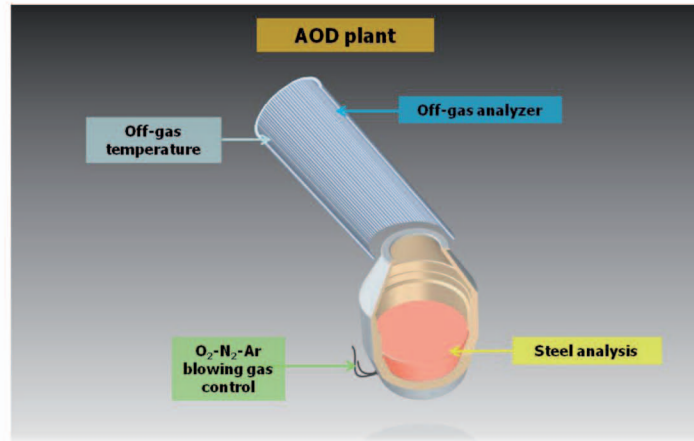




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Problem:

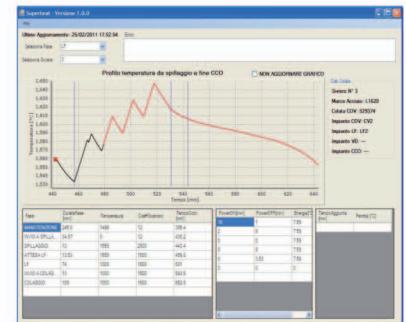
In AOD is necessary to have a robust process control according to the real kinetics of decarburization for achieving the desired chemical and thermal tapping conditions.



Solutions:

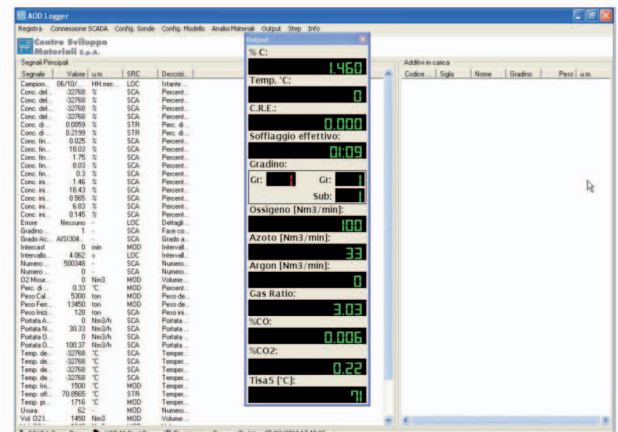
AODyn calculates online, according to the real kinetics of decarburization:

- temperature and composition of steel.
- gas flows and actual better ratio off process gas (O₂, Ar, N₂).



Benefits:

- CRE (Carbon Removal Efficiency) increases of 5% with same blowing time length. Tested over 600 heats.
- Enhanced process control with the online temperature and composition of steel.
- Converter refractory life increases.
- Less deoxidation additions.



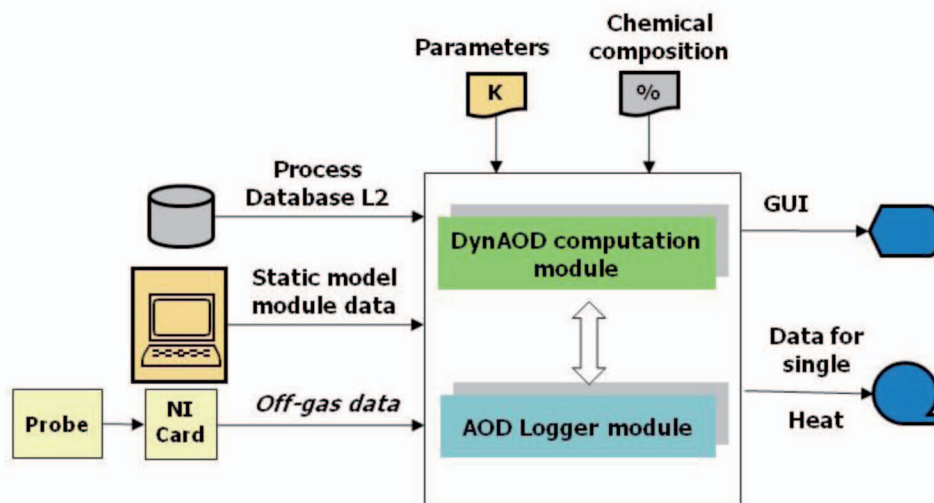
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Industrial equipment arrangement:

- Off-gas analyzer (CO, CO₂, O₂)
- Thermocouple on hot primary fumes hood.
- Off-gas flowmeter (optional)

Industrial installation problem:

- Off-gas type signals.
- Plant Database/L2 system.



Data request:

- Initial weight, temperature and composition of steel.
- Process gas flow and volumes.
- Alloy and slag additions.
- Static model existing in plant data (optional).

AODyn can include:

- Static model off-line package.
- Post process elaborated database based on to customer requirements.

contact:

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