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## Optimizing DRI Production with Lime-Based Coatings Agents

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The production of direct reduced iron (DRI) is vital for the decarbonization of the iron and steel industry. However, operational challenges arise due to the pellet clustering during DRI production. This study examines the effectiveness of lime and dolime-based products from LHOIST in mitigating clustering issues under various reduction conditions that replicate current industrial DRI furnaces. By coating iron ore pellets with these materials, the formation of iron whiskers is inhibited, and particle adhesion is minimized. Preliminary findings indicate that lime and dolime coatings significantly reduce sticking, thereby improving the efficiency and stability of DRI production.

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