Increase the profitability of your operations by monitoring and improving your processes

LOADRITE C2850, C2880
Conveyor Belt Scales

⊕ Trimble

Maximise workflow, maximum profit

Trimble LOADRITE belt scales provide accurate and remote access to rich reports for improved visibility of performance and productivity.
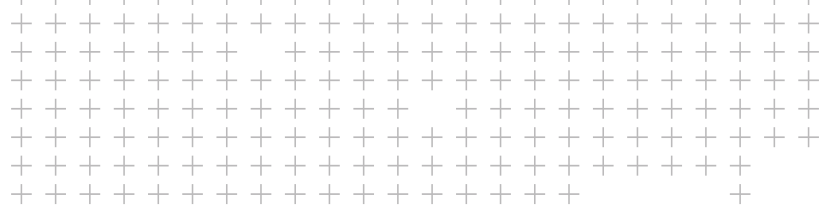
Increase the profitability of your operations by monitoring and improving your processes. LOADRITE belt scales give plant operators and managers a range of powerful tools to measure the actual production from screens and crushers, track final product stockpiles, analyse plant and machine downtime, and monitor load out of trucks, port and rail.

Increase profits

▶ Increase production while maintaining or lowering your costs
▶ Reduce energy consumption
▶ Extend performance of wear parts

Increase productivity

▶ Identify unused capacity to improve asset utilisation, resulting in increased plant availability
▶ Unparalleled global service and support network to guarantee superior product uptime

LOADRITE C2880 for fixed plant brings multiple conveyors onto the one display.

The C2850 is best suited to mobile conveyor belt applications.

LOADRITE conveyor belt scales are designed to work from one single site with as little as one scale, to multiple site operations. Access your data at anytime and anywhere in the world with InsightHQ. Whatever your operation's size, Trimble has a solution to meet your needs.

Single belt solutions (C2850/C2880)

A single scale begins to give you visibility into your operation's performance. Place a scale after your primary crusher and see your:

- ▶ Tonnes per hour, total tonnage, and average tonnes per hour
- ▶ Time spent running empty or partially loaded
- ▶ Start time and stop time, as well as first load to last load

Additionally, placing a scale on your final product belts allows you to track inventory of your most crucial products, as well as identifying waste and leak points.

Mobile screening and crushing (C2850)

LOADRITE belt scales allow you to manage your mobile crushing plants like never before. The C2850 for mobile equipment is quick to retrofit, simple to calibrate and easy to maintain.

Combined with easy-to-read printer performance and emailed reports, or informative web-based reporting, this option will ensure you know what your equipment is really doing. By ensuring your mobile plants are giving you the tonnage you expect, you'll get more profitable crushing.

Full plant performance management (C2880)

When you track your entire operation you can see every bottleneck, track every product, and know exactly what every part of your plant is doing.
Measuring weight, downtime and performance of multiple belts will allow you to track the actual optimal mode mix when planning production to meet sales forecasts.

- ▶ Track throughput of primary, secondary, and tertiary crushing
- ▶ See the effectiveness of your screen decks and wash plants
- ▶ Report inventory levels, optimizing your modes to manufacture the most profitable product mix
- ▶ Measure oversized material and waste

Intuitive, adaptable, rugged

LOADRITE BELT SCALES PRODUCT COMPARISON

Feature/application	C2850	C2880
NUMBER OF SCALE FRAMES CONNECTED PER INTEGRATOR	2	4
MOBILE MACHINES WITH 1 OR 2 SCALES	•	
MOBILE MACHINES WITH 3 OR 4 SCALES		•
INSTALLATION ON 'FIXED PLANTS'		•
CONNECTION OF POWER METER, REMOTE ZERO OR CLEAR		•
INSIGHTHQ REPORTING	•	•
COMPLIANCE TO INDUSTRIAL ELECTRICAL STANDARDS		•
INCLUDED MOUNTING HARDWARE	L-bracket	IP 65 rated enclosure
# COMMUNICATION PORTS	2 (requires Y-Cable for >1)	3
SUPPORT FOR ANALOGUE AND DIGITAL OUTPUTS; MODBUS		•
POWER SUPPLY REQUIREMENT	12 ~ 32V DC	88 ~ 264V AC, 24VDC
CONNECTIONS	Connectors	Screw terminals

Trimble LOADRITE belt scales help you maximize your production. They are easily installed and adapted to suit many conveyor belts or mobile plants like crushers, screens or stackers. The flexible design reduces the need for different belt scale makes and models for challenging applications.

Scale frame assemblies

Several different scale frame assemblies are available to suit installation on a wide range of conveyor belts. The scale frames have a modular design which connect the load cells and the idlers with rollers.

Rugged design

Designed for rugged industries, LOADRITE products are proven in challenging environments all around the world. With proven reliability, durability and accuracy in the most challenging of applications you can be confident that your scale will deliver the results you need in your operation.

Interface

LOADRITE scales feature an intuitive interface that simplifies operator training. The menu structure is similar to all other LOADRITE weighing systems so operators will be comfortable and productive right from day one.
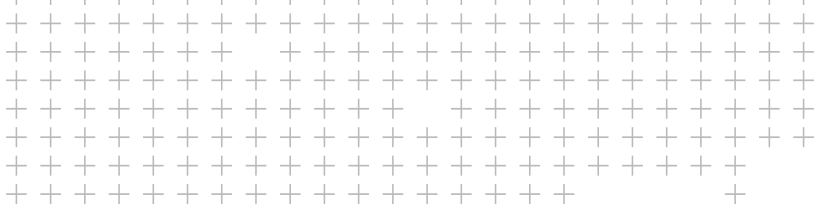
Accessories

Most LOADRITE accessories are interchangeable, making operator training quick and simple, and reducing your spare parts requirements.

Installation

Trimble has fast installation, on-site service and support, and customisable reporting to give you the power of large projects at a fraction of the cost.

How It Works

Communications can send conveyor information to a remote display, a PLC, local computer or web-based reporting via Ethernet, or wireless communication (optional).

LOADRITE belt scales can measure the fuel or energy consumption of a motor or electric engine via a fuel gauge or energy meter connected to the motor (optional).
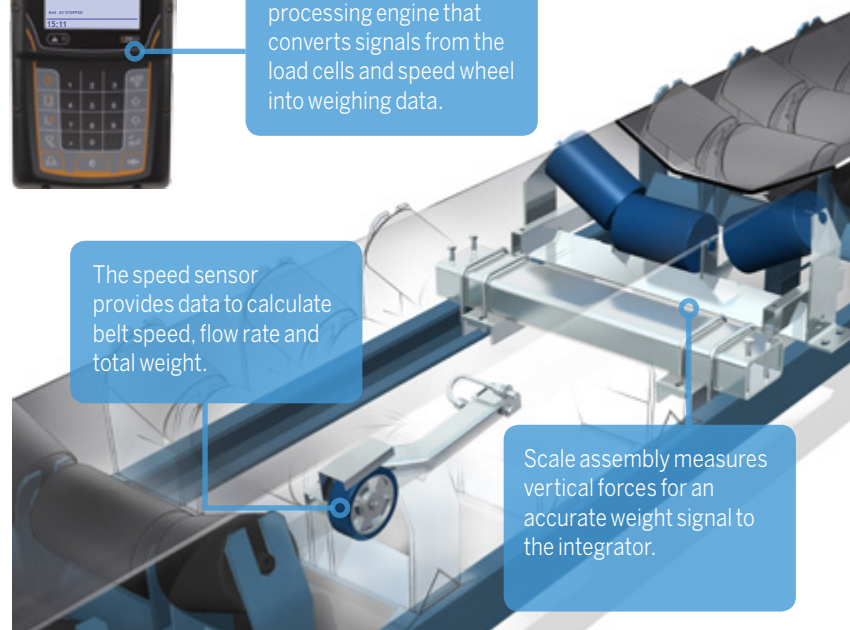
InsightHQ turns data from the belt scale into essential management information. Reports are customizable to suit your business needs and help you make profitable business decisions (optional).

Remote display is designed for the office or control room to monitor and control all LOADRITE belt scale integrators. It also allows data entry of downtime reasons (optional).
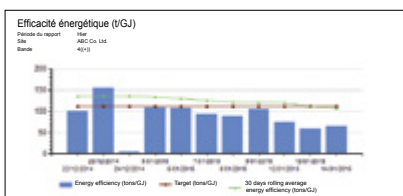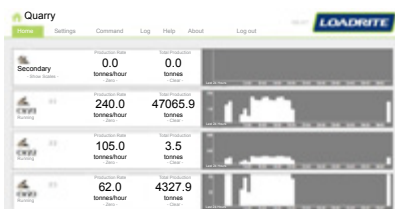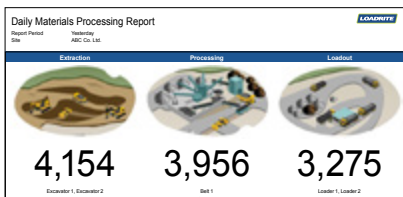
The integrator is the processing engine that converts signals from the load cells and speed wheel into weighing data.

The speed sensor provides data to calculate belt speed, flow rate and total weight.

Scale assembly measures vertical forces for an accurate weight signal to the integrator.

Daily Materials Processing Report
Report Period   Yesterday
Site   ABC Co. Ltd.

Extraction	Processing	Loadout
4,154	3,956	3,275
Excavator 1, Excavator 2	Belt 1	Loader 1, Loader 2

Quarry

	Production Rate	Total Production
Secondary	0.0 tonnes/hour	0.0 tonnes
	240.0 tonnes/hour	47065.9 tonnes
	105.0 tonnes/hour	3.5 tonnes
	62.0 tonnes/hour	4327.9 tonnes

Efficacité énergétique (t/GJ)
Période du report   Hier
Site   ABC Co. Ltd.
Bande   4(I+)

Energy efficiency (tons/GJ)   Target (tons/GJ)   30 days rolling average energy efficiency (tons/GJ)

CVI
2587.78
435
1,97
13050.6
15:11

Easy-to-interpret reporting
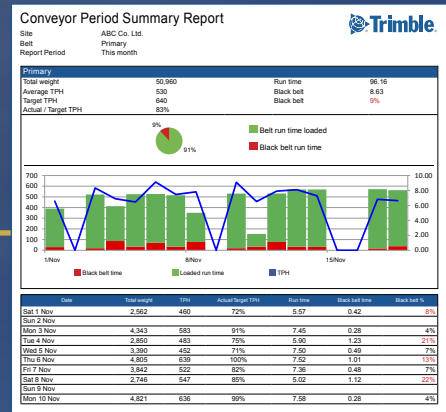
POWERFUL REPORTING

Easy-to-read reports give you operational knowledge previously only available to automated plants with expensive reporting packages - though even those systems require belt scales to accurately work.
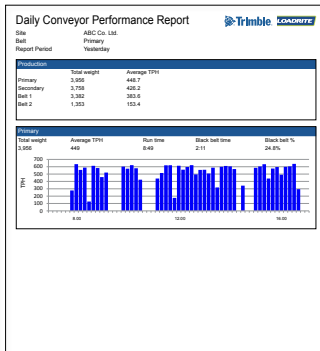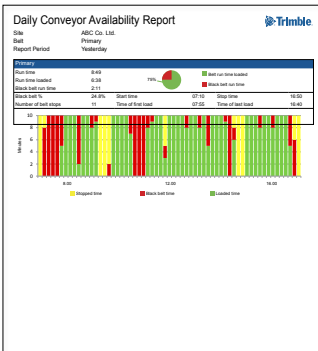
Print, email, web browser, mobile device access

Get daily and weekly reports with the LOADRITE printer or have them delivered straight into your email inbox with a cellular modem. You can also choose live streaming of weighing data to the office or on a remote display in the plant. The options are endless and flexible to suit various businesses needs.

Conveyor Period Summary Report

Site	ABC Co. Ltd.
Belt	Primary
Report Period	This month

Primary

Total weight	50,960	Run time	96.16
Average TPH	530	Black belt	8.63
Target TPH	640	Black belt	9%
Actual / Target TPH	83%		

Pie chart: 9% / 91%
- Belt run time loaded
- Black belt run time

Bar/line chart (1/Nov – 8/Nov – 15/Nov):
- Black belt time
- Loaded run time
- TPH

Conveyor Multi-Site Summary Report

Trimble.

Report period	Last week		
Region	ABC Co. Ltd.		

Site		Total weight	TPH	Run time	Run time loaded	Black belt time	Black belt %
Quarry 1	Primary	25,875.0	608.8	42.50	40.38	2.13	5%
	Belt 1	2,070.0	46.9	44.12	40.15	3.97	9%
	Belt 2	3,105.0	70.3	44.15	39.74	4.42	10%
	Belt 3	6,468.8	146.5	44.17	37.54	6.63	15%
	Belt 4	9,832.5	226.6	43.40	41.66	1.74	4%
	Belt 5	3,105.0	71.9	43.20	39.87	3.33	8%
Quarry 2	Primary	34,072.0	717.3	47.50	43.84	3.66	8%
	Waste	3,105.0	65.8	47.20	42.48	4.72	10%
	Belt 1	7245.0	154.8	46.80	40.72	6.08	13%
	Belt 2	6,468.8	135.9	47.60	42.36	5.24	11%
	Belt 3	3,881.3	81.7	47.50	45.13	2.38	5%
	Belt 4	4,398.8	93.2	47.20	45.31	1.89	4%
Quarry 3	Primary	17,011.0	458.3	37.12	30.07	7.05	19%
	Belt 1	3,105.0	87.5	35.50	28.40	7.10	20%
	Belt 2	1,811.3	51.1	35.43	26.57	8.86	25%
	Belt 3	8,538.8	238.5	35.80	31.50	4.30	12%
	Belt 4	9,056.3	250.2	36.20	33.41	2.79	8%
	Belt 5	2,328.8	64.3	36.21	23.54	12.67	35%
Quarry 4	Belt 1	20,351.0	694.6	29.30	26.37	2.93	10%
	Belt 2	1,035.0	35.8	28.90	24.57	4.34	15%
	Belt 3	4,140.0	144.3	28.70	21.53	7.18	25%
	Belt 4	16,818.8	582.0	28.90	26.59	2.31	8%
	Belt 5	1,811.3	62.0	29.20	18.98	10.22	35%
	Belt 6	1,293.8	46.0	28.10	7.03	21.08	75%
		80,298.0	673.1	119.3	110.59	8.71	7%

ABC Co. Ltd.

Bar/line chart: Quarry 1, Quarry 2, Quarry 3, Quarry 4

Pre-formatted reports

Select from a range of pre-formatted reports based on quarry manager workflows. Simple tables and graphs show operations performance and productivity. InsightHQ reports are a fraction of the cost of similar PLC or SCADA based reporting systems.

Simple graphs

Colour-coded availability graphs quickly highlights black-belt time or stoppages.
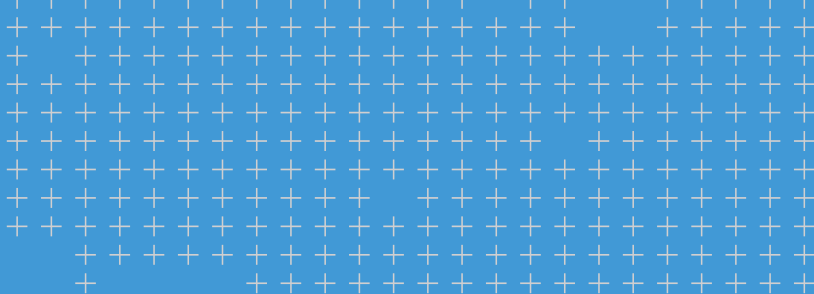
Visibility across the region

Access remote or distributed quarries in a single view to compare production and downtime.

Belt performance

Simple and accurate visibility of TPH and performance, help your team meet daily targets.

KPI summary

All critical key parameters for your plant or equipment in one report, helping you track plant performance.

Trimble: Transforming the Way the World Works

Trimble provides the tools and support for the extraction, processing, loadout, distribution phases of quarry production information for more efficient operations and higher profits. Contact your local dealer today to learn how easy it is to utilize technology that makes significant improvements to the aggregates workflow, optimize production, improve efficiency and lower your operating costs.

YOUR TRIMBLE LOADRITE PROVIDER

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