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## Automatic Scrap Classification Opportunities for Improvements of the Scrap ecosystem in Meltshops

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### Situation:

Today, established mini mill concepts applying scrap based EAF technologies are not viable, in serving the market for advanced high end grades like automotive sheets for exposed surface applications, tin plate or electrical grades. In BOF shops, with scrap rates of around 25%, scrap quality control is also of highest importance, especially when economics of steelmaking is improved by scrap management. The paper explains the opportunities for the utilisation of an AI/ML software development for automatic scrap grade classification.

Future areas to be covered are for safety application in identifying hazardous and improper scrap pieces also in regard to environmental aspects in emission control.

**Author:** Dr KEMPKEN, Jens (SMS group GmbH)

**Presenter:** Dr KEMPKEN, Jens (SMS group GmbH)

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