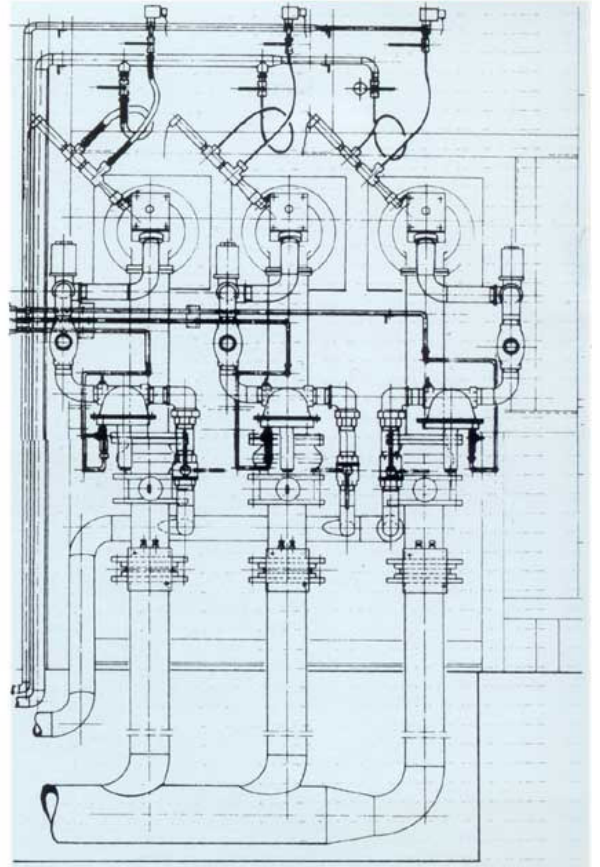




▲ Melting furnace TT 4000 FSAI
with combined 30 tonne holding well



▲ Sequential burners,
PLC controlled with charge initialisation





TECHNICAL INFORMATION SHEET 4020-4112/93

MELTING AND HOLDING FURNACES FS AND FSAI



APPLICATIONS

Foundries and Metal Smelters

ADVANTAGES

Improved metal quality
Production performances and energy returns amongst the best in the field
High metal yields

RANGE OF FURNACES

Melt rates 1 tonne/hour to 5 tonnes/hour
Holding capacity 3 tonnes to 30 tonnes

PROCESS

Experience gained over recent years has enable us to develop a melting system which boasts a Sequential burner Function (FS) operating in relation to the charge introduced into the melting compartment.

This sequential function distributes the energy «where it is needed, when it is needed» and has led to some very interesting performance returns.

Taking this system one step further a

RESULTS (Examples)

«FSAI» version has been developed : PLC controlled sequential burner function with charge initialisation. This enables production personnel to categorise the charge density and type via the automatic weighing system.

METAL SMELTING (Grade AS9U3)

Spot rates :

Charge composed of :

Mixed : 324 kg
Cast : 295 kg
Frag : 2608 kg

3585 kg/h 699 kWh/t at 806° C

Production figures (2 hrs 42 min)

Mixed : 1214 kg
Cast : 1373 kg
Frag : 4824 kg

Total (at 806° C) 7411 kg
2745 kg/h . 752 kWh/t

FOUNDRY (Grade AS9U3)

Spot rates

Ingots 4600 kg/h (584 kWh/t) Metal temp 750° C
Engine blocs 4100 kg/h (689 kWh/t) Metal temp 755° C
(4 charges)
Headers & risers 3500 kg/h (758 kWh/t) Metal temp 760° C

Production figures (over 6 hrs 23 min)

17305 kg of headers and risers 2711 kg/h - 698 kWh/t (M + H)

Notes :

At the same time, frag melt rate equals 1786 kg/h

These installations may be complemented with relief chambers (with or without afterburners), off-gaz filtration systems. For metal smelters : swarf dryers ; metal circulation pumps for salt free melting of swarf and chips ; degassing and or metal treatment equipment.

These examples are not exhaustive.

For all other capacities and applications please contact our head office.

