CHAPTER-7:

SCOPE FOR FUTURE STUDIES

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During the pellet plant commissioning, it was observed that the iron ore rich in hydroxide mineral like goethite behaves totally different as compared to hematite rich ore. The moisture requirement in green pelletizing and drying, pre-heating and firing temperatures differ for goethite rich ores as compared to the hematite ores. Cold strength and tumbler and abrasion indices of pellets prepared from this ore found to be inferior.

Similarly, beneficiated iron ore slimes, which are rich in ultrafines, exhibit different pelletizing characteristics due to their finer particle size distribution and high amount of goethite or limonite minerals. Hence future work should primarily focus on the following;

a) Pelletizing characteristics of goethite rich iron ore fines need to be studied in detail and optimum pelletizing process parameters to be established
b) Utilization of beneficiated iron ore slimes, which are rich in ultrafines, in the pelletizing need to be studied to find out their effect on pellet quality and proper mitigating measures to be established accordingly.

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