for high-speed motors
Fuel-cell air compressors
Electric superchargers, electric turbines for engines
Industrial compressors, high-pressure blowers etc.



**Sprintex Clean Air
Malaysia MFG Base**

Twin Screw supercharger manufacturing



**Sprintex Ltd
Australia R&D Centre**

R&D for twin screw supercharger
R&D ECU calibration

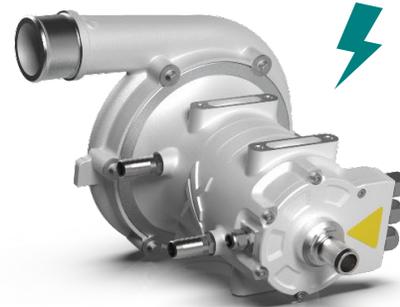




World leading compressor technology company supported by a library of global patents.



Proven in mechanical drive twin-screw compressor applications and successfully applied in high-end aftermarket automotive applications.



Same technology know-how now being applied to electric drive compressor applications, targeting hydrogen fuel cells, the automotive industry and clean air applications.



Offering multiple platform of compressors to the burgeoning clean energy (such as hydrogen fuel cell), industrial clean air (such as wastewater treatment) and vehicle electrification (such as eSuperchargers).



Produce world's most precise mechanical twin-screw compressors and world's most power dense and efficient high-speed electric compressors. Products have been well recognised by global leading automotive Tier-1, OEM and industrial application customers

Product Family

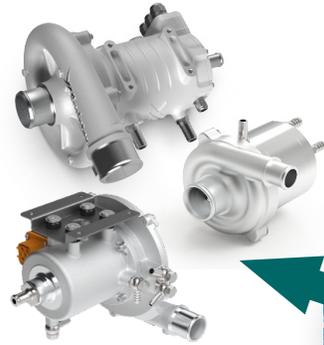
For clean energy and clean air supply



Hydrogen Fuel Cell Compressors

- 2kW ~ 40kW continuous power output
- 48V ~ 700V DC input
- Foil air bearing, and oil free ball bearing configurations

Suitable for 10kw-300kW hydrogen fuel cell systems



Supercharger

- 100HP to 500HP engine supercharger
- World first front intake twin screw supercharger design for better engine layout

Supplied to Jeep Wrangler, Rubicon, Gladiator, Grand Cherokee, Toyota FT86 and Dodge Challenger



Industrial Air Blowers

- 3kW ~ 45kW air bearing blower
- Energy saving jet type axial flow design

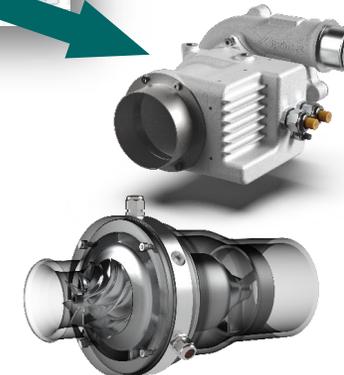
Suitable for wastewater treatment, clean air supply, and carbon capture applications.



Electric Superchargers

- 2kW ~ 20kW 48V~450V electric supercharger for engines
- Maintenance free ball bearings
- Air cooled

Suitable for mild hybrid engine /hydrogen ICE

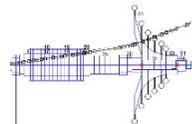
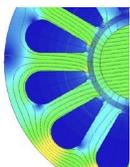
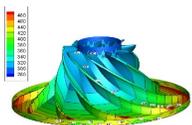


In-House Capabilities

Extensive technical equipment and application know-how



Design



- Computational Fluid Dynamics
- Thermodynamics
- Electromagnetics
- Electrical design & simulation
- Structural – FEA
- Rotor dynamics
- Library of design standards & procedures
- Compressor system modelling

Manufacturing



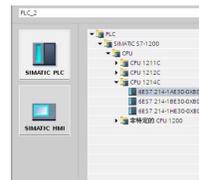
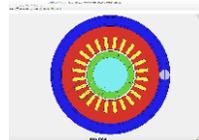
- Fully equipped sample workshop
- Flexible Assembly Stations
- Rotor Assembly and balancing
- Stator Winding and potting
- Soldering Station
- Post Magnetisation
- Industrial Blower Set Assembly Area
- Manufacturing capacity > 5000 units p.a. expanding to 15,000 units p.a.

Inspection and Testing



- Fully equipped incoming part and material inspection
- Motor inductance, resistance and capacitance testing
- Rotor dynamics assessment with accelerometers and displacement probes
- Vibration Testing/Shaker to SAE Standards
- Test cells with 70 kW power supplies or max. 210 Amps
- Compressor test rigs to SAE standard J1723

Software



- ERP System (Enterprise Resource Planning)
- Motor CAD for E-Mag
- LabVIEW
- Simulink
- DyRoBes
- SIMATIC/Siemens PLC

Air Compressors for Hydrogen Fuel Cells

Market and applications

Air compressor is an essential part of the fuel cell system, to supply adequate oxygen (from ambient air) into the fuel cell stack and make the system more efficient and powerful.

A typical high-speed FC compressor represents **20%** of the fuel cell system's cost, as a major balance of plant (BOP) component.

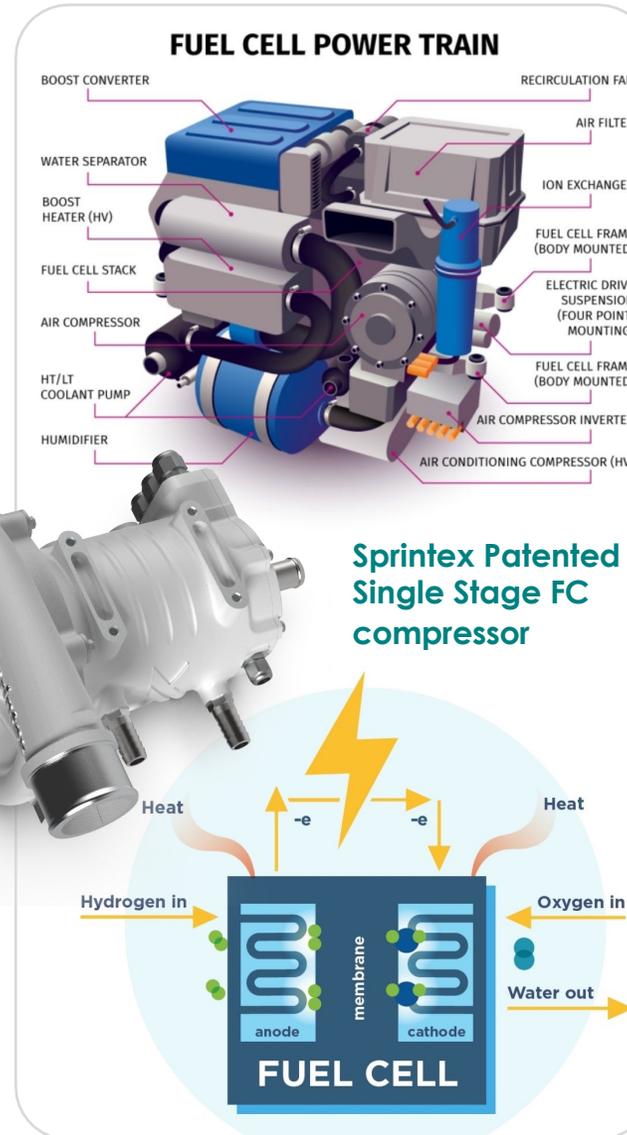
Key Market Drivers

- Global Zero-Carbon regulations and increasing demand for clean energy storage.
- Hydrogen fuel cells to replace fossil fuel engines in transportation, machinery and stationary power generation.

Market Size

- The global Fuel Cell Market is projected to grow from **USD 3.36B** in 2021 to **USD 28.95B** in 2028. The FC compressor Market is about 20% of the overall fuel cell market size.

<https://www.fortunebusinessinsights.com/industry-reports/fuel-cell-market-100733>



- Stationary power generator for micro grid, data centre and 5G base backup power



- Car, SUV, light vehicle



- Long haul commercial vehicle



- Urban zero emission bus and truck



- Forklift truck, off-road construction and agricultural machinery



- Zero-emission marine, train, and aviation

Air Compressors for Hydrogen Fuel Cells

Sprintex Product Advantages



Sprintex value proposition

MORE EFFICIENT

Single stage compressors with aerodynamic efficiency to 80%, 10% more efficient than conventional 2-stage compression layout. Motor electromagnetic efficiency above 98% in high power operation areas. Best in Class.

MORE POWER DENSE and COST EFFECTIVE

Highest power density level in the industry. 25kW compressor weighs under 7.5kg, **1/3 lighter than competitors**. Less Material Cost.

MORE RELIABLE

Lightweight rotor design makes the rotating group more reliable and durable.



VS



Sprintex 25kW Single Stage Compressor

Garrett/Honeywell 25kW Two Stage Compressor

Sprintex advanced fluid dynamics design enables the unique single stage compressor to deliver **80%** aerodynamic efficiency, whereas competitors' two stage compressor only achieves **72%** efficiency as power loss occurs in the additional compressor stage and interface.



The Sprintex electromagnetic team has achieved extremely lightweight motor rotor design. Picture above shows Sprintex **450g** rotor (left) vs competitor's **1000g** rotor (right) for the same 25kW power output. Lighter weight guarantees for reliability and durability while reducing material cost.

Air Compressors for Hydrogen Fuel Cells

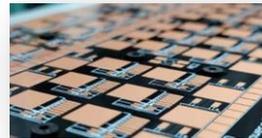
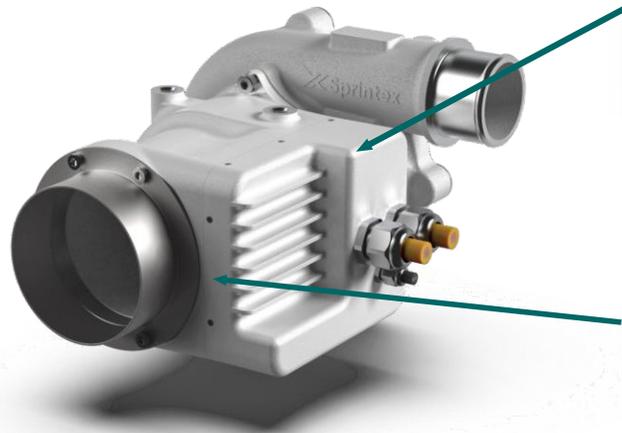
Sprintex Product Advantages



World's first high speed 3kW fuel cell compressor with integrated controller,

as fuel cell manufacturers eagerly look for high quality and compact compressors (1.5kW to 3kW) to supply small fuel cells with 10kW to 20kW output.

Sprintex S15 3kW eCompressor



Integrated power electronics with Copper substrate PCB for enhanced cooling



Patented high efficiency forced air cooling motor

To Replace

Conventional 1.2kW low pressure blower



- Speed:** 80,000rpm for higher boost pressure (up to 50kPa pressure)
- Efficiency:** 80% with 3D impeller design
- Power:** 3.0kW
- Voltage:** From 48V to 800V for advanced vehicle electrical architecture
- Durability:** Hybrid ceramic bearing for 20,000h maintenance free life

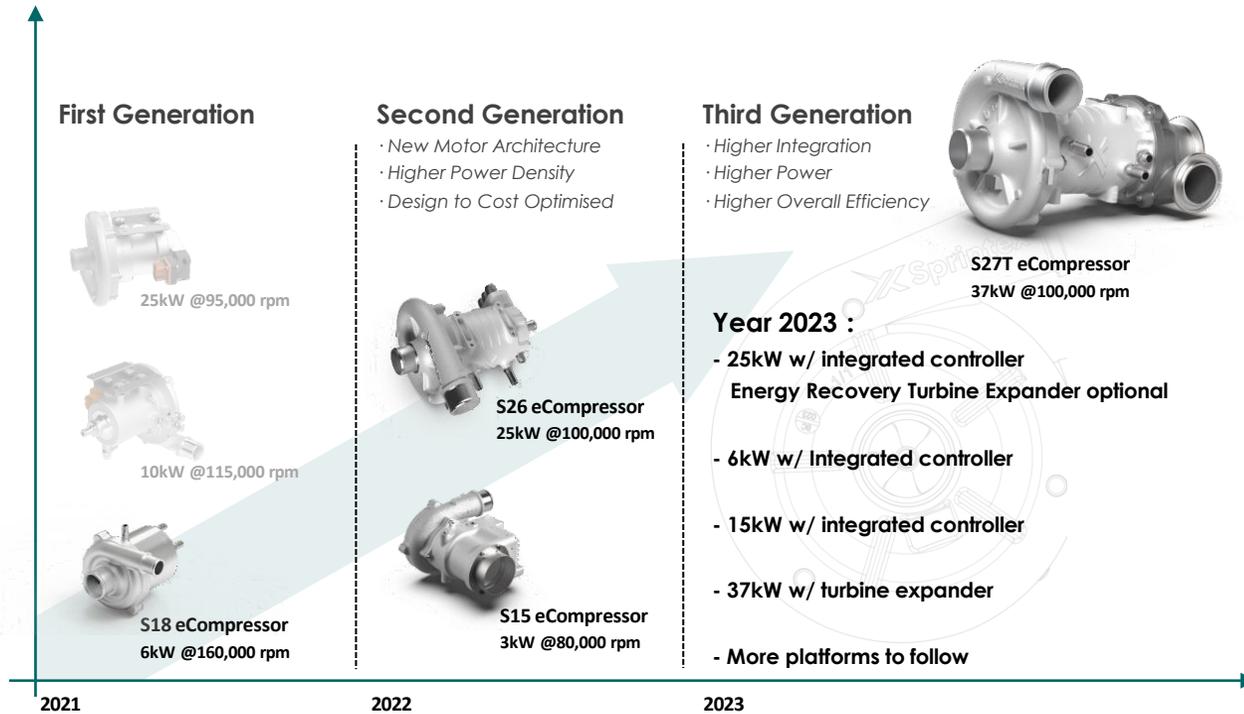
- Speed:** 20,000rpm (only boost to 25kPa pressure)
- Efficiency:** 65% with 2D impeller design
- Power:** Max. 1.2kW available on the market. Lack of Power
- Voltage:** Not available for over 400V
- Durability:** Steel ball bearings, causing electrical corrosion

Air Compressors for Hydrogen Fuel Cells

Sprintex Product Advantages



FC Series Product Roadmap



Sprintex Product Vision

- 
Full coverage for fuel cell applications.
 - eCompressors from 1.5kW to 45kW to provide a full coverage of boosting power for FC industry.
- 
Flexible configuration.
 - Dedicated/integrated controller, Single stage with optional expander, Water-cooled/Air-cooled, Air bearing/ Ball bearing options provide flexible combinations to achieve the customer's needs.
- 
Differentiated product advantages.
 - Deliver more efficient, reliable, power dense and cost-effective solutions for FC industry.

Air Compressors for Hydrogen Fuel Cells

Accelerate the advent of Sustainable Aviation



AERO 2023 – Gewinner „Sustainable Aviation Award“

THWS – Taifun 17 H₂



Award für das ZIM HyFly-Projekt der THWS „Entwicklung eines Flugzeuges mit Brennstoffzellenantrieb“

Collaborated with Technical University of Applied Sciences Würzburg-Schweinfurt Germany, The Projekt Taifun 17H₂ won the Sustainable Aviation Award at the AERO 2023 show. Thanks to Sprintex's lightweight and compact S18 fuel cell eCompressor, the fuel cell system can be fitted in the front of the hydrogen airplane without compromise. The eCompressor's **160,000 rpm** ultra high-speed motor ensures sufficient pressure and power delivery even during high altitude operation.



Sprintex S18 fuel cell eCompressor

Industrial Clean Air Blower (Industrial Air)

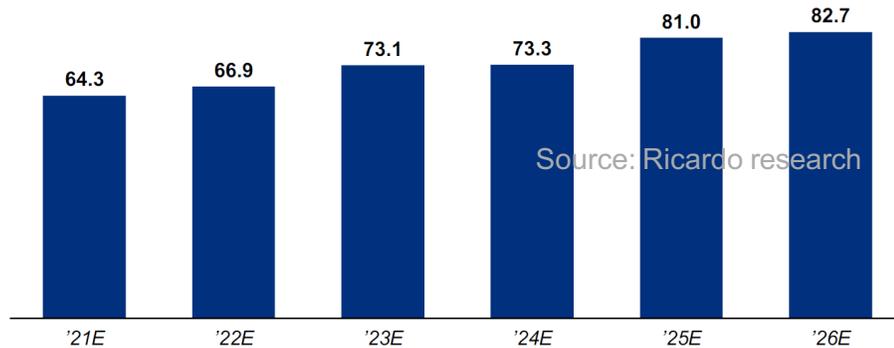
Market and applications

Industrial Air Blowers are widely used in modern production and processing, for metallurgy, production line pneumatic actuators, food and medicine, fabrics, wastewater treatment, vacuum, paper pulp, cement and semi-conductors etc.

Sprintex offers ground-breaking solutions to save **over 35%** of electricity cost for industrial customers:

- 25kW high-speed axial flow type blower system for high-end market applications, with average unit price of USD10,000
- 3kW high-speed blower for generic machinery applications, avg. unit price USD1,500

Market Size (Global Industrial Air, in **GBP billion**)



- Steel manufacturing
- Cement manufacturing



- Food and medicine production



- Wastewater treatment
- Aquaculture industry aeration



- General production line, pneumatic actuators etc.
- Blow cleaning process



- Woven and non-woven fabrics, such as melt blown fabric process



- Semi-conductor industry



Industrial Air Market and Case Study

Case Study 1 – Sprintex 25kW Axial Type Blower



Sprintex USP

- World's first 100krpm 25kW high speed **Axial Flow** design blower – (patented) delivers **over 82%** aerodynamic efficiency vs traditional **75%** radial flow efficiency
- Robust motor and latest power electronics technology enable faster variable speed control for **Smart Pulsation Aeration (S.P.A™)** - improving Oxygen Transfer Rate (OTR) while reducing **30%** energy consumption in wastewater treatment.
- Combined, customers can enjoy an instant **35% plus** electricity bill saving with less noise, less maintenance and less installation footprint compared to the most efficient competitors' products available. **A Sprintex 25kW Blower at USD15k sales price = total electricity bill saving in under 18 months.**
- 500,000 kWh (375 tonnes CO2 emissions) savings in a small/medium (320kW) wastewater treatment facility by switching to Sprintex



Sprintex 1st Gen Turbo Blower tested and presented at RGE Research Institute, Nanjing China



Conventional 25kW turbo Blower

- Less than 50,000rpm max speed due to inverter limits, max. 75% aerodynamic efficiency
- Over 350kg for 25kW power
- Still using 1990s' power electronics technology, average converter power factor of 90% ('Gold' Standard)

VS



Sprintex 2nd Gen 25kW Axial Flow Blower

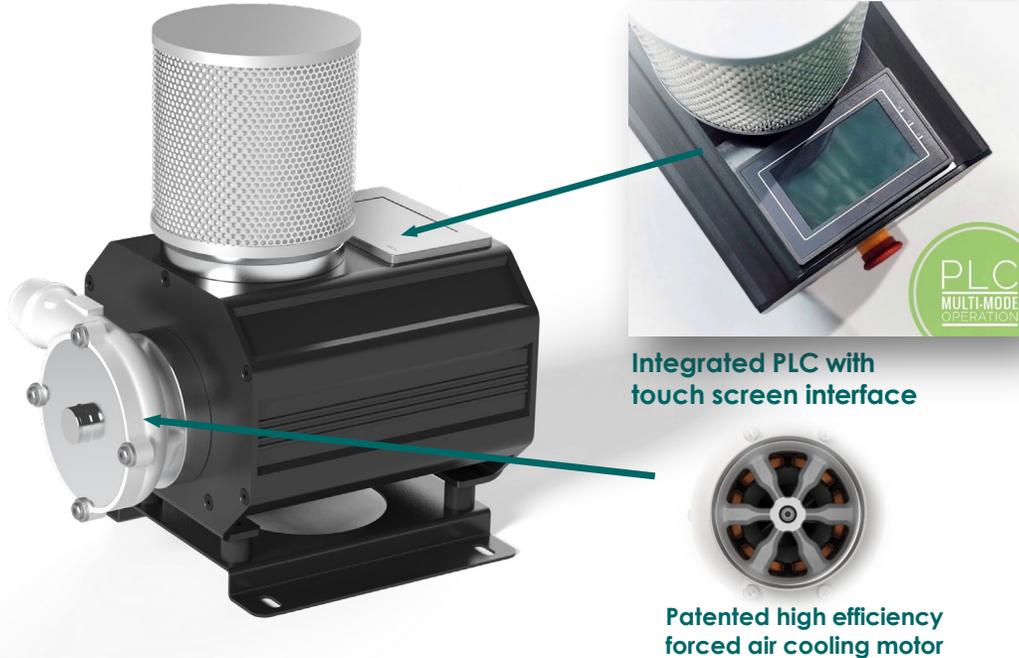
- 100,000rpm rated speed with 82% aerodynamic efficiency
- 150kg for 25kW power
- Smart Control with world's first commercial ready **Smart Pulsation Aeration** technology
- **>98% Converter Power Factor, above the industry's highest 'Titanium' standard**

Industrial Air Market and Case Study

Case Study 2 – Sprintex 3kW Industrial Blower



Sprintex 2.5~4kW Industrial Blower (220V AC Input)



- Speed:** 80,000rpm for higher boost pressure (up to 0.5bar pressure)
- Efficiency:** 80% with 3D impeller design
- Weight:** 6.0kg with accessories
- Control:** Variable speed control, with **Smart Pulsation Aeration** technology
- Durability:** Hybrid ceramic bearings for 20,000h (2.3years) maintenance free



50% electricity saving!
>4x Durability

Conventional Side Channel Blower



Market demand is over 2,000,000 units/yr.

- Speed:** 3,000rpm fixed speed (only boosts to 0.25bar pressure)
- Efficiency:** 40% with 2D impeller design. Overheat causes low life-span
- Weight:** Approx 50kg (for 3kW power)
- Control:** Fixed speed, no power saving adjustment
- Durability:** Bearing or blower parts failure within 6months of continuous operation

Industrial Clean Air Blower

Leading Partner



Nanjing RGE <http://en.njrit.com/>

Nanjing RGE is a large China based manufacturer of wastewater aeration equipment.

In November of 2021, Sprintex announced an agreement with RGE, for the purchase of Sprintex industrial blower sets which would be supplied as a complete unit including cabinet, user interface etc as a plug and play unit. RGE would also collaborate on designs to suit wastewater treatment applications.

Originally the agreement was for a minimum sales value of ~A\$6m over the first two years of a three-year renewable agreement.

The collaboration and development has gone very well and we currently expect to deliver samples for real-world testing of energy savings in the coming month. This model will include a new technology where we are able to save addition energy over the original intent units (approx. 30% saving), utilising an automated variable speed and pressure control system that allows the aeration to be more effective than steady state supply and therefore uses less energy for the same aeration value.



**Sprintex
3kW Blower**



**Sprintex
25kW Blower**

Sprintex Power Systems

Fuel Cell Power Supply Series



Sprintex Power Supply Series

Fully customized modules.

Suitable for 5G base backup power supply, data centre backup power supply, etc.



- **Modular Design**
Easy Maintenance.
- **Quick Response**
Start-up in less than 3s.
- **Environmental Advantage**
Zero emission. No noise.
- **High Reliability**
Service life over 5,000 hours.

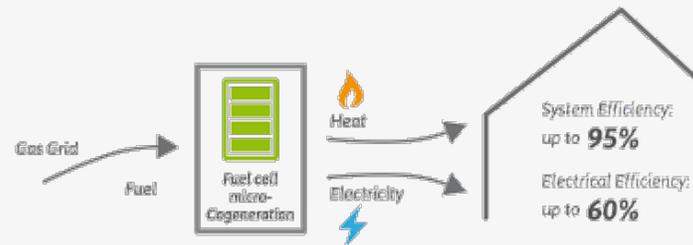
Product Specification:

	SPS-5K	SPS-10K
Rated Power	5kW	10kW
Peak Power	5.5kW	11kW
Rated Output Voltage	54VDC	48VDC/220VAC
Output Voltage Range	40-60VDC	48-54VDC
Hydrogen Pressure	0.35bar	0.3~0.4bar
Operating Temperature	5~45°C	-5~45°C
Operating Altitude	≤2,000m	≤3,000m
Operating Humidity	10~95%RH	10~95%RH
System Weight	<50kg	<300kg
System Dimension	720x450x370mm	800x800x1800mm
Hydrogen Consumption	<0.38kg/hr	<0.8kg/hr

Sprintex Power Generators

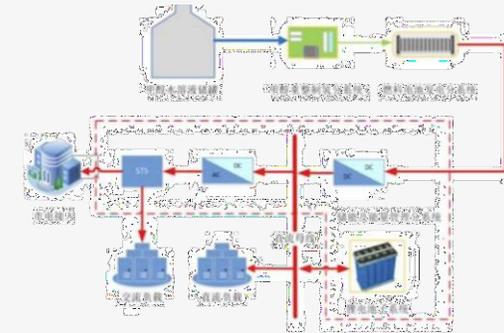
By integration of Fuel Cell Power Supply, we expand our product range into power generators with more functions.

For Civil Use (such as Cogeneration Power Generators)



- Make use of recycled wind and electricity, and store hydrogen through electrolytic water technology.
- When continuous and stable power is required, electricity is generated by Fuel Cells.
- The generated waste heat is used for heating water.
- This Power Generator can be widely used in the field where electric-hydrogen and electric-heat are in close proximity.

For Emergency Use (Mainly Instant Backup Power Generators)



- This power generator focuses mainly on instant generation applications.
- On-site hydrogen production (such as methanol reforming to produce hydrogen, etc.) to provide the necessary hydrogen for Fuel Cells.
- Distributed power transmission be realized through Fuel Cells.
- This Power Generator is suitable for use in the remote areas of power transmission, such as grassland, desert, mountains, islands etc.

END

Contact:

Jay Upton
Managing Director

P: +61 8 9262 7277

E: jay.upton@sprintex.com.au

GO GREEN, GO SMART

Sprintex Limited

Copyright © Sprintex Ltd

 **Sprintex**