

APEX HEROWEAR

Advanced Back-Assist Exosuit Technology



Email
info@sa2050.au

Website
www.sa2050.au

Address
Unit 5/108-120 Marion Rd, Brooklyn Park, South Australia 5032

Distributed by
SA2050

Primary Contact:
Michael Schaefer
Chief Executive Officer
michael@sa2050.au

COMPANY OVERVIEW

SA2050 is a strategic Australian distributor partnering with global innovators to deliver breakthrough workplace safety technologies. We specialise in implementing validated solutions that reduce workplace injuries, enhance operational capability, and deliver measurable return on investment across defence, mining, and high-risk industrial sectors.

VALUE PROPOSITION

Back injuries represent the single leading cause of workplace disability globally, costing the Australian industry millions in lost productivity, workers' compensation, and reduced operational capability. The HeroWear Apex exosuit provides a scientifically validated, passive solution that **reduces back strain by 40%** and **removes up to 23kg of load** from the spine with every lift, enabling organisations to protect their workforce while maintaining peak operational efficiency.



CORE CAPABILITIES

Product Distribution & Implementation

- Supply of HeroWear Apex back-assist exosuit systems
- Workplace ergonomic assessment and risk analysis
- Custom fitting and sizing for diverse workforce demographics
- Integration with existing safety management systems

Training & Support Services

- Comprehensive operator training programs
- Management and supervisor briefings
- Ongoing technical support and consultation
- Performance monitoring and program optimisation

Industry Specialisation

- Australian Defence Force capability enhancement
- Mining operations (surface and underground)
- Agriculture and food production
- Transport and logistics
- Building and construction
- Manufacturing and warehousing

PRODUCT SPECIFICATIONS: HEROWEAR APEX EXOSUIT

- Reduces muscle fatigue and strain by 40%
- Removes up to 23kg of strain from the back with every lift
- Reduces spinal compression forces during bending and lifting
- Improves lifting posture and reduces injury risk



TECHNICAL SPECIFICATIONS

Specification	Detail
Weight	1.2kg (lightweight textile construction)
Power	Passive mechanical system using elastic bands
Operation	No motors, batteries, or charging required
Maintenance	Minimal - no electronic components
Fit Range	Heights 157cm - 198cm
Design	Open-chest, textile-based construction

UNIQUE FEATURES

✓ Passive energy return system operates continuously without power
✓ Purpose-designed sizing for male and female body types
✓ Full range of motion - does not restrict movement
✓ Can be worn all day without discomfort
✓ Quick to put on and remove (under 30 seconds)
✓ Compatible with other personal protective equipment

RESEARCH VALIDATION

- 30+ independent academic research studies
- Hundreds of industry field validation studies
- Proven effectiveness, user acceptance, and safety benefits

KEY DIFFERENTIATORS

1. Scientifically Validated Technology

The HeroWear Apex is the most researched exosuit globally, with 30+ academic studies independently validating its effectiveness in reducing back strain and preventing workplace musculoskeletal disorders.

2. Always Operational

Passive mechanical design means no batteries, charging, or electronic maintenance. The device operates continuously throughout every shift without downtime or power requirements.

3. Inclusive Workforce Design

Purpose-engineered for both male and female body types with curvilinear straps, open-chest design, and accommodations for anatomical differences. Addresses the reality that women comprise over 50% of the modern workforce.

4. Proven Return on Investment

Field implementations demonstrate measurable benefits, including reduced injury rates, decreased workers' compensation costs, improved productivity, and enhanced workforce retention.

5. Australian-Based Support

Local distribution and implementation team with deep experience in government relations, industry partnerships, and operational deployment across multiple sectors.

6. Versatile Application

Successfully deployed across industries from defence and mining to agriculture, manufacturing, and logistics. Suitable for any operation involving repetitive lifting, bending, or load handling.



PAST PERFORMANCE

CASE STUDY 1: HILL-SMITH FAMILY ESTATES

Sector: Sparkling Wine Manufacturing

Challenge: Repetitive lifting and twisting during tirage processes in bottling operations causing lower back fatigue and injury risk.
Solution: Implemented HeroWear Apex2 exosuits with comprehensive training and fitting support.

Results:

- Significant reduction in strain-related issues
- Improved operator performance
- Enhanced workforce morale and retention
- Seamless integration with existing production requirements

> *"The introduction of the HeroWear Apex2 Exosuit has been a genuine game-changer for our team. We've seen a significant reduction in strain-related issues. Our operators report feeling more supported and less fatigued at the end of a shift, which not only improves performance but also contributes to overall morale and retention."*
>
> **— Dean McFadyen, Line Manager, Bottling**

PAST PERFORMANCE

CASE STUDY 2: BEACH ROAD WINES

Sector: Agricultural Operations

Challenge: Vineyard grafting operations requiring repetitive forward bending throughout extended work periods.
Solution: Deployed HeroWear Apex exosuit technology with custom fitting for agricultural environment.

Results:

- Enabled longer working days
- Reduced daily fatigue and pain
- Strong return on investment - "paid for itself many times over"
- Improved comfort in hot environmental conditions

> *"The Apex has been perfect for supporting my lower back whilst also being comfortable and non-restrictive for work movement. It had the flow-on effects of allowing me to work longer days and have less fatigue and pain from day to day. I cannot recommend this technology highly enough for anyone who relies on their back for their income. It's a great investment and paid for itself many times over."*
>
> **— Tony Hoare, Beach Road Wines**

INDUSTRIES SERVED



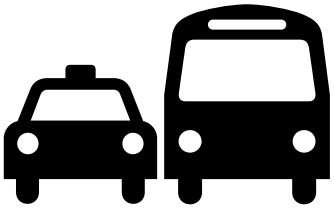
DEFENCE



MINING



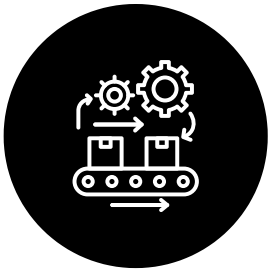
AGRICULTURE



TRANSPORT & LOGISTICS



CONSTRUCTION



MANUFACTURING

LEADERSHIP TEAM



MICHAEL SCHAEFER
CHIEF EXECUTIVE OFFICER

Extensive experience in agribusiness, government relations, and innovation leadership. Former Director of Grain Producers Australia and past Chair of the Grains Council of South Australia. Strong networks across local, state, and federal government with proven capability in strategic stakeholder engagement.

michael@sa2050.au



DANNY MACMAHON
COMMERCIAL DIRECTOR

Deep commercial expertise across international business, sales, and marketing. Former CEO of a mid-sized wine company with a track record of expanding into 15+ international markets. Proven capability in major customer negotiations and strategic growth initiatives.

danny@sa2050.au



DAMIAN SERONG
DIRECTOR, INNOVATION & SUPPLIER RELATIONS

Over 20 years of international business experience spanning technology sectors, including medical devices, healthcare IT, and renewable energy. Strong international network across North America and Europe with proven capability in commercialising innovation from concept to market.

damian@sa2050.au

COMMITMENT TO SAFETY & INNOVATION

SA2050 is committed to delivering solutions that protect Australia's workforce while enhancing operational capability. Our partnership with HeroWear brings world-leading exosuit technology to Australian organisations, backed by rigorous scientific validation and proven field performance.

We work collaboratively with clients from initial assessment through implementation and ongoing support, ensuring seamless integration with existing safety systems and delivering measurable outcomes that support organisational goals.

CONTACT US!

General Inquiries: info@sa2050.au
Website: www.sa2050.au
LinkedIn: linkedin.com/company/sa2050

Protecting Australia's workforce through validated innovation. Delivering measurable outcomes across defence, mining, and high-risk industrial operations.

HEROWEAR

SA2050