

An Inductotherm Group Company

# INDUCTOFORGE

## **Modular Induction Billet Heaters**

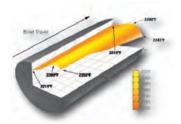
Designed to fit the flexible manufacturing requirements of today's forge shop



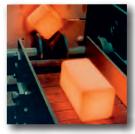
## INDUCTOFORGE

### **Modular Induction Billet Heaters**

Designed to fit the flexible manufacturing requirements of today's forge shop







The powerful combination of advanced engineering, product innovation and over 50 years experience in induction heating has helped Inductoheat to become a world leader in the production of billet and bar heating equipment for the forging industry.

The InductoForge® Modular Billet Heating System offers flexibility and efficiency with its individually controlled (500 Hz – 6000 Hz) power modules. The flexible modular design results in a much finer and more accurate control of the billet temperature.

The iHAZ<sup>TM</sup> Temperature Profile Modeling Software enables advanced temperature control of the billet heating process. iHAZ<sup>TM</sup> software allows you to customize a billet temperature profile (Induction Heat Affected Zone) to best suit your billet or bar heating application. It can also generate the optimum-running parameters and set points for Standby and Rapid Start which are stored as a recipe in the billet heater's PLC.

#### **Additional Features & Benefits:**

- Optimized utility costs
- · Replacement coil liners
- Highest possible efficiency
- Quick release connections
- Compact, heavy-duty modular design
- Variable in-feed drive speeds
- Reduced downtime & maintenance costs





#### **Infeed Systems**

Heavy Duty Pinch Roll and Tractor Chain drive infeed systems push the billets through the InductoForge® coil line at a very accurate rate controlled by a variable frequency AC motor. Both systems automatically adjust for the diameter of the billet (for quick change-over). A lost motion detector will automatically shut down power to the system if the billets stop moving for any reason.



#### **Hot Billet Extraction**

The Fastextractor equipment is manufactured to provide many years of low maintenance operation. Heavy-duty, multi-strand chain works with the gravity pinch wheel to quickly extract parts to insure uniform heating from the front to the back of the billet (also acting as a weld breaker). The Fastextractor comes standard with an infrared temperature activated accept/reject system. Optional over/under temperature gate is available.



#### **Automatic Billet Feed**

Heavy-duty step feeders, bowl feeders, feeder loaders and bin tippers can be added to increase the productivity of the heater by automatically feeding billets from a bin into the coil line. An optional billet weigh system rejects parts that do not meet the acceptable weight range.



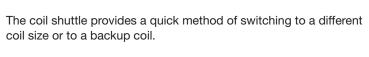
#### **Advanced System Control**

The PLC "Recipe Control" system works in conjunction with the IHAZ™ Temperature Profile Modeling computer software to make the billet heater simple to run. The operator can access stored recipes from the part number or die number identifier. The billet heater operating parameters are stored in the recipe, together they run the system, thus improving quality control and speeding up the system set up. A true "stopped line" Standby system is available for two or more module systems. Manual operation is available for the smaller Inductoheat billet or bar heating systems.



#### **Productivity Enhancements**

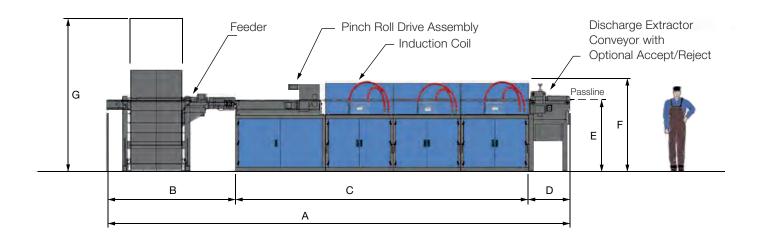
Optional billet push-out chains or bars and coil shuttles can be included. The billet push-out chain allows almost all of the billets in the line to be heated.







# INDUCTOFORGE



	Model	Max. Rate lbs/hr (kg/hr)	Input kVA (@ max. kW)	Cooling Water gpm (lpm)	PHYSICAL DIMENSIONS – INCHES (MM)							
					А	В	С	D	Е	F	G	Weight lbs. (kg)
1 Module	1.65 TPH	3300 (1500)	588	70 (264)	313 (7950)	116 (2930)	138 (3500)	60 (1500)	61.5 (1562)	75 (1905)	142 (3600)	3000 (1360)
2 Modules	3 TPH	6000 (2700)	1160	135 (511)	373 (9475)	116 (2930)	197 (5000)	60 (1500)	61.5 (1562)	75 (1905)	142 (3600)	5000 (2270)
3 Modules	5 TPH	10000 (4540)	1805	205 (776)	496 (12600)	160 (4064)	275 (7000)	60 (1500)	61.5 (1562)	85 (2159)	142 (3600)	7000 (3175)
4 Modules	6.5 TPH	13200 (6000)	2330	270 (1022)	555 (14100)	160 (4064)	335 (8500)	60 (1500)	61.5 (1562)	95 (2413)	142 (3600)	9000 (4080)
5 Modules	8.25 TPH	16500 (7500)	2910	345 (1305)	646 (16410)	160 (4064)	427 (10840)	60 (1500)	61.5 (1562)	95 (2413)	142 (3600)	11000 (5000)
6 Modules	11 TPH	22000 (10000)	4075	420 (1590)	726 (18440)	160 (4064)	505 (12840)	60 (1500)	61.5 (1562)	95 (2413)	142 (3600)	13000 (5900)

<sup>\*</sup> Additional modules can be added as needed.

Note 1 Based on heating carbon steel from 70 to 2250  $^{\circ}\text{F}$  (20 to 1230  $^{\circ}\text{C}$ ).

Note 2 480 V, 3ph, 60 Hz input.

All induction heating systems must have an isolation Note 3

Optional 12 Pulse connection is available. Note 4 95 °F (36 °C) Max. inlet water temperature. Note 5

Note 6 Output frequency – 500 Hz, 1000 Hz, 6000 Hz, 1000/3000 Hz. Max. single pod kW for 6000 Hz is 300 kW.

Note 7

Note 8 Weight includes modules, coil and control/water cabinet (does not include step feeder and bin tipper)

Max. rate is dependent on part size and coil design.

#### Other forging capabilities from the Inductotherm Group:

- Alpha 1: heavy duty material handling equipment.
- Banyard: large diameter billet heating for extrusion.
- Newelco: continuous bar and billet heating for forming.







INDUCTOHEAT Europe GmbH Ostweg 5 D-73262 Reichenbach/Fils Telephone +49(0)7153 504-235 +49(0)7153 504-333 verkauf@inductoheat.eu www.inductoheat.eu



<sup>\*\*</sup> Specifications subject to change without notice.