



# JUPITER-ENCON ALLIANCE



Decrease energy consumption, reduce your carbon footprint **and increase production!**

OUR TECHNOLOGY REDEFINES **PROCESS HEATING, ENERGY EFFICIENCY** AND **LOW MAINTENANCE** IN THE ALUMINIUM AND STEEL INDUSTRY.

SWITCH TO THE **AWARD WINNING OXY-FUEL PROCESS** FROM THE JUPITER-ENCON ALLIANCE FOR:

- 1** SIGNIFICANT FUEL SAVINGS & ENERGY CONSERVATION  
Fuel savings up to 30% in the steel industry; up to 70% in the aluminium industry
- 2** GREENHOUSE GAS EMISSION REDUCTION  
Equivalent reduction in CO<sub>2</sub> output relative to fuel savings
- 3** ENVIRONMENTAL & HEALTH BENEFITS  
Virtual elimination of NO<sub>x</sub> production with natural gas & oxy-fuel combustion
- 4** LOW COST PRODUCTION  
Related to the relatively low energy input and maximized heat transfer
- 5** LOW MAINTENANCE  
Longer furnace refractory life and temperature uniformity due to flame placement

## CONTACT

Jupiter Oxygen Corporation  
4825 North Scott St., Suite 200  
Schiller Park, IL 60176, USA  
+1.847.928.5930 ext 5934  
jupiteroxygen.com

Encon Thermal Engineers Pvt Ltd  
297, Sector - 21 B  
Faridabad 121 001, Haryana, India  
+91.129.4041185 | oxy@encon.co.in  
encon.co.in

# FACTS AND MISCONCEPTIONS

Regarding Use Of The [Jupiter Oxygen Corporation \(JOC\) Oxy-Fuel System](#)

	MISCONCEPTION		FACT
A	Oxy-fuel will cause a furnace meltdown.	>	The Jupiter process has not caused a furnace meltdown or harmed a furnace in any manner.
B	Oxy-fuel systems are expensive.	>	A JOC oxy-fuel combustion system is comparable in cost to a regenerative system and in most cases may be cheaper
C	Oxy-fuel generates more dross.	>	Oxy-fuel generates less dross since one of the requirements is strict control of oxygen volume and placement not found in air fired furnaces.
D	Refractory life is shorter using oxy-fuel	>	Oxy-fuel refractory life is longer due to the exceptional uniformity of temperature and proper flame placement.
E	Oxy-fuel creates higher CO <sub>2</sub> concentrations	>	Oxy-fuel creates higher furnace CO <sub>2</sub> concentrations but reduces overall CO <sub>2</sub> output since the flue gas is retained in the furnace longer enabling greater efficiency and a lower total volume of CO <sub>2</sub> .
F	Oxy-fuel requires sophisticated specialized equipment	>	The Jupiter oxy-fuel system utilizes off the shelf hardware and controls available worldwide.
G	Oxy-fuel flames will cause localized overheating of the furnace and product.	>	Not in the proprietary Jupiter process which is why the system is patented and available only from Jupiter or Encon.
H	Installation requires significant downtime to install.	>	The only downtime required is to install the burners in the walls and is usually less than one week.
I	Oxy-fuel is unproven.	>	The Jupiter process has been in continuous usage at JOC's aluminium mill licensee for over ten years and is a proven process requiring minimal effort to maintain and operate.
J	Installing a Jupiter oxy-fuel system has a high risk.	>	Jupiter and Encon have quoted numerous systems and have the expertise to provide the end user with a proper turnkey system if desired.
K	Oxy-fuel is only good for remelting aluminium	>	The Jupiter process can be implemented in countless applications like metals process reheating such as slab and billet reheating for the steel industry.