**WORK INSTRUCTIONS FOR CAST HOUSE –TAPHOLE DRESSING (BF1)**

**Responsibility: Furnace Incharge/Foreman /Sr.Tap hole operator**

**Identified Hazards:**

1. BF Gas leakage
2. Contact with hot metalwhile dressing the taphole
3. Fall of person in the main runner while dressing.
4. Fall of Person
5. Mechanical –Impact
6. Slipping in the runner
7. Inadequate local lighting
8. Improper housekeeping

**Human Hazards**

1. Nonuse of grating
2. Nonuse of WI, PPE

**Significant Aspect:**

Fumes generation

Procedure:

1. Unauthorized operation or repair of any equipment is a punishable offence
2. Ensure that the personnel involved in the activity should use safety appliances viz. Safety helmets, safety shoes, hand gloves, safety goggle, leg guard, woolen Patti, full sleeve Cotton Company uniform/jean shirts.
3. Ensure that all personnel involved in the activity are trained in safety awareness including contractor workmen.
4. Make 10~20mm opening on face of the tap hole by drilling with drill bit or by taphole cutter.
5. Grating can be placed not to stand and perform the activity but to protect from accidental slip in non-drainable runner
6. Ensure gas coming out of the refractory of the tap hole should be kept continuously lighted throughout the activity.
7. Check the taphole center with the help of gauge
8. The Gap between the tap hole gauge and the tap hole face should be around 5mm.If it is more and the mudgun latch is seating directly, then consider welding MS flat on the square bar to avoid direct seating.
9. If the gap between tap hole and gauge is not seen then dressing of tap hole to be considered
10. Use crow bar to shave off the protruded portion of the tap hole surrounding areas by standing any one side of the taphole. Do not stand on the grating.
11. Tap hole face need to be leveled to the possible extent to avoid unevenness.
12. Mudgun/drill machine trial to be taken to match with the centre of tap hole gauge, in case of minor deviation adjust the equipment which is off centered.
13. Mudgun clay to be slightly pushed on face of the tap hole to create uniform surface so as to avoid slippage of the clay while closing the cast.
14. Ensure that the operators are standing on firm and clean platform during the activity to avoid accidental fall into the main runner by slipping.
15. Furnace- in -charge should ensure that all persons involved in the casting activities are equipped with all safety appliances and are present near the main runner
16. Crossing of the main runner is strictly prohibited as the runner is non drainable type.
17. Ensure Mech fitter is available with all required tools before taking up the above activity.
18. If taphole cutter is available then can be used through drill machine, after cutting required protruding clean the area and take trial of mudgun for center.
19. While inserting the cutter in drill machine through face plate 2 person to be involved as the cutter is heavy and chances of slipping is there.
20. Do not remove the debris with hand shovel directly from tap hole. Use crow bar to shift debris outside the runner wall and then use shovel to fill in crane tray. This is to prevent fall in runner due to imbalance.

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| **Prepared By:**  Head – Production PID I | **Reviewed & Issued By:**  Management Representative | **Approved By:**  Head – Pig Iron Division |
| **Signature:** | **Signature:** | **Signature:** |
| **Date: 10.07.2023** | **Date: 10.07.2023** | **Date: 10.07.2023** |

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| **Amendment Record** | | | |
| **Revision date** | **Manual Section ref. and para** | **Brief details of revision** | **New Revision No.** |
| 12.07.2021 | Procedure for cast house tap hole dressing (BFI) | Point no 19,20 | 10 |
| **15.07.2022** | **Change in format** |  | **11** |