

Non-Ferrous Melting Systems

SX-9
SX-10
SX-11

Lift Swing Furnace (LSF)

The Lift/Swing furnace is an original Pillar design. The Lift/Swing is free standing and used specifically in non-ferrous applications. The two crucible design yields close to 100 percent utilization. As one crucible is under power to melt, the opposite crucible is being tended by the foundryman to pour and prepare the next charge. The key difference between a conventional Push Out furnace and the Lift/Swing furnace is the coil moves instead of the molten metal. Its close coupled design permits the fastest melt rate possible and rapid alloy changeover without fear of crucible or alloy contamination.

MK-8 Power Supply



Lift/Swing Furnace

Melting System Specifications:

Power Supply:	Pillar MK-8
Power Range:	100 kW - 150 kW - 200 kW
Furnace Capacity	
Brass:	210 lbs - 300 lbs - 450 lbs
Furnace Capacity	
Aluminum:	70 lbs - 100 lbs - 150 lbs

System Includes:

- MK-8 Power Supply
- Lift/Swing Furnace with Hydraulic Operation
- Hydraulic Power Supply
- Lead Adaptors
- Water Cooled Power Leads up to 15 ft (4.5 m)

Options:

- Isolation Water Cooling System
- Closed Pressurized Water Cooling System
- Crucible Pedestal
- Anti Draft Skirts
- Fume Collection Ring

SX System #	MK-8 Power Supply Rating	Frequency Rating	Cooling System Type	Lift / Swing Furnace Size Aluminum	Melt Time Aluminum at 1,400°F*	Lift / Swing Furnace Size Brass	Melt Time Brass at 2,150°F*
9	100 kW	3,000 Hz	Water to Water or Single Pump Station with Dry Cooler or Dual Pump Station with Dry Cooler	70 lb (32 Kg)	28 minutes at 50% Power	210 lb (95 Kg)	23 minutes
10	150 kW	3,000 Hz		100 lb (45 Kg)	24 minutes at 50% Power	300 lb (136 Kg)	21 minutes
11	200 kW	3,000 Hz		150 lb (68 Kg)	28 minutes at 50% Power	450 lb (204 Kg)	32 minutes

* Based on nominal furnace size for a second heat when crucible is hot, charge is dense and interconnect bus/lead runs installed properly.

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Lift Swing Furnace (LSF) — MK-8 Power Supply



MK-8 Power Supply

Standard Features:

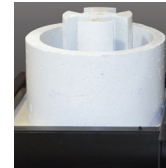
- High Efficiency design allows use of maximum inlet water temperature of 115° F.
- Full Range Power Adjustment from a single operator control.
- Load Matching Water Cooled Capacitors with pressure sensitive safety switches
- Fused disconnect switch
- Instrumentation
 - Output power (KW) meter
 - Output voltage meter
 - Operating frequency meter
- Self Diagnostic monitor and indicators
- Operator Controls
 - High frequency power on/off/reset
 - Power control potentiometer
 - Leakage detector test / reset push button
- Compact, Economical, Easy Access Package incorporates a design with convenient front side access
- Most Efficient Coupling Method utilized to give the best matching capabilities over a wider range of operating conditions without the need of transformer tap or capacitor switching



Lift/Swing Furnace (LSF)

- Fully grounded structural steel frame assembly & steel column type stanchions
- Fully captive electromagnetic flux containment system
- High efficiency induction coil
- Hydraulic flow control valve
- Operator foot switch for lift/lower operation
- Sectioned fireproof cement composite top plate
- Emergency hoist connection
- Positive lock swing cam to prevent crucible contact when alternating coil location

Optional Equipment

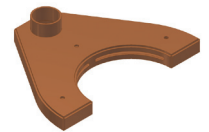


Anti Draft Skirt & Crucible Support Pedestal

- Significantly reduces "chimney effect" through the furnace
- Promotes even distribution of heat across crucible outer surface
- Increases efficiencies of fume collection ring

Fume Collection Ring

- Mounted to the lift / swing furnace
- Top draft extraction
- Outlet is connected to a customer supplied exhaust system
- Able to provide an air flow rate of up to 80 CFM



Hydraulic Power Supply

- Pump, motor, manual motor starter, start/stop buttons, reservoir & filter
- Use of a water/glycol based fluid or suitable synthetic fluid required

Ancillary Equipment



Isolation Water Cooling System (ICER)

- Water to Water heat exchanger
- Closed & Pressurized Power Supply Cooling
- Air elimination system
- Expansion tank
- Structural steel frame
- Pump with motor
- Requires customer supplied water source

Closed Pressure Water Cooling System – Single Pump (Dual also available)

- Pump Station with Dry Cooler
- Closed & Pressurized System Cooling
- Air elimination system
- Expansion tank
- Structural steel frame
- Pump with motor
- Internal piping & wiring included
- Electrical & temperature control panel with alarm circuit
- Dry Cooler (liquid to air) complete with fans, coils and enclosure for outdoor mounting
- Automatic pump switchover to standby pump (Dual Pump Station Only)



Dry Cooler

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