

• TECHNICAL SPECIFICATION SHEET

MINE TRUCK
WEIGHBRIDGE

A single modular platform engineered for open-pit and underground haul fleets – from site tippers to 250-tonne rigid dumpers. Built for the load, the terrain, and the duty cycle.

CAPACITY RANGE

10^T – 250^T

Custom-rated in 10T increments · single or multi-module platforms

12–24m

PLATFORM LENGTH

±0.1%

WEIGHING ACCURACY

IP68

LOAD CELL SEALING

24×7

UNMANNED-READY



BUILT FOR MINING DUTY

One modular design, field-configurable from 10T site trucks to 250T rigid dumpers – no re-engineering per fleet.



CUP & BALL OR DESB

Choose compression-type Cup & Ball or Double-Ended Shear Beam load cells to match your foundation and site conditions.



SURGE & LIGHTNING HARDENED

Fully protected junction boxes, armoured cabling and isolated I/O built to survive monsoon and open-pit electrical conditions.



UNMANNED & CONNECTED

ANPR, boom barriers, CCTV and cloud dashboards integrate directly with the weight indicator – no third-party stitching.

01 PLATFORM & LOAD CELL CONFIGURATION

■ PLATFORM CONSTRUCTION

- Heavy structural steel, pit or pitless mounting
- Modular sections – **3m to 6m** per module
- Full-length: **12m to 24m**, width **3.0-3.5m**
- Deep-beam / box-girder deck for axle overload margin
- Hot-dip galvanised / anti-corrosive primer & enamel finish

■ FOUNDATION OPTIONS

- RCC pit-type foundation – flush with ground
- Pitless / above-ground with ramps – faster install
- Site-graded for open-pit & hilly mine terrain
- Drainage-integrated design for monsoon regions
- Suitable for both permanent and relocatable sites

■ RATED CAPACITIES

- 10T · 20T · 30T · 40T · 60T
- 80T · 100T · 150T · 200T · 250T
- Intermediate capacities engineered on request
- Safe overload margin built into every load cell rating
- Sized to fleet – from tippers to rigid mine dumpers

OPTION A

CUP & BALL LOAD CELLS

Compression-type alloy steel cells with self-aligning cup & ball seating that isolates side loads and eccentric loading – a proven, field-serviceable choice for high-vibration mine haul roads.

OPTION B

DESB LOAD CELLS

Double-Ended Shear Beam cells in hermetically sealed alloy steel, IP68-rated, for low-profile pit installations with tight deflection tolerances and superior long-term repeatability.

02 JUNCTION BOX, CABLING & INDICATOR

Junction Box	Cast aluminium / SS316 enclosure, IP67-IP68 , potted terminal chamber, integrated lightning & surge suppression, corner-adjustment summing circuit
Instrumentation Cable	Armoured, shielded, UV & rodent-resistant, direct-burial rated, routed through sealed conduit between cells, JB and indicator
Weight Indicator	Digital high-resolution display, backlit for outdoor visibility, multi-level password protection, auto zero-tracking, tare & gross-net modes
Connectivity	RS232 / RS485 / Ethernet / GSM-GPRS, ticket printer output, remote large display, SCADA / ERP-SAP data exchange
Automation Software	Unmanned weighbridge operation, ANPR & RFID vehicle ID, boom barrier & traffic-light interlock, CCTV snapshot capture, cloud data logging & MIS reporting
Power Supply	230V AC ±10%, 50Hz, with battery backup / UPS; solar-compatible for remote mine sites

03 PERFORMANCE & COMPLIANCE

- ✓ **Accuracy Class:** OIML R76 Class III (multi-interval on request)
- ✓ **Repeatability:** within legal-for-trade tolerance across full range
- ✓ **Load Cell Protection:** IP68, hermetically sealed, corrosion-resistant alloy steel
- ✓ **Operating Range:** –20°C to +60°C, monsoon & dust-resistant enclosures
- ✓ **Surge Protection:** lightning arrestors at JB, indicator & cell summing points
- ✓ **Calibration:** traceable test weights, NPL-referenced certification
- ✓ **Service:** PAN-India installation, commissioning & AMC support

LEGAL METROLOGY

ISO 9001

CE

MADE IN INDIA