1. **PURPOSE:** To Monitor and to ensure the proper Process Control in Amona Pig Iron Plant
2. **SCOPE:** BF 1, 2 &3
3. **RESPONSIBILITY:** Process Control Team
4. **PERFORMANCE INDICATORS:**

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| **Sr. No.** | **Measure** | **Unit** | **Frequency** | **Acceptance Criteria** | **Responsibility** |
| 1 | Production | MT | Daily | As per BP | Process Control Team |
| 2 | Coke Rate | Kg/THM | Daily | As per BP | Process Control Team |
| 3 | Skull | % | Daily | As per BP | Process Control Team |
| 4 | Off Grade | % | Daily | As per BP | Process Control Team |

1. **PROCEDURE:**
2. **Yearly Budgeting:** Yearly Budgeting is done for all three furnaces in close co-ordination with Production, Sales, Finance, Commercial and Raw Material team. Following are the activity:
   * 1. **Sales Plan:** Getting the sales plan from the sales team and studying the overall requirement. Each & every grade requirement with its quantity to be studied and depending upon it further plan to be made.
     2. **Production Plan:** Depending upon the sales requirement for that fiscal year, production plan is made in consultation with the Head Production and Finance Controller. Previous 3 years production data is collaborated and on that performance basis we make the business plan with increased targets in each area considering major assumptions required to achieve the BP. Detailed production plan is made, which includes detailed Pig Iron grade requirement, production plan and off grade corresponding from each day to complete year. In that we also include Production, Raw Material, and Availability plan of each day, month and complete year.
     3. **Raw Material Plan:** After production plan is finalized, the raw material required for that is taken out and is being given to Raw Material and Commercial for making the procurement plan of R/M.
     4. **Finance:** After completing the above activities the whole team sits together with the Finance and Business Controller for the business plan review. Any discrepancy in the BP from any of the department is discussed & if required changes are made accordingly. After agreement from each department, Business & Finance Controller finalizes the plan and same is sent to the Management.
3. **Current Estimate:** After Business plan for the year is made, we are also making plans for every month based on the previous month performance and this month prediction within the first week of the month.
   * 1. **Sales Plan:** Getting the sales plan from the sales team for the current month and studying the overall requirement. Each & every grade requirement with its quantity to be studied and depending upon it further plan to be made.
     2. **Production Plan:** Depending upon the sales requirement for that month, production plan is made in consultation with the Head Production and Finance Controller. Previous month’s production data is collaborated and on that performance basis we make the CE with targets in each area. Detailed production plan is made, which includes detailed Pig Iron grade requirement, production plan and off grade corresponding from each day to complete month. In that we also include Production, Raw Material, and Availability plan of each day and month.
     3. **Raw Material Plan:** After production plan is finalized, the raw material required for that is taken out and is being given to Raw Material and Commercial for making the procurement plan of R/M.
     4. **Finance:** After completing the above activities the plan is forwarded to Finance Controller for the review. After Finance Controller finalizes the plan, same is sent to the required users.
4. **BMG/OR Preparation:**  For every month we make presentation for OR/ BMG review. Same Presentation is presented in the respective forum to the top management in presence of Production & Quality Heads. Remarks and suggestion made in the forum is noted done and same is being implemented in the process.
5. **Raw material Procurement and quality:** R/M and commercial team identifies sources of required R/M for our consumption. If required, we go along with them to the source and collect the sample and sent it to lab for analysis. After analysis is done, we put that analysis into burden economics and calculate our COP. If it fits our requirement, we ask the R/M or commercial team to buy the required quantity of ore.
6. **Daily Activities:** Some of the activity which are done on daily basis are listed below:
   * 1. On daily basis furnace performance is monitored and further plan is made to achieve the CE & BP requirements. We coordinate with the production team and inform them about the changes in process and grade requirement.
     2. We also coordinate with the R/M team and tell them our requirement as per our current & future plans, for e.g., which R/M is required in what quantity and for which f/c. Also, if there is any discrepancy in quality of any R/M same is 1informed to them and correspondingly changes are done in F/C.
     3. We coordinate with Sales team and prioritize the grade requirement from the respective f/c.
     4. Also, on daily basis we do rounds of Furnaces, R/M and Dispatch yard to monitor the process and note any discrepancy in the process and further take appropriate action or inform the concerned about the discrepancy. Also, if there is any safety violation, hazard or unsafe act, we take appropriate action and if required inform the concerned depts.
     5. Also, we analyze the daily production reports with the help of log sheet and the data available. Inputs are given to production head and further it is discussed to stabilize and smoothen the process
     6. We also cater the requirements coming from different department or Head’s

for any data feedback and analysis.

1. **Meeting Customers and consultants:**  We also regularly organize customer’s visit and also visit the customers for proper feedback and improve in process and quality. We also meet the consultant’s hired for improving our process and give our requirement and ensure we get the required knowledge and benefit from them.
2. **Future Projects:**  In this role we also have to look for future prospects for better process, quality and growth of the company. We are actively taking part in every upcoming project and ensure its benefit and alignment to Blast furnace and the process.
3. **REFERENCES:**
4. **RECORDS:**

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| **Sr. No.** | **Record Title** | **Maintained by** | **Soft/Hard form** | **Retention Time** |
| 1. | VAB Report | Process Control Team | Soft | Continuous |
| 2. | Daily Production Report | Process Control Team | Soft | Continuous |
| 3. | Key Performance Indicator | Process Control Team | Soft | Continuous |
| 4. | Business Plan | Process Control Team | Soft | Continuous |
| 5. | Current Estimate | Process Control Team | Soft | Continuous |
| 6. | OR/BMG Presentation | Process Control Team | Soft | Continuous |

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