Process Sheet for furan mould

Moulding / Core Making

1. Receive the planning and ref the PD card +PIN(Process instruction note)
2. Arrange following items & Check quality
   i) Sprue cup
   ii) Gaggers /reinforcement rod
   iii) Flat wooden Rammer
   iv) Mould Box
3. Do visual Inspection of Pattern / Core Box condition.
4. Clean pattern surface with waste cloth with air.
5. Place all loose pieces in pattern (if available)
6. Check numbering as per method card./numeralcode
7. Apply strip coat on the pattern / core box.
8. Chill should be shot blasted. (if available)
9. Paint the chill with a thin layer of chill coat. (if available)
10. Provide gaggers/r.rod to increase strength of the mould
11. Provide ø10 venting on the core print area & at the ends of runner bar
12. Use flat w. rammer for ramming of Moulds / Core. In addition to compaction table vibration
13. Provide hooks for core only in print area.(preferable) if not
14. Place hook at a proper depth , so that sufficient sand is used to repair the area.
15. Sand thickness should be at least 50mm around the core grid
16. At least one person should move with the mixture machine & continue ramming of the moulds.
17. Use pipe, rod to keep sprue/ sleeves in straight line.
18. Strip the mould after 15 mts.
19. Check scratch hardness of the mould (Required minimum 50)
20. Check the mould for damages, if any.
21. Remove loose dry sand & repair the mould using core fix and nails. (If required)
22. Leave the mould for pre heating , coating, post heating after stripping
23. Keep all the patterns, core boxes, loose pieces and accessories in orderly manner after completion of work.
Painting / coating

1. Do visual inspection of the moulds.
2. Check scratch hardness of the mould / core
3. Use good quality painting brush.
4. Stir the coating before use in the mould.
5. **Measure viscosity value of coating & record in the viscosity note**
6. coating the 1st layer with alumina.silicate
7. Heat the mould for coating drying
8. Remove excess paint deposit from the Mould / Core
9. Remove the brush marks with sand paper
10. Coat the 2nd layer with **Graphite coat/ zircon coating**
11. Heat the mould for drying
12. Record any kind of repairing work

Core Setting , Closing & Metal pouring

1. Read the Method card /PD card
2. Arrange all the **core setting gauges**
3. Preheat all the moulds and cores
4. Use core setting gauge to ensure **wall thickness**
5. Cover casting area in parting line with **jutes / core paste / clay**
6. Take care during sand filling in core prints. Sand should not enter into cavity (casting) area
7. Take **care** to avoid any gap in parting line, crushing of core prints, mismatch.
8. Check stability of **matching Pin** to avoid any mismatch
9. Take care during sand fill up in the hook area.
10. Clean free sand from the flow offs/ sprue of top mould box
11. Cover all the **risers** after closing
12. Do bolting / clamping distance interval max 400mm ,and ensure even tight proper clamping
13. Mention Pattern no , serial no, grade , pouring time ,and knock time on mould box,