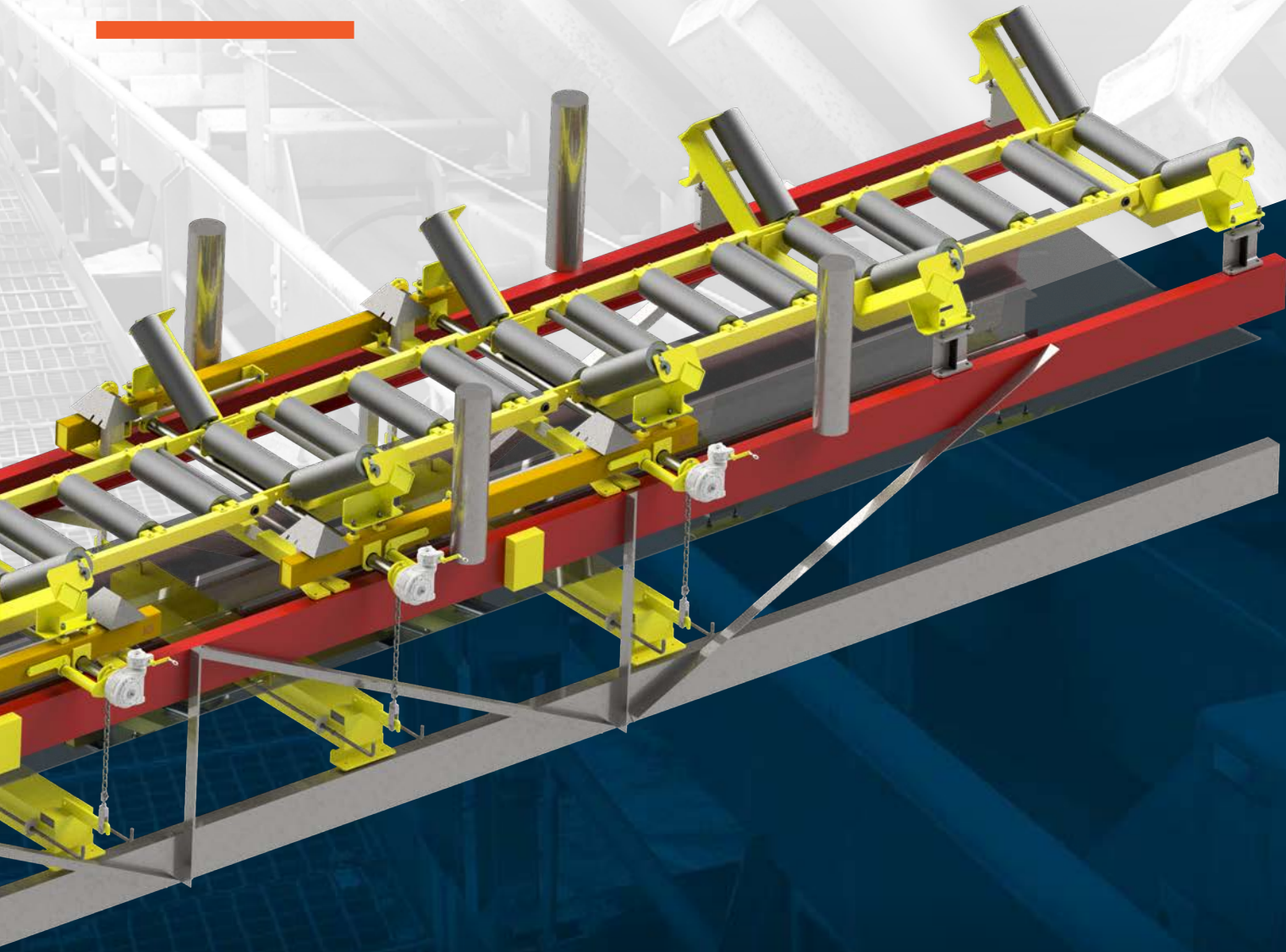
CONTROL
SYSTEMS TECHNOLOGY

THE BELT WEIGHING SPECIALISTS

CAPABILITY STATEMENT



ACCURACY GUARANTEED

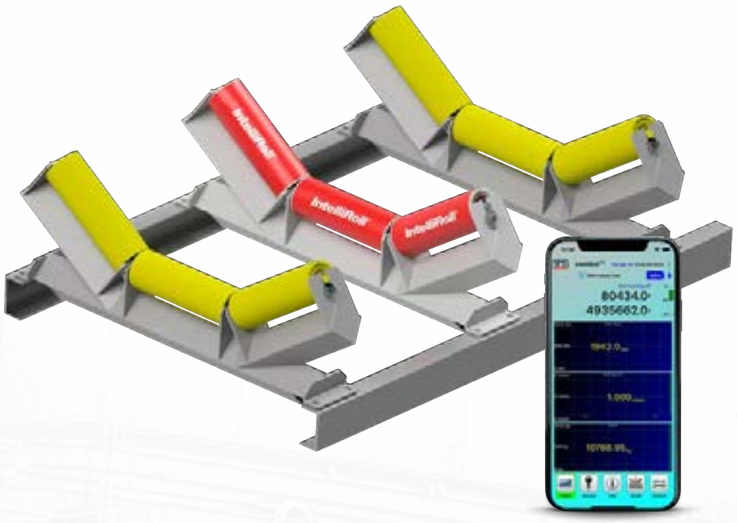
THE BELT WEIGHING SPECIALISTS

CONTENTS

COMPANY PROFILE

Control Systems Technology is redefining the global standard for belt weighing, combining precision engineering, deep industry understanding and a relentless commitment to innovation. As CST expands, we are focused on combining global expertise with local market knowledge to deliver scalable, high-integrity, application-engineered systems backed by the world's most extensive team of service technicians.

Our technologies, including the **IntelliRoll® wireless belt weigher and Mavis-ARM Integrator,** demonstrate leadership in belt weighing by continuously pushing the boundaries, setting new standards for accuracy, reliability and performance. Our dedication to research and development allows us to actively shape international standards and educate the global market on the critical role of applications engineering and service excellence.



Our purpose is to establish a new international standard for belt weighing as a trusted technology for trade and process control.

MISSION

To lead the world in advancing belt weighing technology, guaranteeing accuracy and supporting customers with trusted solutions for trade and process control.

VISION

To set the global standard for belt weighing – combining engineering ingenuity, integrity and innovation – so that every customer can trust the truth their scales tell.

OUR VALUES

We are guided by a set of deeply held values that shape who we are and how we work:

INTEGRITY

We tell the truth in our products and our relationships.

RESPONSIBILITY

We own outcomes long-term.

INNOVATION

We push the boundaries of belt weighing, advancing the field through ingenuity.

PARTNERSHIP

We stand by customers and colleagues alike, building bonds that endure.

EXCELLENCE

Accuracy without compromise.

INDUSTRIES

CST supports over 3,500 active installations across a wide range of industries, including **mining, ship loading, quarrying, waste management, minerals processing and agriculture.** Our belt weighing systems are trusted in environments where accuracy, reliability and long-term performance are critical to operational success.

Whether it's a remote mine site, a high-throughput port or a complex processing facility, CST delivers scalable solutions tailored to each application. Our belt weighing systems are designed to meet the demands of real-world conditions, helping operators maintain control, optimise performance and ensure compliance across diverse bulk handling operations.

THE CST DIFFERENCE

ACCURACY GUARANTEE

At CST, we understand that **performance isn't optional,** so we engineer it into every application. We pride ourselves on delivering the most accurate and reliable belt scales in the industry. For us, accuracy isn't just a benchmark; it's a commitment we stand behind. Our guarantee is built on decades of engineering expertise, a deep understanding of operational challenges and an uncompromising dedication to doing things right.

HOW WE GUARANTEE ACCURACY

Our ability to guarantee accuracy is the result of how we work. From engineering the right solution to understanding the unique conditions of your conveyor belt, staying true to our values and supporting you long after commissioning, every step we take is designed to deliver the result you specify, with the confidence to stand by it.

1 Solutions Start with Your Operation

We begin by understanding your site, process and requirements. From there, we engineer a weighing system that solves your specific challenge with the accuracy and reliability you need. We don't start with a product, we adapt it to suit your operation.

2 Engineered for Complex Applications

CST has the most experienced belt weighing specialists in the industry, including the only two PhDs in belt weighing globally. With decades of expertise and advanced R&D, we deliver the world's most accurate systems, tailored to your conveyor.

3 No Compromise on Core Values

Integrity, quality, trust, value, commitment and responsibility guide everything we do.

We care about your results and never take shortcuts.

4 Long-Term Partnership

Our support doesn't end at commissioning. We stay involved until your requested accuracy is proven and continue to support your team with maintenance and upgrades for as long as you choose CST.

OUR DIFFERENCE

Our accuracy guarantee is a commitment to excellence. When you choose CST, you're not just getting a belt scale; you're getting long-term value through proven experience, backed by integrity and built by people who stay with you for the long haul.

Our commitment to excellence is supported by:

BETTER WEIGH FRAMES

Fully suspended with more idlers, longer spacing and heavier steel, engineered with an 'in conveyor' performance and accuracy guarantee.

ADVANCED TACHOMETERS

Proven performance alongside an Automatic Tachometer Calibration System available in our integrators.

PRECISION CALIBRATION MASSES

Sized at 100%, divisible for linearity checking with safer application systems. We ensure full sizing to maintain the highest standards of accuracy and reliability, unlike competitors who offer a cheaper, less accurate solution by reducing size to save costs.

MINIMAL MAINTENANCE

Supported by the best team of technicians in the world, our systems requiring less maintenance and reduce downtime. With remote connectivity functionality, we can diagnose problems immediately from anywhere.

STATE-OF-THE-ART ELECTRONICS

Trade Certified up to 0.1% with remote connectivity and advanced features.

EASE OF INSTALLATION

Modular breakdown and logical assembly, avoiding the need for cranage in many instances.

THE APPLICATIONS ENGINEERING PROCESS

Our applications engineering process is the cornerstone of our accuracy guarantee. It consists of:

DETAILED ANALYSIS

We conduct a thorough analysis of your conveyor's environment to understand its specific requirements.

PURPOSE-BUILT SOLUTIONS

Based on our analysis, we design and implement a system that is perfectly suited to your application.

CONTINUOUS IMPROVEMENT

We stay in touch with our customers, continuously innovating and improving our technology to meet evolving demands. We provide ongoing service and calibration to ensure the scales maintain their measuring accuracy throughout their design life.

ACCURACY GUARANTEED

PRODUCTS

CST offers a comprehensive range of Australian-made belt weighing systems and integrated technologies designed to deliver maximum accuracy, reliability and long-term performance across bulk material handling operations.

Close Spaced Roller Rack

BELT SCALE DESIGN VARIATIONS

NON-INTRUSIVE DESIGN

CST's non-intrusive design **installs on conveyors without requiring structural modifications.** Unlike standard belt weighers that require removing bracing and structural steel, CST's non-intrusive belt weigher sits above any conveyor, saving on site modification and re-engineering costs.

Applicable belt weighers:

- PCSX2
- PFS4-2
- PFS4-4

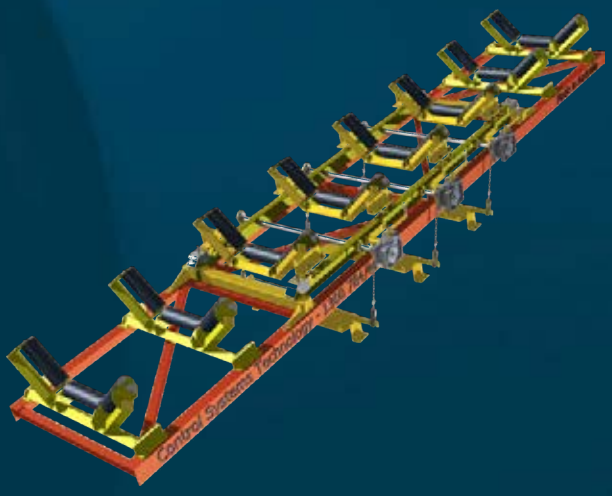
PCX2-1 Non-Intrusive

CLOSE SPACED ROLLER RACK

The Close Spaced Roller Rack (CSRR) is designed to **enhance accuracy by minimising the angular misalignment effects of a tensioned belt.** This is achieved through an extended effective weigh length and significantly reduced material and belt agitation during the transition into and out of the weigher zone. The system offers 0.1% repeatability for up to 12 months without recalibration, making it the only system on the market capable of such precision.

Applicable belt weighers:

- PFS4-2
- PFS4-4



PFS4-4 Non-Intrusive

BELT WEIGHERS

PRECISION FULLY SUSPENDED (PFS4-2, PFS4-4)

Our flagship model, the PFS series, delivers **the highest level of accuracy and stability** across a wide range of applications. These weighers offer exceptional repeatability under live load conditions and are ideal for operations where limited space or budget constraints are not a major concern. Optional design variations include:

- CSRR Design: Designed for maximum accuracy in demanding applications.
- NI Design: Non-intrusive installation that preserves conveyor integrity and saves on modification costs.

PFS4-4

PRECISION CENTRALLY SUSPENDED (PCS1, PCS2, PCX2)

A more compact and budget-friendly option, these weighers are built with fewer components while still delivering dependable performance.

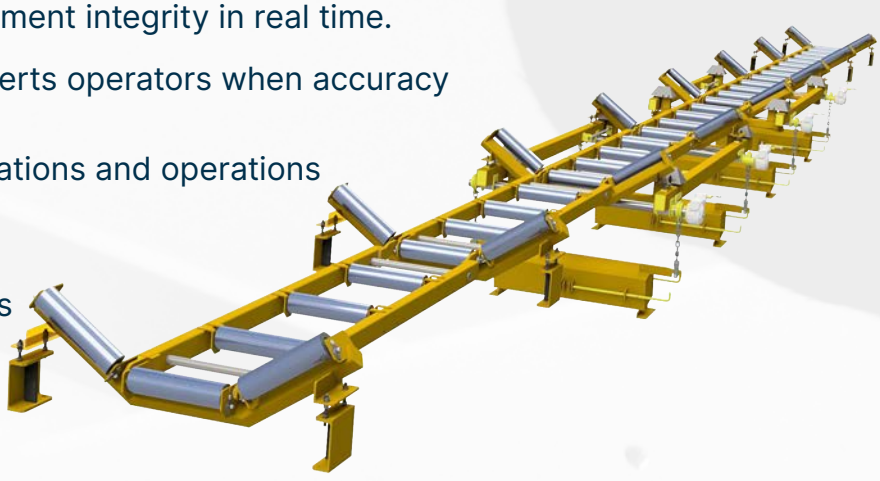
- Ideal for smaller installations or where ultra-high accuracy is not required.
- PCS1 and PCX2 are especially suited to space-constrained environments.
- The PCSX2 is suitable for wider belts and is available in a Non-Intrusive Design.

PCS1

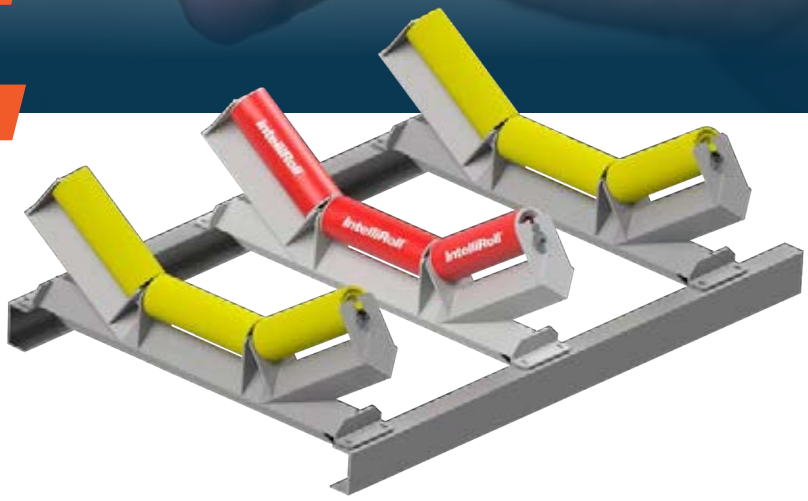
SYMMETRICAL DUAL REDUNDANT (SDR) SCALE

The highest level of assurance in conveyor weighing, combining two fully suspended weigh frames operating in parallel to continuously cross-check performance, detect discrepancies and verify measurement integrity in real time.

- Self-checking system which alerts operators when accuracy is compromised.
- Built for mission-critical applications and operations with high trade values.
- Recommended for trade-certified load-outs, shiploaders and critical weighers used for accurate financial and metallurgical reporting.



IntelliRoll®

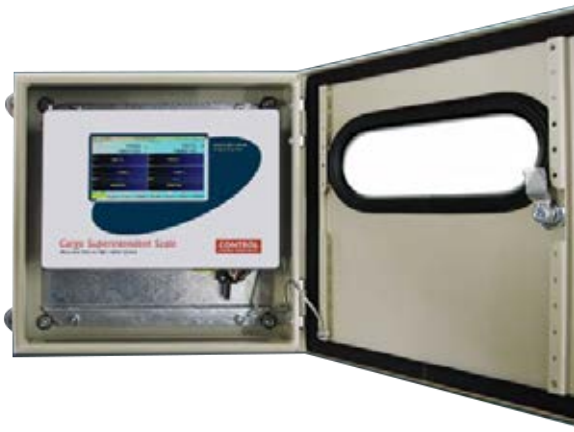


A wireless, autonomous weigh roll **that transforms a standard roller into a smart, autonomous belt weigher.** It houses load cells, electronics, communications and self-charging power inside, with no external wiring required.

- Pre-calibrated, eliminating need for tachometers and integrators
- Simplifies installation and reduces maintenance
- Delivers real-time data for process control via Wi-Fi and Bluetooth

OTHER CORE PRODUCTS

MaVIS-ICS-ARM (BELT SCALE INTEGRATOR)



An advanced all-in-one bulk material handling control centre that unifies data from belt weighers, bin scales and volumetric scanners. By centralising data, it simplifies analysis, boosts safety, prevents overfilling and streamlines operations.

- Provides real-time visibility of mass, volume and density in motion
- Enhances safety and operational efficiency

VOLUMETRIC SCANNER

Delivers high-precision material flow data and integrates seamlessly with CST belt weigher systems via the MaVIS-ICS-ARM software. Ensures accurate, reliable measurements to improve efficiency and decision-making in bulk material handling.

- Improves loading safety and process optimisation
- Tracks belt wear and material density

METAL DETECTORS

CST Conveyor Tramp Metal Detectors are engineered to **protect your equipment, prevent costly production downtime and ensure product quality** by detecting unwanted metal in bulk material flow.

- Easily integrated into CST's weighing systems
- Supports safe and efficient operations

SERVICES

CST has the largest and most experienced team of belt scale technicians in the world; we have more specialists in Western Australia alone than most companies have globally.

Our service team is made up of trade measurement–approved professionals qualified to **calibrate, install, certify, recertify, maintain and repair** all types of belt weighers and weigh feeders, whether CST systems, competitor brands or custom-built setups. They combine deep technical expertise with region-specific knowledge to ensure your system remain accurate, reliable and fully compliant with local regulations.

With 50 service personnel across Australia, offices in Sydney, Newcastle, Mackay and Perth, plus international service bases in Peru, Chile and Canada, CST is equipped to support your operations wherever and whenever you need us.

SERVICE TEAM CAPABILITIES

REMOTE MONITORING AND CALIBRATION SERVICE

A breakthrough in remote system management and performance assurance. CST's Remote Calibration Service (RCS) gives sites 24/7 access to the world's leading belt scale technicians from anywhere, helping them manage and maintain their systems without the need for on-site visits.

Using the WIM3 integrator, the system allows for real-time monitoring and troubleshooting from any location. It includes built-in checks to reduce calibration errors, sends alerts when faults occur and helps detect issues early to avoid unexpected downtime. This setup is especially useful for remote or travel-restricted sites. CST's RCS also keeps a record of calibration history for quality control and works with any brand of belt weigher.

SERVICE TEAM CAPABILITIES (CONT'D)

INSTALLATION

Our expert team handles full installation of belt weighing systems, ensuring each system is application engineered to suit your conveyor's environment and meet your specific requirements.

CALIBRATION

We provide precise calibration services, including live material calibrations, to guarantee the accuracy and reliability of your weighing systems. Each calibration follows a strict quality assurance process where data is verified against theoretical calculations, historical trends and performance criteria. With remote calibration capability, we can keep your system running at its peak when you need it most.

REPAIR & MAINTENANCE

Our skilled technicians are available around the clock and offer comprehensive repair and maintenance services to keep your equipment running smoothly and efficiently. We work to identify issues early and minimise costly unplanned downtime through timely, site-specific support.

WEIGHT CERTIFICATION

As a NATA accredited testing facility, we design, manufacture and supply certified masses for various applications, ensuring compliance with industry standards. We offer:

- Weighbridge Certified Masses
- Beltweigher Certified Masses
- Platform Scale Certified Masses
- Certified Calibration Chains
- Automated Certified Calibration Chains
- POS System Certified Masses
- Laboratory Weighing Certified Masses
- Bespoke Application Certified Masses

SHAPING THE FUTURE OF BELT WEIGHING

R&D AND INNOVATION

Our Research & Development team ensures CST remains at the forefront of belt weighing technology and industry leadership.

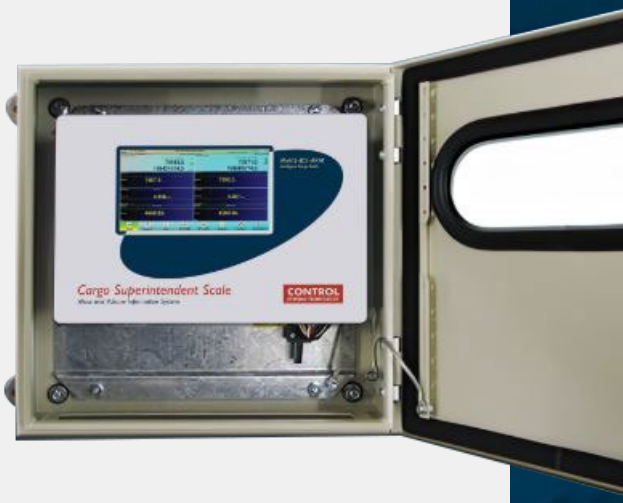
Staying ahead means constant evolution, combining deep expertise with a commitment to innovation to address challenges before they become industry problems. While others offer off-the-shelf solutions, we pioneer cutting-edge, application-engineered systems designed to meet the most complex operational requirements.

We're not just focused on today's needs. We're actively asking what we can develop now to solve the problems of the future. Spear-headed by **the only two PhD's in belt weighing worldwide,** we develop new systems, refine existing installations and apply bold thinking with practical engineering to deliver unmatched performance. With CST, you're choosing more than high performance, you're choosing a system and service that will stand the test of time. We set the industry benchmark. **We are accuracy guaranteed.**

Our commitment to innovation is demonstrated by:

MaVIS-ICS-ARM (BELT SCALE INTEGRATOR)

A breakthrough in improving decision-making across bulk material handling operations. The MaVIS-ICS-ARM (Belt Scale Integrator) is an advanced all-in-one control centre for bulk material handling. By centralising real-time data from belt weighers, bin scales and volumetric scanners, it delivers a complete view of mass, volume and density in motion. Its ability to unify system-wide data into a single, intelligent platform makes it a powerful innovation that transforms how operations monitor performance, maintain compliance and optimise production.



INTELLIROLL®

A breakthrough in convenient, connected, low-maintenance material monitoring. The IntelliRoll® is a wireless, self-powered weigh roll that transforms a standard roller into a smart, autonomous belt weigher. With integrated load cells, electronics and real-time data transmission via Wi-Fi and Bluetooth, it eliminates the need for external wiring, calibration and traditional components.

SYMMETRICAL DUAL REDUNDANT (SDR) SCALE

A breakthrough in weighing assurance, giving operators real-time confidence in every measurement. The SDR system is a self-checking belt scale that runs two fully independent weigh frames side by side, continuously comparing their outputs to confirm system health. This built-in validation ensures that any fault, from misalignment to calibration drift, is immediately revealed.

LEGAL FOR TRADE CERTIFICATION

CST's belt weighing systems are certified to meet the highest international standards for trade accuracy. Our technologies comply with OIML R50:2014, the global benchmark for belt scales used in custody transfer, inventory management and commercial transactions. This certification ensures that every measurement is traceable, reliable and legally recognised.

With accuracies of 0.5%, 0.25% and 0.1% available for approved engineered applications, CST systems are trusted in operations where precision is critical. Our certification process includes rigorous testing, independent calibration and continuous validation, giving operators confidence that their data meets regulatory and commercial requirements.

PATTERN APPROVAL OF CST BELT WEIGHING SYSTEMS FOR TRADE PURPOSES

Europe OIML Certificate	***European***	***Canada***	***Australia***	***United States of America***
of Class 0.5 Conformity R50/ 1997-AU-03.0102-135	MID approval UK/126/0084	0.1% AM-5612 0.5% AM-5442 Rev 1	0.25% Class 0.5 Certificate of Approval 6/14d/13	NTEP 0.25% Certificate of Conformity 02-135A4 2016

AWARDS

CST's commitment to innovation has been recognised globally through multiple industry awards. Our technologies continue to set new standards in belt weighing, automation and integrated control.

IntelliRoll® received the **QME Best Product Launch Award (2018)** and the **Innovative Product of the Year Award at the Sensors Expo & Conference (2019)** for its breakthrough wireless design and autonomous performance.

MaVIS-ICS-ARM was awarded the **Bulk Handling Innovative Technology Award (2024)** for its role in transforming real-time visibility and control across bulk material handling systems.

CLIENTS

From global miners to major export terminals, our clients choose CST for engineered accuracy and the assurance that every tonne is measured with confidence.

Rio Tinto
BHP
GLENCORE
VALE
Alcoa
AngloAmerican
NEWCREST MINING LIMITED
BORAL
Downer Relationships creating success
NEWMONT
SEDGMAN
SOUTH32
Hanson HEIDELBERGCEMENT Group
GrainCorp
Fortescue
westernpower
thyssenkrupp
SAMSUNG

CASE STUDY

IMPALA TERMINALS, PERU

Impala Terminals at Callao Port faced major challenges in achieving accurate trade-certified measurements during ship loading, with cargo values reaching up to USD 50 million per vessel. Traditional methods introduced errors of up to 1%, risking financial discrepancies and undermining confidence in trade transactions.

CST delivered a high-accuracy solution through its **Symmetrical Dual Redundant (SDR) Scale,** achieving **0.1% trade-certified accuracy** under live load conditions. The project included on-site supervision, a custom OIML R50 testing process and Continuous, In-Service, Permanence Testing (CISPT) to ensure long-term reliability. CST's application-engineered approach and real-time monitoring set a new benchmark for precision in bulk material handling at ports.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CONTROL
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SERVICES WORLDWIDE

Control Systems Technology service all brands of belt weighers at sites all over Australia and globally.

Service Bases:

- **Australia** (Perth, Mackay, Hunter Valley)
- **Africa** (Remote Support)
- **Chile**
- **Peru**
- **Canada** (Vancouver)

Well trained technicians provide thorough recalibrations, trade verifications, audits and repairs to ensure equipment is performing as it should and to confirm the results are accurate.