



Linde's COJET[®] Gas Injection System Delivers

The concept behind Linde's COJET gas injection system is simple: An annular oxy-fuel flame shroud surrounding the main supersonic jet creates a "coherent oxygen jet" that penetrates deeper into an electric arc furnace's (EAF) molten metal bath than conventional supersonic jets.



The COJET System Difference

The difference between Linde's COJET technology and similar systems is the distance between the injector and the molten bath. Only Linde's patented COJET system uses a fixed injector high on the furnace wall to increase the distance and still penetrate deep into the bath, while creating less splash and requiring no manipulator.

Linde's COJET System for EAFs

Features → Proven patented process

- Coherent jets longer than 70 nozzle diameters
- Burner, lancing, solids injection and post combustion from the furnace wall
- Injector installed high in furnace wall, providing increased efficiency and deeper bath penetration
- Furnace operates with slag door closed without losing bath penetration features

- Speeds decarburization up to 40 percent
- Less splashing and better slag-metal stirring
- Enhances slag foaming with reduced carbon injection
- Decreases electrode consumption, refractory erosion, arc flair damage, and maintenance gunning
- Automation and precision process control system provides consistency

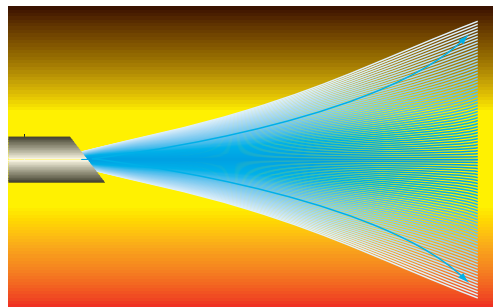
Benefits

- Technical expertise
- Improves operator safety
- Increases yield
- Lowers ferrous oxide (FeO) levels
- Reduce operating and maintenance costs
- Consistent end point control



Linde's COJET System For EAFs

Conventional Supersonic Jet



Coherent Jet



Typical EAF Savings With Linde's COJET System*

Power Savings:	20-70 kwh/ton
Refractory Savings:	5-10% kg/ton
Electrode Savings:	10-25% kg/ton
Increased Yield:	0.5-1.5% \$/ton

*Results based on Linde internal testing



Ask About The Linde's COJET System Difference

For EAF mills, Linde's COJET gas injection method can save a typical operation an average of \$2 per ton, depending on the specific application and prevailing electric and natural gas costs. Discover the difference Linde's COJET technology can make in your operation.

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