



Practical Exercise 13

Study of packaging system of milk

Objective

To know about the packaging material and machinery used for packaging of fluid milk

Requirements

Milk, LDPE (Low density polyethylene) roll, VFFS (Vertical form fill seal) packaging machine

Procedure

- i. Place the packaging roll in the roller assembly
- ii. Connect the film to pouch forming assembly
- iii. Switch on UV (Ultra Violet) lamp provided for sterilizing the film
- iv. Check the teflon tapes of horizontal seal and vertical seal for proper integrity
- v. Check the water connection to sealer head
- vi. Set the pouch size to either 500ml or 1000ml
- vii. Fill the milk to buffering tank of packaging machine
- viii. Start the machine in manual mode



- ix. Check for seal integrity whether it is sealed properly or not and weight of the pouch
- x. Store the packed pouches in cold room

Observations

Make and model of the VFFS machine	_____
Capacity of machine	_____litre per hour
Type of milk	_____
Quantity of milk	_____kg
Thickness of the film	_____micron
Weight of 500ml pouch	_____g
Weight of 1000ml pouch	_____g
Number of 500ml pouches obtained per minute	_____
Number of 1000ml pouches obtained per minute	_____

REVIEW QUESTIONS

1. What is the procedure for operating vertical form fill seal (VFFS) packaging machine?
2. What is the purpose of UV lamp in the packaging machine?
3. Why checking of seal integrity important?
4. How will you determine capacity of packaging machine in terms of milk pouch per hour?