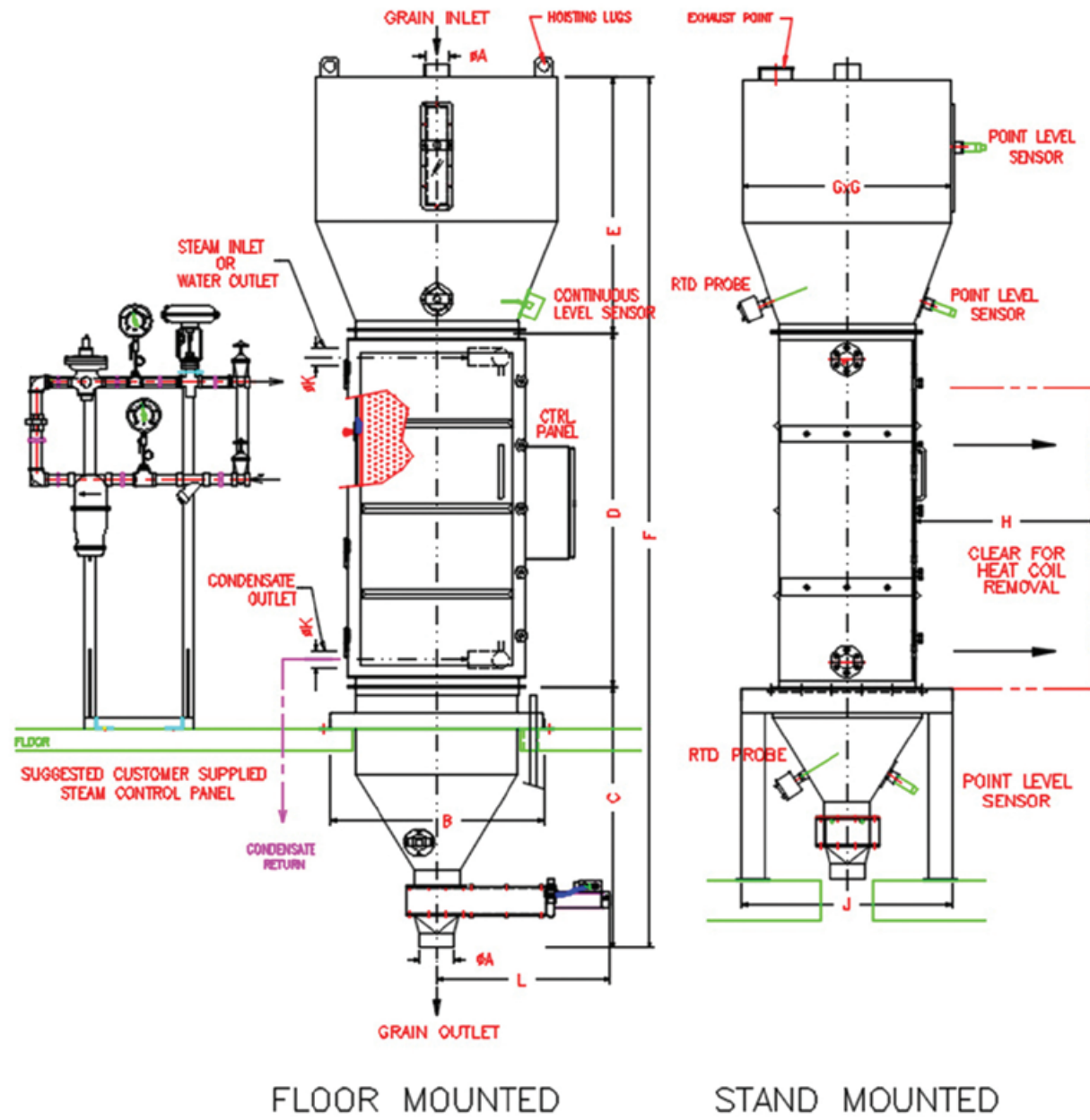


Technical and Dimensional Data.

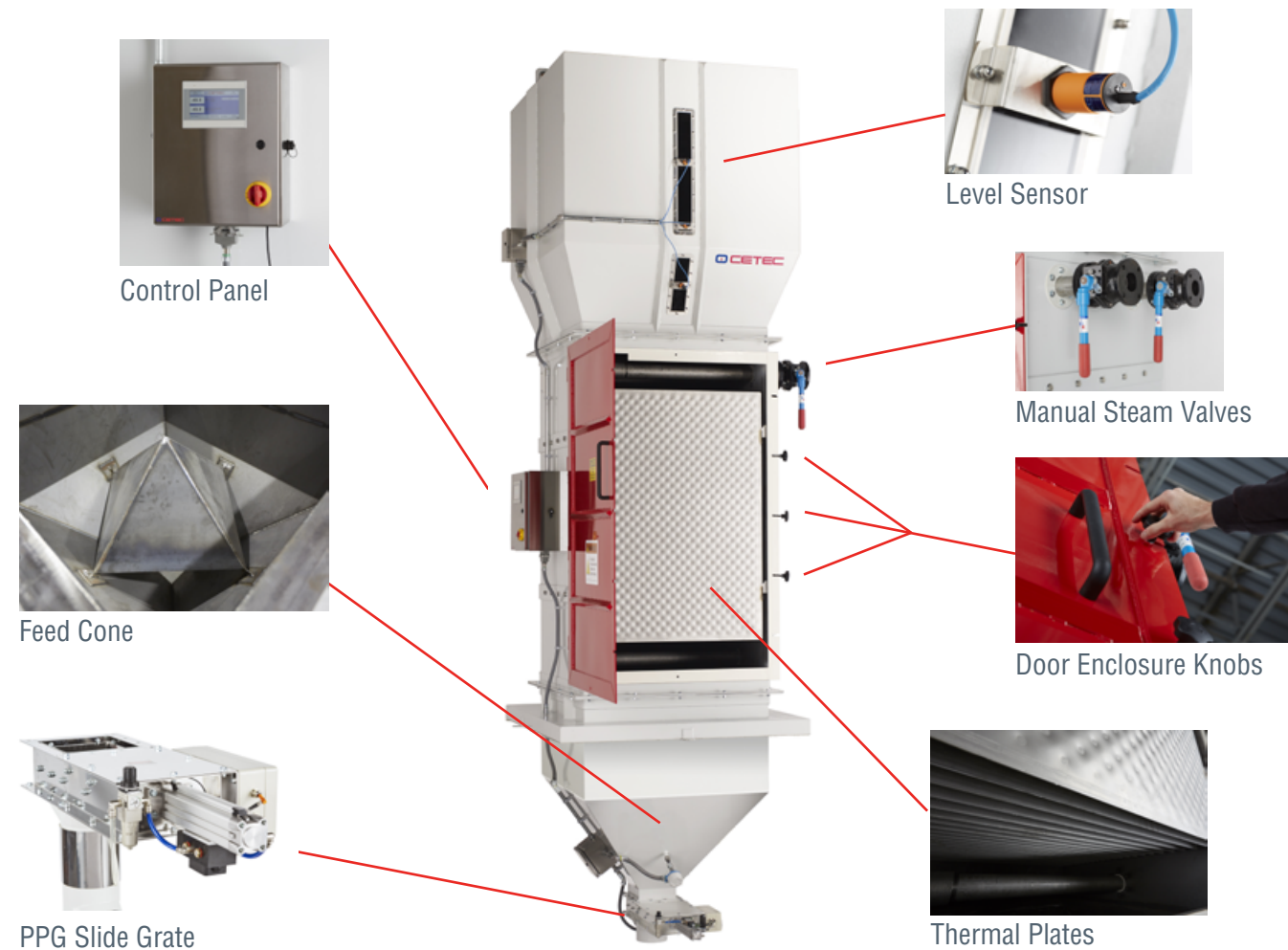
HTX GRAIN HEATER



MOD.	T/H	BU/H	ALL DIMENSIONS IN MILLIMETERS											(#LBS)	
			A	B	C	D	E	F	GxG	H	J	K	L	DEAD WT.	LIVE WT.
HTX/10	10	360	150	850	1023	1742	1143	3908	1000	700	900	1 1/2"	775	1330	2160
HTX/20	20	735	150	1365	1480	2230	1500	5210	1320	970	1210	2"	775	1490	3155
HTX/30	30	1100	180	1365	1567	2230	1600	5397	1320	1220	1300	3"x2"	775	1660	4155
HTX/40	40	1835	200	1550	1640	2230	1700	5505	1515	1340	1500	3"x2"	775	1930	5265

ALL DATA SHOWN IS PURELY INFORMATIVE, AND MAY VARY AT SUPPLIER'S DISCRETION DUE TO DESIGN VARIABLES OR MACHINE DESIGN UPDATES. CUSTOMIZED SIZES AND HOPPER CAPACITIES AVAILABLE UPON REQUEST.

Why the CETEC HTX System?



The Optional Control System continuously monitors and maintains a constant product level above the plates, based on the incoming rate of feed. In cases where thermal oil or hot water is used as a heating medium, the target set-point temperature will also be maintained.

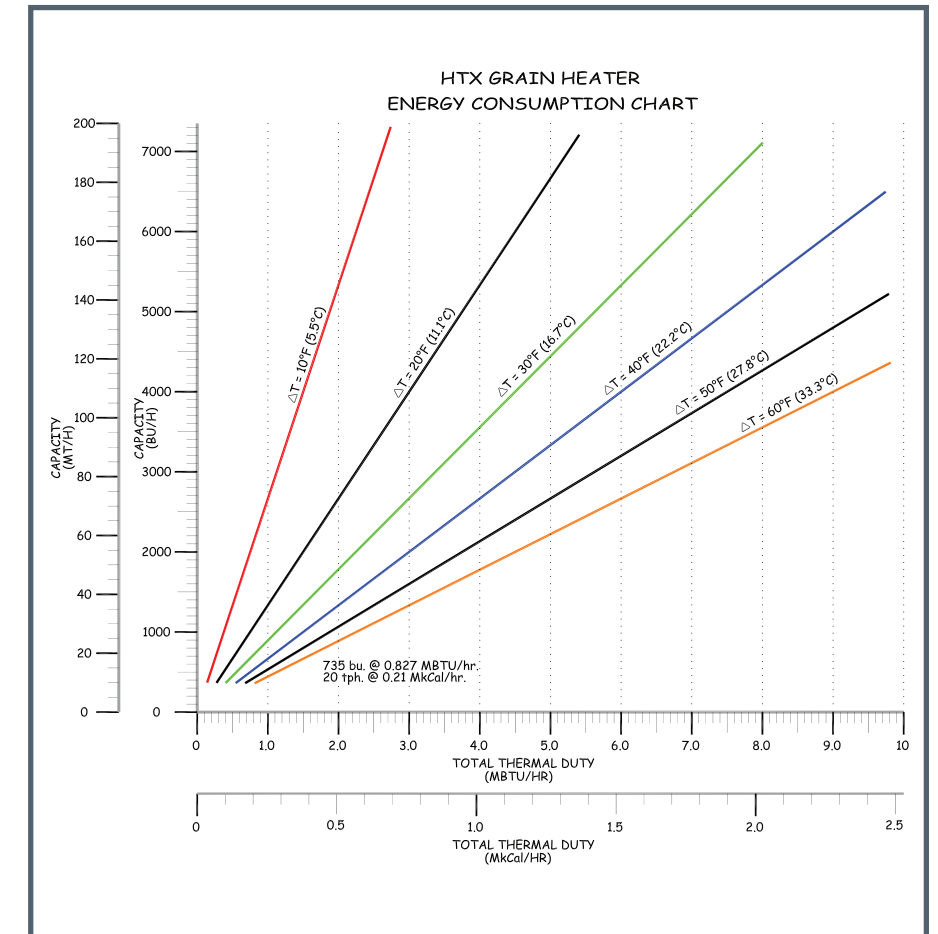
Temperature is regulated by steam pressure (in the case of high pressure steam) or by a hot fluid mixing valve. The valve position is determined by the product discharge temperature. The inlet temperature is also displayed for reference.

Product retention time is maintained by a continuous level control system. An inlet hopper sensor determines the variable position of the discharge slide gate. As the product level varies above or below a preset target, the slide gate will open or close proportionally. This, along with a mass-flow discharge design, ensures a constant retention time within the heating area, and a smooth discharge flow equivalent to the incoming flow.

The optional control panel is housed in a NEMA 4 enclosure with front panel operator controls. The continuous digital displays include target discharge temperature, actual inlet and discharge temperatures, gate position, and inlet product level. Remote communication is possible with existing PLC's. Manual back up controls are built into the panel.

System Sizing.

Upon completion of preliminary data required on the CETEC Specification Form, (available at www.cetec.org) the correct HTX model can be selected for your application, product flows can be determined, and you can be provided with data on the energy consumption you can expect from the HTX Grain Heater at various temperature Deltas.



Operation.

The HTX Grain Heater is designed for controlled temperature increase of free-flowing grains. Grain is conveyed into the heater via the inlet hopper, which acts as an upper surge vessel. A continuous level sensor monitors flow and modulates the discharge rate maintaining a constant head of product in the machine. The main body contains the stainless steel heat exchanger plates, while the lower discharge hopper has a mass flow cone that ensures uniform flow of product over the vertical heating plates. As the grain flows through the plates, heat is conducted from the plate surface to the grain. Temperature increases of up to 40° F (20° C) can easily be achieved.

Benefits.

- Eliminates condensation problems.
- Improved grain cleaning efficiency.
- Improved grain tempering.
- Increased flour mill yields.
- Reduced flour ash.
- Fully automatic - PLC controlled.
- Low maintenance - No moving parts.
- Most compact grain heater available.
- Stainless steel heat exchange ensures no corrosion issues with exchanger assembly.

Flexibility.

- Automatic or manual control.
- Modular design.
- Suitable for steam or superheated water or thermal oil systems.
- Above or through floor mounting.