

ALARC-JET™



optimized
supersonic
oxygen jet

- Patented nozzle design
- Supersonic velocity 2 meters from nozzle
- No flame shrouding

Designed for Flat Bath Operations

- Large proportion of DRI/HBI
- Continuous charged furnaces
- High proportion of hot metal

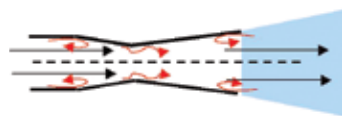
Lower Costs

- Lancing performance similar with PyreJet's™ when used with a flat bath hot atmosphere
- Lower capital investment
- No need for fuel

ALARC-JET™

Optimized Supersonic Oxygen Jet

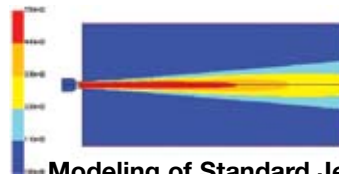
- ALARC-Jet™ injectors are available for up to 3000 Nm³/h of Mach 2 to Mach 2.5 supersonic oxygen flow, each having capability for melt decarburization and carbon injection for slag foaming.
- Process control solutions include PLC and HMI programming for fully-automated injection of oxygen and carbon.
- ALARC-Jet™ is mounted in a water-cooled copper panel, equipped with a carbon injector and located close to the slag line, to provide superior carbon injection efficiency.
- ALARC-Jet™ optimized nozzle allows for decarburization rates from 0.1%C up to 0.15%C per minute.



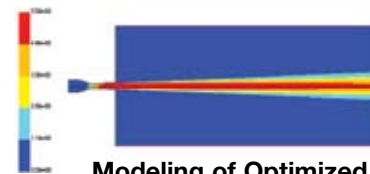
Standard SS Jet



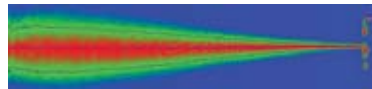
Optimized SS Jet



Modeling of Standard Jet



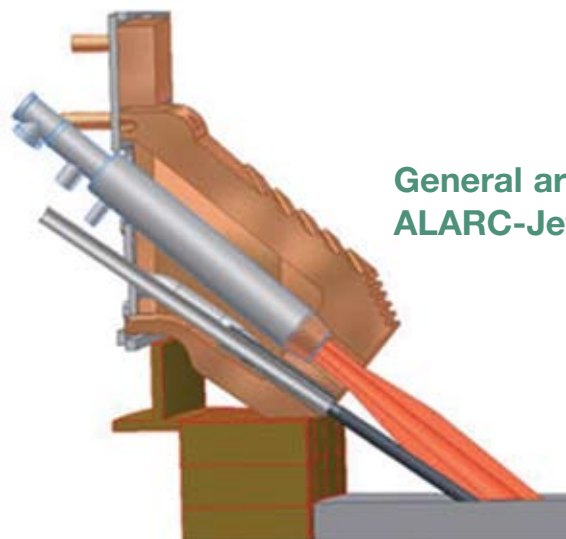
Modeling of Optimized ALARC-Jet Nozzle



Experimental Visualization Standard Jet



Experimental Visualization of ALARC-Jet Nozzle



General arrangement of ALARC-Jet™ in panel.



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