



Atmospheric Tray Dryers



10 Tray Cabinet



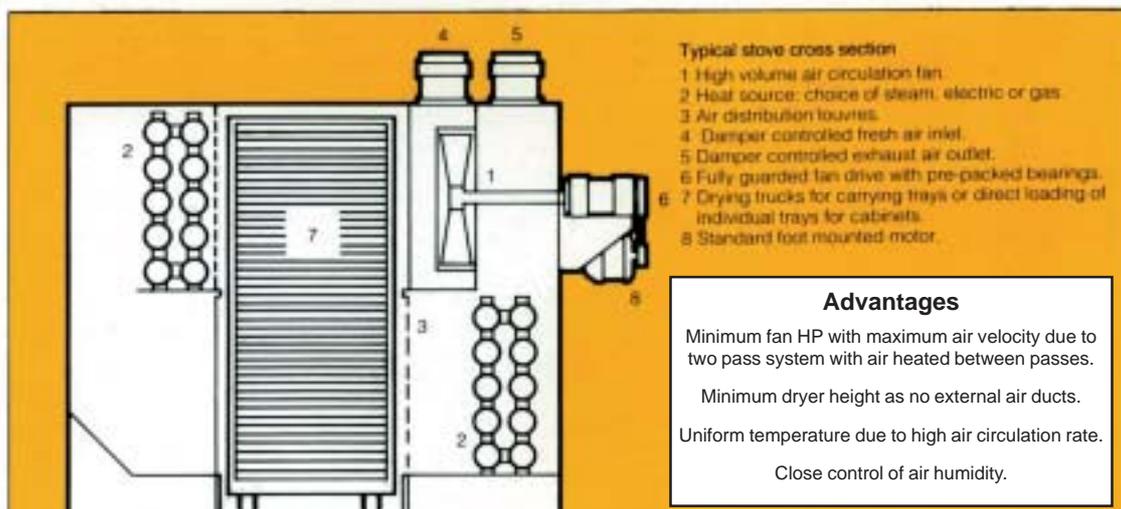
Type 1-1 Truck Stove

General

For many years Mitchell Dryers has specialised in the design and manufacture of drying plant for processing a great variety of materials. This experience has resulted in the development of the "Mitchell" range of forced convection drying stoves and cabinets, designed to ensure the highest efficiency, reduced processing time, lowest operating costs and consistency of output. In standard construction, panels of mild steel sheets containing rigid thermal insulation are bolted together to make the dryer enclosure. Mild steel frame sections are incorporated to support the circulating fan and heater arrangement. Other materials of construction such as stainless steel are available upon request. These types of dryers can incorporate many special features such as humidity control equipment, process programmers and timers, air filters to prevent contamination, flameproof construction including explosion venting and hygienic designs which are easily cleaned and suitable for the food and pharmaceutical industries.

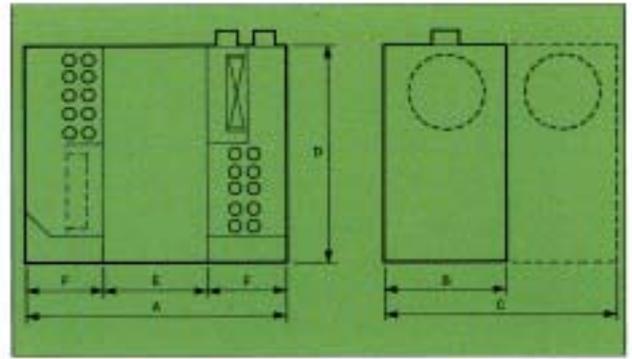
Air Circulation

The method of controlled air circulation used in batch drying stoves and cabinets provides for two air passes through the truck or trays contained in the drying compartment. The air passes from right to left over the trays contained in the lower half of the unit and into the side compartment on the left hand side. Here the air is reheated to the operating temperature before passing over the trays contained in the upper half of the machine. Large volume circulation is maintained at all times by the high efficiency fan mounted in the right hand plenum compartment and adjustable dampers allow control of the humidity level within the dryer. Where air enters the drying compartment, adjustable louvres are fitted to ensure uniform air distribution and even drying.



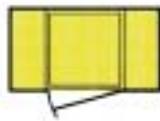
Stoves

Two types of stove form the standard range. The Type 1 accommodates one truck in the width of the drying compartment. The Type 2 carries 2 trucks side by side. With the modular type of construction, multiple units can be built from either standard design. Similarly, a tunnel stove arrangement can be built from either the Type 1 or the Type 2 stove, incorporating doors at either end of the tunnel. For higher evaporation duties the Type C stove can be used, utilising twin fans and larger capacity steam heaters. Details upon application.

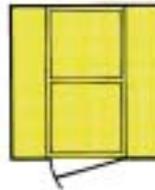


Stove type	Dimensions						Number of fans	Total motor load
	A	B	C	D	E	F		
No. 1-1	2368	1004	-	1905	940	714	1	0.75 kW
No. 1-2	2368	-	1900	1905	940	714	2	1.50 kW
No. 2-2	3364	1004	-	1905	1936	714	1	1.10 kW
No. 2-4	3364	-	1900	1905	1936	714	2	2.20 kW

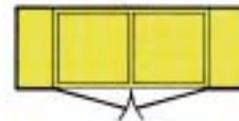
Stove type	Truck capacity	Tray capacity	Tray area m ²	Tray volume L	Electric heater load kW			Max temp steam °C
					100°C	150°C	200°C	
No. 1	1	40	13	340	12	15	18	100/120
No. 1	2	80	26	680	24	30	36	100/120
No. 2	2	80	26	680	24	30	36	100/120
No. 2	4	160	52	1360	48	54	66	100/120



Type 1-1 Truck



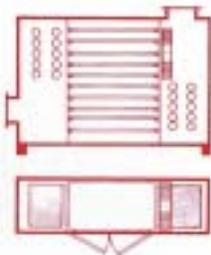
Type 1-2 Truck



Type 2-2 Truck

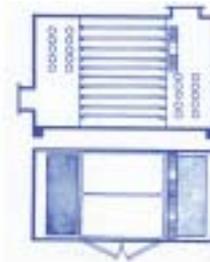
Cabinets

These smaller capacity dryers are ideal for pilot plant work and small levels of production. Two sizes of cabinet are available, of 10 or 20 tray capacity to accommodate standard trays of 813 mm x 406 mm x 30 mm deep. The trays are supported on angle slides spaced 75 mm apart, with 1 tray per level in the 10 tray unit and 2 trays per level in the 20 tray unit. Cabinet dryers are available with either electric or steam heating, with a choice of stainless steel or painted mild steel construction.



10 Tray Cabinet

SIZE		10 TRAY	20 TRAY
Heater	100°C	4.5	8
Rating, kW	150°C	6.0	8
	200°C	7.5	12
Fan Rating	W	375	375
Tray Area	m ²	3.3	6.6
Interior Size	mm	813x406x936	813x813x936
Temperature Control	Electric	Indicating type	Indicating type
Temperature Control	Steam	Non-indicating type	Non-indicating type
Temperature Indication - steam		Dial thermometer	Dial thermometer



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LEADERS IN DRYING TECHNOLOGY



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