RECUPERATIVE GAS FIRED BASIN TILTING MK V 'R'

IMPROVES THE THERMAL EFFICIENCY OF THE MELTING PROCESS

REDUCES FUEL CONSUMPTION

LOW NOISE LEVEL

LOW HOLDING COSTS

SIMPLE MAINTENANCE

The Morgan Recuperative Basin Tilting Furnace is specially designed for highly efficient, rapid, bulk melting of aluminium and zinc alloys for both die-casting and non-ferrous foundries. The furnace utilizes exhaust recuperation, where a portion of the heat in the waste gases is recycled to the combustion air, saving at least 25% in energy over non recuperating furnaces.

FURNACE DESCRIPTION

The steel furnace casing is lined with MorganMMS radiant panels backed by premium grade insulation.

LIP AXIS POURING

Lip axis pouring is achieved by tilting the furnace by means of twin hydraulic rams. The pouring rate is easily controlled, allowing a transfer ladle to be kept in one position.

SIZE RANGE

- 213—1496 kg Aluminium

CONTROL SYSTEM

Furnaces with automatic, fully-modulating burners are supplied with a fixed pyrometer assembly, which is connected to the control system, to provide metal temperature control. Other control systems are also available.

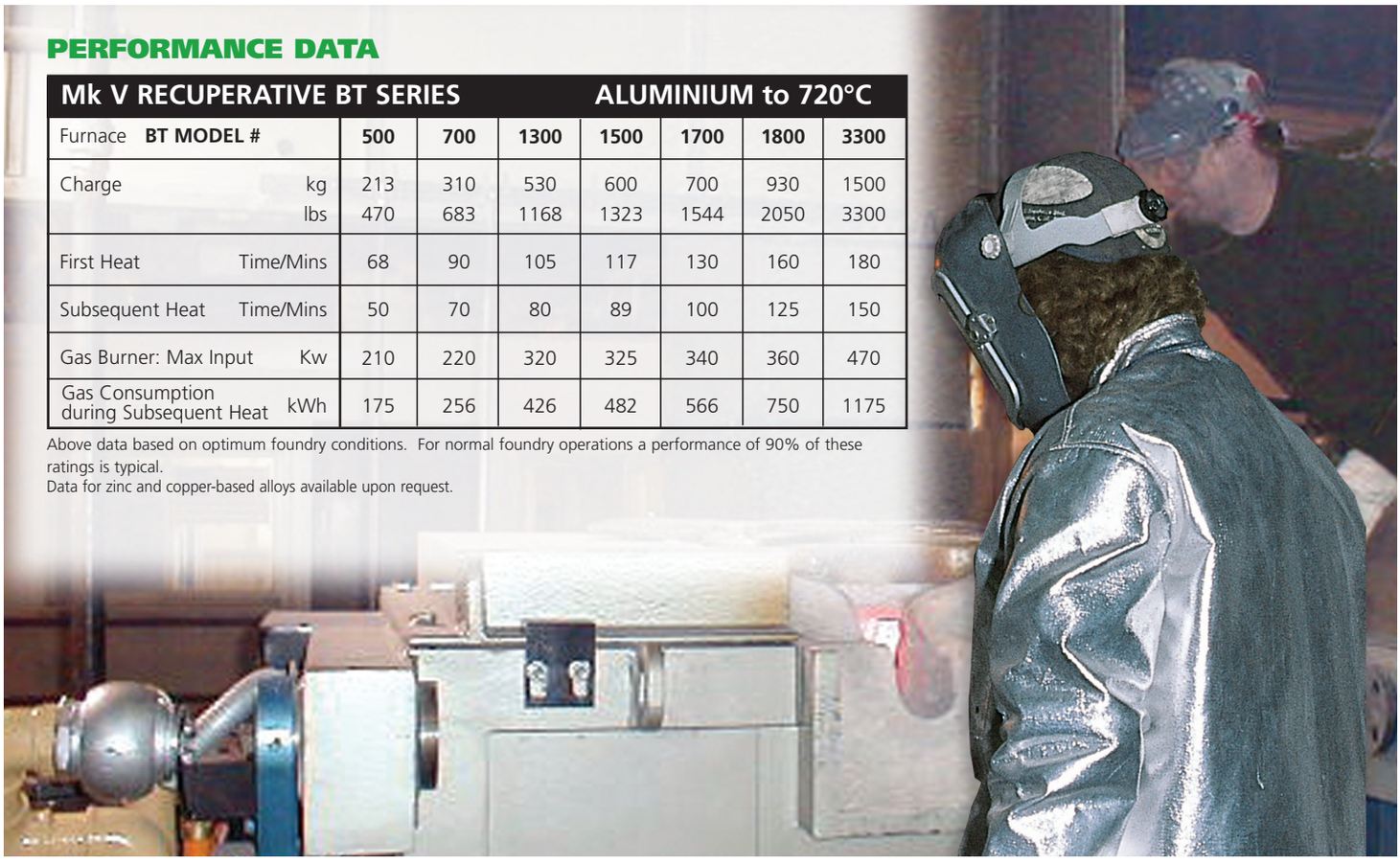
INSTALLATION

The furnace is supplied assembled and only requires bolting down on a suitable concrete floor and connection to fuel and electricity sources. For zinc and aluminium melting, MKV Furnaces up to BT700 Furnaces can be fitted with a spilt metal tray. Otherwise, spilt-metal pits should be provided.

PERFORMANCE DATA

Mk V RECUPERATIVE BT SERIES		ALUMINIUM to 720°C						
Furnace **BT MODEL #**		**500**	**700**	**1300**	**1500**	**1700**	**1800**	**3300**
Charge	kg	213	310	530	600	700	930	1500
	lbs	470	683	1168	1323	1544	2050	3300
First Heat	Time/Mins	68	90	105	117	130	160	180
Subsequent Heat	Time/Mins	50	70	80	89	100	125	150
Gas Burner: Max Input	Kw	210	220	320	325	340	360	470
Gas Consumption during Subsequent Heat	kWh	175	256	426	482	566	750	1175

Above data based on optimum foundry conditions. For normal foundry operations a performance of 90% of these ratings is typical.
Data for zinc and copper-based alloys available upon request.



For additional information on Morgan MMS' products & services or to find a location nearest to you, please visit: www.morganmms.com

MorganMMS

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KEY FEATURES

BURNER EQUIPMENT

- Fully-Modulating Gas Burners: high velocity, low NOX, pre heated air, nozzle mix, with inverter fan control
- Exhaust recuperator
- Burner Tilts with Furnace
- Radiant Panels
- Crucible and Burner Hour Meters
- Seven Day Time Clock
- Proportional (PID) Control

FURNACE LINING

For aluminium and zinc alloy applications: lined with a high alumina, gas radiant panel hot face, backed with a highly efficient insulation. The system is particularly beneficial in gas-fired applications, providing an effective radiating surface from the non-luminous productions of combustion.

BENEFITS

- Very Low Energy Costs
- Good Metal Temperature Control
- Very Low Casing Temperature
- Low Noise Level
- Low Holding Costs
- Simple Maintenance

POLICEMAN CONTROL

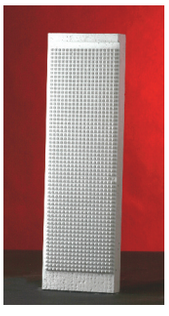
The furnace is equipped with a "policeman" control. This feature is designed to prevent overheating of the furnace refractories and radiant panels, thus avoiding reduction of their lifespan.

PYROMETRY

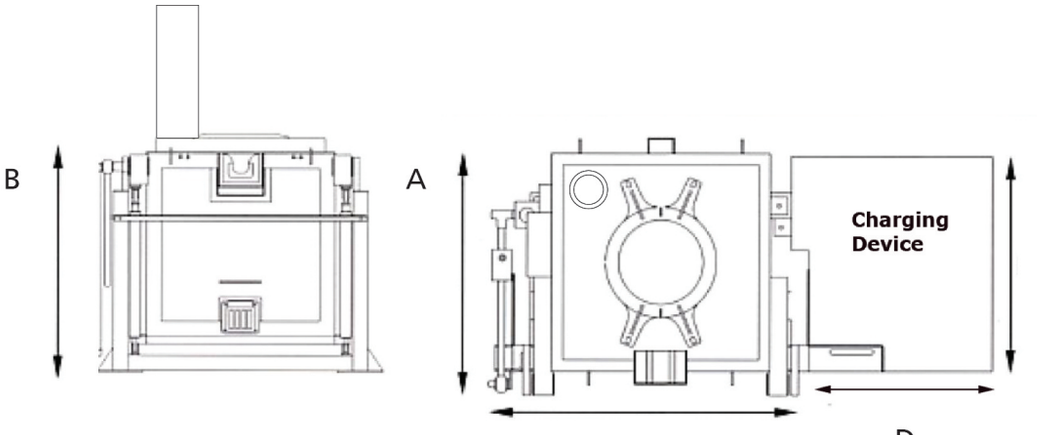
A variety of metal temperature pyrometry can be specified. This includes adjustable or fixed immersion types and thermocouples housed within the crucible for holding applications.

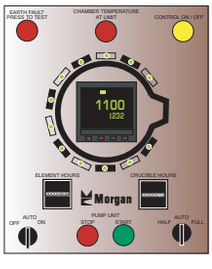
OPTIONS AVAILABLE

Spilt metal detection, low metal temperature alarm, in-range indicating beacons and metal temperature overshoot control.



Gas radiant panel.





Control panel.

SPECIFICATIONS

		BT500	BT700	BT1300	BT1500	BT1700	BT1800	BT3300
CRUCIBLE		TPX387E	TPX412E TBN412	TPX587E TPX1600 TBN587, TBN750	TPX587E TPX1600 TBN587, TBN750	TPX1800E TBN690	TBN1100	BU1800ALU
FURNACE DIMENSIONS (mm)	A	1480	1480	1780	1780	1815	1815	2100
	B	1560	1560	1630	1630	1850	1850	2250
	C	2310	2310	2500	2500	2500	2500	3000
	D	1370	1370	1410	1410	1650	1650	1800
	E	1460	1460	1460	1460	1460	1460	2000
SHIPPING (approximate)								
NETT WEIGHT	kg	3500	3800	4200	4200	4500	4500	8000
GROSS WEIGHT	kg	3700	4000	4500	4500	4800	4800	8500
VOLUME	m^3	5.4	5.5	7.3	7.3	8	8	15

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