UNBALANCE MOTOR REPLACEMENT AND COUNTERWEIGHT ADJUSTMENT

**Objective: Unbalance motor replacement.**

Scope: Raw material handling area

Ref: Motor manufacturer instructions.

* Aspect: Nil
* Impact: Nil
* Hazards: Falling of motor .   falling of motor cover, falling of counter weight,

1. Shift the motor at site by using suitable motor lifting rod available at tool room or by using hiab or palfinger.

*Responsibility: Electrician and Contractor employee*

1. Take shutdown of the respective feeder.

*Responsibility: Electrical & mechanical Engineer*

1. Disconnect the motor & give clearance to mechanical for removing the motor.

*Responsibility: Electrician*

Check motor mounting holes are not oblonged . Motor mounting foundation bolts tightness shall be done upto the required torque recommended by the OEM by using torque wrench available with Mechanical. After replacing with the new motor & adjusting the counterweight as required, take clearance from mechanical to clear the s/d temporarily & start the drive for checking direction temporarily. Before taking trial ensure 1) sling is fitted to the motor, 2 Unbalance motor's shall be connected through RCCB . No power Circuit to be kept remain charged with faulty  RCCB . In no case RCCB can be bypassed.

1. flexible cable from JB to motor shall have additional flexible GI mesh protection for protection against insulation damage.

*Responsibility:Electrical Engineer*

1. After confirming direction from mechanical engineer put back the counterweight cover and seal motor counter weight covers and terminal box covers with anabond sealant

*Responsibility:Electrical Engineer and Electrician*

1. Clear the shutdown, take a trial & hand over to production.
2. Running parameters like body temperature, current drawn has to be checked for every shift for three days. Motor mounting bolts tightness has to be done by using torque wrench. After 8 hrs of running, foundation bolts tightness has to be checked once again to ensure it is not become loose.

*Responsibility:Electrical Engineer*

**ADJUSTING COUNTER WEIGHT**

1. Mechanical engineer will take the clearance from production engineer & inform elect dept.

*Responsibility: Mechanical Engineer*

1. Mechanical engineer will take the shutdown of the respective feeder.

*Responsibility:Electrical & Mechanical Engineer*

1. Electrician along with fitter will go to site, both together will remove the cover, adjust the counterweight & put back the cover and seal with anabond

*Responsibility:Electrician and mechanical fitter* .

1. Electrician will clear the shutdown after taking mechanical clearance.

*Responsibility :Electrician*

1. Electrical engineer will give clearance to production after taking trial and ensuring current drawn by the motor is ok. Check for relay setting, if require setting may be enhanced upto the FLC of the motor.

*Responsibility : Electrical Engineer*

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| **Prepared By:**  Head – Electrical & Instrumentation PID1 | **Reviewed & Issued By:**  Management Representative | **Approved By:**  Head – Electrical & Instrumentation VAB |
| **Signature:** | **Signature:** | **Signature:** |
| **Date:31.12.2021** | **Date: 31.12.2021** | **Date : 31.12.2021** |