

FUJI UNIVERSAL SERPENTINE TYPE BOTTLE AND CAN VENDER

1. INTRODUCTION

Conventionally, returnable bottles and one way cans were used mainly for drink containers. On the other hand, the one way cans have rapidly been changed over to PLB (Pre-Label Bottle) because of the following reasons.

- (1) Reduction of container cost
- (2) Countermeasure for new regulations such as a deposit system (Countermeasure for empty can problems)
- (3) Advantages in taste and appearance.

However, all the containers have not yet been replaced with PLBs completely, but both bottles and cans are used. For this reason, such venders which are capable of handling both bottles and cans are still being required. The stack type venders made in the United States had led other venders as a vender which satisfies this requirement.

However, the stack type venders could not be used easily. Namely, bottles and cans could not loaded smoothly; When vending both bottles and cans and changing bottles to cans or from cans to bottles, adjustments were required in response to shapes and dimensions of the containers. And, improvements were desired.

To realize the improvements, Fuji Electric developed universal serpentine type bottle and can vender having various features. This paper introduces the new vender.

II. FEATURES

- (1) Both 370/3750 ml cans and 10 oz (285 ml) PLB-bottles can be vended without any adjustment or modification.
- (2) With the built-in universal serpentine racks, merchandises can be loaded easily.
- (3) The universal serpentine racks and vending mechanism are constructed to be a shock-absorbing type as a countermeasure to prevent breakdown of bottles.
- (4) This vender has a flip-flop sequential vend system to

deliver out the prime products for the purpose of first in and first out.

- (5) The vend racks and vend meachanism can be detached and reinstalled easily and quickly.
- (6) Single, dual and multi coin mechanism can be equipped simply by changing the wiring at the price board because this vender uses Fuji SDM price board.

III. SPECIFICATIONS

Table 1 shows specifications of this vender.

Fig. 1 is a photograph showing this vender, and Fig. 2 shows external dimensions.

Table 1 Specifications

MODEL	CU-220-7																												
DIMENSIONS	1830(H) × 906(W) × 588(D) mm																												
WEIGHT	280 kg																												
TYPE	Universal Serpentine 10-Track Vender (i.e.5 front-and 5 rear tracks) for 370/375 ml Cans and/or 385 ml PLB-Bottles.																												
SELECTIONS	7 Selections as follow: 1 Selection: 1 Large Button for Prime Product combining 4 Tracks and dispensing product in a rotaing first-in/first-out action from each alternative track; i.e. sequential vend system. 6 Selections: 6 Small Buttons for Associated Products; i.e. 6 single tracks.																												
CAPACITY	220 × 285 ml PLB-Bottle <table> <tr> <td>rear</td><td>22</td><td>22</td><td>22</td><td>22</td><td>22</td></tr> <tr> <td>front</td><td>22</td><td>22</td><td>22</td><td>22</td><td>22</td></tr> </table> 230 × 370 375 ml Can <table> <tr> <td>rear</td><td>23</td><td>23</td><td>23</td><td>23</td><td>23</td></tr> <tr> <td>front</td><td>23</td><td>23</td><td>23</td><td>23</td><td>23</td></tr> </table> Pre-cool 20 Cans or Bottles					rear	22	22	22	22	22	front	22	22	22	22	22	rear	23	23	23	23	23	front	23	23	23	23	23
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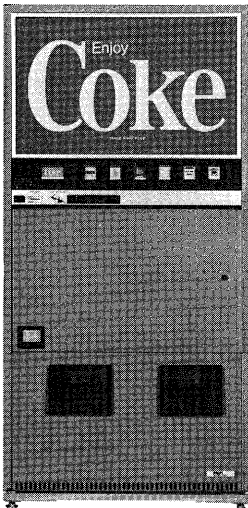


Fig. 1

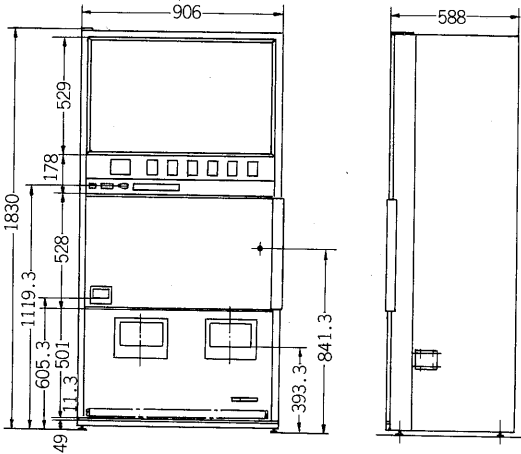


Fig. 2

FUJI PAPER PACK VENDER

I. INTRODUCTION

In Japan, various vending machines are installed in various places, and various merchandises are vended.

For drinks, the containers are classified into bottle, can, cup and paper pack. Out of these containers, paper packs handled by this Fuji Paper Pack Vender are continuously increasing because of the following reasons.

- 1) Convenient – Can be carried in the same manner as cans.
- 2) Collection of empty paper packs is not required, and they can be easily disposed by burning them.
- 3) The cost is less than bottle or can.
- 4) New paper packs with which drinks can be stored for a longer period of time have been produced.

II. FEATURES

- 1) Paper packs of various shapes and capacities can be vended. (See *Table 2*.)
- 2) Soft handling – The special mechanism employed in the vending machine minimizes pressure and shock applied to paper packs, preventing breakdown and deformation of containers.
- 3) A large accommodating capacity realized by the high accommodation efficiency.
- 4) Vertically accommodated paper packs – Preventing leakage of drink through the sealed portion of the paper pack.

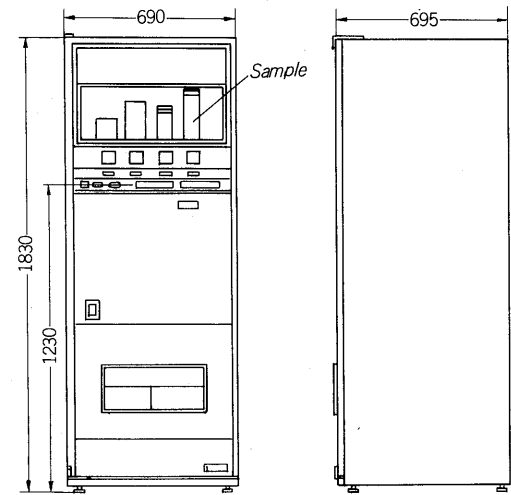


Fig. 1

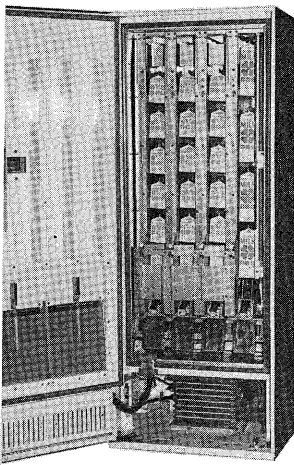


Fig. 2

Table 2 List of paper packed drinks

	500	1,000	250	500	180	200	250	500	1,000	200
	138	238	68	90	101	83	107	95	95	50
	73	73	73	125	63	63	63	63	167	50
				60	41	41	41	41	63	

Table 1 Specifications

Model	RVP288	RVP360
Vending products	Packaged	
Selections	4	5
Storage Capacity at 200/250ml pack	288	360
Vend Mechanism	Chain elevator	
Cooling unit (W)	175	300
Coin Mechanis	Single, Dual or Multi pricing	
Power Supply	Requested Voltage	
Fluorescent Lighting (W)	15	15
Dimensions (H)×(W)×(D) (m/m)	1830×690×695	1830×770×695
Weight (kg)	250	300
Others	—	—

- 5) Overall equalized cooling – Storing drinks toward a longer period of time.

III. SPECIFICATIONS

Specifications of this vending machine are shown in *Table 1*.

IV. CONSTRUCTION

Fig. 1 shows the external dimensions of this vender. *Fig. 2* shows the internal construction, and the vending mechanism.