Note: Planned Shut Down burden depends upon f/c operating conditions, duration of shut down & running grade in which shut down to be taken. So the below process can be modified/ changed during the time of execution after consultation with HOD/SS.

1. **PURPOSE:**
2. **SCOPE:**
3. **RESPONSIBILITY:**
4. **PERFORMANCE INDICATORS:**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Sr. No.** | **Measure** | **Unit** | **Frequency** | **Acceptance Criteria** | **Responsibility** |
| **Quality** | | | | | |
| 1 |  |  |  |  |  |
| **Environment** | | | | | |
| 1 |  |  |  |  |  |
| **Safety** | | | | | |
| 1 |  |  |  |  |  |

1. **PROCEDURE:**

A) Shut-Down Burden in Foundry Grade

* Responsibility: BF Control room shift in charge
* Shut down Burden to be given only after receiving proper communication either from HOD-Production or Head Process or Head PID.
* Ensure N/C and Gholi is stopped before 12 hrs. of shut down and will continued in skip mode till furnace is not normalised after start-up.
* No change in Lump coke base
* For Shut down Burden follow the below format.

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Burden | Time | Charges | Sinter % | High Grade % | Si | Basicity | C/R |
| A | 7 hrs before S/D | 0.50 | As per furnace requirement & consultation with HOD | | | | |
| B | 6 hrs before S/D | 1.50 |
| 1.00 |  | 14.00 | 25-35 | 10-20 | 3.00 | 0.80-0.9 | 730-770 |
| 2.00 |  | 10.00 | 25-35 | 10-20 | 2.70 | 0.80-0.9 | 680-730 |
| 3.00 |  | 5.00 | 25-35 | 10-20 | 2.50 | 0.80-0.9 | 640-680 |
| 4.00 |  | 10.00 | 25-35 | 10-20 | 2.30 | 0.80-0.9 | Running |

* The above burden is an approximate estimation. This can change depending upon f/c condition, duration of Shut down and raw material used.

A) Shut-Down Burden in Basic Grade

* Responsibility: BF Control room shift in charge
* Shut down Burden to be given only after receiving proper communication either from HOD-Production or Head Process or Head PID
* Ensure N/C and Gholi is stopped before 12 hrs. of shut down and will continued in skip mode till furnace is not normalised after start up.
* No change in Lump coke base.
* For Shut down Burden follow the below format.

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Burden | Time | Charges | Sinter % | High Grade % | Si | Basicity | C/R |
| A | 7 hrs before S/D | 0.50 | As per furnace requirement & consultation with HOD | | | | |
| B | 6 hrs before S/D | 1.50 |
| 1.00 |  | 14.00 | 25-35 | 10-20 | 1.75 | 0.9-1.0 | 710-750 |
| 2.00 |  | 10.00 | 25-35 | 10-20 | 1.50 | 0.9-1.0 | 660-710 |
| 3.00 |  | 5.00 | 25-35 | 10-20 | 1.30 | 0.9-1.0 | 620-660 |
| 4.00 |  | 10.00 | 25-35 | 10-20 | 1.00 | Running | Running |

* The above burden is an approximate estimation. This can change depending upon f/c condition, duration of Shut down and raw material used.

C) Shut-Down Burden in SG Grade

* Responsibility: BF Control room shift in charge
* Shut down Burden to be given only after receiving proper communication either from HOD-Production or Head Process or Head PID.
* Ensure N/C and Gholi is stopped before 12 hrs of shut down and will continued in skip mode till furnace is not normalised after start-up.
* No change in Lump coke base.
* For Shut down Burden follow the below format.

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Burden | Time | Charges | Sinter % | High Grade % | Si | Basicity | C/R |
| A | 7 hrs before S/D | 0.50 | As per furnace requirement & consultation with HOD | | | | |
| B | 6 hrs before S/D | 1.50 |
| 1.00 |  | 14.00 | 0-10 | 90-100 | 1.75 | 0.95-1.0 | 730-780 |
| 2.00 |  | 10.00 | 0-10 | 90-100 | 1.50 | 0.95-1.0 | 680-730 |
| 3.00 |  | 5.00 | 0-10 | 90-100 | 1.40 | 0.95-1.0 | 650-680 |
| 4.00 |  | 10.00 | 0-10 | 90-100 | 1.30 | Running | Running |

* The above burden is an approximate estimation. This can change depending upon f/c condition, duration of Shut down and raw material used.

1. **REFERENCES:**
2. **RECORDS:**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Sr. No.** | **Record No.** | **Record Title** | **Maintained by** | **Soft/Hard form** | **Retention Time** |
| 1. |  |  |  |  |  |
| 2. |  |  |  |  |  |
| 3. |  |  |  |  |  |
| 4. |  |  |  |  |  |
| 5. |  |  |  |  |  |
| 6. |  |  |  |  |  |

|  |  |  |
| --- | --- | --- |
| **Prepared By:**  Head – Process Control PID | **Reviewed & Issued By:**  Management Representative | **Approved By:**  Head – Head Pig Iron Division |
| **Signature:** | **Signature:** | **Signature:** |
| **Date: 15.07.2022** | **Date: 15.07.2022** | **Date: 15.07.2022** |