GOYAL TECHNOCHEM PVT. LTD.





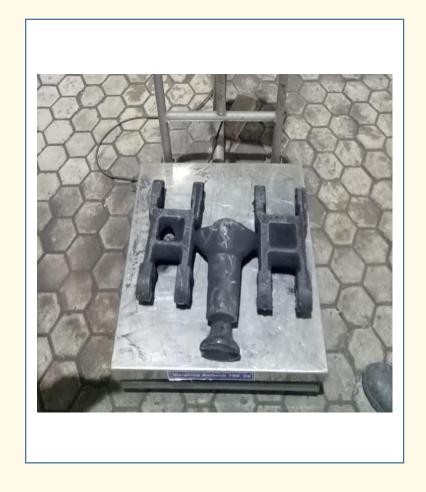
CASE STUDIES OF PIHBOND INDUCTION IN VERTICALLY PARTED HIGH PRESURE LINE

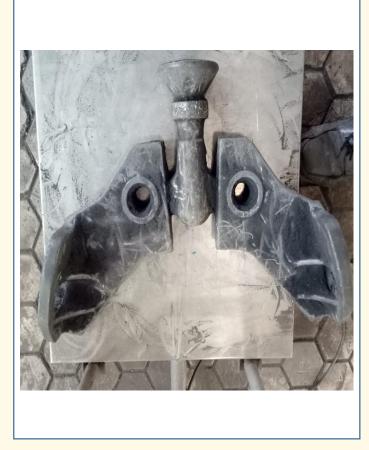
By Goyal Technical Team

AGENDA

- The Goyal Group, trying to ensure better castings for the foundries, have now after considerable R&D effort, developed Single Additive product *PihBond series* for foundry's green sand system and now associated with a Foundries with Vertically Parted High Pressure Line.
- Goyal Group introduced Single Additive—*PIHBOND series* in the sand system with the following objectives:
 - ✓ Improve the peel off and finish of castings.
 - ✓ Optimizing Shot blasting time.
 - ✓ Optimize the addition of various consumables.
 - ✓ Control Weight of Castings.
 - ✓ Reduction in Sand related Rejections.

STATUS OF SAND STICKING





STATUS OF CASTING SURFACE FINISH







TECHNICAL IMPROVEMENT - FOR 150MT PRODUCTION FOUNDRY

| Reduction in Addition of Additives | 44.82% |
|---|--------|
| • Increase in GCS | 83.41% |
| • Increase in WTS | 23% |
| Reduction in Sand Sticking | 47.40% |
| Reduction in Shot Blasting Time | 30% |
| Avg. Reduction in Casting Weight | 3.80% |
| Reduction in Sand Related Rejection | 65.54% |
| Reduction in New Sand Addition | 56% |
| | |

CONCLUSION

- The Foundry accrued Technical Advantages as stated in our proposal.
- WIP in the fettling was reduced considerably
- This enabled faster dispatch of castings
- Mould breakage reduction, enabled better production
- Shop floor pollution reduced considerably enabling better working conditions in the Foundry
- While the cost of PihBond enriched sand works out higher than Bentonite + LCA enriched sand, when considering the overall costing (cost advantage accrued by the tangible Technical Advantages) the Foundry was advantaged commercially in comparison to the Bentonite + LCA System.