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At the end of 2008, were launched two stations of hot metal desulfurization. Hot metal desulfurization is situated in BOF plant. Since 2008, our company has gained five years' experience not only optimization of this technology, but also with optimization of technologies which are closely related to hot metal desulphurisation i.e. sinter and hot metal production, handling with hot metal desulphurisation by-products. The results of this optimization are mainly cost savings, but also reduced negative impacts to the environment. The main stages out of process optimization could be specified as:

- *modification of pig iron chemical composition, especially focused on sulphur content*
- *modification of produced Blast furnace sinter basicity*
- *utilization of most suitable reagents for desulfurization, taking into consideration steels variety – grade of desulfurization*
- *usage of proper ceramic materials with excellent durability*
- *usage of secondary products of desulfurization.*

The primary aim of this paper is to inform about practical experiences and operational outputs, which were achieved by realization of the process optimizations mentioned above, regarding to hot metal desulfurization technology implemented in technological cycle of TRINEC STEELMAKING COMPANY, PLC.

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