



## SIAD's Combustion Technologies

We design and build water cooled as well as non water cooled oxy-fuel burners, for any specific range of thermal capacity and type of combustibles.

Our burners are studied to accomplish melting process requests and we adapt the flame shape and its length to the specific furnace.

To date we have installed our oxy-fuel burners for:

- gold and silver scraps melting,
- recovering of precious metals from computer scraps,
- copper and its alloys melting,
- aluminum recovering from scraps and dross,
- lead recovering from batteries scraps,
- cast iron melting,
- tin dross melting,
- nickel and its alloys melting,
- glass melting,
- frits melting,
- pigments production.

Moreover we have implemented the combustion efficiency of air burners, applied in shaft furnaces, inserting our oxy-fuel burners into the air burners, obtaining a more stable and hot flame and controlling the combustion kinetics.

We don't supply oxy-fuel burners, but its application technology!



## Oxy-fuel burners in rotary furnaces

The technical and economic requirements for greater thermal efficiency in rotary melting furnaces, to modernize their industrial employment, has directed the technical research to the study of combustion in pure oxygen.

As a result, SIAD has developed a range of oxy-fuel burners which has been successfully applied to melting furnaces for the recovery or melting of metals. The substitution of conventional air burners by oxy-fuel burners has had a positive effect on the overall results of melting plants and the advantages obtained can be resumed as follows:

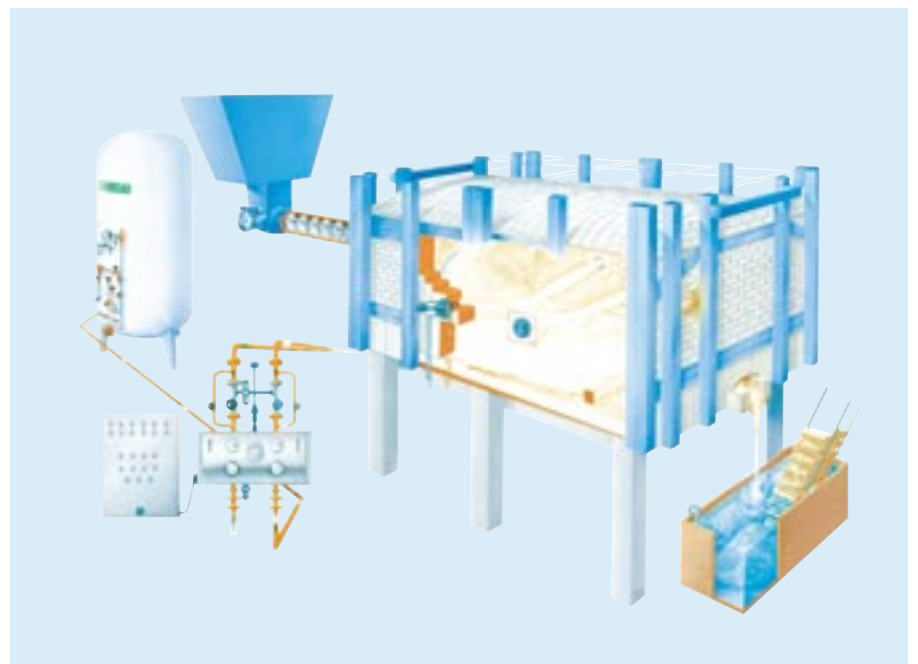
- reduced melting costs,
- reduced melting time,
- reduced off-gases volume,
- more operating flexibility.



## Oxy-fuel burners in reverberatory furnaces

Oxy-fuel burners have found many applications in the glass and frit industries. In particular, in frit production, they have brought an important quality improvement in the design and construction of melting furnaces, as well as reductions in cost and off-gas volumes.

In glass and aluminum melting furnaces, oxy-fuel burners are used for assisted melting in transferring high quality energy to critical points in the furnace thus increasing specific production and giving new life to the furnace itself.



## SIAD IN EUROPE

### SIAD S.p.A.

#### Headquarter

Via S. Bernardino, 92  
I-24126 BERGAMO  
Tel. +39 035 328111  
Fax +39 035 315486  
www.siad.com  
siad@siad.com



SAP PUK 032 05/03

### AUSTRIA

SIAD VTG  
Vertrieb Technischer Gase GmbH

#### Head office

Trimmelkam 111  
A-5120 ST. PANTALEON  
Tel. +43 (6277) 7447-0  
Fax +43 (6277) 7401  
siad\_vtg@praxair.com

#### Regional office

Hofherr-Schranz-Gasse, 4  
A-1210 WIEN  
Tel. +43 (1) 2719200  
Fax +43 (1) 2719200-10

### BULGARIA

SIAD Bulgaria ood

#### Head office

4, Amsterdam str.  
P. O. Box 28  
BG-1528 SOFIA  
Tel. +359 (2) 9785636  
Fax +359 (2) 9789787  
siad@siad.bg

### CROATIA

MONTKEMIJA d.o.o.

#### Head office

Senjska cesta b.b.  
HR-51222 BAKAR (RIJEKA)  
Tel. +385 (51) 761466  
Fax +385 (51) 761175  
montkemija@montkemija.hr

### CZECH REPUBLIC

SIAD Czech spol. s r.o.

#### Head office

č.p. 193  
CZ-435 22 BRAŇANY U MOSTU  
Tel. +420 476765000  
Fax +420 476129286  
siad@siad.cz

#### Regional office

Doubravínova 25  
CZ-163 00 PRAHA 6  
Tel. +420 235301241  
Fax +420 235323828

### HUNGARY

SIAD Hungary Kft

#### Head office

H-3527 MISKOLC, Zsigmondy u. 38  
Tel. +36 (46) 412417  
Fax +36 (46) 411681  
siad@siad.hu

### ROMANIA

SIAD Romania s.r.l.

#### Head office

Bd. Carol I n° 62  
Ap. 17 - Sect. 2  
RO-70334 BUCURESTI  
Tel. +40 (21) 3103658  
Fax +40 (21) 3149806  
siad@siad.ro

### SLOVAKIA

SIAD Slovakia spol. s r.o.

#### Head office

Rožňavská č. 17  
SK-831 04 BRATISLAVA  
Tel. +421 (2) 44255969  
Fax +421 (2) 44460348  
siad\_sg@siadsg.sk

### SLOVENIA

ISTRABENZ PLINI

Plini in plinske tehnologije, d.o.o.

#### Head office

Sermin 8/a  
SLO-6000 KOPER  
Tel. +386 (5) 6634600  
Fax +386 (5) 6634699  
Istrabenzplini@s-net.net

