# **LAUNDRY**

In any residential establishment, a lot of dirty linen accumulates in the various units and departments. It is essential to ensure a continuous supply of linen, which is well laundered, so that operations can be carried out smoothly and efficiently. Linen is an expensive item, so how it will be laundered requires serious consideration. People involved in handling linen should have some knowledge of the process. Although it is essential that good quality linen be purchased, the life of the linen depends on the care of linen in use and the treatment it gets at the laundry. A good laundry facility ensures the following: - Careful handling of linen articles while laundering - Correct processing and use of a suitable laundry agent - While materials are kept white, excessive bleach is not used - Proper counting and records maintained to avoid shortages of linen - Speedy operations to meet with operational requirements -Sound policies regarding damages or loss

## TYPES OF LAUNDRIES

### **Commercial & On-site Laundry**

A commercial or off-premises laundry refers to laundering activities performed outside the establishment i.e. it is given on a contract basis to specialists in the field. In a rare circumstance, the laundry is contracted and on-premises. The laundered items can be expected to be returned to the hotel in one to two days.

#### Contracting out the laundry services comes with its own set of advantages and disadvantages.

#### Advantages:

- 1. Heavy investment in space and equipment is avoided.
- 2. Reduction in labour costs.
- 3. Expensive technical experts need not be employed

## Disadvantages:

- 1. Higher linen par stocks are required.
- 2. Reduced control over standard of cleaning.
- 3. Greater chances of loss and damage of linen.
- 4. The contractor may be less flexible in case of emergencies

### **On-Site Laundry**

An on-site or on premises laundry refers to laundering activities carried on within the establishment by staff employed by the hotel. The decision as to whether to buy your own laundry or to use a rental service that provides clean linen according to a contract is difficult and many factors must be considered. Whether there should be a laundry on the premises in a property is a decision that the management must take long before the building is built or is extensively remodelled. Only occasionally is it possible to fit a

complete facility into a property after construction is completed. The decision is made after careful comparisons that take into consideration not just the fairly substantial cost of equipment, but also of labour and supplies.

#### ADVANTAGES AND DISADVANTAGES OF AN ON-PREMISES LAUNDRY

#### Advantages

- 1. Time taken for laundering is reduced because transportation is eliminated.
- 2. Linen is readily available especially in the case of emergency requirements.
- 3. Control can be exercised over the wash process and the laundry agents used making the wear and tear on linen comparatively much lesser.
- 4. Pilferage is reduced.
- 5. The 'par' stock required is reduced.
- 6. Revenue is earned from guest laundry.

### Disadvantages

- 1. Cost of equipment and its maintenance is fairly high.
- 2. Related expenses like water taxes, energy costs, printing of forms, employee taxes and insurance are high.
- 3. A larger number of technically qualified staff is required.
- 4. Investment must be justified by an adequate amount of linen.

# **Laundry Equipment and Machines**

- 1. WASHER-EXTRACTORS- It consists of a large perforated drum of stainless steel that hold the laundry encased in an external stationary shell which holds the wash water of varying capacities ranging from 7-350 kg. Soiled linens are fed into the drum and suitable temperature, detergent and water are introduced at appropriate times. The inner drum washes and rinses by rotating backwards & forwards agitating the water & articles inside. The alternating of the rotating direction ensures prevents the roping of the items in the drum. To extract water, the drum spins at a high speed using the principle of centrifugal force. The spin will whirl out 70-80% water which is suitable for ironing. Machines may be programmed to give specific number of different wash, rinse or extract cycles. Water temperature is generally kept between 30-95°C The compact mass of hydro-extracted clothes is referred to as 'cheese' and the water level is referred to as 'dip'
- 2. WASHING MACHINES- may be top or Front loaded, semi-automated or fully automated. Some machines have automatic sensors to monitor, overloading, wash or excess detergent and give alerts. These sensors are known as Fuzzy Logic.
- **3. LAUNDROMATS-** are self-service laundries where washer-extractors and tumble dryers are available for the individual user, operated with the help of a coin, card or token. They may be found in public areas like hostels, apartment blocks etc.

- **4. HYDROEXTRACTORS/ SPIN DRYERS-** Separate spin dryers of a small capacity may also be installed. They, too, have a dual drum like the washer-extractors but are designed solely for hydro-extraction at high speed using centrifugal force.
- 5. TUMBLE DRYER- Dryers are machines that dry laundry by tumbling it slowly in a perforated drum exposed to hot air ranging from 40°C to 60°C in low capacity dryers and going right upto 85°C in an industrial dryer. There are programmes for delicate articles with low or no heat. For speedy drying and less wrinkling the volume of the dryer should be 25% more than the washerextractor. Most dryers have a microprocessor computer control system. The length of the cycle is dependent on the absorbency of the fabric, the residue of moisture and whether them fabric is to be completely dried (approximately 40 mins.)
- 6. CALENDER/ROLLER PRESS/ FLATWORK IRONERS- It consists of pairs of heated, padded rollers which rotate and iron flat items of linen such as tablecloths, bed sheets etc. These are fed in from one end, pass between the rollers and are retrieved ironed from the other end. Only large and flat linen items like bed sheets, napkins, table cloths can be pressed and ironed. It is not suitable for napped items such as blankets.
- 7. TUNNEL WASHERS/ BATCH WASHERS- It has many separate compartments to process the linens. Linen are loaded from one end and removed from another end. These machines take linens in large capacities example 500- 2000KG hence installed only in commercial laundries Machines are fully automatic They are time saving and efficient.
- **8. FOLDING MACHINES-** Machines may be semi-automated which do not exactly fold the linens but holds the ends of the linen from the other end. Fully automated machines may fold the linens automatically immediately after being calendered.
- **9. SPOTTING UNIT-** This is a machine which aids in cleaning and removing stains from fabrics. It consists of a spotting board, spotting gun, vacuum and a steam nozzle. Fabric is laid onto the board, spotted with gun, steam is applied and the stain is removed by vacuum.
- **10. CABINET DRYER OR DRYING ROOM-** This is a chamber where low-crease garments are suspended on hangers and steam or hot air is circulated through the cabinet.
- 11. TUNNEL DRYER- Clothes are hung on conveyor belts that pass through a tunnel. Hot air blowing in the tunnel renders the articles completely dry by the time they exit. It is a fully automated process that also transfers the linen to the next area of activity.
- **12. PUFFER OR SUZIE-** This is used for coats and articles that do not crease heavily. The articles are put onto a dummy that is inflated with steam to remove creases and then with hot air to remove the moisture created by the steam. It is ideal for ironing gowns, coats.
- **13. SHIRT PRESS UNIT-** This consists of several units designed for pressing different parts of the shirt which are padded and shaped appropriately. These units are:
  - i. Cuff, collar and yoke unit
  - ii. Body and bosom unit
  - iii. Sleever
- **14. HOT HEAD/ TROUSER LEGGER PRESS/ FLAT BED PRESS-** This consists of a flat padded base on which to lay the fabric along with an attached hot head which is controlled with

the help of foot pedals to lower and raise it in a scissor like fashion to iron the garments. The application of heat, pressure and steam helps to iron the article.

# **Laundry Agents/Chemicals**

Detergents Strictly speaking, the term detergent can be applied to any cleaning agent. Its usage is known generally restricted to those cleaning agents containing significant quantities of a group of chemicals known as surfactants. A number of other chemicals are frequently included to produce a detergent suitable for a specific use.

### Essential properties A good detergent will possess many or all of the following properties:

- Reduce the surface tension of water so that the cleaning solution can penetrate the soil and surface.
- Emulsify soil and lift it from a surface.
- Suspend soil in the cleaning solution.
- Be soluble in cold water.
- Be effective in hard water.
- Be harmless to user and surface to be cleaned.
- Rinse easily to leave no streaks or scum.
- Be economical in use

## **CLASSIFICATION OF CLEANING AGENTS**

- 1) **Builders-** are alkaline chemicals that influence the effectiveness of a cleaning agents in one or both of the following two ways:
  - They sequester (combine with) calcium ions in hard water to form water-soluble salts, thus preventing the adverse effects of calcium.
  - Enhance the emulsifying and dispersing properties of the detergent.
  - Complex phosphates e.g. Sodium Tripolyphosphate, are included in many detergents powders and act in both of the ways described.
- 2) Foaming- AgentsIncrease or stabilize the foam formed by a detergent. Foaming can be used to indicate surfactant activity, the level of foam being dependent on the amount of surfactant active in a cleaning solution. Alkalonamides derived from coconuts oil are frequently used for this purpose. Other foaming agents can be used to produce stable, relatively thick foams in which the other chemicals are dispersed. The foam will stick to non-horizontal surface and the cleaning chemicals.
- 3) Chelating agents- are relatively complex chemicals which are included in many liquid detergents to sequester calcium ion. In simple terms a combination of sodium carbonate or metasilicate and a chelating agent will have a similar effect to tripolyphosphate alone.
  Tripolyphosphate is not normally included in a liquid detergent because ittends to break down

- in alkaline solution. Chelating agents are now frequently used as descaling agents, being a more acceptable alternative to strong acids.
- 4) Suspending agents- e.g. Sodium carboxymethyl cellulose (CMS), increase the amount of soil that can be held in suspension in the cleaning solution.
- 5) **Bleaches-** Will break down by oxidation, stains which have not been removed from a surface by surfactants or builders. Sodium perborate, weak bleach is included in detergents intended for washing textile.
- 6) Bulking Agents- Eg:- Sodium sulphate, contribute to the volume of detergent powder.
- 7) Conditioning Agents- Ensure that the granules in detergent powders are crisp firm and dry.
- 8) Whiteners- Absorb ultra violet light and transmit it as visible white light. The whiteness of a surface will normally depend on the amount of natural light reflected from it and received by the eye. Whiteners therefore increase the amount of light received by the eye.
- 9) Enzymes- Are complex proteins that will break down organic substances e.g. blood stains, adhering to a surface. They are most effective at 30-50°C and are inactivated at temperatures above 60°C.
- **10) Anticorrosive Agents-** Inhibit the formation of water films on a surface. Chemical reactions resulting in corrosion are generally dependent on the presence of water.
- 11) **Perfumes and dyes-** Are included to increase consumer acceptability, but increases the risk of allergic reaction.

#### 12) Suspending Agent-

- The role of the suspending agent in cleaning is to hold the dirt in suspension and to prevent it from re-depositing onto the surface of the article.
- ❖ It plays a crucial role in the laundry agent due to the amount of time that the clothes rotate in the machine while the dirt is in suspension.
- ❖ The suspending agent is carboxyl methyl cellulose.

## 13) Sequestering Agent-

- ❖ These act along with the suspending agent to hold dirt in suspension.
- ❖ They assist by holding a greater amount of dirt in suspension thereby reducing the likelihood of redeposition.
- ❖ They also have the additional ability to dissolve lime salts that are responsible for temporary hardness in water.
- Sodium polyphosphates act as sequestering agents.

## **GUEST LAUNDRY**

Among the many amenities provided by a hotel, one of them is laundry service for the guest. It is an amenity which is essential in resort hotels where guests are long-staying and prefer to travel light. Even if a full-fledged laundry service is not available, at least some facility for ironing is required as clothes get crumpled in packing. It is a source of revenue in hotels and may serve as a means of preventing them from washing clothes and hanging them out to dry in hotel guest rooms. Guest laundry must be picked up

from time, laundered and delivered back to the guests on time without any mix ups. Usually guest cloths collected in the morning and are given back the same evening.

- Laundry service may be Normal (Ordinary) or Urgent (Express) and provide Drycleaning, Washing and Ironing. The time gap between the collection and delivery is dependent on whether the laundry is on-premises or off-premises. A guest may avail of laundry service by either telephoning the Housekeeping Desk and a Room Attendant is sent to collect the laundry.
- Alternatively, if the Laundry is on premises, the Order-taker in the Laundry cabin will receive the call and the Valet Runner will collect the laundry.
- ➤ If the hotel provides a Laundry Hanger, the guest may hang this out on the doorknob indicating that there is laundry for collection.
- Laundry lists are provided in the room or the format is printed on the laundry bag.
- The guest wish to avail of laundry services, should fill the necessary details like the date, room no., name of guest, no. of type of articles and service required in laundry list.
- A list is filled in, it is signed by a guest and kept along with the articles to be laundered in the laundry bag.
- The staff collecting the laundry must check the articles given against the entries made.
- > They must also look out for tears and damages or guest belongings left behind on/in the articles. It is especially important to check if the guest has left laundry for collection when the laundry is off-premises.
- ➤ It is absolutely essential to mark guest articles before despatch to an off- premises laundry in order to prevent any mix-up. Marking is done on a marking machine which usually indicates only the room number but may also indicate the initials of the guest.
- > The heat-sealed tape used for marking does not come out in the normal wash procedure but can be peeled off if so desired.
- > The laundry list is used for making the bill which is charged according to the service requested.
- Extra care must be taken when handling guest laundry.
- ➤ If stains and damages are present, they must be dealt with prior to the laundering process. As it is directly related to guest satisfaction, staff working on guest laundry should be most experienced.
- ➤ The machine capacity is also smaller to deal with smaller loads and control the quality of wash.
- ➤ Instructions for washing and washing symbols on the garment must be strictly adhered to and small items are tied loosely in a net bag prior to loading to prevent them from getting lost.
- ➤ When delivering guest articles, some will be folded while others are placed on hangers. Folded articles are put together in a laundry bag with the room number written on it, while hanging articles are clubbed with a tie label indicating the room number.
- Lastly, a bill will be sent to Front Office to get it added in guest folio for final billing of the guest.