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Nozzle, skids and demisters have big influences on cleaning efficiency in off gas systems

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In order to comply with the stricter environmental regulations, efficient cleaning of the process and waste gases is crucial. In this context, even small, cost-negligible components such as nozzles and separators play an important role, as they have a significant influence on trouble-free, low-maintenance production and environmental regulations.

Lechler is a well-known manufacturer of nozzles and spray technology for various applications. The product range includes a variety of nozzles.

EAF have batch operations with frequent heating and cooling cycles. This rapidly varying heat load requires that droplet sizes and water flow rate respond maintain the desired temperature without causing any wetting and precise distribution of liquids in gases or aerosols.

In order to be able to select nozzles for the individual metallurgical processes, a wide range of criteria must be taken into account, which requires appropriate metallurgical process knowledge. The following things have to be considered for the nozzle selection: Energy saving and efficiency, droplet size distribution, efficiency, application-specific design and adapted control technology are decisive. On the other hand, other criteria are decisive for separation: emission reduction, improvement of air quality, recycling of process fluids and thus an increase in process efficiency. This combined knowledge makes Lechler a unique partner.

This paper highlights a case where Lechler spray technology played a crucial role in solving mill's persistent off gas cleaning issue.

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