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Direct use of Scrap in Aluminum-foundries

A resource-efficient approach to reduce CO2-footprint for casting products

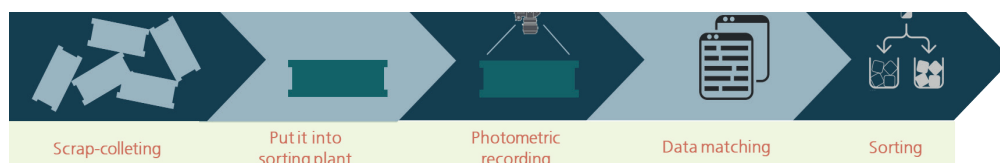
The use of recirculated scrap in light metal foundries is unavoidable due to resource-efficiency and the reduction of gases with high global warming potential. The process routes as we know need to be reoriented therefor to fulfill the requirements in terms of efficiency, product-quality and the stability of processes.

The one column of this approach addresses a more precise sorting in order to get a higher amount of different alloy-classes. The other targets on the achievable material-performance while remelting and casting. Using the example of alloy-rims it could be shown that a high level of performance does not contradict with the use of secondary ingots.

A therefor developed Software-solution supports the storage of scrap-metal as well as it leads through the melting process in order to melt the right alloy with the appropriate amount of ingots. The behaviour and the impact of alloying elements on the properties have been taken into account as well.



So the conventional route via remelting plants can be cut in order to save CO2-emissions and being enhanced by an alternative way.



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