

## Accepted Manuscript

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PII: S0032-5910(16)30588-5  
DOI: doi: [10.1016/j.powtec.2016.09.020](https://doi.org/10.1016/j.powtec.2016.09.020)  
Reference: PTEC 11930

To appear in: *Powder Technology*

Received date: 6 February 2016  
Revised date: 8 September 2016  
Accepted date: 10 September 2016



Please cite this article as: Mahdi Heydari, Rassoul Amirfattahi, Behzad Nazari, Pooyan Rahimi, An industrial image processing-based approach for estimation of iron ore green pellet size distribution, *Powder Technology* (2016), doi: [10.1016/j.powtec.2016.09.020](https://doi.org/10.1016/j.powtec.2016.09.020)

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# **An Industrial Image Processing-Based Approach for Estimation of Iron Ore Green Pellet Size Distribution**

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Abstract:

Green pellets are spherical objects mainly made from crushed iron and water in rotating pelletizing disk. Pellets play an important role in the process of direct reduction steel manufacturing. For high quality steel production, pellets should be of an appropriate size. Oversized pellets cannot be properly cooked in furnace and undersized pellets may pass through metal grid of the furnace, which affects the performance of the process. In most of the steel manufacturing companies, operators use sequential sampling and traditional methods to measure size of pellets, however, limited number of tested pellets, low speed of the quality control and

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