



**DALMIA CEMENT (B) LIMITED – CEMENT PLANT  
ARIYALUR  
INSTRUMENTATION MANUAL**



Issue No. 01	Rev. No: 02	Effective Date: 20.09.2017	SOP/INST/011
Issued By: M.R		Approved By: HOD - INSTRUMENTATION	
SOP for Checking of Bin Weighing system.			

**Scope:** To check the Bin weighing system.

**Responsibility:** Instrumentation technician.

**Accountability:** Instrumentation - Section Engineer.

**PPE:**

- Safety helmet
- Safety shoe
- Mask
- Goggles
- Hand gloves
- Safety belt

**Tools required:**

- Multimeter
- Tester
- Screw Driver



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**Hazard Analysis:**

**Risks associated**

**Mitigating Measures**

Electrocution

Use Insulated Tools/ hand glove

Hand/Leg injury

Use Hand gloves and shoes

**Procedure:**

1. Get work permit and line clearance if required.
2. Use PPE and hand gloves while handling the calibration weight.
3. Ensure the signal interlocks and block the interlock if necessary.
4. Use the Multimeter with insulated probes for checking the signals.
5. Check all the load cell Earthing.
6. Clean the load cells and load cell junction Box with hand blower.
7. Check the load cell connections and tightness of the terminal blocks.
8. Ensure the Bin is empty. Check all the inlet, outlet & venting flexible joints and weighing parts are physically free from stationary parts.
9. Carryout tare/zeroing and ensure the zero reading at weighing controller and CCR.
10. Apply some weight and check the repeatability by removing and placing.
11. If found any deviation in repeatability, repeat the point no.8.
12. Place the known weight and check the actual and indicated weight. Do the span calibration if required.
13. After span calibration, remove the weight and ensure the zero reading. Place the known weight once again for checking the repeatability and remove weights.



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14. Retrieve the blocked signals interlocks.

15. Give the clearance for operation.

**Emergency / Emergency Shut OFF:**

1. If any unconsciousness from electrocution is there, give First aid and inform to the Safety department or Call Emergency number 3108/9865152222/9750963761.

**Records/Annexure:**

1. JSA as enclosed below.

**JOB SAFETY ANALYSIS :( JSA)**

<b>Job Safety Analysis</b>	Job: Checking of Bin weighing system	Date: 20.09.2017	Analysis by:	Reviewed by:
Title of employee doing job: INST - TECHNICIAN	Supervisor: SECTION ENGINEER	Department: INSTRUMENTATION	Section: RAWMILL, PYRO, CEMENT MILL & PACKING PLANT	Approved by: HOD INSTRUMENTATION
Req'd/recommended PPE: SAFETY HELMET, SAFETY SHOES, GOGGLES, DUST MASK, HAND GLOVES				



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<b>SEQUENCE OF BASIC JOB STEPS</b>	<b>POTENTIAL HAZARDS</b>	<b>RECOMMENDED SAFE JOB PROCEDURE</b>	<b>WHAT COULD GO WRONG</b>	<b>CORRECTIVE ACTION</b>
1. CLEAN THE LOAD CELL & JUNCTION BOX WITH HAND BLOWER.  . PLACING /REMOVING THE WEIGHT ON THE BIN	MAY COME OUT OF THE JUNCTION BOX DUST  ELECTROCUTI ON  WEIGHT MAY SLIP FROM THE HAND.	WEAR GOOGLES,HAND GLOVES & NOSE MASK BEFORE BLOWERING  ENSURE THE FITNESS CERTIFICATION FOR PORTABLE INSTRUMENTS  WEAR HAND GLOVES	COUGHING,E YE IRRITATION MAY OCCUR  RESULTING ELECTROCUT ION  LEG INJURY	USE GOOGLES, DUST MASK AND HAND GLOVES  CHECK THE INSTRUMENTS HEALTHINESS AND FITNESS CERTIFICATE VALIDITY  USE HAND GLOVES AND SAFETY SHOES BEFORE LIFTING THE WEIGHT



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